

Produkte  
Products

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                           |                                                            |                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------|
| <b>Prüfbericht - Nr.: 14037858 001</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                           | <b>Seite 1 von 19</b>                                      |                                              |
| <i>Test Report No.:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                           | <i>Page 1 of 19</i>                                        |                                              |
| <b>Auftraggeber:</b><br><i>Client:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                           | Baby Stars GmbH<br>Uferstr. 19<br>Leipzig<br>Germany 04105 |                                              |
| <b>Gegenstand der Prüfung:</b><br><i>Test Item:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                           | WiFi speaker                                               |                                              |
| <b>Bezeichnung:</b><br><i>Identification:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                | snu:mee                                                                                                                                                                                                   | <b>Serien-Nr.:</b><br><i>Serial No.:</i>                   | Engineering sample                           |
| <b>Wareneingangs-Nr.:</b><br><i>Receipt No.:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                             | A000140139-007<br>A000145302-001                                                                                                                                                                          | <b>Eingangsdatum:</b><br><i>Date of Receipt:</i>           | 05.12.2014<br>18.12.2014                     |
| <b>Prüfört:</b><br><i>Testing Location:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                  | TÜV Rheinland Hong Kong Ltd.<br>8/F, First Group Centre, 14 Wang Tai Road, Kowloon Bay, Kowloon, Hong Kong<br><br>Hong Kong Productivity Council<br>HKPC Building, 78 Tat Chee Avenue, Kowloon, Hong Kong |                                                            |                                              |
| <b>Zustand des Prüfgegenstandes bei Anlieferung:</b><br><i>Condition of test item at delivery:</i>                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                           | Test samples are not damaged and suitable for testing.     |                                              |
| <b>Prüfgrundlage:</b><br><i>Test Specification:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                          | FCC Part 15 Subpart C<br>ANSI C63.4-2009                                                                                                                                                                  |                                                            |                                              |
| <b>Prüfergebnis:</b><br><i>Test Results:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Das vorstehend beschriebene Gerät wurde geprüft und entspricht oben genannter Prüfgrundlage.<br><br>The above mentioned product was tested and <b>passed</b> .                                            |                                                            |                                              |
| <b>Prüflaboratorium:</b><br><i>Testing Laboratory:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                       | TÜV Rheinland Hong Kong Ltd.<br>8 - 10/F., Goldin Financial Global Square, 7 Wang Tai Road, Kowloon Bay, Kowloon, Hong Kong                                                                               |                                                            |                                              |
| <b>geprüft/ tested by:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                           | <b>kontrolliert/ reviewed by:</b>                          |                                              |
| 23.06.2015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Joey Leung<br>Project Engineer                                                                                                                                                                            | 23.06.2015                                                 | Benny Lau<br>Senior Project Manager          |
| <b>Datum</b><br><i>Date</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Name/Stellung</b><br><i>Name/Position</i>                                                                                                                                                              | <b>Datum</b><br><i>Date</i>                                | <b>Name/Stellung</b><br><i>Name/Position</i> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Unterschrift</b><br><i>Signature</i>                                                                                                                                                                   |                                                            | <b>Unterschrift</b><br><i>Signature</i>      |
| <b>Sonstiges:</b><br><i>Other Aspects</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                           | FCC ID: 2ADSR-SNUMEE-01                                    |                                              |
| <b>Abkürzungen:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                           | <b>Abbreviations:</b>                                      |                                              |
| P(ass) = entspricht Prüfgrundlage                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                           | P(ass) = passed                                            |                                              |
| F(ail) = entspricht nicht Prüfgrundlage                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                           | F(ail) = failed                                            |                                              |
| N/A = nicht anwendbar                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                           | N/A = not applicable                                       |                                              |
| N/T = nicht getestet                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                           | N/T = not tested                                           |                                              |
| <p><b>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</b><br/> <i>This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.</i></p> |                                                                                                                                                                                                           |                                                            |                                              |

## Table of Content

|                                                                                  | Page         |
|----------------------------------------------------------------------------------|--------------|
| <b>Cover Page .....</b>                                                          | <b>1</b>     |
| <b>Table of Content .....</b>                                                    | <b>2</b>     |
| <b>Product information.....</b>                                                  | <b>4</b>     |
| Manufacturers declarations .....                                                 | 4            |
| Product function and intended use .....                                          | 4            |
| Submitted documents.....                                                         | 4            |
| Independent Operation Modes .....                                                | 4            |
| Related Submittal(s) Grants .....                                                | 5            |
| Remark .....                                                                     | 5            |
| <b>Test Set-up and Operation Mode.....</b>                                       | <b>6</b>     |
| Principle of Configuration Selection .....                                       | 6            |
| Test Operation and Test Software.....                                            | 6            |
| Special Accessories and Auxiliary Equipment.....                                 | 6            |
| Countermeasures to achieve EMC Compliance.....                                   | 6            |
| <b>Test Methodology .....</b>                                                    | <b>7</b>     |
| Radiated Emission .....                                                          | 7            |
| Field Strength Calculation.....                                                  | 7            |
| <b>List of Test and Measurement Instruments.....</b>                             | <b>8</b>     |
| <b>Results FCC Part 15 – Subpart C .....</b>                                     | <b>9</b>     |
| FCC 15.203 – Antenna Requirement 1.....                                          | Pass..... 9  |
| FCC 15.204 – Antenna Requirement 2.....                                          | N/A..... 9   |
| FCC 15.207 – Conducted Emission on AC Mains .....                                | Pass..... 9  |
| FCC 15.247 (a)(2) – 6dB Bandwidth Measurement .....                              | Pass..... 10 |
| FCC 15.247(b)(3) – Maximum Peak Conducted Output Power .....                     | Pass..... 11 |
| FCC 15.247(e) – Power Spectral Density.....                                      | Pass..... 12 |
| FCC 15.247(d) – Spurious Conducted Emissions.....                                | Pass..... 13 |
| FCC 15.247 (d) – Band edge compliance of conducted emissions.....                | Pass..... 15 |
| FCC 15.247(d) or 15.205 – Radiated Emissions in Restricted Frequency Bands ..... | Pass..... 16 |
| Appendix 1 – Test protocols .....                                                | 69 pages     |
| Appendix 2 – Test setup .....                                                    | 3 pages      |

|                                           |          |
|-------------------------------------------|----------|
| Appendix 3 – Photo documentation .....    | 5 pages  |
| Appendix 4 – Product documentation.....   | 36 pages |
| Appendix 5 – RF exposure information..... | 2 pages  |

