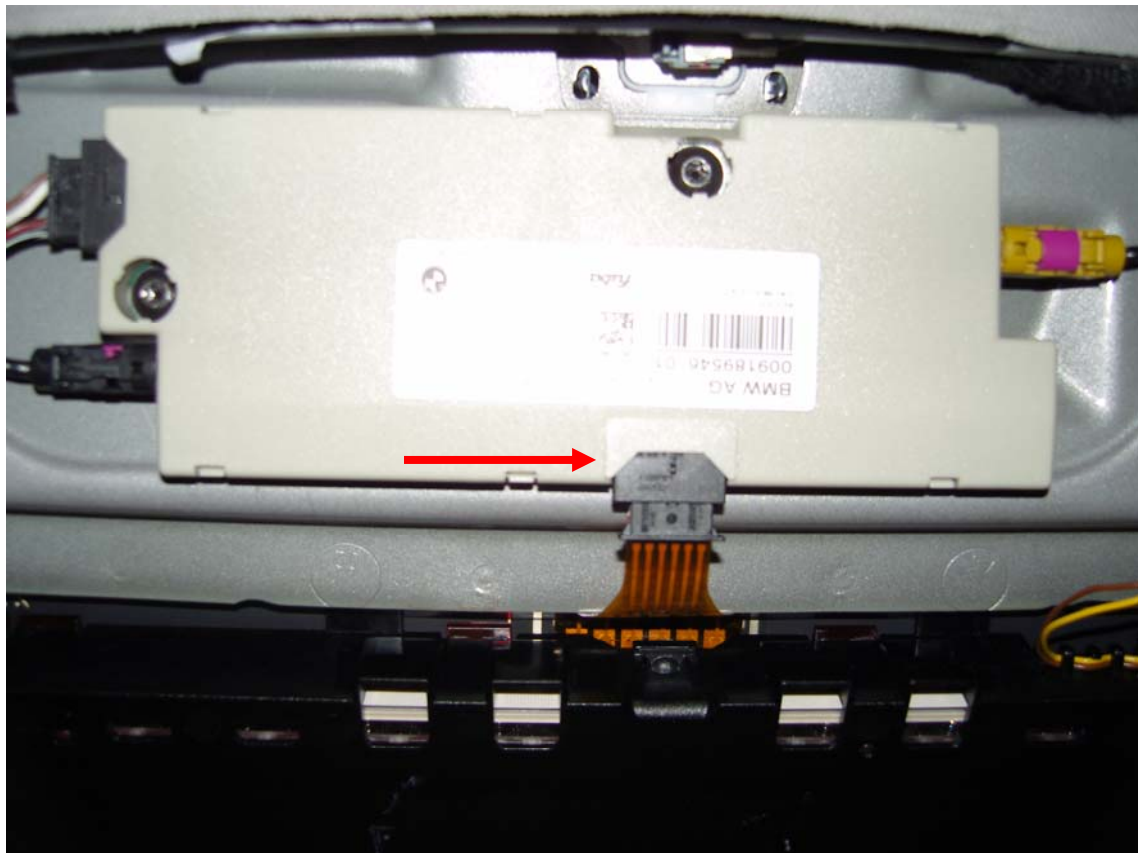


EUT connected to the dedicated window antenna in the original integration of a car.



5.3 Radiated emissions

For test instruments and accessories used see section 6 Part **SER 2**, **SER 3**.

5.3.1 Description of the test location

Test location: OATS1
Test location: Anechoic Chamber A1

Test distance: 3 metres

5.3.2 Photo documentation of the test set-up



5.4 Pulsed operation

For test instruments and accessories used see section 6 Part DC.

5.4.1 Description of the test location

Test location: AREA4

5.4.2 Photo documentation of the test set-up



5.4.3 Applicable standard

According to RSS-Gen Issue 2, 4.5:

When the field strength (or envelope power) is not constant or when it is in pulses, and average detector is specified to be used, the value of field strength or power shall be determined by averaging over one complete pulse train, including blanking intervals within the pulse train, as long as the pulse train not exceed 0.1 s. In case where the pulse train exceeds 0.1 s, the average value shall be determined during 0.1 s interval during which the field strength is at its max value.

