3.2 WiFi Testing

3.2.1 Conducted Test Setup: WiFi & SAR

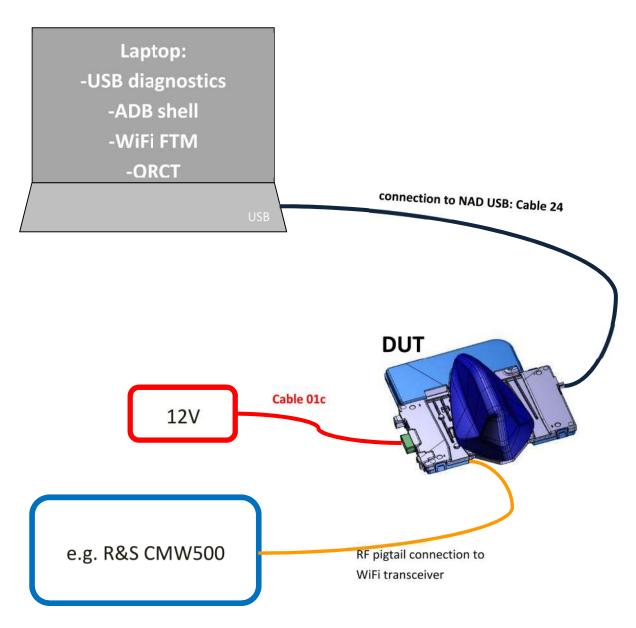


Figure 3 Conducted Setup: WiFi & SAR



This picture only shows the principal wiring of the test sample and equipment but not the real test setup and surrounding in the laboratory.

3.2.2 Radiated Test Setup: WiFi & SAR

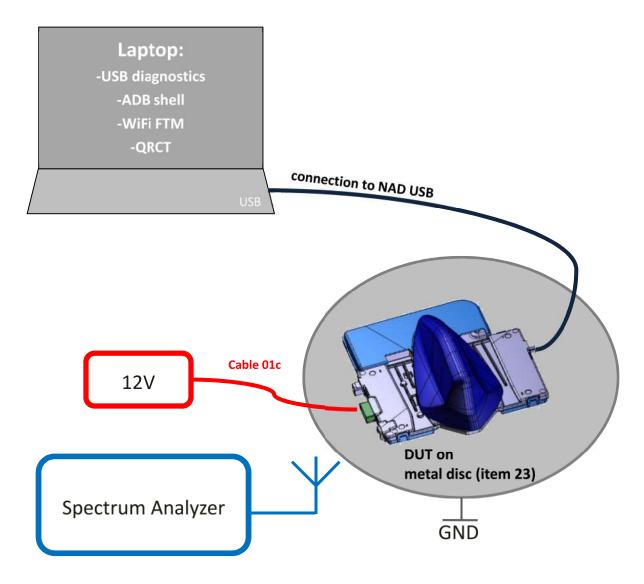
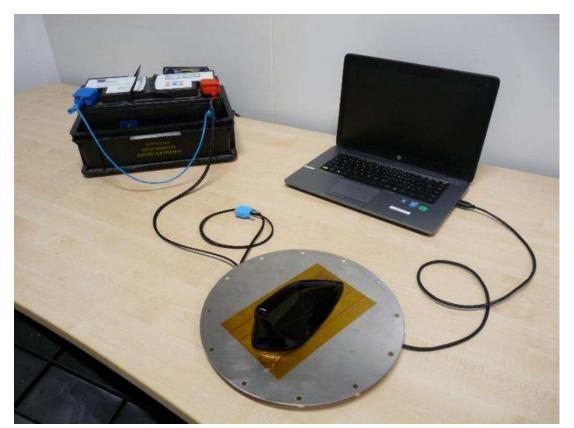


Figure 4 Radiated Setup WiFi & SAR



This picture only shows the principal wiring of the test sample and equipment but not the real test setup and surrounding in the laboratory.