## Product information

### Manufacturers declarations

|                                         | <b>Transceiver</b>                          |
|-----------------------------------------|---------------------------------------------|
| Operating frequency range               | 2412 - 2462 MHz                             |
| Type of modulation                      | DSSS, OFDM, MCS0-7                          |
| Number of channels                      | 11                                          |
| Channel separation                      | 5 MHz                                       |
| Type of antenna                         | PCB Antenna                                 |
| Antenna gain (dBi)                      | 2.0 dBi                                     |
| Power level                             | fix                                         |
| Type of equipment                       | WIFI speaker                                |
| Connection to public utility power line | No                                          |
| Nominal voltage                         | 3.7 VDC (internal battery)<br>5.0 VDC (USB) |
| Independent Operation Modes             | Transmitting mode                           |

### Product function and intended use

The equipment under test (EUT) is a WIFI speaker. It is powered by 3.7VDC internal battery or 5VDC by USB charging cable. It is designed to amplify audio signals and to work as a baby monitor. It is intended for private use and is not fit for any commercial purposes.

It has a factory-made setting of 6 classic slumber tunes and is equipped with a further 7 relaxing sound tunes. Users can operate the EUT by using the integrated control buttons or through the App on smartphone or tablet computer when establishing a WiFi connection.

When the WiFi functionality is switched on, the EUT should be kept separation distance between the radiator and the user or by-stander at least 20cm.

FCC ID: 2ADSR-SNUMEE-01

| <b>Models</b> | <b>Product description</b> |
|---------------|----------------------------|
| snu:mee       | WIFI speaker               |

### Submitted documents

Circuit Diagram  
Block Diagram  
Bill of material  
User manual  
Label

### Independent Operation Modes

The basic operation mode is WIFI transmit mode.

For further information refer to User Manual

### **Related Submittal(s) Grants**

This is a single application for certification of the single transmitter.

### **Remark**

The EUT uses 2 PCB antennas. The EUT automatically configure the antennas used in different modes of operation.

In 802.11-B or 802.11-G mode, only one antenna (namely DAC0) will be used.

In 802.11-N mode, both antennas (namely DAC0 and DAC1) will be used.

## Test Set-up and Operation Mode

### Principle of Configuration Selection

**Emission:** The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

### Test Operation and Test Software

Test operation should refer to test methodology.

- Special software is provided by the grantee to set the device to operate in a fixed frequency channel and maximum RF output power level declared by manufacturer.
- Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and data rate.

### Special Accessories and Auxiliary Equipment

The product has been tested together with the following additional accessories:

- none

### Countermeasures to achieve EMC Compliance

- none

## Test Methodology

### Radiated Emission

The radiated emission measurements were performed according to the procedures in ANSI C63.4-2009.

The equipment under test (EUT) was placed at the middle of the 80 cm height turntable, and the turntable is 3 meters far from the measuring antenna. During the testing, the EUT was operated standalone and arranged for maximum emissions. The EUT was tested in three orthogonal planes.

The investigation is performed with the EUT rotated 360°, the antenna height scanned between 1m and 4m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations. Repeat the measurement steps until the maximum emissions were obtained.

All radiated tests were performed at an antenna to EUT with 3 meters distance, unless stated otherwise in particular parts of this test report.

### Field Strength Calculation

The field strength at 3 m was established by adding the meter reading of the spectrum analyzer to the factors associated with antenna correction factor, cable loss, preamplifiers and filter attenuation.

The equation is expressed as follow:

$$FS = R + AF + CF + FA - PA$$

Where FS = Field Strength in dBuV/m at 3 meters.  
R = Reading of Spectrum Analyzer in dBuV.  
AF = Antenna Factor in dB.  
CF = Cable Attenuation Factor in dB.  
FA = Filter Attenuation Factor in dB.  
PA = Preamplifier Factor in dB.

FA and PA are only be used for the measuring frequency above 1 GHz.

## List of Test and Measurement Instruments

**Hong Kong Productivity Council (Registration number: 90656)**

### Radiated Emission

| Equipment                                  | Manufacturer | Type        | S/N          | Due Date    |
|--------------------------------------------|--------------|-------------|--------------|-------------|
| Semi-anechoic Chamber                      | EMC209       | Frankonia   | Nil          | 14 Apr 2016 |
| Cable                                      | EMC 604      | Hubersuhner | SUCOFLEX 104 | 31 Mar 2016 |
| Test Receiver                              | EMC567       | R & S       | ESU26        | 12 Feb 2016 |
| Bi-conical Antenna                         | EMC577       | R & S       | HK116        | 22 Aug 2015 |
| Coaxial cable                              | EMC624       | Harbour     | LL335        | 10 Jun 2016 |
| Microwave amplifier 0.5-26.5GHz, 25dB gain | EMC557       | HP          | 83017A       | 17 Jul 2016 |
| High Pass Filter (cutoff freq. =1000MHz)   | EMC572       | Trilithic   | 23042        | 28 Oct 2015 |
| Horn Antenna                               | EMC 185      | EMCO        | 3115         | 07 Aug 2015 |

