

FCC 47 CFR PART 15 SUBPART C

Product Type : Notebook computer
Applicant : MilDef Crete Inc.
Address : 7F, No. 250, Sec.3, Peishen Rd., Shenkeng District, New Taipei City, Taiwan
Trade Name : MilDef Crete Inc.
Model Number : DT10
Test Specification : FCC 47 CFR PART 15 SUBPART C: Oct., 2013
ANSI C63.4:2009
Receive Date : Aug. 07, 2014
Test Period : Aug. 11 ~ Aug. 22, 2014
Issue Date : Sep. 03, 2014

Issue by

A Test Lab Techno Corp.
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Taiwan Accreditation Foundation accreditation number: 1330

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Revision History

| Rev. | Issue Date | Revisions | Revised By |
|------|---------------|---------------|------------|
| 00 | Sep. 03, 2014 | Initial Issue | |
| | | | |
| | | | |
| | | | |

Verification of Compliance

Issued Date: 09/03/2014

Product Type : Notebook computer
Applicant : MilDef Crete Inc.
Address : 7F, No. 250, Sec.3, Peishen Rd., Shenkeng District, New Taipei City, Taiwan
Trade Name : MilDef Crete Inc.
Model Number : DT10
FCC ID : IR5DT10
EUT Rated Voltage : DC 12~32V, 7A
Test Voltage : 120 Vac / 60 Hz
Applicable Standard : FCC 47 CFR PART 15 SUBPART C: Oct., 2013
ANSI C63.4:2009

Test Result : Complied

Performing Lab. : A Test Lab Techno Corp.
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Taiwan Accreditation Foundation accreditation number: 1330
<http://www.atl-lab.com.tw/e-index.htm>



The above equipment was tested by A Test Lab Techno Corp. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4: 2009 and the energy emitted by the sample tested as described in this report is in compliance with the requirements of FCC Rules Part 15.207, 15.209, 15.247 .

The test results of this report relate only to the tested sample identified in this report.

Approved By : Fly Lu (Fly Lu) Reviewed By : Eric Ou Yang (Eric Ou Yang)
(Manager) (Testing Engineer)

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1 General Information

1.1 Summary of Test Result

| Standard | Item | Result | Remark |
|--------------|---|--------|--------|
| 15.247 | | | |
| 15.207 | AC Power Conducted Emission | PASS | ----- |
| Standard | Item | Result | Remark |
| 15.247 | | | |
| 15.247(d) | Transmitter Radiated Emissions | PASS | ----- |
| 15.247(b)(3) | Max. Output Power | PASS | ----- |
| 15.247(a)(2) | 6dB RF Bandwidth | PASS | ----- |
| 15.247(e) | Power Spectral Density | PASS | ----- |
| 15.247(d) | Out of Band Conducted Spurious Emission | PASS | ----- |
| 15.247(d) | Band Edge Measurement | PASS | ----- |
| 15.203 | Antenna Requirement | PASS | ----- |

The test results of this report relate only to the tested sample(s) identified in this report. Manufacturer or whom it may concern should recognize the pass or fail of the test result.

1.2 Measurement Uncertainty

| Test Item | Frequency Range | Uncertainty (dB) | |
|--------------------|---------------------|------------------|--------|
| Conducted Emission | 9kHz ~ 30MHz | ± 2.02 | |
| Radiated Emission | 30MHz ~ 1000MHz | Horizontal | ± 3.98 |
| | | Vertical | ± 3.62 |
| | 1000MHz ~ 18000MHz | Horizontal | ± 3.11 |
| | | Vertical | ± 3.07 |
| | 18000MHz ~ 40000MHz | Horizontal | ± 3.66 |
| | | Vertical | ± 3.54 |

2 EUT Description

| | | | | |
|-------------------------|---|------------------|--------------|-----------|
| Product Type | Notebook computer | | | |
| Trade Name | MilDef Crete Inc. | | | |
| Model No. | DT10 | | | |
| Applicant | MilDef Crete Inc. 7F, No. 250, Sec.3, Peishen Rd., Shengkeng District, New Taipei City, Taiwan | | | |
| Manufacturer | MilDef Crete Inc. 7F, No. 250, Sec.3, Peishen Rd., Shengkeng District, New Taipei City, Taiwan | | | |
| FCC ID | IR5DT10 | | | |
| Frequency Range | IEEE 802.11b / 802.11g / 802.11n 2.4GHz 20MHz: 2412 ~ 2462 MHz IEEE 802.11n 2.4GHz 40MHz: 2422 ~ 2452 MHz Bluetooth v4.0 LE: 2402 ~ 2480 MHz | | | |
| Modulation Type | IEEE 802.11b:DSSS IEEE 802.11g:DSSS + OFDM IEEE 802.11n 2.4GHz 20MHz: OFDM IEEE 802.11n 2.4GHz 40MHz: OFDM Bluetooth v4.0 LE: GFSK | | | |
| Antenna Used | Band | Antenna Port | Type | Max. Gain |
| | WLAN | Antenna 1 (MAIN) | PIFA Antenna | 0.55 dBi |
| | WLAN / Bluetooth | Antenna 2 (AUX) | PIFA Antenna | 1.81 dBi |
| Antenna Delivery | IEEE 802.11b/g : 1TX + 1RX IEEE 802.11n 20MHz / 40MHz : 2TX + 2RX | | | |
| RF Output Power | IEEE 802.11b: 0.096 W / 19.81 dBm IEEE 802.11g: 0.153 W / 21.85 dBm IEEE 802.11n 2.4GHz 20MHz: 0.231 W / 23.63 dBm IEEE 802.11n 2.4GHz 40MHz: 0.146 W / 21.64 dBm Bluetooth v4.0 LE: 0.005 W / 7.10 dBm | | | |
| 99 % Occupied Bandwidth | IEEE 802.11b: 13.22 MHz IEEE 802.11g: 16.38 MHz IEEE 802.11n 2.4GHz 20MHz: 17.55 MHz IEEE 802.11n 2.4GHz 40MHz: 35.97 MHz Bluetooth v4.0 LE: 1.08 MHz | | | |

3 Test Methodology

3.1. Mode of Operation

Decision of Test ATL has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

| Test Mode |
|---|
| Mode 1: Normal Operation Mode |
| Mode 2: IEEE 802.11b Link Mode |
| Mode 3: IEEE 802.11g Link Mode |
| Mode 4: IEEE 802.11n 2.4GHz 20MHz Link Mode |
| Mode 5: IEEE 802.11n 2.4GHz 40MHz Link Mode |
| Mode 6: Bluetooth v4.0 LE Link Mode |

Software used to control the EUT for staying in continuous transmitting mode was programmed.

After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz and power line conducted emissions below 30MHz, which worst case was in normal link mode only.

IEEE 802.11b mode: (Antenna 2)

Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with 1Mbps data rate and cyclic delay diversity were chosen for full testing.

IEEE 802.11g mode: (Antenna 2)

Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with 6Mbps data rate and cyclic delay diversity were chosen for full testing.

IEEE 802.11n 2.4GHz 20MHz mode: (Antenna 1 + 2)

Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with 6.5Mbps data rate were chosen for full testing.

IEEE 802.11n 2.4GHz 40MHz mode: (Antenna 1 + 2)

Channel Low (2422MHz), Channel Mid (2437MHz) and Channel High (2452MHz) with 13.5Mbps data rate were chosen for full testing.