5.4.4 Description of Measurement

The duty cycle measurement is performed using an arbitrary waveform generator and an RF-Generator as stimulus for the receiver. The spectrum analyser displays the pulse train in zero span mode. The EUT is only able to send the right pulse train in normal mode. The stimulus shall provide with the shortest reaction possible for this programmed pulse train. The pulse train exists from two pulses, a "button pressed acknowledge pulse" and a "button released acknowledge pulse". The pulse train is programmed for CH1 and CH2 as "button pressed pulse" (14.5 ms) + min blank time (45 ms) + "button released telegram" (37 ms) + blank time (4 ms) + "button released acknowledge pulse" (14.5 ms). The pulse train is recorded.

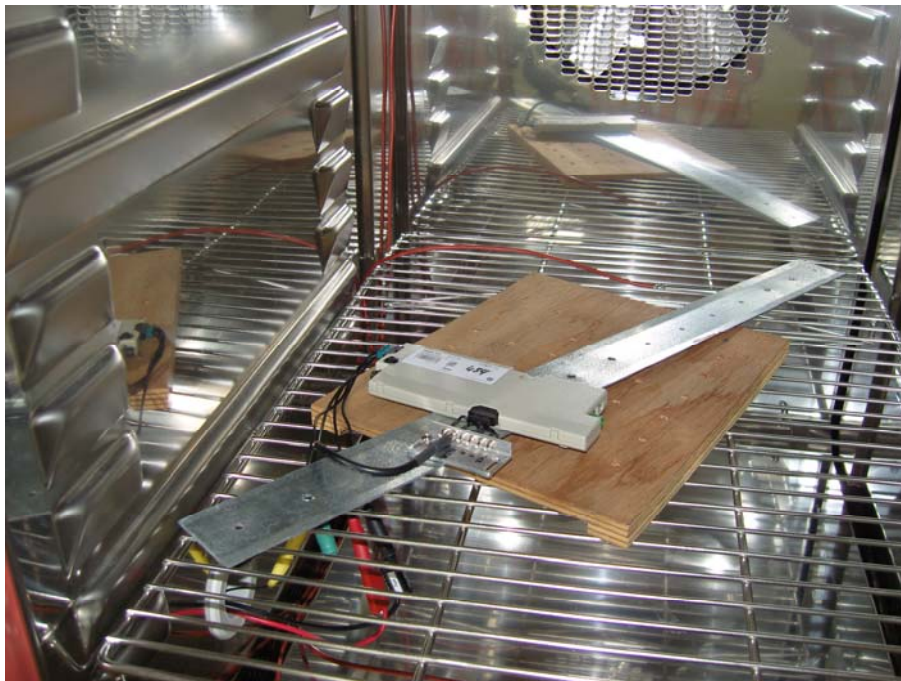
5.5 Bandwidth of momentary signals

For test instruments and accessories used see section 6 Part MB.

5.5.1 Description of the test location

Test location: AREA4

5.5.2 Photo documentation of the test set-up



5.5.3 Test result

Fundamental (MHz)	99% Bandwidth F1	99% Bandwidth F2	Measured bandwidth	Limit (kHz)
314.60	314.554251	314.579280	89.789 kHz	786.5
315.00	314.954125	315.043625	89.500 kHz	787.5

Limit according to RSS 210, Annex 1, section A1.1.3:

The 99% bandwidth shall be no wider than 0.25% of the center frequency for devices operating between 70 MHz - 900 MHz.

The requirements are **FULFILLED**.

Remarks: For detailed results, please see the test protocol below.

