

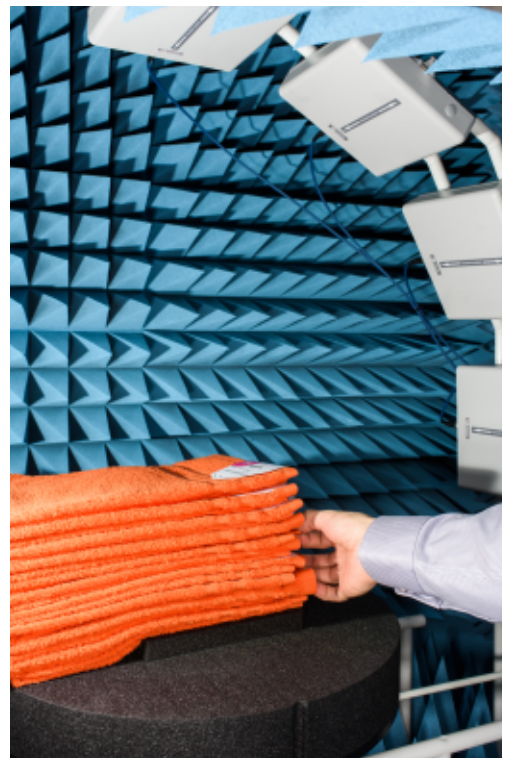
## UHF RFID Testing and Measurement for Tag Development and Selection

# Tagformance Tagged-Item Grading™

Simplifying UHF RFID tag buying and selling  
in retail and supply chain:

- > Easy way to set tagging requirements for suppliers
- > Clear results for communicating performance requirements
- > Quick method to verify performance
- > Standardized test method
- > 100% aligned with GS1 TIPP guideline

### Standardized Tagged-Item Grades



Managing RFID tag performance in retail environment is challenging. The RF performance of tagged items may vary greatly due to different UHF RFID labels used, different materials of the items, and different ways the items are displayed. The tagged items should fulfill the set performance requirements in diverse retail settings. Choosing the correct tags plays a key role in the application performance.

## Tagged-Item Grading

Tagged-Item Grading is a measurable and comparable set of RFID tag performance qualities for tagged items. Most importantly, it is a way to communicate the performance requirements between retailers, suppliers and technology providers.



The Voyantic Tagformance Tagged-Item Grading makes buying and selling UHF RFID tags easier. The idea of grading is familiar from many goods: whether it is engine oils or clothes. It is a lot easier for you to buy shoes of size 11½, than to specify your foot dimensions. It is also a lot easier for the supplier to sell his shoes with few different sizes, than to verify that each individual customer set requirement is met.



Similarly, it is easier to buy and sell tagged items performing according to a grade S05B, than to list and verify individually all relevant performance requirements. Retailers can choose or define grade levels suitable for their operations, and communicate the tagged-item grades to their suppliers.



The Voyantic Tagformance Tagged-Item Grading is the way to define and verify the grading. Remove any uncertainties, assure the performance of your application right from the moment of implementation.

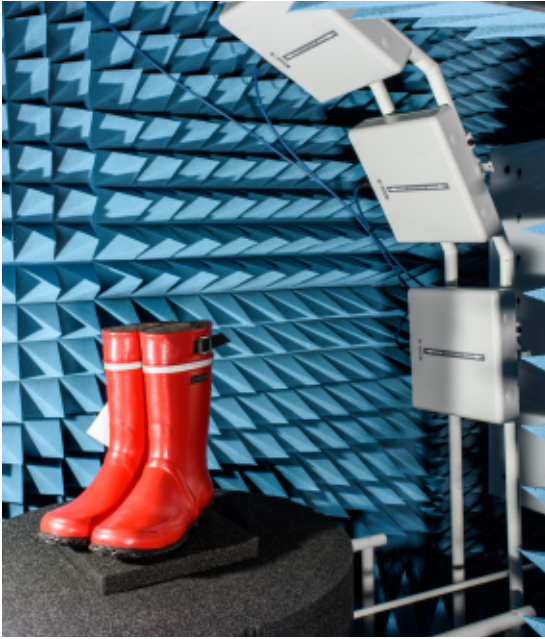
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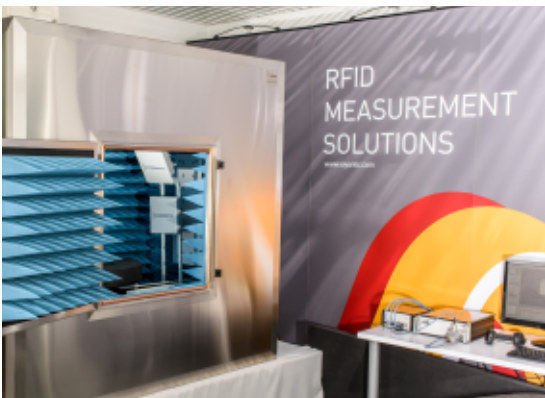
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Testing a pair of tagged rubber boots



Test results view



System components

## Compliance to GS1 TIPP

GS1 has established the Tagged-Item Performance Protocol (TIPP) as a common language and a common test procedure to achieve successful and reliable RFID operations.

The Voyantic Tagformance Tagged-Item Grading System is 100% aligned with the GS1 Tagged-Item Grading concept and the related test methodology. The Tagformance system simplifies complex RF tests and brings high quality testing to the reach of anyone.

## Automated Test Procedures

The system does not require an RFID expert to use it, thanks to its automated and straightforward test procedure. Open file formats and clear reporting allow the test data to be easily shared between retailers and their suppliers.

Tagged-Item Grading provides the capability to define to which grade your item falls into, or a fast way to check whether the tagged item meets the required set grade.

## System Components and Variants

The measurement is made in an RFID measurement cabinet using a rotation table and four antennas from different angles. Voyantic offers three size options for the setup to comply with different sized items. The distance from the antennas to the center of the tested item can be chosen as 50 cm, 100 cm or 150 cm.

Voyantic delivers the system as a complete setup. You can also upgrade an existing Tagformance testing system with any of the main components.