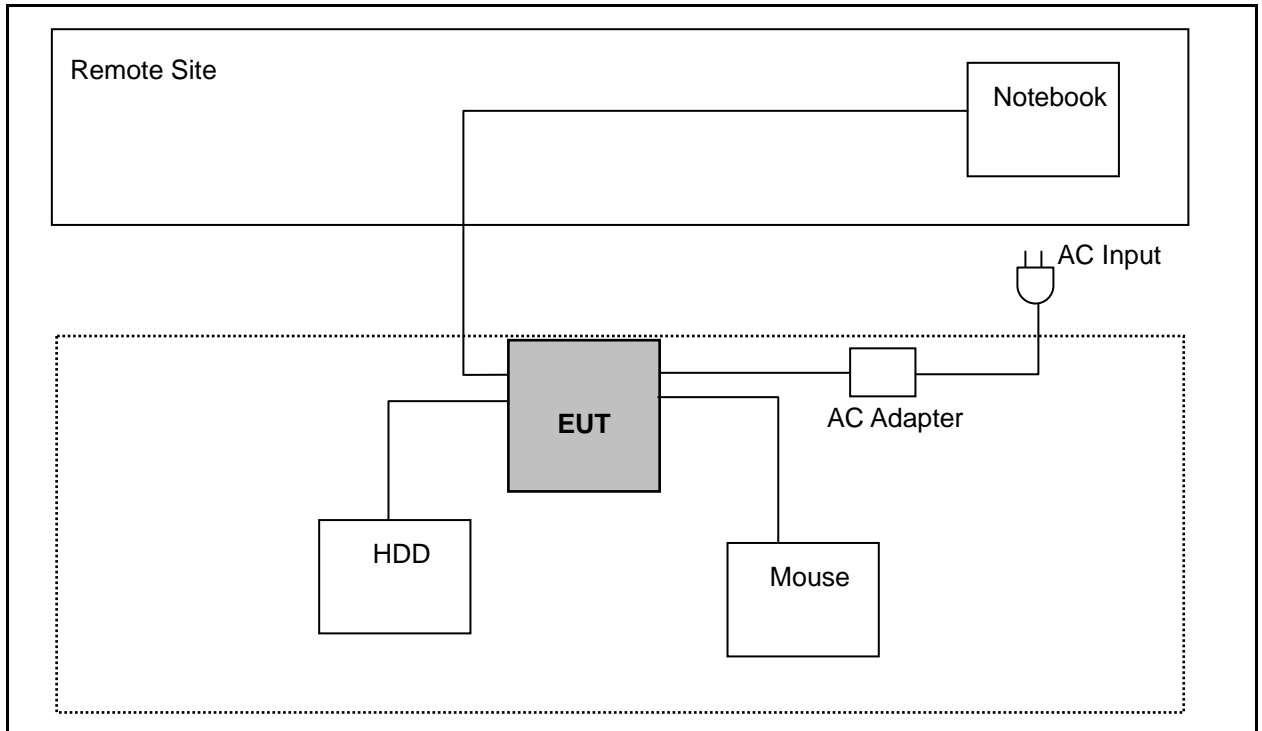
By preliminary testing and verifying three axis (X, Y and Z) position of EUT transmitted status, it was found that "X axis" position was the worst, then the final test was executed the worst condition and test data were recorded in this report.

3.2. EUT Exercise Software

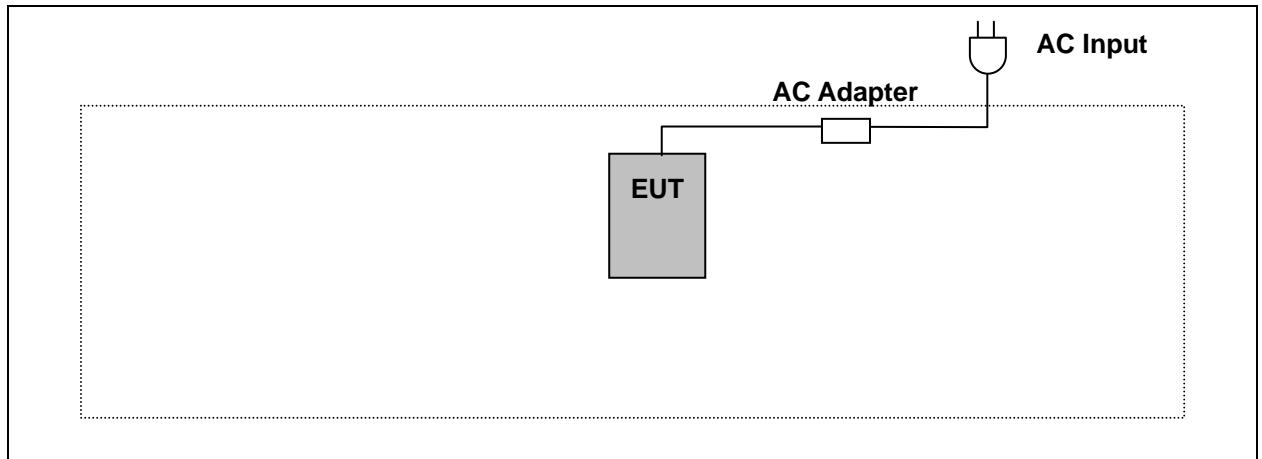
| |
|---|
| 1. Setup the EUT shown on 3.3. |
| 2. Turn on the power of all equipment. |
| 3. Turn on Wi-Fi function link to AP. |
| 4. EUT run test program. |
| 5. Turn Bluetooth function link to CBT. |

3.3. Configuration of Test System Details

Conducted Emissions



Radiated Emissions



3.4. Test Site Environment

| Items | Required (IEC 60068-1) | Actual |
|----------------------------|------------------------|--------|
| Temperature (°C) | 15-35 | 26 |
| Humidity (%RH) | 25-75 | 60 |
| Barometric pressure (mbar) | 860-1060 | 950 |

4 Conducted Emission Measurement

4.1. Limit

| Frequency (MHz) | Quasi-peak | Average |
|-----------------|------------|----------|
| 0.15 - 0.5 | 66 to 56 | 56 to 46 |
| 0.50 - 5.0 | 56 | 46 |
| 5.0 - 30.0 | 60 | 50 |

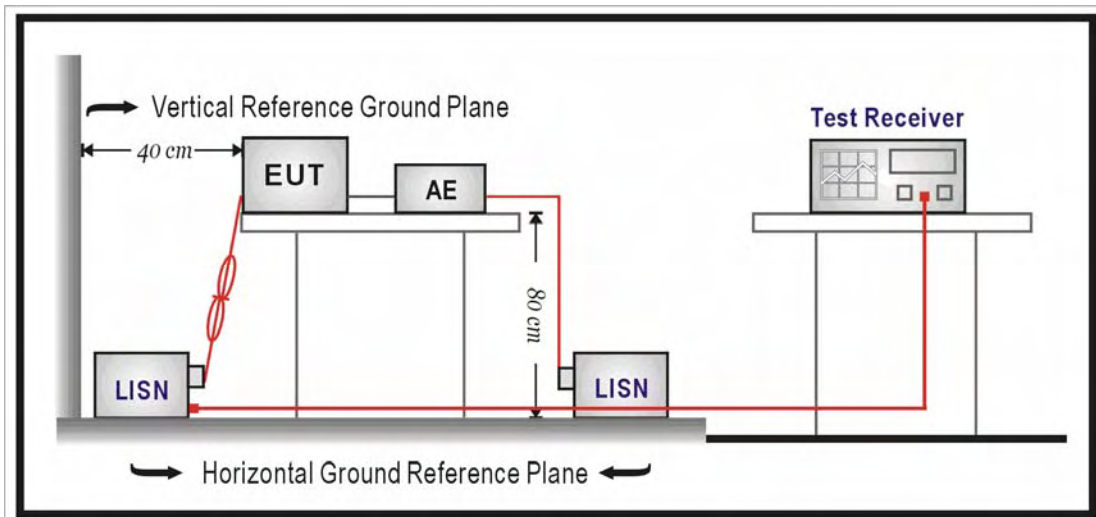
4.2. Test Instruments

| Describe | Manufacturer | Model Number | Serial Number | Cal. Date | Remark |
|---------------|--------------|--------------|---------------|------------|--------|
| Test Receiver | R&S | ESCI | 100367 | 06/06/2014 | (1) |
| LISN | R&S | ENV216 | 101040 | 03/07/2014 | (1) |
| LISN | R&S | ENV216 | 101041 | 03/07/2014 | (1) |
| Test Site | ATL | TE02 | TE02 | N.C.R. | ----- |

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years. (3) Calibration period 3 years.

Note: N.C.R. = No Calibration Request.

