

## 5.2 Maximum peak output power

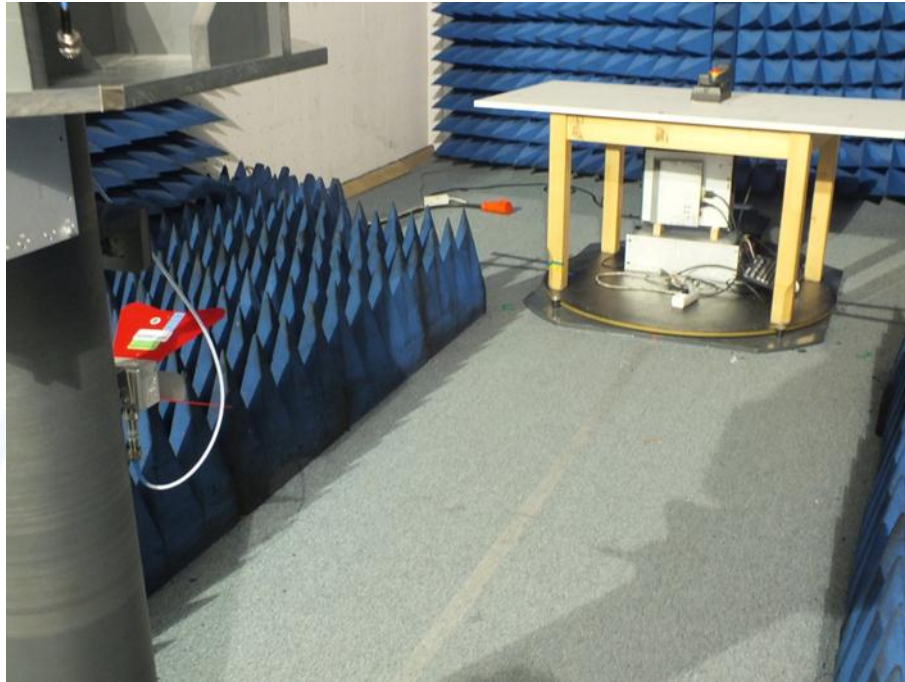
For test instruments and accessories used see section 6 Part CPR 3.

### 5.2.1 Description of the test location

Test location: Anechoic chamber 2  
Test distance: 3 m

### 5.2.2 Photo documentation of the test set-up

Anechoic chamber



### 5.2.3 Applicable standard

According to FCC Part 15, Section 15.247(b)(3):

For systems using digital modulation in the 2400-2483.5 MHz and 5725 – 5850 MHz bands, the maximum peak conducted output power of the transmitter shall not exceed 1 Watt. The limit is based on transmitting antennas of directional gain that do not exceed 6 dBi.

### 5.2.4 Description of Measurement

The output power is measured using a spectrum in a test setup following the procedures set out in KDB 558074 D01 for DTS. Measurement procedure PK2.

Spectrum analyser settings:

RBW: 1 MHz, VBW: 3 MHz, Detector: Max. peak, Trace: Max. hold, Sweep: Auto

The measured field strength is scaled by a bandwidth correction factor for the actual 6 dB bandwidth 1.6 MHz {BWCF=10log (1.6 MHz/1 MHz) = 2.0 dB} and converted to EIRP using the following formula:

$$\text{EIRP} = E - 95.2; (\text{dBm}) (\text{Distance } 3 \text{ m})$$

where: E in (dBμV/m)

## 5.4 Spurious emissions radiated

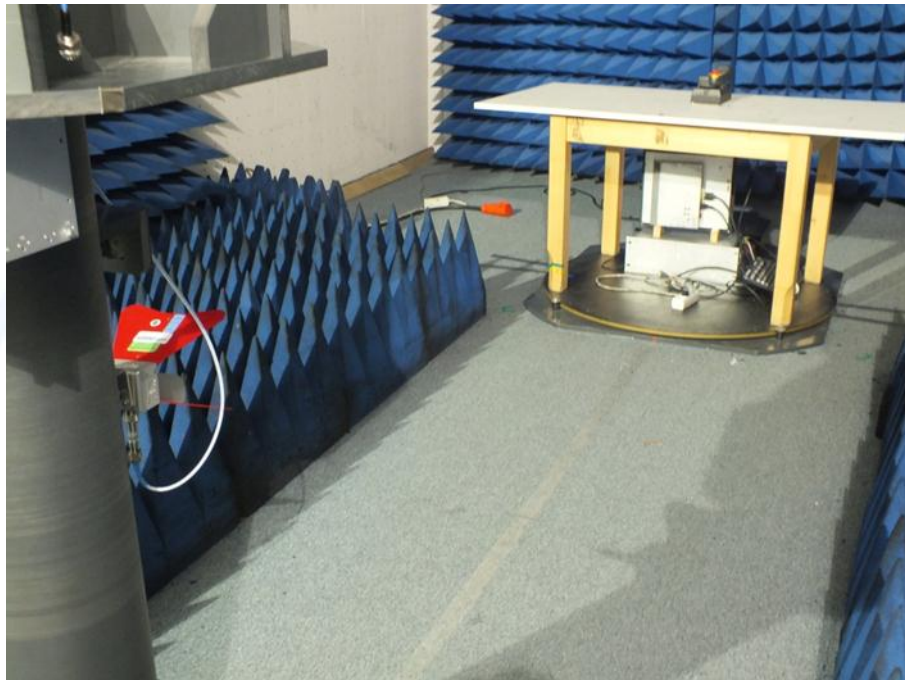
For test instruments and accessories used see section 6 Part **SER 2**, **SER 3**.