### TÜV Rheinland Hong Kong Ltd

#### Radio Test

| Equipment         | Manufacturer                                           | Type     | S/N           | Due Date    |
|-------------------|--------------------------------------------------------|----------|---------------|-------------|
| Spectrum Analyzer | R & S                                                  | FSP30    | 100007        | 12 Jan 2017 |
| Power meter       | Dijkstra Advice,<br>Research & EMC<br>Instruments B.V. | RPR3006W | 13I00030SN079 | 26 Jul 2015 |

#### AC Mains Conducted Emission

| Equipment     | Manufacturer | Type   | S/N    | Due Date    |
|---------------|--------------|--------|--------|-------------|
| Test Receiver | R & S        | ESR3   | 101833 | 12 Sep 2015 |
| LISN          | R & S        | ENV216 | 100273 | 05 Feb 2016 |
| EMC32         | R & S        | v9.12  | N/A    | N/A         |

## Results FCC Part 15 – Subpart C

|                                                                                                                     |                                                                                            |             |
|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------|
| <b>FCC 15.203 – Antenna Requirement 1</b>                                                                           |                                                                                            | <b>Pass</b> |
| <b>FCC Requirement:</b> No antenna other than that furnished by the responsible party shall be used with the device |                                                                                            |             |
| <b>Results:</b>                                                                                                     | a) Antenna type: PCB antenna<br>b) Manufacturer and model no: N/A<br>c) Peak Gain: 2.0 dBi |             |
| <b>Verdict:</b>                                                                                                     | Pass                                                                                       |             |

|                                                                                                 |                                                  |            |
|-------------------------------------------------------------------------------------------------|--------------------------------------------------|------------|
| <b>FCC 15.204 – Antenna Requirement 2</b>                                                       |                                                  | <b>N/A</b> |
| <b>FCC Requirement:</b> Provide information for every antenna proposed for the use with the EUT |                                                  |            |
| <b>Results:</b>                                                                                 | The EUT uses printed circuit board antenna only. |            |
| <b>Verdict:</b>                                                                                 | N/A                                              |            |

|                                                                                                                                                                                                                                                                                                      |                 |                 |              |                 |                 |         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|--------------|-----------------|-----------------|---------|
| FCC 15.207 – Conducted Emission on AC Mains                                                                                                                                                                                                                                                          |                 |                 |              |                 |                 | Pass    |
| Test Specification : ANSI C63.4 – 2009<br>Mode of operation : Charging + music playing with WiFi connected mode<br>Port of testing : AC Mains input port of power supply<br>Detector : Quasi-peak and Average<br>RBW : 9 kHz<br>Supply voltage : 120Vac 60Hz<br>Temperature : 23°C<br>Humidity : 50% |                 |                 |              |                 |                 |         |
| Requirement: 15.207(a)                                                                                                                                                                                                                                                                               |                 |                 |              |                 |                 |         |
| Results: Pass                                                                                                                                                                                                                                                                                        |                 |                 |              |                 |                 |         |
| Live measurement                                                                                                                                                                                                                                                                                     |                 |                 |              |                 |                 |         |
| Frequency range (MHz)                                                                                                                                                                                                                                                                                | Frequency (MHz) | Quasi-peak dBµV | Average dBµV | Limit QP (dBµV) | Limit AV (dBµV) | Verdict |
| 0,15 – 0,5                                                                                                                                                                                                                                                                                           | 0.150           | 51.0            | 33.9         | 66 - 56         | 56 - 46         | Pass    |
| > 0,5 - 5                                                                                                                                                                                                                                                                                            | No peak found   | ---             | ---          | 56              | 46              | Pass    |
| > 5 - 30                                                                                                                                                                                                                                                                                             | No peak found   | ---             | ---          | 60              | 50              | Pass    |
| Neutral measurement                                                                                                                                                                                                                                                                                  |                 |                 |              |                 |                 |         |
| Frequency range (MHz)                                                                                                                                                                                                                                                                                | Frequency (MHz) | Quasi-peak dBµV | Average dBµV | Limit QP (dBµV) | Limit AV (dBµV) | Verdict |
| 0,15 – 0,5                                                                                                                                                                                                                                                                                           | No peak found   | ---             | ---          | 66 - 56         | 56 - 46         | Pass    |
| > 0,5 - 5                                                                                                                                                                                                                                                                                            | No peak found   | ---             | ---          | 56              | 46              | Pass    |
| > 5 - 30                                                                                                                                                                                                                                                                                             | No peak found   | ---             | ---          | 60              | 50              | Pass    |

**Results:** Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and data rate.

The radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150kHz to 30MHz does not exceed the limits. For test Results plots refer to Appendix 1, page 2-3.

**FCC 15.247 (a)(2) – 6dB Bandwidth Measurement****Pass**

**FCC Requirement:** Systems using digital modulation techniques may operate in the 902 – 928 MHz, 2400 – 2483.5 MHz, and 5725 – 5850 MHz bands. The minimum 6dB bandwidth shall be at least 500kHz.