4.3. Test Setup



4.4. Test Procedure

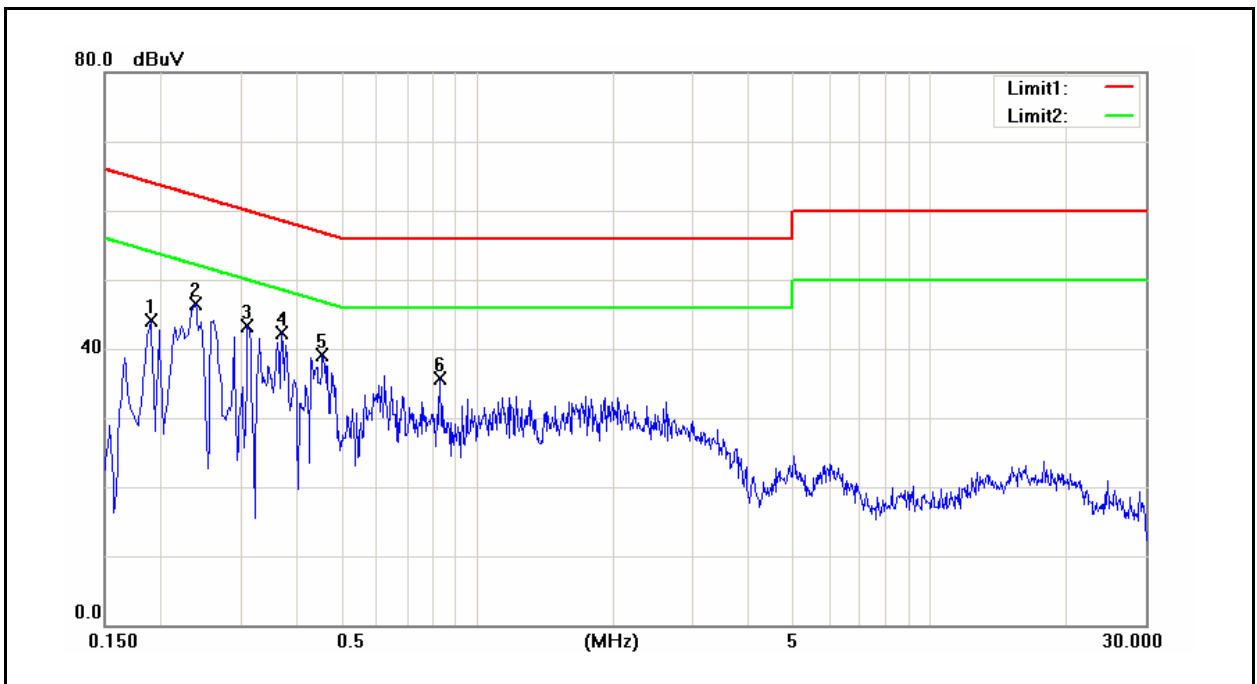
The power line conducted emission measurements were performed in a shielded enclosure. The EUT was assembled on a wooden table which is 80 centimeters high, was placed 40 centimeters from the back wall and at least 1 meter from the sidewall.

Power was fed to the EUT from the public utility power grid through a line filter and EMCO Model 3162/2 SH Line Impedance Stabilization Networks (LISN). The LISN housing, measuring instrumentation case, ground plane, etc., were electrically bonded together at the same RF potential. The Spectrum analyzer was connected to the AC line through an isolation transformer. The 50-ohm output of the LISN was connected to the spectrum analyzer directly. Conducted emission levels were in the CISPR quasi-peak detection mode. The analyzer's 6 dB bandwidth was set to 9 KHz. No post-detector video filter was used.

The spectrum was scanned from 150 KHz to 30 MHz. The physical arrangement of the test system and associated cabling was varied (within the scope of arrangements likely to be encountered in actual use) to determine the effect on the unit's emanations in amplitude and frequency. All spurious emission frequencies were observed. The highest emission amplitudes relative to the appropriate limit were measured and have been recorded in paragraph 4.1.

4.5. Test Result

| | | | |
|---------------|--------------------|----------------------|--------------|
| Standard: | FCC Part 15C | Line: | L1 |
| Test item: | Conducted Emission | Power: | AC 120V/60Hz |
| Model Number: | DT10 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode: | 1 | Date: | 08/22/2014 |
| | | Test By: | Eric Ou Yang |
| Description: | | | |

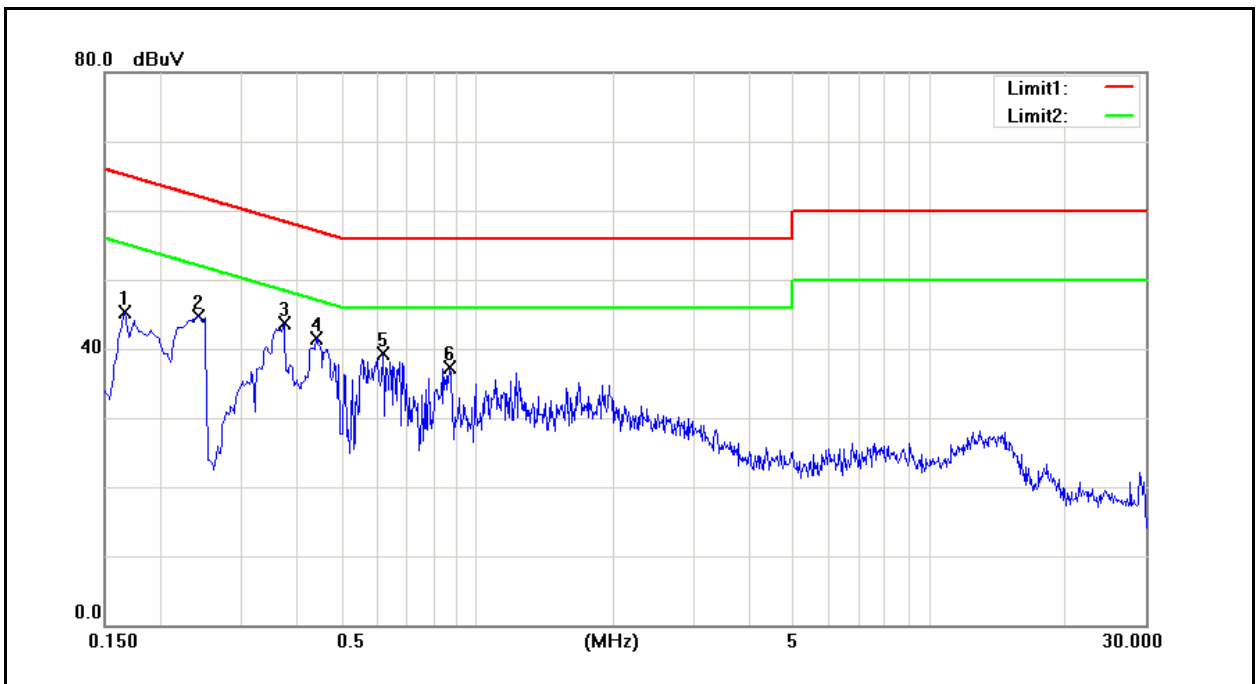


| No. | Frequency (MHz) | QP reading (dBuV) | AVG reading (dBuV) | Correction factor (dB) | QP result (dBuV) | AVG result (dBuV) | QP limit (dBuV) | AVG limit (dBuV) | QP margin (dB) | AVG margin (dB) | Remark |
|-----|-----------------|-------------------|--------------------|------------------------|------------------|-------------------|-----------------|------------------|----------------|-----------------|--------|
| 1 | 0.1900 | 30.70 | 11.86 | 9.60 | 40.30 | 21.46 | 64.04 | 54.04 | -23.74 | -32.58 | Pass |
| 2 | 0.2380 | 33.98 | 19.54 | 9.60 | 43.58 | 29.14 | 62.17 | 52.17 | -18.59 | -23.03 | Pass |
| 3 | 0.3100 | 25.55 | 5.67 | 9.61 | 35.16 | 15.28 | 59.97 | 49.97 | -24.81 | -34.69 | Pass |
| 4 | 0.3700 | 29.26 | 14.22 | 9.61 | 38.87 | 23.83 | 58.50 | 48.50 | -19.63 | -24.67 | Pass |
| 5 | 0.4540 | 27.82 | 14.17 | 9.62 | 37.44 | 23.79 | 56.80 | 46.80 | -19.36 | -23.01 | Pass |
| 6 | 0.8300 | 21.44 | 11.60 | 9.64 | 31.08 | 21.24 | 56.00 | 46.00 | -24.92 | -24.76 | Pass |

Note: 1. Result (dBuV) = Correction factor (dB) + Reading(dBuV).