3.2.3 Wi-Fi Output Power Configuration

Frequency [GHz]	Band	Max. Power [dBm]	Bandwidth [MHz]
2.4	802.11b	8	20
2.4	802.11g	10	20
2.4	802.11n	10	20
5.150 - 5.250	802.11a,n,ac	4	20, 40, 80
5.725 - 5.850	802.11a,n,ac	1	20, 40, 80

5 GHz and the respective subbands are only used in countries where it is allowed

3.3 Cellular Testing

Conducted Test Setup: Cellular & SAR

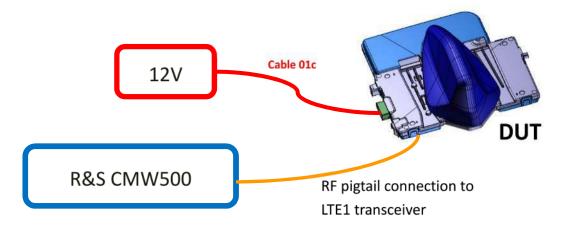


Figure 5 Conducted Setup: Cellular & SAR



This picture only shows the principal wiring of the test sample and equipment but not the real test setup and surrounding in the laboratory.

3.3.2 Radiated Test Setup: Cellular Spurious Emissions

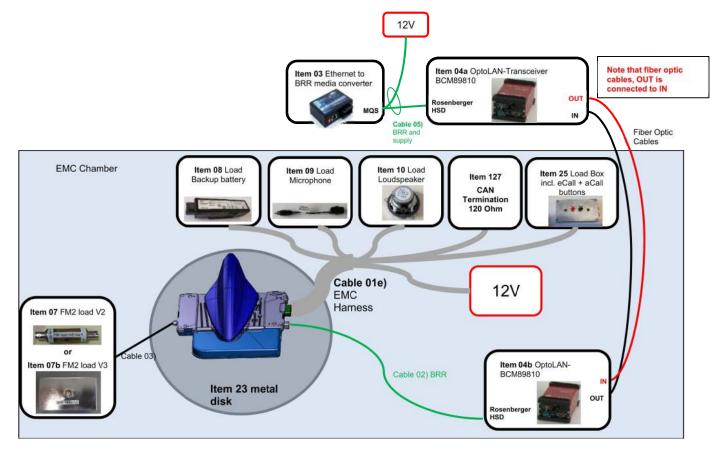
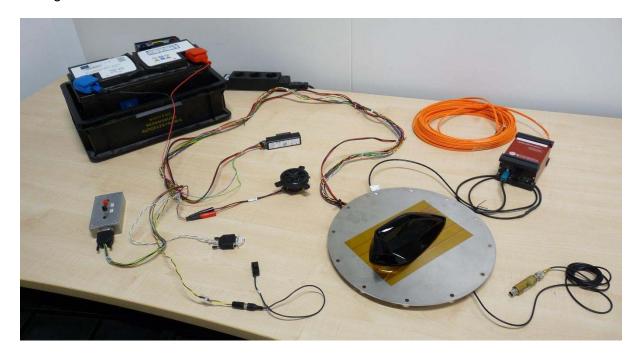


Figure 6 Radiated Setup: Cellular Spurious Emissions

Backup battery connected

Boot up: A boot up of the BSRF on the backup battery ONLY is NOT supported. **Power cycle:** If you cut the main supply on the main connector of the BSRF, then the **BSRF will run on the backup battery for max. 60sec** and will then shut down

Wiring inside chamber:



Comment: The picture shows a FM2 load V2.Alternatively a FM2 load V3 can be used for this test.

Wiring outside chamber:



These pictures only show the principal wiring of the test sample and equipment but not the real test setup and surrounding in the laboratory.

Configuration of Media Converter see chapter 8.1.

Configuration of Opto LAN Tranceiver see chapter 8.2.