Test Specification : KDB 558074 D01 DTS Measurement Guidance v03r02 section 8.1 Option 1  
 Mode of operation : TX mode  
 Port of testing : Temporary antenna port  
 Detector : Peak  
 RBW/VBW : 100KHz/ 300KHz  
 Supply voltage : 3.3VDC from DC power supply  
 Temperature : 23°C  
 Humidity : 50%

**Results:** For test protocols please refer to Appendix 1, page 4-9.

**802.11b**

| Channel frequency (MHz) | 6 dB left (MHz) | 6 dB right (MHz) | 6dB bandwidth (MHz) |
|-------------------------|-----------------|------------------|---------------------|
| 2412                    | 2406.960        | 2417.040         | 10.08               |
| 2437                    | 2431.920        | 2442.120         | 10.20               |
| 2462                    | 2456.960        | 2467.080         | 10.12               |

**802.11g**

| Channel frequency (MHz) | 6 dB left (MHz) | 6 dB right (MHz) | 6dB bandwidth (MHz) |
|-------------------------|-----------------|------------------|---------------------|
| 2412                    | 2403.800        | 2420.240         | 16.44               |
| 2437                    | 2428.800        | 2445.240         | 16.44               |
| 2462                    | 2453.800        | 2470.240         | 16.44               |

**802.11n (20MHz)**

| Channel frequency (MHz) | 6 dB left (MHz) | 6 dB right (MHz) | 6dB bandwidth (MHz) |
|-------------------------|-----------------|------------------|---------------------|
| 2412                    | 2403.240        | 2420.760         | 17.52               |
| 2437                    | 2428.240        | 2445.800         | 17.56               |
| 2462                    | 2453.280        | 2470.600         | 17.32               |

**802.11n (40MHz)**

| Channel frequency (MHz) | 6 dB left (MHz) | 6 dB right (MHz) | 6dB bandwidth (MHz) |
|-------------------------|-----------------|------------------|---------------------|
| 2422                    | 2403.840        | 2439.920         | 36.08               |

|      |          |          |       |
|------|----------|----------|-------|
| 2437 | 2418.840 | 2455.160 | 36.32 |
| 2452 | 2433.760 | 2470.160 | 36.40 |

**FCC 15.247(b)(3) – Maximum Peak Conducted Output Power****Pass**

**FCC Requirement:** For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850MHz bands: 1 Watt (30dBm)

Test Specification : KDB 558074 D01 DTS Measurement Guidance v03r02 section 9.2

Mode of operation : TX mode

Port of testing : Temporary antenna port

Detector : Peak

Supply voltage : 3.3VDC from DC power supply

Temperature : 23°C

Humidity : 50%

**Results:** For test protocols please refer to Appendix 1, page 10-18.

**802.11b**

| Channel frequency (MHz) | Maximum peak output power (dBm) | Cable attenuation (dB) | Output power (dBm) | Limit (W/dBm) | Verdict |
|-------------------------|---------------------------------|------------------------|--------------------|---------------|---------|
| 2412                    | 14.61                           | 0.0                    | 14.61              | 1 / 30.0      | Pass    |
| 2437                    | 14.42                           | 0.0                    | 14.42              | 1 / 30.0      | Pass    |
| 2462                    | 14.16                           | 0.0                    | 14.16              | 1 / 30.0      | Pass    |

**802.11g**

| Channel frequency (MHz) | Maximum peak output power (dBm) | Cable attenuation (dB) | Output power (dBm) | Limit (W/dBm) | Verdict |
|-------------------------|---------------------------------|------------------------|--------------------|---------------|---------|
| 2412                    | 4.88                            | 0.0                    | 4.88               | 1 / 30.0      | Pass    |
| 2437                    | 4.33                            | 0.0                    | 4.33               | 1 / 30.0      | Pass    |
| 2462                    | 3.86                            | 0.0                    | 3.86               | 1 / 30.0      | Pass    |

**802.11n (20MHz)**

| Channel frequency (MHz) | Maximum peak output power at DAC0 (dBm) | Maximum peak output power at DAC1 (dBm) | Cable attenuation (dB) | Resultant Output power (dBm) | Limit (W/dBm) | Verdict |
|-------------------------|-----------------------------------------|-----------------------------------------|------------------------|------------------------------|---------------|---------|
| 2412                    | 3.85                                    | 3.32                                    | 0.0                    | 6.60                         | 1 / 30.0      | Pass    |
| 2437                    | 3.25                                    | 2.62                                    | 0.0                    | 5.96                         | 1 / 30.0      | Pass    |
| 2462                    | 2.92                                    | 1.90                                    | 0.0                    | 5.45                         | 1 / 30.0      | Pass    |

**802.11n (40MHz)**

| Channel frequency (MHz) | Maximum peak output power at DAC0 (dBm) | Maximum peak output power at DAC1 (dBm) | Cable attenuation (dB) | Resultant Output power (dBm) | Limit (W/dBm) | Verdict |
|-------------------------|-----------------------------------------|-----------------------------------------|------------------------|------------------------------|---------------|---------|
| 2422                    | -1.84                                   | -2.08                                   | 0.0                    | 1.05                         | 1 / 30.0      | Pass    |
| 2437                    | -2.00                                   | -2.47                                   | 0.0                    | 0.78                         | 1 / 30.0      | Pass    |
| 2452                    | -2.08                                   | -2.76                                   | 0.0                    | 0.60                         | 1 / 30.0      | Pass    |