2. Correction factor (dB) = Cable loss (dB) + L.I.S.N. factor (dB).

| | | | |
|---------------|--------------------|----------------------|--------------|
| Standard: | FCC Part 15C | Line: | N |
| Test item: | Conducted Emission | Power: | AC 120V/60Hz |
| Model Number: | DT10 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode: | 1 | Date: | 08/22/2014 |
| | | Test By: | Eric Ou Yang |
| Description: | | | |



| No. | Frequency (MHz) | QP reading (dBuV) | AVG reading (dBuV) | Correction factor (dB) | QP result (dBuV) | AVG result (dBuV) | QP limit (dBuV) | AVG limit (dBuV) | QP margin (dB) | AVG margin (dB) | Remark |
|-----|-----------------|-------------------|--------------------|------------------------|------------------|-------------------|-----------------|------------------|----------------|-----------------|--------|
| 1 | 0.1660 | 34.47 | 16.71 | 9.60 | 44.07 | 26.31 | 65.16 | 55.16 | -21.09 | -28.85 | Pass |
| 2 | 0.2420 | 34.29 | 18.81 | 9.60 | 43.89 | 28.41 | 62.03 | 52.03 | -18.14 | -23.62 | Pass |
| 3 | 0.3740 | 27.44 | 10.99 | 9.61 | 37.05 | 20.60 | 58.41 | 48.41 | -21.36 | -27.81 | Pass |
| 4 | 0.4420 | 28.15 | 14.09 | 9.61 | 37.76 | 23.70 | 57.02 | 47.02 | -19.26 | -23.32 | Pass |
| 5 | 0.6180 | 24.36 | 10.58 | 9.62 | 33.98 | 20.20 | 56.00 | 46.00 | -22.02 | -25.80 | Pass |
| 6 | 0.8700 | 22.89 | 11.30 | 9.64 | 32.53 | 20.94 | 56.00 | 46.00 | -23.47 | -25.06 | Pass |
| 7 | 28.9620 | 29.32 | 23.21 | 10.14 | 39.46 | 33.35 | 60.00 | 50.00 | -20.54 | -16.65 | Pass |

Note: 1. Result (dBuV) = Correction factor (dB) + Reading(dBuV).

2. Correction factor (dB) = Cable loss (dB) + L.I.S.N. factor (dB).

5 Radiated Emission Measurement

5.1. Limit

According to §15.209(a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

| Frequency (MHz) | Field Strength ($\mu\text{V}/\text{m}$ at meter) | Measurement Distance (meters) |
|-----------------|---|-------------------------------|
| 0.009 – 0.490 | 2400 / F (kHz) | 300 |
| 0.490 – 1.705 | 24000 / F (kHz) | 30 |
| 1.705 – 30.0 | 30 | 30 |
| 30 - 88 | 100** | 3 |
| 88-216 | 150** | 3 |
| 216-960 | 200** | 3 |
| Above 960 | 500 | 3 |

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

5.2. Test Instruments

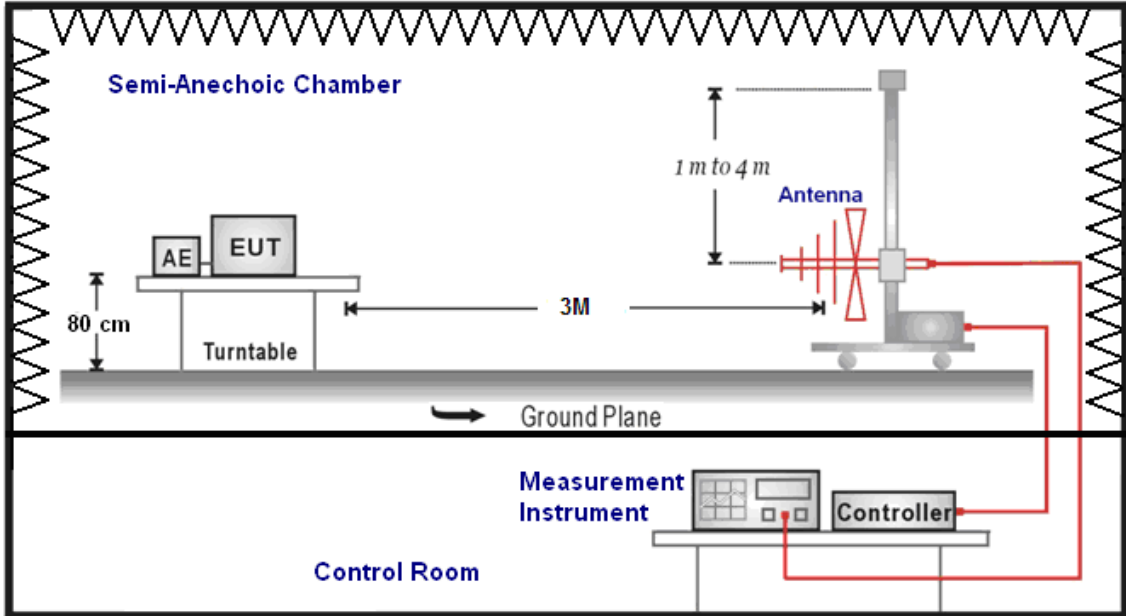
| 3 Meter Chamber | | | | | |
|--------------------------------|-----------------------------|--------------|---------------|------------|--------|
| Equipment | Manufacturer | Model Number | Serial Number | Cal. Date | Remark |
| RF Pre-selector | Agilent | N9039A | MY46520256 | 01/10/2014 | (1) |
| Spectrum Analyzer | Agilent | E4446A | MY46180578 | 01/10/2014 | (1) |
| Pre Amplifier | Agilent | 8449B | 3008A02237 | 02/21/2014 | (1) |
| Pre Amplifier | Agilent | 8447D | 2944A10961 | 02/21/2014 | (1) |
| Broadband Antenna (30MHz~1GHz) | SCHWARZBECK MESS-ELEKTRONIK | VULB9163 | 9163-270 | 07/22/2014 | (1) |
| Horn Antenna (1~18GHz) | SCHWARZBECK MESS-ELEKTRONIK | BBHA9120D | 9120D-550 | 06/11/2014 | (1) |
| Horn Antenna (18~40GHz) | SCHWARZBECK MESS-ELEKTRONIK | BBHA9170 | 9170-320 | 07/02/2014 | (1) |
| Loop Antenna | COM-POWER CORPORATION | AL-130 | 121014 | 08/14/2012 | (3) |
| Test Site | ATL | TE01 | 888001 | 08/28/2013 | (1) |

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years. (3) Calibration period 3 years.

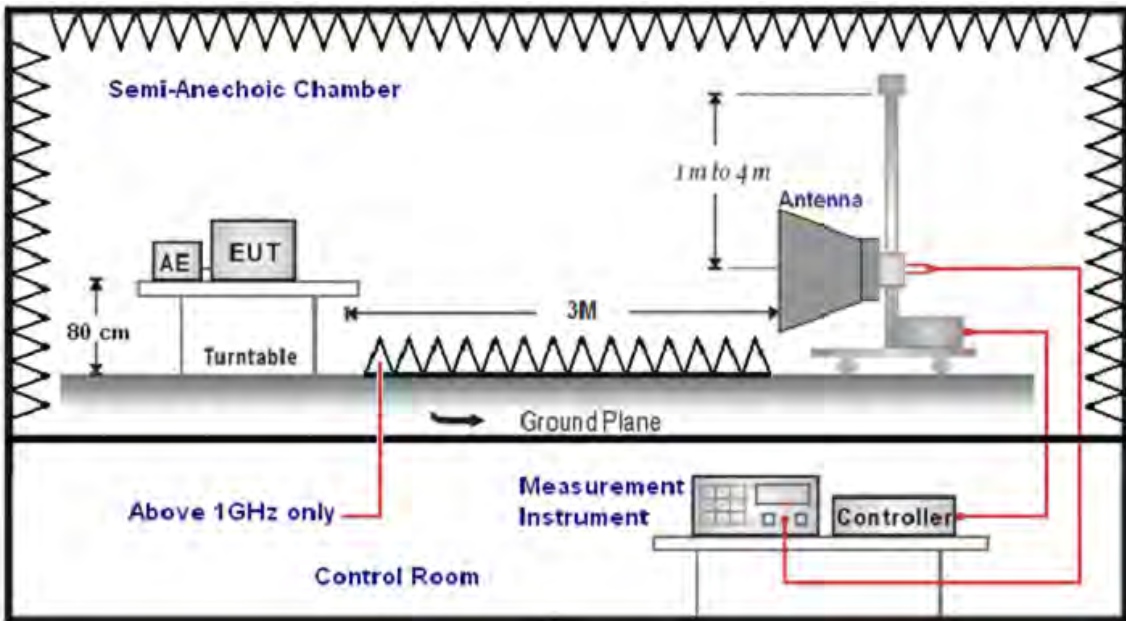
Note: N.C.R. = No Calibration Request.