### 5.4.1 Description of the test location

Test location: OATS 1  
 Test location: Anechoic chamber 2  
 Test distance: 3 m

### 5.4.2 Photo documentation of the test set-up

Anechoic chamber



### 5.4.3 Applicable standard

According to FCC Part 15, Section 15.247(d):

In any 100 kHz bandwidth outside the frequency bands 2400 – 2483.50 MHz and 5725 – 5850 MHz, the digitally modulated radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or an radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limit specified in Section 15.209(a) (see Section 15.205(c)).

### 5.4.4 Description of Measurement

The radiated power of the spurious emission from the EUT is measured in a test setup following the procedures set out in ANSI C63.4. If the emission level of the EUT in peak mode complies with the average limit is 20 dB lower, then testing will be stopped and peak values of the EUT will be reported, otherwise the emission will be measured in average mode again and reported.

Spectrum analyser settings:

RBW: 100 kHz, VBW: 300 kHz, Detector: Max. peak, Trace: Max. hold, Sweep: Auto

## 5.5 Radiated emissions in restricted bands

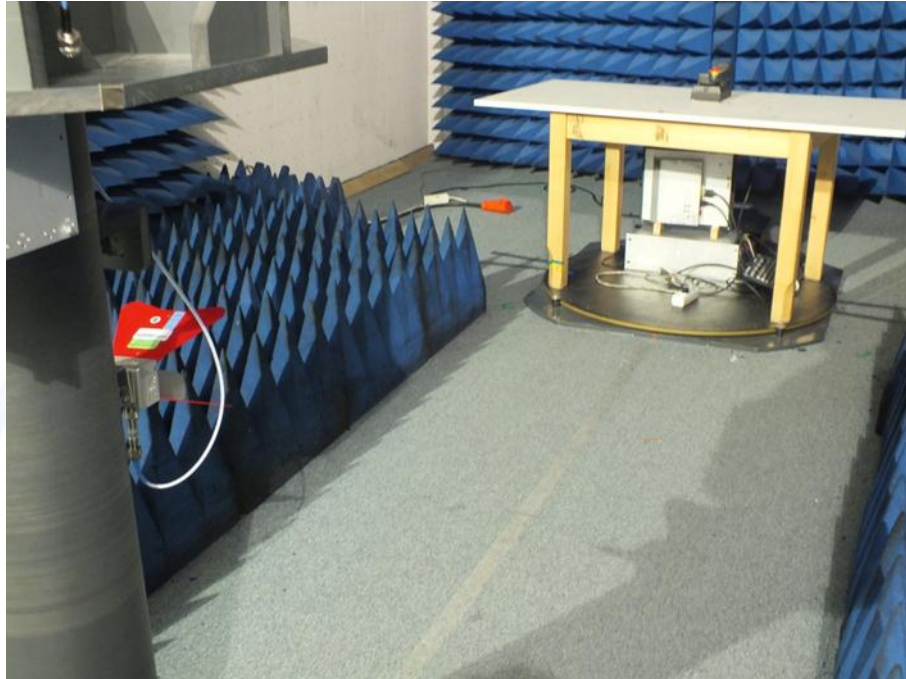
For test instruments and accessories used see section 6 Part **SER 3**.

### 5.5.1 Description of the test location

Test location: Anechoic chamber 2  
Test distance: 3 m

### 5.5.1 Photo documentation of the test set-up

Anechoic chamber



According to FCC Part 15, Section 15.205(a):

In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limit specified in Section 15.209(a).

### 5.5.2 Description of Measurement

The restricted bands are measured radiated. The span of the spectrum analyser is set wide enough to capture the restricted band and measure the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products which fall outside of the authorized band of operation. The restricted bands are measured falling emissions into it and the nearest restricted band are checked for emissions also the restricted band for the harmonics of the carrier.

Spectrum analyser settings:

PK: RBW: 1 MHz, VBW: 3 MHz, Sweep: Auto, Detector function: Peak