|                                                                                                                                                                                                                                                                                                                               |                                    |                                    |                                      |                  |         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------|---------|
| FCC 15.247(e) – Power Spectral Density                                                                                                                                                                                                                                                                                        |                                    |                                    | Pass                                 |                  |         |
| FCC Requirement: For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.                                                                                    |                                    |                                    |                                      |                  |         |
| Test Specification : KDB 558074 D01 DTS Measurement Guidance v03r02 section 10.2<br>Mode of operation : TX mode<br>Port of testing : Temporary antenna port<br>Detector : Peak<br>RBW/VBW : ≥100 KHz / ≥3xRBW<br>span : ≥1.5 x DTS BW<br>Supply voltage : 3.3VDC from DC power supply<br>Temperature : 23°C<br>Humidity : 50% |                                    |                                    |                                      |                  |         |
| Results: For test protocols please refer to Appendix 1, page 19-27.                                                                                                                                                                                                                                                           |                                    |                                    |                                      |                  |         |
| 802.11b                                                                                                                                                                                                                                                                                                                       |                                    |                                    |                                      |                  |         |
| Channel frequency (MHz)                                                                                                                                                                                                                                                                                                       | Power density (dBm/100kHz)         | Limit (dBm/3kHz)                   | Verdict                              |                  |         |
| 2412                                                                                                                                                                                                                                                                                                                          | -3.27                              | 8.0                                | Pass                                 |                  |         |
| 2437                                                                                                                                                                                                                                                                                                                          | -3.46                              | 8.0                                | Pass                                 |                  |         |
| 2462                                                                                                                                                                                                                                                                                                                          | -3.90                              | 8.0                                | Pass                                 |                  |         |
| 802.11g                                                                                                                                                                                                                                                                                                                       |                                    |                                    |                                      |                  |         |
| Channel frequency (MHz)                                                                                                                                                                                                                                                                                                       | Power density (dBm/100kHz)         | Limit (dBm/3kHz)                   | Verdict                              |                  |         |
| 2412                                                                                                                                                                                                                                                                                                                          | -14.19                             | 8.0                                | Pass                                 |                  |         |
| 2437                                                                                                                                                                                                                                                                                                                          | -14.59                             | 8.0                                | Pass                                 |                  |         |
| 2462                                                                                                                                                                                                                                                                                                                          | -14.86                             | 8.0                                | Pass                                 |                  |         |
| 802.11n (20MHz)                                                                                                                                                                                                                                                                                                               |                                    |                                    |                                      |                  |         |
| Channel frequency (MHz)                                                                                                                                                                                                                                                                                                       | Power density at DAC0 (dBm/100kHz) | Power density at DAC1 (dBm/100kHz) | Resultant power density (dBm/100kHz) | Limit (dBm/3kHz) | Verdict |
| 2412                                                                                                                                                                                                                                                                                                                          | -16.44                             | -17.31                             | -13.84                               | 8.0              | Pass    |
| 2437                                                                                                                                                                                                                                                                                                                          | -16.45                             | -17.51                             | -13.94                               | 8.0              | Pass    |
| 2462                                                                                                                                                                                                                                                                                                                          | -17.34                             | -18.23                             | -14.75                               | 8.0              | Pass    |
| 802.11n (40MHz)                                                                                                                                                                                                                                                                                                               |                                    |                                    |                                      |                  |         |
| Channel frequency (MHz)                                                                                                                                                                                                                                                                                                       | Power density at DAC0 (dBm/100kHz) | Power density at DAC1 (dBm/100kHz) | Resultant power density (dBm/100kHz) | Limit (dBm/3kHz) | Verdict |
| 2422                                                                                                                                                                                                                                                                                                                          | -16.96                             | -17.86                             | -14.38                               | 8.0              | Pass    |
| 2437                                                                                                                                                                                                                                                                                                                          | -22.04                             | -22.41                             | -19.21                               | 8.0              | Pass    |
| 2452                                                                                                                                                                                                                                                                                                                          | -24.04                             | -24.90                             | -21.44                               | 8.0              | Pass    |

| FCC 15.247(d) – Spurious Conducted Emissions                                                                                                                                                                                                                                                                                                                                                                                           |                          |                      |                       |            | Pass    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------|-----------------------|------------|---------|
| Test Specification : KDB 558074 D01 DTS Measurement Guidance v03r02 section 11.1<br>Mode of operation : TX mode<br>Port of testing : Temporary antenna port<br>Detector : Peak<br>RBW/VBW : 100 kHz / 300 kHz<br>Supply voltage : 3.3VDC from DC power supply<br>Temperature : 23 °C<br>Humidity : 50 %                                                                                                                                |                          |                      |                       |            |         |
| <b>FCC Requirement:</b> In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the 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 a radiated measurement. |                          |                      |                       |            |         |
| <b>Results:</b> Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and data rate.<br><br>Only the worst cases is shown below. For test protocols refer to Appendix 1, page 28-63.                                                                                                                                                                               |                          |                      |                       |            |         |
| <b>802.11b</b>                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                      |                       |            |         |
| Channel frequency (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                | Spurious frequency (MHz) | Spurious Level (dBm) | Reference value (dBm) | Delta (dB) | Verdict |
| 2412                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4833.006                 | -36.84               | 5.97                  | -42.81     | Pass    |
| 2437                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4860.006                 | -36.40               | 5.62                  | -42.02     | Pass    |
| 2462                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4914.006                 | -37.96               | 5.60                  | -43.56     | Pass    |
| <b>802.11g</b>                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                      |                       |            |         |
| Channel frequency (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                | Spurious frequency (MHz) | Spurious Level (dBm) | Reference value (dBm) | Delta (dB) | Verdict |
| 2412                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4806.006                 | -44.96               | 4.53                  | -49.49     | Pass    |
| 2437                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4860.006                 | -44.84               | 4.07                  | -48.91     | Pass    |
| 2462                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4914.006                 | -45.75               | 3.58                  | -49.33     | Pass    |
| <b>802.11n (20MHz, DAC0)</b>                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                      |                       |            |         |
| Channel frequency (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                | Spurious frequency (MHz) | Spurious Level (dBm) | Reference value (dBm) | Delta (dB) | Verdict |
| 2412                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4806.006                 | -41.20               | 2.30                  | -43.50     | Pass    |
| 2437                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4860.006                 | -42.80               | 1.80                  | -44.60     | Pass    |
| 2462                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4914.006                 | -43.79               | 1.20                  | -44.99     | Pass    |
| <b>802.11n (20MHz, DAC1)</b>                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                      |                       |            |         |
| Channel frequency (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                | Spurious frequency (MHz) | Spurious Level (dBm) | Reference value (dBm) | Delta (dB) | Verdict |
| 2412                                                                                                                                                                                                                                                                                                                                                                                                                                   | 3213.007                 | -44.16               | 1.50                  | -45.66     | Pass    |
| 2437                                                                                                                                                                                                                                                                                                                                                                                                                                   | 7371.004                 | -44.32               | 1.05                  | -45.37     | Pass    |
| 2462                                                                                                                                                                                                                                                                                                                                                                                                                                   | 3267.007                 | -43.99               | 0.30                  | -44.29     | Pass    |

