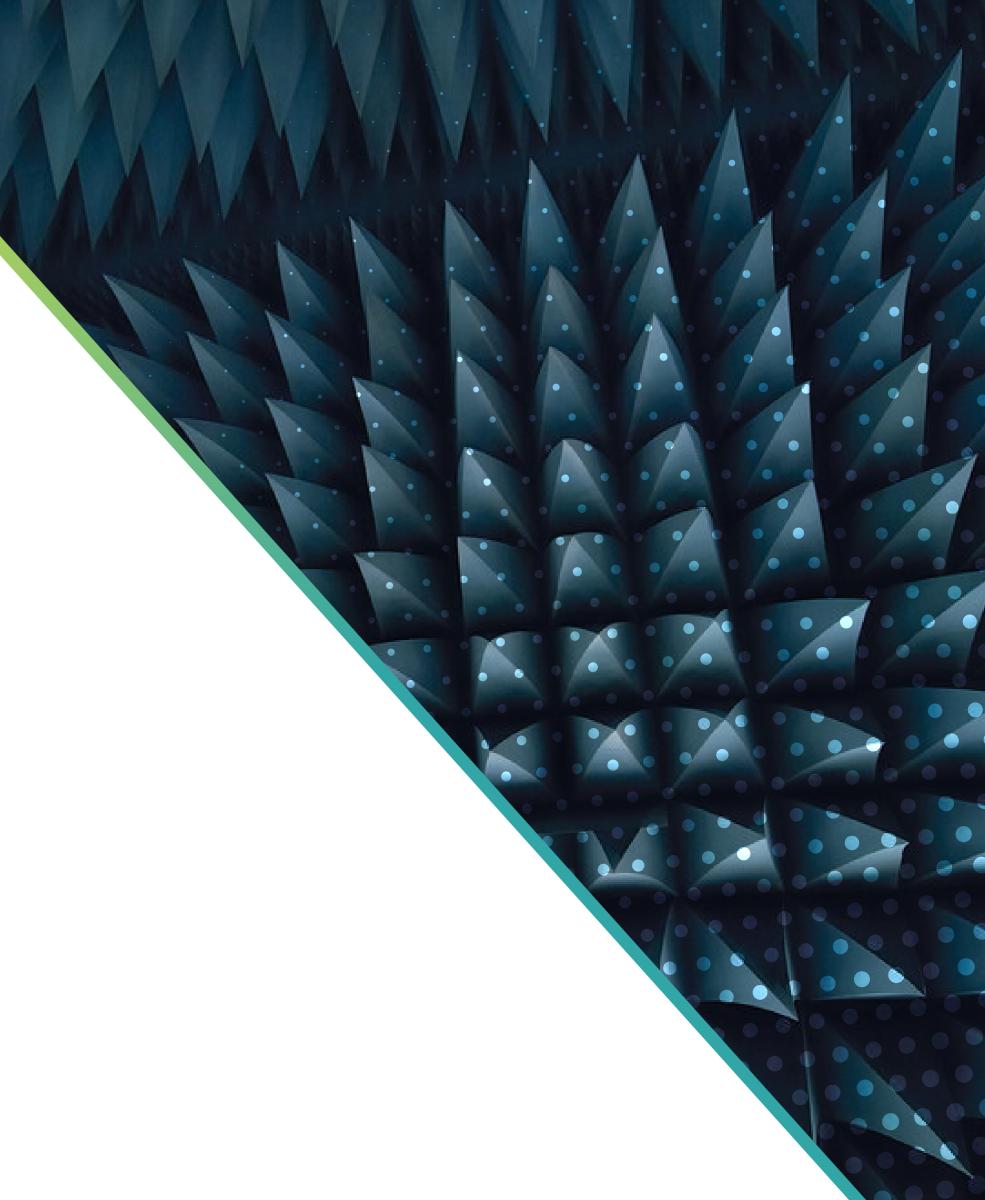


### **Application Note**

# Silver Oxidation and Antenna Performance



#### **Application Note**

Silver oxidiation and antenna performance

#### Contents

Silver oxidation and antenna performan

PA.26 oxidation and antenna performa

SGGP.12.A.02 oxidation and antenna

CGGP.25.4.A.02 oxidation and antenna performance test example

Taoglas makes no warranties based on the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Taoglas reserves all rights to this document and the information contained herein. Reproduction, use or disclosure to third parties without express permission is strictly prohibited. Copyright © Taoglas Ltd

nce test method	03
ance test example	03
performance test example	04
a nerformance test example	04

### **1. Silver oxidation and antenna performance**

Silver is easily oxidized and discolored in everyday life. This change does not affect antenna performance. You can refer to our example test results here for confirmation that antenna performance is not affected by silver oxidation.