Transmittal, reproduction, dissemination and/or editing of this document as well as utilization of its contents and communication thereof to others without express authorization are prohibited. Offenders will be held liable for payment of damages. All rights created by patent grant or registration of a utility model or design patent are reserved.

3.3.3 Radiated Test Setup: Cellular SAR

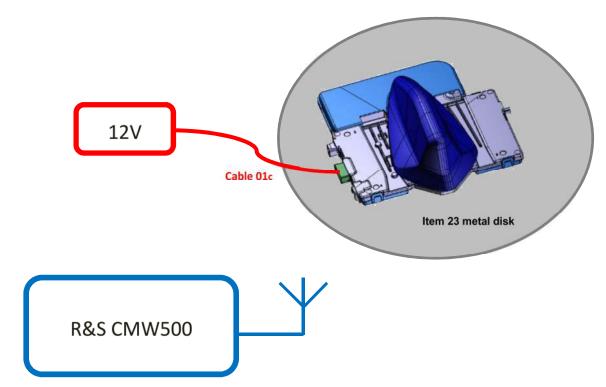


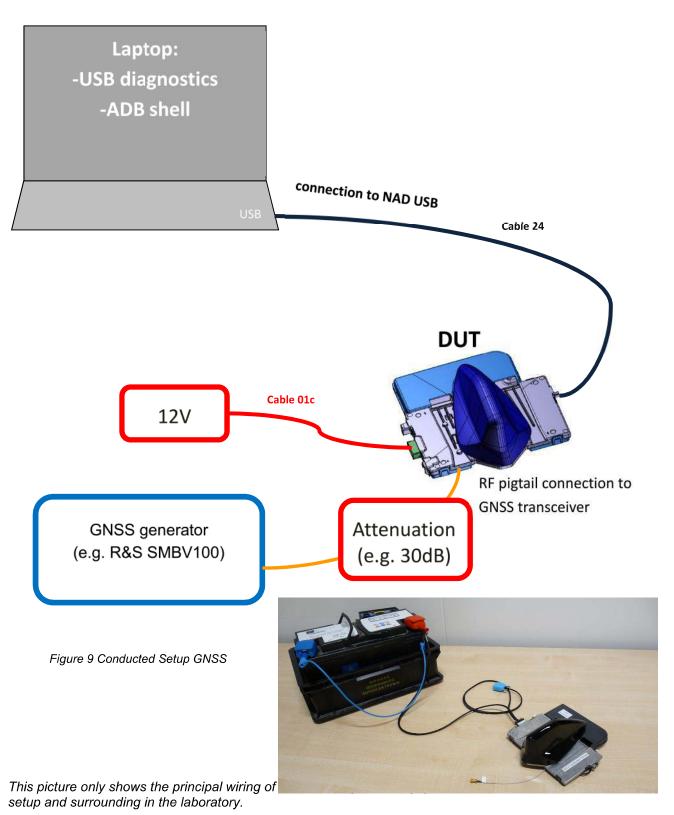
Figure 7 Radiated Setup: Cellular SAR



This picture only shows the principal wiring of the test sample and equipment but not the real test setup and surrounding in the laboratory.

3.4 GNSS Testing

Conducted Test Setup GNSS



Transmittal, reproduction, dissemination and/or editing of this document as well as utilization of its contents and communication thereof to others without express authorization are prohibited. Offenders will be held liable for a pyment of damages. All rights created by patent grant or registration of a utility model or design patent are reserved.