| 802.11n (40MHz, DAC0)   |                          |                      |                       |            |         |
|-------------------------|--------------------------|----------------------|-----------------------|------------|---------|
| Channel frequency (MHz) | Spurious frequency (MHz) | Spurious Level (dBm) | Reference value (dBm) | Delta (dB) | Verdict |
| 2422                    | 4833.006                 | -45.58               | -0.80                 | -44.78     | Pass    |
| 2437                    | 7560.004                 | -46.10               | -1.20                 | -44.90     | Pass    |
| 2452                    | 4266.006                 | -45.44               | 0.30                  | -45.74     | Pass    |
| 802.11n (40MHz, DAC1)   |                          |                      |                       |            |         |
| Channel frequency (MHz) | Spurious frequency (MHz) | Spurious Level (dBm) | Reference value (dBm) | Delta (dB) | Verdict |
| 2422                    | 3213.007                 | -44.00               | -1.30                 | -42.70     | Pass    |
| 2437                    | 3240.007                 | -44.11               | -1.70                 | -42.41     | Pass    |
| 2452                    | 3618.007                 | -45.34               | -2.10                 | -43.24     | Pass    |

| <b>FCC 15.247 (d) – Band edge compliance of conducted emissions</b>                                                                                                                                                                                                                                                                                                                                                                    |                          |                      |                       |            | <b>Pass</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------|-----------------------|------------|-------------|
| Test Specification : KDB 558074 D01 DTS Measurement Guidance v03r02<br>Mode of operation : Tx mode<br>Port of testing : Temporary antenna port<br>Detector : Peak<br>RBW/VBW : 100 kHz / 300 kHz<br>Supply voltage : 3.3VDC from DC power supply<br>Temperature : 23°C<br>Humidity : 50%                                                                                                                                               |                          |                      |                       |            |             |
| <b>FCC Requirement:</b> In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the 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 a radiated measurement. |                          |                      |                       |            |             |
| <b>Results:</b> Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and data rate.<br><br>For test protocols refer to Appendix 1, page 64-69.                                                                                                                                                                                                                    |                          |                      |                       |            |             |
| <b>802.11b</b>                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                      |                       |            |             |
| Channel frequency (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                | Spurious frequency (MHz) | Spurious Level (dBm) | Reference value (dBm) | Delta (dB) | Verdict     |
| 2412                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2400.000                 | -37.06               | 2.89                  | -39.95     | Pass        |
| 2462                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2483.500                 | -38.91               | 2.25                  | -41.16     | Pass        |
| <b>802.11g</b>                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                      |                       |            |             |
| Channel frequency (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                | Spurious frequency (MHz) | Spurious Level (dBm) | Reference value (dBm) | Delta (dB) | Verdict     |
| 2412                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2400.000                 | -35.34               | 1.20                  | -36.54     | Pass        |
| 2462                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2483.500                 | -35.31               | 0.79                  | -36.10     | Pass        |
| <b>802.11n (20MHz) ANT0</b>                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                      |                       |            |             |
| Channel frequency (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                | Spurious frequency (MHz) | Spurious Level (dBm) | Reference value (dBm) | Delta (dB) | Verdict     |
| 2412                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2400.000                 | -37.35               | -0.65                 | -36.70     | Pass        |
| 2462                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2483.500                 | -39.35               | -1.52                 | -37.83     | Pass        |
| <b>802.11n (20MHz) ANT1</b>                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                      |                       |            |             |
| Channel frequency (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                | Spurious frequency (MHz) | Spurious Level (dBm) | Reference value (dBm) | Delta (dB) | Verdict     |
| 2412                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2400.000                 | -36.72               | -1.28                 | -35.44     | Pass        |
| 2462                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2483.500                 | -39.94               | -2.98                 | -36.96     | Pass        |

| 802.11n (40MHz) ANT0    |                          |                      |                       |            |         |
|-------------------------|--------------------------|----------------------|-----------------------|------------|---------|
| Channel frequency (MHz) | Spurious frequency (MHz) | Spurious Level (dBm) | Reference value (dBm) | Delta (dB) | Verdict |
| 2422                    | 2400.000                 | -36.57               | -4.23                 | -32.34     | Pass    |
| 2452                    | 2483.500                 | -39.95               | -1.52                 | -38.43     | Pass    |
| 802.11n (40MHz) ANT1    |                          |                      |                       |            |         |
| Channel frequency (MHz) | Spurious frequency (MHz) | Spurious Level (dBm) | Reference value (dBm) | Delta (dB) | Verdict |
| 2422                    | 2400.000                 | -38.05               | -4.15                 | -33.90     | Pass    |
| 2452                    | 2483.500                 | -39.80               | -6.10                 | -33.70     | Pass    |