#### Silver oxidation and antenna performance test method

- 1. We prepared two new sets of examples of the same antennas.
- 2. We verified the electrical characteristics of the example antennas.
- 3. We applied an oxidation process to one set of example antennas:

Temperature:	+ 28 ± 2° C indoors
Humidity:	55 ± 5%,
Duration:	168 hours
Appearance after process: Slightly oxidized and discolored surface	

- 4. We compared the electrical characteristics of the non oxidized and oxidized antenna sets.
- 5. The results in each case show that there was no adverse effect in antenna performance.

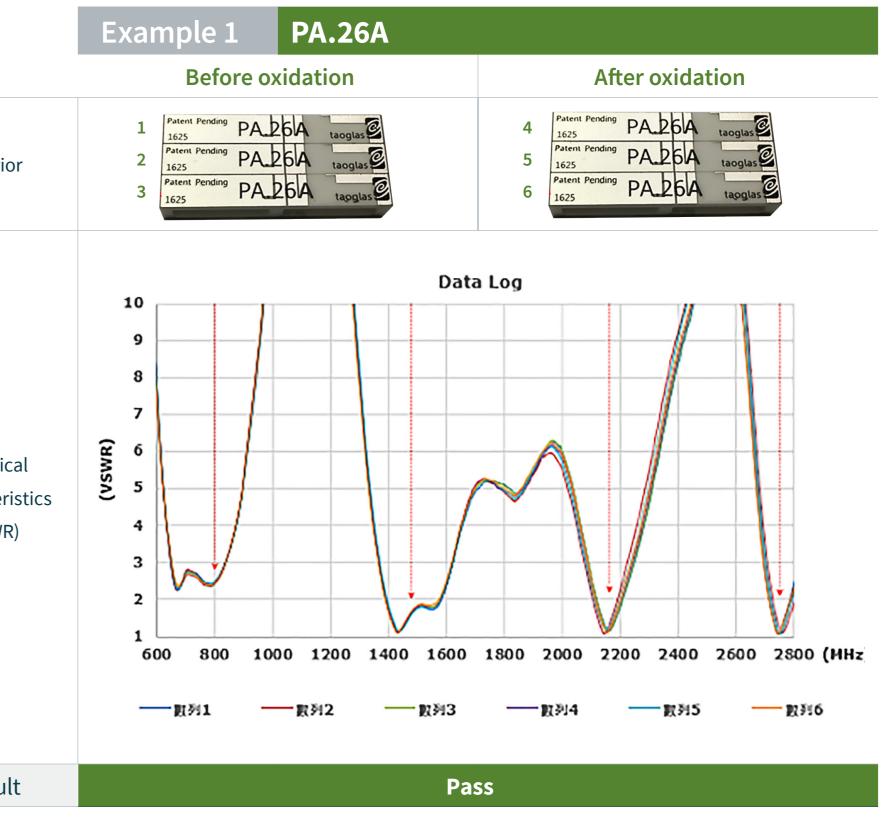
Exterior

Electrical Characteristics (VSWR)