5.3. Setup

Below 1GHz



Above 1GHz



5.4. Test Procedure

Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 meters height, top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuously & Measurements spectrum range from 9 kHz to 26.5 GHz is investigated.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

A nonconductive material surrounded the EUT to supporting the EUT for standing on three orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Biconilog Antenna (mode VULB9163) at 3 Meter and the SCHWARZBECK Double Ridged Guide Antenna (model BBHA9120D&9170) was used in frequencies 1 – 26.5 GHz at a distance of 1 meter. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20dB/decade).

For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. No post – detector video filters were used in the test.

The spectrum analyzer's 6 dB bandwidth was set to 1 MHz, and the analyzer was operated in the peak detection mode, for frequencies both below and up 1 GHz. The average levels were obtained by subtracting the duty cycle correction factor from the peak readings.

The following procedures were used to convert the emission levels measured in decibels referenced to 1 microvolt (dBuV) into field intensity in micro volts pre meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in micro volts per meter (dBuV/m).

The actual field intensity in referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) and Subtracting the gain of preamplifier (dB) is auto calculate in spectrum analyzer.

(1) $\text{Amplitude (dBuV/m)} = \text{FI (dBuV)} + \text{AF (dBuV)} + \text{CL (dBuV)} - \text{Gain (dB)}$

FI= Reading of the field intensity.

AF= Antenna factor.

CL= Cable loss.

P.S Amplitude is auto calculate in spectrum analyzer.

(2) $\text{Actual Amplitude (dBuV/m)} = \text{Amplitude (dBuV)} - \text{Dis (dB)}$

The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:

(a) For fundamental frequency : Transmitter Output < +30dBm

(b) For spurious frequency : Spurious emission limits = fundamental emission limit /10

Data of measurement within this frequency range without mark in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

5.5. Test Result

Below 1GHz

| | | | |
|---------------|-------------------|----------------------|--------------|
| Standard: | FCC Part 15C | Test Distance: | 3m |
| Test item: | Radiated Emission | Power: | AC 120V/60Hz |
| Model Number: | DT10 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode: | 1 | Date: | 08/11/2014 |
| | | Test By: | Eric Ou Yang |

| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
|-----------------|----------------|-----------------------|-----------------|----------------|-------------|--------|------------------|
| 126.5000 | 34.52 | -13.70 | 20.82 | 43.50 | -22.68 | QP | H |
| 219.0000 | 37.22 | -13.61 | 23.61 | 46.00 | -22.39 | QP | H |
| 315.5000 | 37.22 | -9.99 | 27.23 | 46.00 | -18.77 | QP | H |
| 519.5000 | 32.90 | -5.96 | 26.94 | 46.00 | -19.06 | QP | H |
| 665.0000 | 32.77 | -3.01 | 29.76 | 46.00 | -16.24 | QP | H |
| 943.0000 | 26.40 | 2.67 | 29.07 | 46.00 | -16.93 | QP | H |
| 126.5000 | 44.86 | -13.70 | 31.16 | 43.50 | -12.34 | QP | V |
| 178.0000 | 44.45 | -12.92 | 31.53 | 43.50 | -11.97 | QP | V |
| 310.0000 | 47.70 | -10.08 | 37.62 | 46.00 | -8.38 | QP | V |
| 518.0000 | 41.96 | -5.99 | 35.97 | 46.00 | -10.03 | QP | V |
| 665.0000 | 38.40 | -3.01 | 35.39 | 46.00 | -10.61 | QP | V |
| 898.5000 | 34.79 | 1.66 | 36.45 | 46.00 | -9.55 | QP | V |

Note: No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz).

Above 1GHz

| Standard: | FCC Part 15C | Test Distance: | 3m | | | | |
|-----------------|-------------------|-----------------------|-----------------|----------------|-------------|--------|------------------|
| Test item: | Radiated Emission | Power: | AC 120V/60Hz | | | | |
| Model Number: | DT10 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | | | |
| Mode: | 2 | Date: | 08/12/2014 | | | | |
| Frequency: | 2412MHz | Test By: | Eric Ou Yang | | | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 3030.000 | 37.45 | -0.11 | 37.34 | 74.00 | -36.66 | peak | H |
| 4824.000 | 40.09 | 5.03 | 45.12 | 74.00 | -28.88 | peak | H |
| 6719.000 | 34.41 | 10.09 | 44.50 | 74.00 | -29.50 | peak | H |
| 3037.000 | 36.95 | -0.10 | 36.85 | 74.00 | -37.15 | peak | V |
| 4824.000 | 44.12 | 5.03 | 49.15 | 74.00 | -24.85 | peak | V |
| 6642.000 | 33.43 | 9.87 | 43.30 | 74.00 | -30.70 | peak | V |

| Standard: | FCC Part 15C | Test Distance: | 3m | | | | |
|-----------------|-------------------|-----------------------|-----------------|----------------|-------------|--------|------------------|
| Test item: | Radiated Emission | Power: | AC 120V/60Hz | | | | |
| Model Number: | DT10 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | | | |
| Mode: | 2 | Date: | 08/12/2014 | | | | |
| Frequency: | 2437MHz | Test By: | Eric Ou Yang | | | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 2981.000 | 37.24 | -0.25 | 36.99 | 74.00 | -37.01 | peak | H |
| 4874.000 | 37.92 | 5.16 | 43.08 | 74.00 | -30.92 | peak | H |
| 6705.000 | 35.12 | 10.05 | 45.17 | 74.00 | -28.83 | peak | H |
| 2995.000 | 37.63 | -0.22 | 37.41 | 74.00 | -36.59 | peak | V |
| 4874.000 | 43.51 | 5.16 | 48.67 | 74.00 | -25.33 | peak | V |
| 6670.000 | 34.94 | 9.95 | 44.89 | 74.00 | -29.11 | peak | V |

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 2 | | | Date: | 08/12/2014 | | |
| Frequency: | 2462MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 3030.000 | 37.06 | -0.11 | 36.95 | 74.00 | -37.05 | peak | H |
| 4598.000 | 33.97 | 4.45 | 38.42 | 74.00 | -35.58 | peak | H |
| 6691.000 | 34.50 | 10.01 | 44.51 | 74.00 | -29.49 | peak | H |
| 3037.000 | 36.88 | -0.10 | 36.78 | 74.00 | -37.22 | peak | V |
| 4924.000 | 40.61 | 5.29 | 45.90 | 74.00 | -28.10 | peak | V |
| 6670.000 | 34.60 | 9.95 | 44.55 | 74.00 | -29.45 | peak | V |

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 3 | | | Date: | 08/12/2014 | | |
| Frequency: | 2412MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 2995.000 | 37.03 | -0.22 | 36.81 | 74.00 | -37.19 | peak | H |
| 4605.000 | 33.30 | 4.47 | 37.77 | 74.00 | -36.23 | peak | H |
| 6670.000 | 33.34 | 9.95 | 43.29 | 74.00 | -30.71 | peak | H |
| 3023.000 | 36.28 | -0.14 | 36.14 | 74.00 | -37.86 | peak | V |
| 4535.000 | 35.72 | 4.29 | 40.01 | 74.00 | -33.99 | peak | V |
| 6698.000 | 34.45 | 10.03 | 44.48 | 74.00 | -29.52 | peak | V |

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 3 | | | Date: | 08/12/2014 | | |
| Frequency: | 2437MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 3002.000 | 37.47 | -0.20 | 37.27 | 74.00 | -36.73 | peak | H |
| 4619.000 | 34.14 | 4.51 | 38.65 | 74.00 | -35.35 | peak | H |
| 6663.000 | 33.66 | 9.94 | 43.60 | 74.00 | -30.40 | peak | H |
| 3037.000 | 36.66 | -0.10 | 36.56 | 74.00 | -37.44 | peak | V |
| 4563.000 | 34.49 | 4.36 | 38.85 | 74.00 | -35.15 | peak | V |
| 6663.000 | 35.22 | 9.94 | 45.16 | 74.00 | -28.84 | peak | V |

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 3 | | | Date: | 08/12/2014 | | |
| Frequency: | 2462MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 3037.000 | 38.66 | -0.10 | 38.56 | 74.00 | -35.44 | peak | H |
| 4563.000 | 33.41 | 4.36 | 37.77 | 74.00 | -36.23 | peak | H |
| 6698.000 | 33.67 | 10.03 | 43.70 | 74.00 | -30.30 | peak | H |
| 3002.000 | 37.07 | -0.20 | 36.87 | 74.00 | -37.13 | peak | V |
| 4549.000 | 34.27 | 4.33 | 38.60 | 74.00 | -35.40 | peak | V |
| 6719.000 | 34.08 | 10.09 | 44.17 | 74.00 | -29.83 | peak | V |