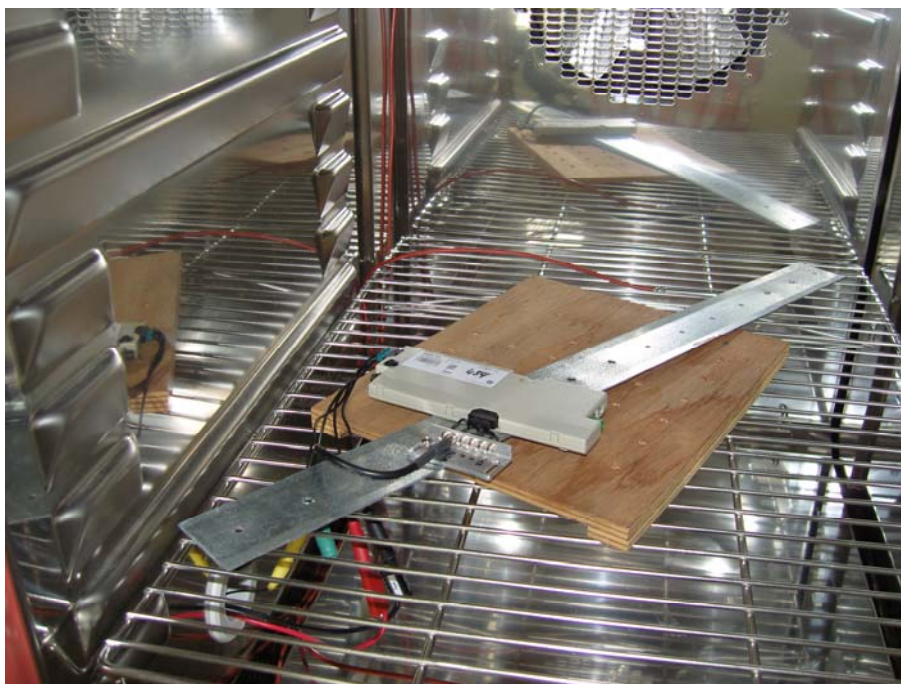
5.6 Frequency stability

For test instruments and accessories used see section 6 Part MB.

5.6.1 Description of the test location

Test location: AREA4

5.6.2 Photo documentation of the test set-up



5.6.3 Applicable standard

According to RSS 210, 7.2.4:

Transmitter frequency stability for licence-exempt LPDs shall be measured at temperature range of -30°C, 20°C and +50°C and at +20°C over a supply voltage variation of $\pm 15\%$.

5.6.4 Description of Measurement

The frequency tolerance is measured with the spectrum analyzer. The sweep points were set to maximum for higher the frequency resolution or the function "frequency counter" is used. The signal is unmodulated; the marker of the analyzer is set to maximum amplitude at normal temperature, the frequency was recorded. Then the maximum supply voltage is set and the marker of the analyzer is set to maximum amplitude. This procedure is done again for the minimum supply voltage. The EUT was now driven at normal supply voltage but in the climatic chamber to range the temperature from -30 °C to +50 °C. The drifting carrier is measured by setting the marker at the analyzer.

5.7 Signal deactivation

For test instruments and accessories used see section 6 Part MB.

5.7.1 Description of the test location

Test location: AREA4

5.7.2 Photo documentation of the test set-up



5.7.3 Applicable standard

According to RSS 210, Annex A, section A1.1.1:

A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter not exceeding the defined on time limit.

5.7.4 Description of Measurement

The duration of transmission is measured using an arbitrary waveform generator and an RF-Generator as stimulus for the receiver. The spectrum analyser displays the puls train in zero span mode. The EUT is only able to send the right puls train in normal mode. The stimulus shall provide with a usually reaction for this programmed puls train. The puls train exists from two pulses, a "button pressed acknowledge puls" and a "button released acknowledge puls". The puls train is programmed for CH1 and CH2 as "button pressed puls" (14.5 ms) + min blank time (45 ms) + "button released telegram" (37 ms) + blank time (4 ms) + "button released acknowledge puls" (14.5 ms). The puls train is recorded.