3.4.2 Radiated Test Setup GNSS

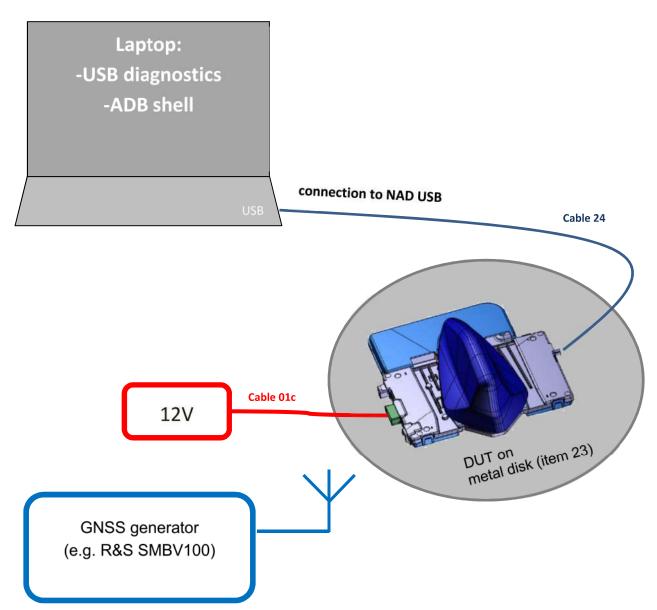
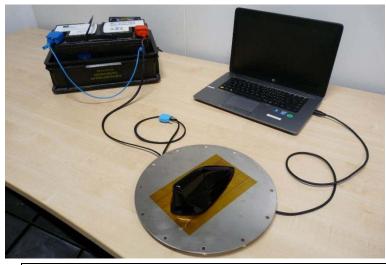


Figure 10 Radiated Setup GNSS

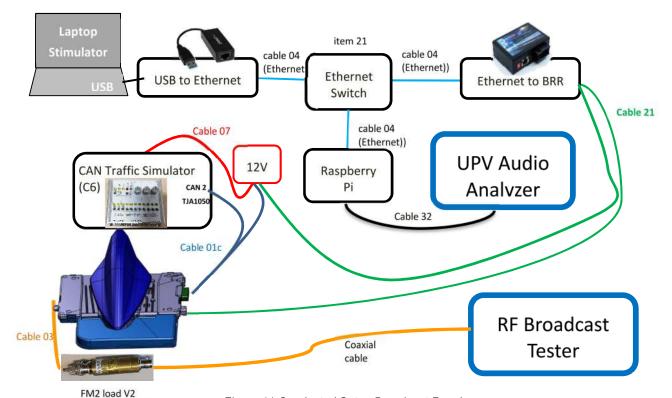


This picture only shows the principal wiring of the test sample and equipment but not the real test setup and surrounding in the laboratory

Transmittal, reproduction, dissemination and/or editing of this document as well as utilization of its contents and communication thereof to others without express authorization are prohibited. Offenders will be held liable for payment of damages. All rights created by patent grant or registration of a utility model or design patent are reserved.

3.5 Broadcast Receiver Testing – AM/FM/DAB

3.5.1 Conducted Test Setup: Broadcast Receiver (FM2 or FM external)



FM load needs pathloss compensation of 6dB

Transmittal, reproduction, dissemination and/or editing of this document as well as utilization of its contents and communication thereof to others without express authorization are prohibited. Offenders will be held liable for payment of damages. All rights created by patent grant or registration of a utility model or design patent are reserved.

Figure 11 Conducted Setup Broadcast Receiver

This picture only shows the principal wiring of the test sample and equipment but not the real test setup and surrounding in the laboratory



Copyright © by Continental AG, 2021
All rights reserved, internal and external use

File name: BSRF Homologation Test Setup Manual.docx Version 1.3 (Released) 19.07.'21

Radiated Test Setup: Broadcast Receiver (AM / FM / DAB)