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 4 | | | Date: | 08/12/2014 | | |
| Frequency: | 2412MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 3023.000 | 37.24 | -0.14 | 37.10 | 74.00 | -36.90 | peak | H |
| 4598.000 | 33.97 | 4.45 | 38.42 | 74.00 | -35.58 | peak | H |
| 6663.000 | 33.44 | 9.94 | 43.38 | 74.00 | -30.62 | peak | H |
| 3023.000 | 36.49 | -0.14 | 36.35 | 74.00 | -37.65 | peak | V |
| 4570.000 | 34.04 | 4.38 | 38.42 | 74.00 | -35.58 | peak | V |
| 6705.000 | 33.38 | 10.05 | 43.43 | 74.00 | -30.57 | peak | V |

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 4 | | | Date: | 08/12/2014 | | |
| Frequency: | 2437MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 2981.000 | 37.71 | -0.25 | 37.46 | 74.00 | -36.54 | peak | H |
| 4563.000 | 33.41 | 4.36 | 37.77 | 74.00 | -36.23 | peak | H |
| 6677.000 | 33.41 | 9.97 | 43.38 | 74.00 | -30.62 | peak | H |
| 2981.000 | 35.90 | -0.25 | 35.65 | 74.00 | -38.35 | peak | V |
| 4542.000 | 34.30 | 4.31 | 38.61 | 74.00 | -35.39 | peak | V |
| 6691.000 | 33.66 | 10.01 | 43.67 | 74.00 | -30.33 | peak | V |

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 4 | | | Date: | 08/12/2014 | | |
| Frequency: | 2462MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 3023.000 | 37.90 | -0.14 | 37.76 | 74.00 | -36.24 | peak | H |
| 4605.000 | 33.66 | 4.47 | 38.13 | 74.00 | -35.87 | peak | H |
| 6691.000 | 34.42 | 10.01 | 44.43 | 74.00 | -29.57 | peak | H |
| 3058.000 | 36.36 | -0.04 | 36.32 | 74.00 | -37.68 | peak | V |
| 4619.000 | 35.21 | 4.51 | 39.72 | 74.00 | -34.28 | peak | V |
| 6649.000 | 33.54 | 9.90 | 43.44 | 74.00 | -30.56 | peak | V |

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 5 | | | Date: | 08/12/2014 | | |
| Frequency: | 2422MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 3002.000 | 37.43 | -0.20 | 37.23 | 74.00 | -36.77 | peak | H |
| 4577.000 | 34.64 | 4.39 | 39.03 | 74.00 | -34.97 | peak | H |
| 6663.000 | 33.72 | 9.94 | 43.66 | 74.00 | -30.34 | peak | H |
| 3051.000 | 37.06 | -0.06 | 37.00 | 74.00 | -37.00 | peak | V |
| 4591.000 | 35.19 | 4.43 | 39.62 | 74.00 | -34.38 | peak | V |
| 6691.000 | 34.26 | 10.01 | 44.27 | 74.00 | -29.73 | peak | V |

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 5 | | | Date: | 08/12/2014 | | |
| Frequency: | 2437MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 3030.000 | 36.06 | -0.11 | 35.95 | 74.00 | -38.05 | peak | H |
| 4591.000 | 33.73 | 4.43 | 38.16 | 74.00 | -35.84 | peak | H |
| 6649.000 | 33.83 | 9.90 | 43.73 | 74.00 | -30.27 | peak | H |
| 3023.000 | 36.48 | -0.14 | 36.34 | 74.00 | -37.66 | peak | V |
| 4577.000 | 34.28 | 4.39 | 38.67 | 74.00 | -35.33 | peak | V |
| 6649.000 | 35.53 | 9.90 | 45.43 | 74.00 | -28.57 | peak | V |

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 5 | | | Date: | 08/12/2014 | | |
| Frequency: | 2452MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 3009.000 | 36.43 | -0.17 | 36.26 | 74.00 | -37.74 | peak | H |
| 4577.000 | 35.20 | 4.39 | 39.59 | 74.00 | -34.41 | peak | H |
| 6698.000 | 33.07 | 10.03 | 43.10 | 74.00 | -30.90 | peak | H |
| 3030.000 | 37.06 | -0.11 | 36.95 | 74.00 | -37.05 | peak | V |
| 4577.000 | 34.51 | 4.39 | 38.90 | 74.00 | -35.10 | peak | V |
| 6698.000 | 34.50 | 10.03 | 44.53 | 74.00 | -29.47 | peak | V |

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 6 | | | Date: | 08/16/2014 | | |
| Frequency: | 2402MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 3030.000 | 37.83 | -0.11 | 37.72 | 74.00 | -36.28 | peak | H |
| 4619.000 | 34.45 | 4.51 | 38.96 | 74.00 | -35.04 | peak | H |
| 6747.000 | 33.63 | 10.16 | 43.79 | 74.00 | -30.21 | peak | H |
| 3030.000 | 36.75 | -0.11 | 36.64 | 74.00 | -37.36 | peak | V |
| 4619.000 | 33.39 | 4.51 | 37.90 | 74.00 | -36.10 | peak | V |
| 6705.000 | 33.06 | 10.05 | 43.11 | 74.00 | -30.89 | peak | V |

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 6 | | | Date: | 08/16/2014 | | |
| Frequency: | 2440MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 2974.000 | 36.66 | -0.27 | 36.39 | 74.00 | -37.61 | peak | H |
| 4598.000 | 35.19 | 4.45 | 39.64 | 74.00 | -34.36 | peak | H |
| 6677.000 | 32.95 | 9.97 | 42.92 | 74.00 | -31.08 | peak | H |
| 3009.000 | 37.44 | -0.17 | 37.27 | 74.00 | -36.73 | peak | V |
| 4577.000 | 35.84 | 4.39 | 40.23 | 74.00 | -33.77 | peak | V |
| 6691.000 | 33.29 | 10.01 | 43.30 | 74.00 | -30.70 | peak | V |

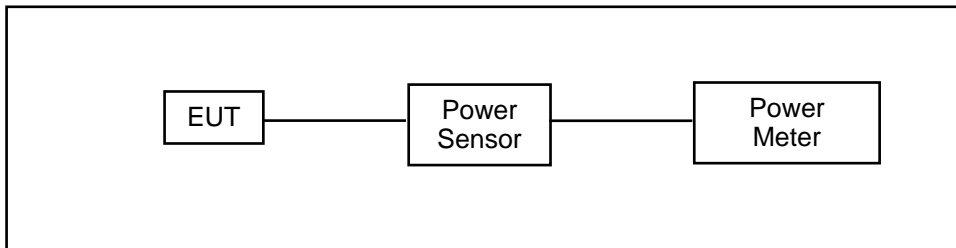
| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 6 | | | Date: | 08/16/2014 | | |
| Frequency: | 2480MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 3009.000 | 37.94 | -0.17 | 37.77 | 74.00 | -36.23 | peak | H |
| 4549.000 | 34.00 | 4.33 | 38.33 | 74.00 | -35.67 | peak | H |
| 6691.000 | 33.53 | 10.01 | 43.54 | 74.00 | -30.46 | peak | H |
| 3030.000 | 38.01 | -0.11 | 37.90 | 74.00 | -36.10 | peak | V |
| 4577.000 | 35.07 | 4.39 | 39.46 | 74.00 | -34.54 | peak | V |
| 6726.000 | 34.34 | 10.10 | 44.44 | 74.00 | -29.56 | peak | V |

6 Maximum Conducted Output Power Measurement

6.1. Limit

For systems using digital modulation in the 2400-2483.5MHz, the limit for peak output power is 30dBm.

6.2. Test Setup



6.3. Test Instruments

| Equipment | Manufacturer | Model Number | Serial Number | Cal. Date | Remark |
|--------------------------------|--------------|--------------|---------------|------------|--------|
| Single Channel PK Power Sensor | Agilent | N1911A | MY45101619 | 12/21/2013 | (1) |
| Wideband Power Meter | Agilent | N1921A | MY45241957 | 12/21/2013 | (1) |
| Test Site | ATL | TE05 | TE05 | N.C.R. | ----- |

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years. (3) Calibration period 3 years.

Note: N.C.R. = No Calibration Request.

6.4. Test Procedure

The tests below are run with the EUT's transmitter set at high power in TX mode. The EUT is needed to force selection of output power level and channel number. While testing, EUT was set to transmit continuously. Remove the Subjective device's antenna and connect the RF output port to power sensor. The maximum peak output power shall not exceed 1 watt.

