





Annex 3 – STATEMENT  
to  
TEST REPORT  
No.: 2-20752095a/08

According to: FCC Regulations

Part 15.205 & 15.209  
Part 15.247

for  
Infineon Technologies  
Adams RF Module RFT V2.0

Laboratory Accreditation and Listings			
 DAT-P176/94-02	 Reg. No.: 99538 MRA US-EU 0003	 Industry Canada Reg. No.: IC 3465	 Reg. No.: R-2665, R-2666 C-2914, T-339
accredited according to DIN EN ISO/IEC 17025			
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### **1. APPLICANTS DECLARATION, PARAMETERS ACCORDING §15.247(A)(1) AND RSS 210, A8.1(B)3**

## **1. Applicants declaration, parameters according §15.247(a)(1) and RSS 210, A8.1(b)**

Following statements are made by the applicant for requirements on transmitters parameters as defined in the standards:

### **REQUIREMENT 1:**

*The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies.*

### **STATEMENT:**

The above requirement is implemented in the firmware of the device. A Pseudo-Random hopping sequence is used for each system. The sequence generation is based on a Maximum Length Linear Feedback Shift register (ML-LFSR)

### **REQUIREMENT 2:**

*Each frequency must be used equally on the average by each transmitter.*

### **STATEMENT:**

The above requirement is implemented in the firmware of the device. At least 7 bits of the 19 bit M sequences are used for selecting RF channels. To be fully compliant to FCC requirement each channel has to be equally accessed. If the 7 LSB value is larger than a dedicated number the channel will be skipped and the next one is used.

### **REQUIREMENT 3:**

*The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters.*

### **STATEMENT:**

The input section of the receiver contains a polyphase filter which will be justified by an internal algorithm to the carrier frequency of the transmitted channel +/- the defined bandwidth (1.6MHz)

### **REQUIREMENT 4:**

*The system receivers shall shift frequencies in synchronization with the transmitted signals.*

### **STATEMENT:**

The Host station of the system transmit a primitive polynomial. From this polynomial all accessories calculating the next channel. Disturbed channels can be disabled by an RSSI measurement and an update of the channel map. The polynomial will be provided by host station to the connected accessories and is for each host station unique. Within one system (1 host station + max. number of accessories per host) all devices have the same hopping.