

3GPP TSG RAN meeting #103
Maastricht, Netherlands, March 18-21, 2024
Agenda Item: 9.1.4.3
Document for: Discussion

RP-240405



Views on R19 RAN4 OTA topics

China Unicom

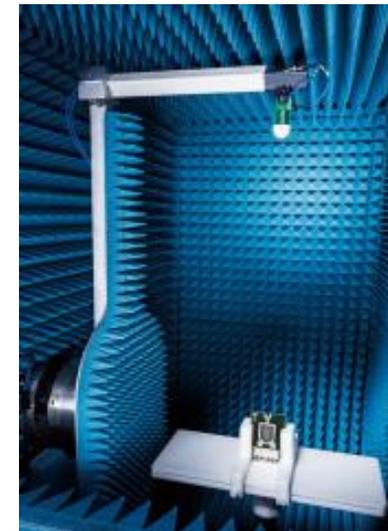
OTA enhancements: Reverberation Chamber (RC) Test for FR2-1

□ Background & Motivations

- Reverberation Chamber has the advantage of faster testing time comparing with anechoic chamber on RF parameters (e.g. TRP, etc.) for BS and UE. RC has been widely used in LTE/NR FR1 TRP testing and NR BS testing.
- Several OTA testing related Work/Study had been carried out in previous releases based on anechoic chamber assumptions for FR2-1. And relevant work on reverberation chamber for UE testing was not studied in previous release.
- Due to the complexity of OTA testing, it is widely accepted that reducing the testing time for FR2-1 UEs is very important. **For TRP-based test cases, test time in RC would reduce significantly by nearly 90% comparing with AC.** RC is considered as a solution to reduce the time for UE performance verification.
- The path loss is smaller for RC comparing with AC due to the smaller chamber size, making RC less dependent on LNA, and **more suitable for spurious emission test cases.**



Reverberation Chamber



Anechoic Chamber

□ Proposals

- **To support the RC Method as an alternative method for TRP and TRP-based test cases in Rel-19, e.g. spurious emission for NR FR2-1 UE RF testing.**

Thanks!