Use a direct connection between the antenna port of transmitter and the power sensor, for prevent the power sensor input attenuation 40-50 dB. Set the RBW Bandwidth of the emission or use a channel power meter mode.

For antennas with gains of 6 dBi or less, maximum allowed transmitter output is 1 watt (+30 dBm). For antennas with gains greater than 6 dBi, transmitter output level must be decreased by an amount equal to $(\text{GAIN} - 6)/3$ dBm.

The antenna port of the EUT was connected to the input of a power sensor. Power was read directly and cable loss correction was added to the reading to obtain power at the EUT antenna terminals.

6.5. Test Result

| Model Number | DT10 | | | | | | | | | |
|-----------------|--------------------------------|---------------|-------|------------|-------|---------------|-------|--------------|--------------|-------------|
| Test Item | Maximum Conducted Output Power | | | | | | | | | |
| Test Mode | Mode 2: IEEE 802.11b Link Mode | | | | | | | | | |
| Date of Test | 08/11/2014 | | | | | Test Site | | TE05 | | |
| Frequency (MHz) | Data Rate | Antenna 1 | | | | Antenna 2 | | | | Limit (dBm) |
| | | Average Power | | Peak Power | | Average Power | | Peak Power | | |
| | | (dBm) | (W) | (dBm) | (W) | (dBm) | (W) | (dBm) | (W) | |
| 2412 | 1M | 16.95 | 0.050 | 19.80 | 0.095 | 16.93 | 0.049 | 19.75 | 0.094 | < 30 |
| 2437 | | 16.93 | 0.049 | 19.79 | 0.095 | 16.98 | 0.050 | 19.81 | 0.096 | < 30 |
| 2462 | | 16.64 | 0.046 | 19.42 | 0.087 | 16.52 | 0.045 | 19.36 | 0.086 | < 30 |
| 2437 | 2M | 16.59 | 0.046 | 19.53 | 0.090 | 16.68 | 0.047 | 19.53 | 0.090 | < 30 |
| 2437 | 5.5M | 16.81 | 0.048 | 19.17 | 0.083 | 16.83 | 0.048 | 19.19 | 0.083 | < 30 |
| 2437 | 11M | 16.59 | 0.046 | 19.29 | 0.085 | 16.76 | 0.047 | 19.55 | 0.090 | < 30 |

| Model Number | DT10 | | | | | | | | | |
|-----------------|--------------------------------|---------------|-------|------------|-------|---------------|-------|--------------|--------------|-------------|
| Test Item | Maximum Conducted Output Power | | | | | | | | | |
| Test Mode | Mode 3: IEEE 802.11g Link Mode | | | | | | | | | |
| Date of Test | 08/11/2014 | | | | | Test Site | | TE05 | | |
| Frequency (MHz) | Data Rate | Antenna 1 | | | | Antenna 2 | | | | Limit (dBm) |
| | | Average Power | | Peak Power | | Average Power | | Peak Power | | |
| | | (dBm) | (W) | (dBm) | (W) | (dBm) | (W) | (dBm) | (W) | |
| 2412 | 6M | 13.20 | 0.021 | 21.32 | 0.136 | 14.22 | 0.026 | 21.68 | 0.147 | < 30 |
| 2437 | | 13.72 | 0.024 | 21.37 | 0.137 | 14.30 | 0.027 | 21.85 | 0.153 | < 30 |
| 2462 | | 13.70 | 0.023 | 21.34 | 0.136 | 14.13 | 0.026 | 21.83 | 0.152 | < 30 |
| 2437 | 9M | 13.57 | 0.023 | 21.17 | 0.131 | 14.24 | 0.027 | 21.64 | 0.146 | < 30 |
| 2437 | 12M | 13.67 | 0.023 | 21.19 | 0.132 | 14.28 | 0.027 | 21.83 | 0.152 | < 30 |
| 2437 | 18M | 13.63 | 0.023 | 21.08 | 0.128 | 14.16 | 0.026 | 21.47 | 0.140 | < 30 |
| 2437 | 24M | 13.66 | 0.023 | 21.29 | 0.135 | 14.26 | 0.027 | 21.78 | 0.151 | < 30 |
| 2437 | 36M | 13.67 | 0.023 | 21.23 | 0.133 | 14.12 | 0.026 | 21.58 | 0.144 | < 30 |
| 2437 | 48M | 13.69 | 0.023 | 21.06 | 0.128 | 14.19 | 0.026 | 21.66 | 0.147 | < 30 |
| 2437 | 54M | 13.67 | 0.023 | 21.08 | 0.128 | 14.22 | 0.026 | 21.72 | 0.149 | < 30 |

| Model Number | DT10 | | | | | | | | | |
|-----------------|---|-----------------------|-------|------------|------------|---------------|-------|--------------|-------|-------------|
| Test Item | Maximum Conducted Output Power | | | | | | | | | |
| Test Mode | Mode 4: IEEE 802.11n 2.4GHz 20MHz Link Mode | | | | | | | | | |
| Date of Test | 08/11/2014 | | | | | Test Site | | TE05 | | |
| Frequency (MHz) | Data Rate | Antenna 1 | | | | Antenna 2 | | | | Limit (dBm) |
| | | Average Power | | Peak Power | | Average Power | | Peak Power | | |
| | | (dBm) | (W) | (dBm) | (W) | (dBm) | (W) | (dBm) | (W) | |
| 2412 | 6.5M | 12.17 | 0.016 | 20.17 | 0.104 | 12.79 | 0.019 | 20.45 | 0.111 | < 30 |
| 2437 | | 11.91 | 0.016 | 20.07 | 0.102 | 13.22 | 0.021 | 21.11 | 0.129 | < 30 |
| 2462 | | 12.18 | 0.017 | 20.18 | 0.104 | 12.98 | 0.020 | 20.85 | 0.122 | < 30 |
| 2437 | 13M | 11.79 | 0.015 | 19.95 | 0.099 | 13.09 | 0.020 | 20.92 | 0.124 | < 30 |
| 2437 | 19.5M | 11.81 | 0.015 | 19.99 | 0.100 | 13.12 | 0.021 | 20.81 | 0.121 | < 30 |
| 2437 | 26M | 11.90 | 0.015 | 20.04 | 0.101 | 12.52 | 0.018 | 20.72 | 0.118 | < 30 |
| 2437 | 39M | 11.86 | 0.015 | 19.81 | 0.096 | 13.13 | 0.021 | 20.94 | 0.124 | < 30 |
| 2437 | 52M | 11.67 | 0.015 | 19.72 | 0.094 | 13.01 | 0.020 | 20.95 | 0.124 | < 30 |
| 2437 | 58.5M | 11.86 | 0.015 | 19.70 | 0.093 | 13.09 | 0.020 | 20.98 | 0.125 | < 30 |
| 2437 | 65M | 11.66 | 0.015 | 19.86 | 0.097 | 13.14 | 0.021 | 21.00 | 0.126 | < 30 |
| Frequency (MHz) | Data Rate | Antenna 1 + Antenna 2 | | | | | | Limit (dBm) | | |
| | | Average Power | | | Peak Power | | | | | |
| | | (dBm) | (W) | (dBm) | (W) | | | | | |
| 2412 | 6.5M | 15.50 | | 0.035 | | 23.32 | | 0.215 | | < 30 |
| 2437 | | 15.62 | | 0.037 | | 23.63 | | 0.231 | | < 30 |
| 2462 | | 15.61 | | 0.036 | | 23.54 | | 0.226 | | < 30 |
| 2437 | 13M | 15.50 | | 0.035 | | 23.47 | | 0.222 | | < 30 |
| 2437 | 19.5M | 15.52 | | 0.036 | | 23.43 | | 0.220 | | < 30 |
| 2437 | 26M | 15.23 | | 0.033 | | 23.40 | | 0.219 | | < 30 |
| 2437 | 39M | 15.55 | | 0.036 | | 23.42 | | 0.220 | | < 30 |
| 2437 | 52M | 15.40 | | 0.035 | | 23.39 | | 0.218 | | < 30 |
| 2437 | 58.5M | 15.53 | | 0.036 | | 23.40 | | 0.219 | | < 30 |
| 2437 | 65M | 15.47 | | 0.035 | | 23.48 | | 0.223 | | < 30 |