|                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                        |                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| <b>FCC 15.247(d) or 15.205 – Radiated Emissions in Restricted Frequency Bands</b>                                                                                                                                                                                                                                                     | <b>Pass</b>                                                                                                                                                                                                                                                                            |                                   |
| Test Specification : ANSI C63.4 – 2009<br>Mode of operation : TX mode<br>Port of testing : Enclosure<br>Detector : Peak<br>Frequency range : 9kHz – 25GHz<br>RBW/VBW : 100 kHz / 300 kHz for f < 1 GHz<br>1 MHz / 3 MHz for f > 1 GHz<br>Supply voltage : 3.7V fully charged internal battery<br>Temperature : 23°C<br>Humidity : 50% |                                                                                                                                                                                                                                                                                        |                                   |
| <b>FCC Requirement:</b> In any 100kHz bandwidth outside the frequency band at least 20dB below the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, as defined in section15.205(a), must also comply with the radiated emission limits specified in section 15.205(c).         |                                                                                                                                                                                                                                                                                        |                                   |
| <b>Results:</b>                                                                                                                                                                                                                                                                                                                       | Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and data rate.<br><br>All three transmit frequency modes comply with the field strength within the restricted bands. There is no spurious found below 30MHz. |                                   |
| Mode: 802.11b 2412MHz TX Vertical Polarization                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                        |                                   |
| <b>Freq<br/>MHz</b>                                                                                                                                                                                                                                                                                                                   | <b>Level<br/>dBuV/m</b>                                                                                                                                                                                                                                                                | <b>Limit/ Detector<br/>dBuV/m</b> |
| 2390.000                                                                                                                                                                                                                                                                                                                              | 60.68                                                                                                                                                                                                                                                                                  | 74.0 / PK                         |
| 2390.000                                                                                                                                                                                                                                                                                                                              | 40.03                                                                                                                                                                                                                                                                                  | 54.0 / AV                         |
| Mode: 802.11b 2412MHz TX Horizontal Polarization                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                        |                                   |
| <b>Freq<br/>MHz</b>                                                                                                                                                                                                                                                                                                                   | <b>Level<br/>dBuV/m</b>                                                                                                                                                                                                                                                                | <b>Limit/ Detector<br/>dBuV/m</b> |
| 2389.615                                                                                                                                                                                                                                                                                                                              | 64.42                                                                                                                                                                                                                                                                                  | 74.0 / PK                         |
| 2390.000                                                                                                                                                                                                                                                                                                                              | 41.10                                                                                                                                                                                                                                                                                  | 54.0 / AV                         |

|                          |                         |                                   |                         |                         |                                   |
|--------------------------|-------------------------|-----------------------------------|-------------------------|-------------------------|-----------------------------------|
| Mode: 802.11b 2437MHz TX |                         |                                   | Vertical Polarization   |                         |                                   |
| <b>Freq<br/>MHz</b>      | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> | <b>Freq<br/>MHz</b>     | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| 4873.936                 | 57.52                   | 74.0 / PK                         | 4873.936                | 57.52                   | 74.0 / PK                         |
| 4873.952                 | 51.22                   | 54.0 / AV                         | 4873.952                | 51.22                   | 54.0 / AV                         |
| Mode: 802.11b 2437MHz TX |                         |                                   | Horizontal Polarization |                         |                                   |
| <b>Freq<br/>MHz</b>      | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> | <b>Freq<br/>MHz</b>     | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| 4873.904                 | 57.11                   | 74.0 / PK                         | 4873.904                | 57.11                   | 74.0 / PK                         |
| 4873.952                 | 48.36                   | 54.0 / AV                         | 4873.952                | 48.36                   | 54.0 / AV                         |
| Mode: 802.11b 2462MHz TX |                         |                                   | Vertical Polarization   |                         |                                   |
| <b>Freq<br/>MHz</b>      | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> | <b>Freq<br/>MHz</b>     | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| 2483.606                 | 58.36                   | 74.0 / PK                         | 2483.606                | 58.36                   | 74.0 / PK                         |
| 2483.500                 | 40.43                   | 54.0 / AV                         | 2483.500                | 40.43                   | 54.0 / AV                         |
| 4923.960                 | 56.93                   | 74.0 / PK                         | 4923.960                | 56.93                   | 74.0 / PK                         |
| 4923.976                 | 49.70                   | 54.0 / AV                         | 4923.976                | 49.70                   | 54.0 / AV                         |
| Mode: 802.11b 2462MHz TX |                         |                                   | Horizontal Polarization |                         |                                   |
| <b>Freq<br/>MHz</b>      | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> | <b>Freq<br/>MHz</b>     | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| 2483.553                 | 59.32                   | 74.0 / PK                         | 2483.553                | 59.32                   | 74.0 / PK                         |
| 2483.500                 | 40.59                   | 54.0 / AV                         | 2483.500                | 40.59                   | 54.0 / AV                         |
| 4923.744                 | 56.30                   | 74.0 / PK                         | 4923.744                | 56.30                   | 74.0 / PK                         |
| 4923.984                 | 47.95                   | 54.0 / AV                         | 4923.984                | 47.95                   | 54.0 / AV                         |
| Mode: 802.11g 2412MHz TX |                         |                                   | Vertical Polarization   |                         |                                   |
| <b>Freq<br/>MHz</b>      | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> | <b>Freq<br/>MHz</b>     | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| 2389.487                 | 58.85                   | 74.0 / PK                         | 2389.487                | 58.85                   | 74.0 / PK                         |
| 2390.000                 | 40.59                   | 54.0 / AV                         | 2390.000                | 40.59                   | 54.0 / AV                         |
| Mode: 802.11g 2412MHz TX |                         |                                   | Horizontal Polarization |                         |                                   |
| <b>Freq<br/>MHz</b>      | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> | <b>Freq<br/>MHz</b>     | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| 2390.000                 | 65.25                   | 74.0 / PK                         | 2390.000                | 65.25                   | 74.0 / PK                         |
| 2390.000                 | 44.51                   | 54.0 / AV                         | 2390.000                | 44.51                   | 54.0 / AV                         |
| Mode: 802.11g 2437MHz TX |                         |                                   | Vertical Polarization   |                         |                                   |
| <b>Freq<br/>MHz</b>      | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> | <b>Freq<br/>MHz</b>     | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| No peak found            | ---                     | 74.0 / PK                         | No peak found           | ---                     | 74.0 / PK                         |
| No peak found            | ---                     | 54.0 / AV                         | No peak found           | ---                     | 54.0 / AV                         |
| Mode: 802.11g 2437MHz TX |                         |                                   | Horizontal Polarization |                         |                                   |
| <b>Freq<br/>MHz</b>      | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> | <b>Freq<br/>MHz</b>     | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| No peak found            | ---                     | 74.0 / PK                         | No peak found           | ---                     | 74.0 / PK                         |
| No peak found            | ---                     | 54.0 / AV                         | No peak found           | ---                     | 54.0 / AV                         |
| Mode: 802.11g 2462MHz TX |                         |                                   | Vertical Polarization   |                         |                                   |
| <b>Freq</b>              | <b>Level</b>            | <b>Limit/ Detector</b>            | <b>Freq</b>             | <b>Level</b>            | <b>Limit/ Detector</b>            |