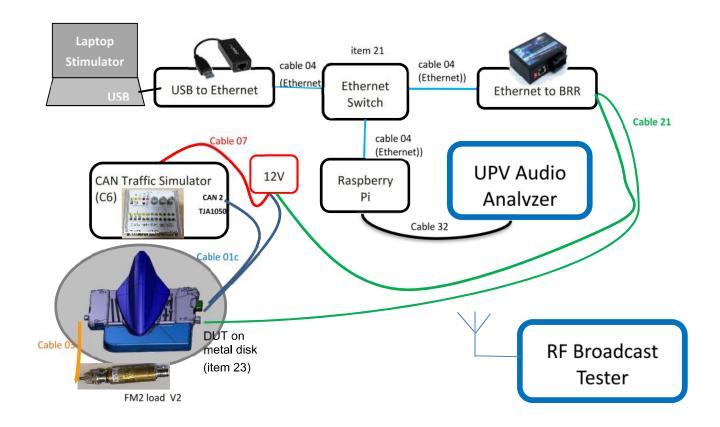
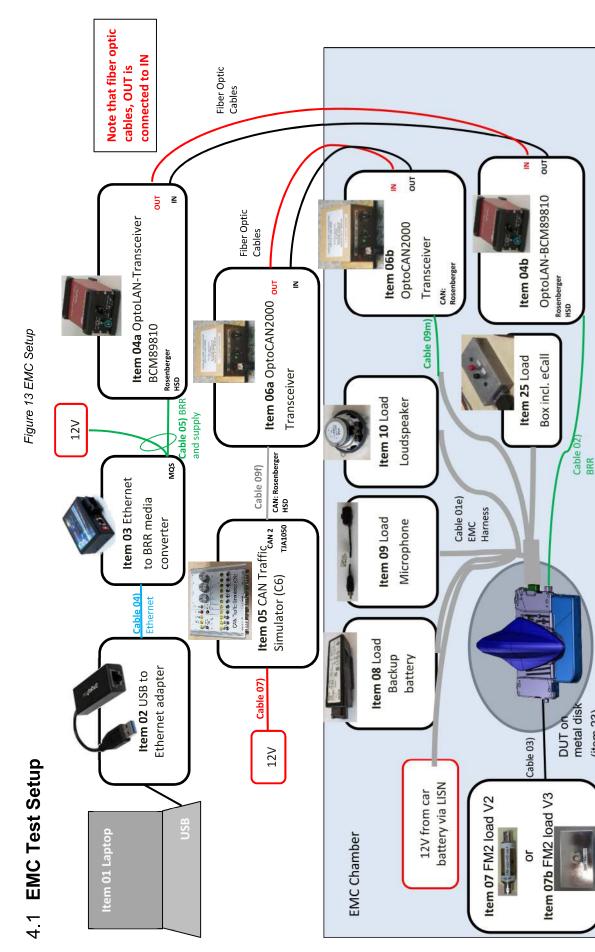


Figure 12 Radiated Setup Broadcast Receiver



This picture only shows the principal wiring of the test sample and equipment but not the real test setup and surrounding in the laboratory



File name: BSRF Homologation Test Setup Manual.docx

Version 1.3 (Released) 19.07.21

Page 40 of 74

All rights reserved, internal and external use

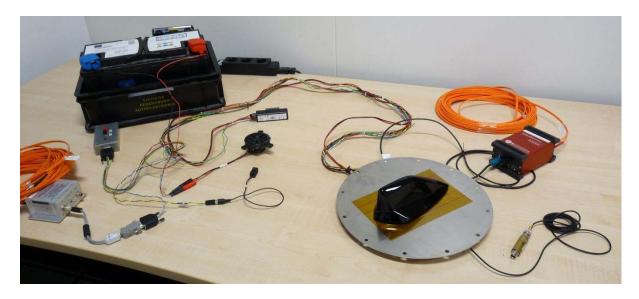
Copyright © by Continental AG, 2021

(item 23)

Wiring outside EMC chamber:



Wiring inside EMC chamber (Supply has to be used with LISN):



Comments:

- The picture shows a FM2 load V2.Alternatively a FM2 load V3 can be used for this test.
- The pictures only show the principal wiring of the test sample and equipment but not the real test setup and surrounding in the laboratory.
- Configuration of Media Converter see chapter 8.1.
- Configuration of Opto LAN Tranceiver see chapter 8.2.