Result

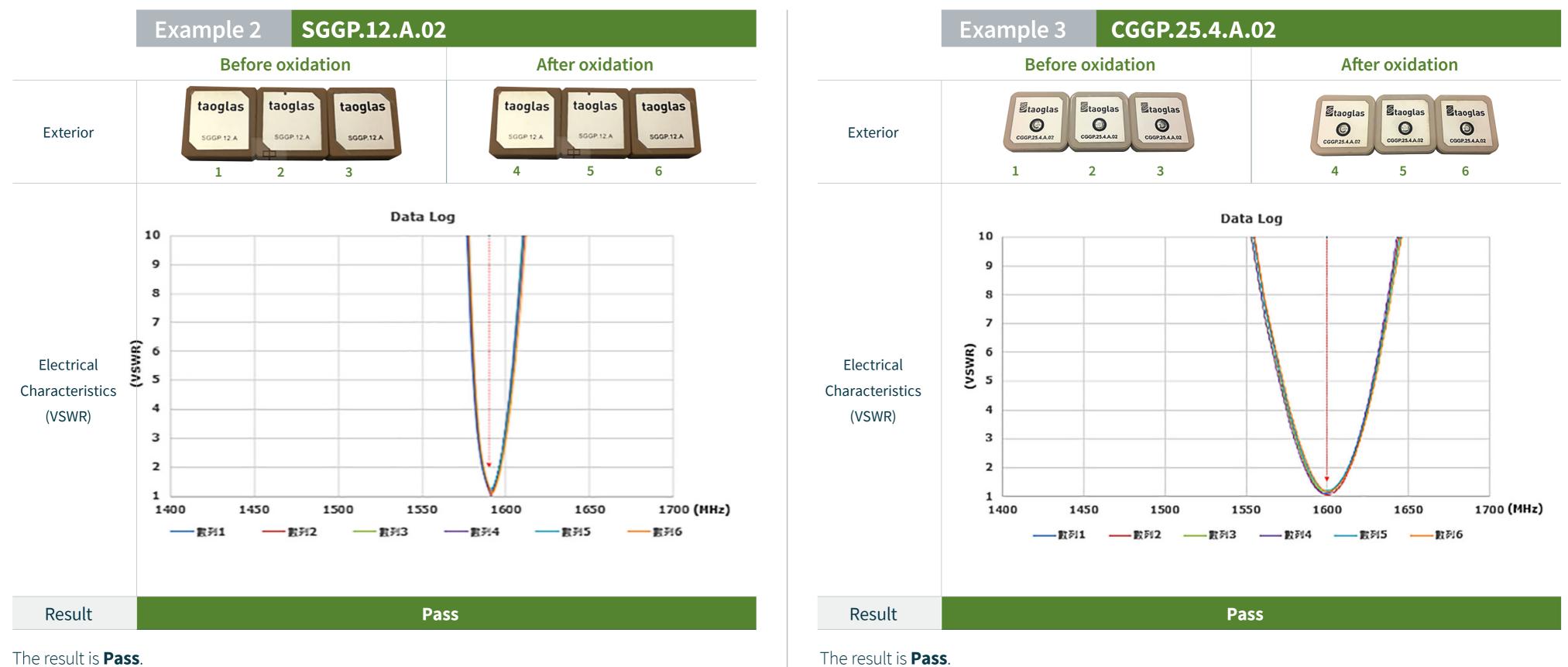
The result is **Pass**.

### Silver oxidation and antenna performance test examples



After the oxidation process, the electrical characteristics still follow the product specifications.

### Silver oxidation and antenna performance test examples



After the oxidation process, the electrical characteristics still follow the product specifications.

After the oxidation process, the electrical characteristics still follow the product specifications.



#### Dublin, Ireland

R&D Test Lab DCU Alpha, Innovation Campus, Old Finglas Road, Glasnevin, Dublin 11, Ireland

+353 53 9196500 emeasales@taoglas.com

#### Ireland (HQ)

Full RF Test Laboratory Unit 5 Kilcannon Business Park, Old Dublin Road, Enniscorthy, Co. Wexford, Y21 XW56, Ireland

+353 53 9169500 emeasales@taoglas.com

## www.taoglas.com

Any unauthorized use, reproduction, dissemination, distribution or other disclosure of the contents is strictly prohibited. All copyrights, trademarks and any other intellectual property rights related are owned by Taoglas Group Holding Limited.

#### San Diego, USA

Full RF Test Laboratory Cable & Connector Division

8525 Camino Santa Fe, Suite A & B, San Diego, CA 92121, USA

> +1 858 450 0888 nasales@taoglas.com

### Munich, Germany

Full RF Test Laboratory Erika-Mann-Straße 25, Second Floor, 80636 München, Germany

+49 89 3803 7426 emeasales@taoglas.com