| <b>MHz</b>                                               | <b>dBuV/m</b>           | <b>dBuV/m</b>                     |
|----------------------------------------------------------|-------------------------|-----------------------------------|
| 2484.637                                                 | 57.54                   | 74.0 / PK                         |
| 2483.500                                                 | 38.31                   | 54.0 / AV                         |
| Mode: 802.11g 2462MHz TX Horizontal Polarization         |                         |                                   |
| <b>Freq<br/>MHz</b>                                      | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| 2483.923                                                 | 59.58                   | 74.0 / PK                         |
| 2483.500                                                 | 39.60                   | 54.0 / AV                         |
| Mode: 802.11n (20MHz) 2412MHz TX Vertical Polarization   |                         |                                   |
| <b>Freq<br/>MHz</b>                                      | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| 2388.718                                                 | 62.91                   | 74.0 / PK                         |
| 2390.000                                                 | 42.57                   | 54.0 / AV                         |
| 4824.359                                                 | 54.85                   | 74.0 / PK                         |
| 4826.314                                                 | 40.47                   | 54.0 / AV                         |
| Mode: 802.11n (20MHz) 2412MHz TX Horizontal Polarization |                         |                                   |
| <b>Freq<br/>MHz</b>                                      | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| 2388.590                                                 | 65.39                   | 74.0 / PK                         |
| 2390.000                                                 | 44.56                   | 54.0 / AV                         |
| Mode: 802.11n (20MHz) 2437MHz TX Vertical Polarization   |                         |                                   |
| <b>Freq<br/>MHz</b>                                      | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| No peak found                                            | ---                     | 74.0 / PK                         |
| No peak found                                            | ---                     | 54.0 / AV                         |
| Mode: 802.11n (20MHz) 2437MHz TX Horizontal Polarization |                         |                                   |
| <b>Freq<br/>MHz</b>                                      | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| No peak found                                            | ---                     | 74.0 / PK                         |
| No peak found                                            | ---                     | 54.0 / AV                         |
| Mode: 802.11n (20MHz) 2462MHz TX Vertical Polarization   |                         |                                   |
| <b>Freq<br/>MHz</b>                                      | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| 2485.087                                                 | 59.35                   | 74.0 / PK                         |
| 2484.425                                                 | 38.37                   | 54.0 / AV                         |
| Mode: 802.11n (20MHz) 2462MHz TX Horizontal Polarization |                         |                                   |
| <b>Freq<br/>MHz</b>                                      | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| 2484.188                                                 | 61.20                   | 74.0 / PK                         |
| 2483.685                                                 | 39.83                   | 54.0 / AV                         |
| Mode: 802.11n (40MHz) 2422MHz TX Vertical Polarization   |                         |                                   |
| <b>Freq<br/>MHz</b>                                      | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| 2386.667                                                 | 65.45                   | 74.0 / PK                         |
| 2389.872                                                 | 44.14                   | 54.0 / AV                         |
| Mode: 802.11n (40MHz) 2422MHz TX Horizontal Polarization |                         |                                   |

| <b>Freq<br/>MHz</b>                                           | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
|---------------------------------------------------------------|-------------------------|-----------------------------------|
| 2386.538                                                      | 70.56                   | 74.0 / PK                         |
| 2390.000                                                      | 48.31                   | 54.0 / AV                         |
| Mode: 802.11n (40MHz) 2437MHz TX      Vertical Polarization   |                         |                                   |
| <b>Freq<br/>MHz</b>                                           | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| No peak found                                                 | ---                     | 74.0 / PK                         |
| No peak found                                                 | ---                     | 54.0 / AV                         |
| Mode: 802.11n (40MHz) 2437MHz TX      Horizontal Polarization |                         |                                   |
| <b>Freq<br/>MHz</b>                                           | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| No peak found                                                 | ---                     | 74.0 / PK                         |
| No peak found                                                 | ---                     | 54.0 / AV                         |
| Mode: 802.11n (40MHz) 2452MHz TX      Vertical Polarization   |                         |                                   |
| <b>Freq<br/>MHz</b>                                           | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| 2484.584                                                      | 60.86                   | 74.0 / PK                         |
| 2483.500                                                      | 42.22                   | 54.0 / AV                         |
| Mode: 802.11n (40MHz) 2452MHz TX      Horizontal Polarization |                         |                                   |
| <b>Freq<br/>MHz</b>                                           | <b>Level<br/>dBuV/m</b> | <b>Limit/ Detector<br/>dBuV/m</b> |
| 2484.055                                                      | 59.04                   | 74.0 / PK                         |
| 2483.632                                                      | 40.78                   | 54.0 / AV                         |