| Model Number | DT10 | | | | | | | | | |
|-----------------|---|-----------------------|-------|------------|-------|---------------|-------|--------------|-------|-------------|
| Test Item | Maximum Conducted Output Power | | | | | | | | | |
| Test Mode | Mode 5: IEEE 802.11n 2.4GHz 40MHz Link Mode | | | | | | | | | |
| Date of Test | 08/11/2014 | | | | | Test Site | | TE05 | | |
| Frequency (MHz) | Data Rate | Antenna 1 | | | | Antenna 2 | | | | Limit (dBm) |
| | | Average Power | | Peak Power | | Average Power | | Peak Power | | |
| | | (dBm) | (W) | (dBm) | (W) | (dBm) | (W) | (dBm) | (W) | |
| 2422 | 13.5M | 9.03 | 0.008 | 18.89 | 0.077 | 9.04 | 0.008 | 17.98 | 0.063 | < 30 |
| 2437 | | 9.00 | 0.008 | 18.64 | 0.073 | 9.39 | 0.009 | 18.61 | 0.073 | < 30 |
| 2452 | | 8.76 | 0.008 | 18.60 | 0.072 | 9.61 | 0.009 | 18.63 | 0.073 | < 30 |
| 2437 | 27M | 8.54 | 0.007 | 18.23 | 0.067 | 9.28 | 0.008 | 18.59 | 0.072 | < 30 |
| 2437 | 40.5M | 8.64 | 0.007 | 18.18 | 0.066 | 9.30 | 0.009 | 18.52 | 0.071 | < 30 |
| 2437 | 54M | 8.68 | 0.007 | 18.16 | 0.065 | 8.99 | 0.008 | 18.49 | 0.071 | < 30 |
| 2437 | 81M | 8.70 | 0.007 | 18.33 | 0.068 | 8.98 | 0.008 | 18.43 | 0.070 | < 30 |
| 2437 | 108M | 7.57 | 0.006 | 18.61 | 0.073 | 8.51 | 0.007 | 18.54 | 0.071 | < 30 |
| 2437 | 121.5M | 7.69 | 0.006 | 18.40 | 0.069 | 8.47 | 0.007 | 18.53 | 0.071 | < 30 |
| 2437 | 135M | 7.77 | 0.006 | 18.60 | 0.072 | 8.16 | 0.007 | 18.48 | 0.070 | < 30 |
| Frequency (MHz) | Data Rate | Antenna 1 + Antenna 2 | | | | Limit (dBm) | | | | |
| | | Average Power | | Peak Power | | | | | | |
| | | (dBm) | (W) | (dBm) | (W) | | | | | |
| 2422 | 13.5M | 12.05 | | 0.016 | | 21.47 | | 0.140 | | < 30 |
| 2437 | | 12.21 | | 0.017 | | 21.64 | | 0.146 | | < 30 |
| 2452 | | 12.22 | | 0.017 | | 21.63 | | 0.145 | | < 30 |
| 2437 | 27M | 11.94 | | 0.016 | | 21.42 | | 0.139 | | < 30 |
| 2437 | 40.5M | 11.99 | | 0.016 | | 21.36 | | 0.137 | | < 30 |
| 2437 | 54M | 11.85 | | 0.015 | | 21.34 | | 0.136 | | < 30 |
| 2437 | 81M | 11.85 | | 0.015 | | 21.39 | | 0.138 | | < 30 |
| 2437 | 108M | 11.08 | | 0.013 | | 21.59 | | 0.144 | | < 30 |
| 2437 | 121.5M | 11.11 | | 0.013 | | 21.48 | | 0.140 | | < 30 |
| 2437 | 135M | 10.98 | | 0.013 | | 21.55 | | 0.143 | | < 30 |

| Model Number | DT10 | | | | | |
|-----------------|-------------------------------------|---------------|-------|-------------|--------------|-------------|
| Test Item | Maximum Conducted Output Power | | | | | |
| Test Mode | Mode 6: Bluetooth v4.0 LE Link Mode | | | | | |
| Date of Test | 08/11/2014 | | | Test Site | TE05 | |
| Frequency (MHz) | Data Rate | Average Power | | Peak Power | | Limit (dBm) |
| | | (dBm) | (W) | (dBm) | (W) | |
| 2402 | --- | 3.75 | 0.002 | 6.29 | 0.004 | < 30 |
| 2440 | --- | 3.05 | 0.002 | 5.52 | 0.004 | < 30 |
| 2480 | --- | 4.67 | 0.003 | 7.10 | 0.005 | < 30 |

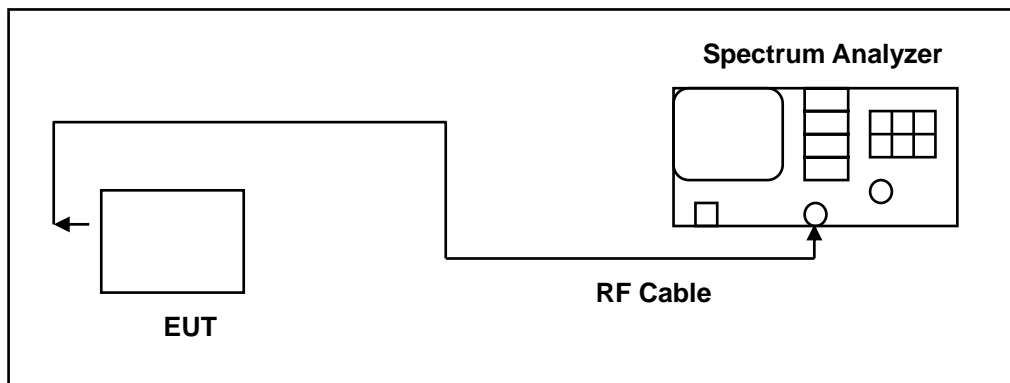
7 6dB RF Bandwidth and 99 % Occupied Bandwidth Measurement

7.1. Limit

6dB RF Bandwidth: Systems using digital modulation techniques may operate in the 2400–2483.5 MHz bands. The minimum 6 dB band-width shall be at least 500 kHz.

99 % Occupied Bandwidth: N/A

7.2. Test Setup



7.3. Test Instruments

| Equipment | Manufacturer | Model Number | Serial Number | Cal. Date | Remark |
|-------------------|--------------|--------------|---------------|------------|--------|
| Spectrum Analyzer | Agilent | E4445A | MY45300744 | 12/19/2012 | (2) |
| Test Site | ATL | TE05 | TE05 | N.C.R. | ----- |

dRemark: (1) Calibration period 1 year. (2) Calibration period 2 years. (3) Calibration period 3 years.

Note: N.C.R. = No Calibration Request.

7.4. Test Procedure

The EUT was setup to ANSI C63.4, 2009; tested to DTS test procedure of KDB558074D01 for compliance to FCC 47CFR 15.247 requirements.

6dB RF Bandwidth: The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer RES BW was set to 100 kHz. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A peak output reading was taken, a DISPLAY line was drawn 6 dB lower than peak level. The 6 dB bandwidth was determined from where the channel output spectrum intersected the display line.

The test was performed at 3 channels (Channel low, middle, high)

99 % Occupied Bandwidth: The transmitter shall be operated at its maximum carrier power measured under normal test conditions.

The video bandwidth shall be set to 3 times the resolution bandwidth. Video averaging is not permitted. Where practical, a sampling detector shall be used since a peak or, peak hold, may produce a wider bandwidth than actual.

The trace data points are recovered and are directly summed in linear terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached and that frequency recorded. The process is repeated for the highest frequency data points. This frequency is recorded.

7.5. Test Result

| Model Number | DT10 | | |
|-----------------|--|-------------------------------|------------------------------|
| Test Item | 6dB RF Bandwidth and 99 % Occupied Bandwidth | | |
| Test Mode | Mode 2: IEEE 802.11b Link Mode | | |
| Date of Test | 08/11/2014 | Test Site | TE05 |
| Frequency (MHz) | 6dB RF Bandwidth (MHz) | 99 % Occupied Bandwidth (MHz) | 6dB RF Bandwidth Limit (MHz) |
| 2412 | 10.182 | 13.2169 | > 0.500 |
| 2437 | 10.107 | 13.1802 | > 0.500 |
| 2462 | 10.088 | 13.1380 | > 0.500 |

| Model Number | DT10 | | |
|-----------------|--|-------------------------------|------------------------------|
| Test Item | 6dB RF Bandwidth and 99 % Occupied Bandwidth | | |
| Test Mode | Mode 3: IEEE 802.11g Link Mode | | |
| Date of Test | 08/11/2014 | Test Site | TE05 |
| Frequency (MHz) | 6dB RF Bandwidth (MHz) | 99 % