# 1 TEST CONDITIONS AND RESULTS

## 1.1 Conducted emissions

For test instruments and accessories used see section 6 Part A 4.

#### 1.1.1 Description of the test location

Test location: Shielded Room S2

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



#### 1.1.3 Applicable standard

According to FCC Part 15, Section 15.207(a):

Except as shown in paragraphs (b) and (c) of this Section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the given limits.

#### 1.1.4 Description of Measurement

The measurements are performed following the procedures set out in ANSI C63.4 described under item 4.4.3. If the minimum limit margin appears to be less than 20 dB with a peak mode measurement, the emissions are remeasured using a tuned receiver with quasi-peak and average detection and recorded on the data sheets.

#### 1.1.5 Test result

Frequency range:	0.15 MHz - 30 MHz
Min. limit margin	8.8 dB at 0.485 MHz

## 1.8 Radiated emissions in restricted bands

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

#### **1.8.1** Description of the test location

Test location:OATS 1Test location:Anechoic Chamber A2

Test distance: 3 metres

#### 1.8.2 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).

#### 1.8.3 Description of Measurement

The restricted bands are measured radiated following the methods are set out in the ANSI C93.4. 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 emisiions into it and the nearest restricted band are checked for emissions also the restricted band for the harmonics of the carrier. Spectrum analyser settings:

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

For the radiated test a test jig with the PCB antenna ACX3216-B2R7HAA is used. The antenna gain is 0.5 dBi.

#### 1.8.4 Test result

## WLAN Standard 802.11b

Power setting 10

Restricted band: 108 – 121.94 MHz Channel 6 (2437 MHz)

Frequency	Peak		Average	
	Value	Limit	Value	Limit
(MHz)	dB(µV/m)	dB(µV/m)	dB(µV/m)	dB(µV/m)
119.24	24.0	63.5	-	43.5

### 1.9 Receiver radiated emissions

For test instruments and accessories used see section 6 Part SER2 and SER3.

#### 1.9.1 Description of the test location

Test location:OATS 1Test location:Anechoic Chamber A2

Test distance: 3 metres

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

Open area test site (Test setup for 30 MHz - 1000 MHz)



Anechoic chamber (Test setup for 1000 MHz - 7500 MHz)

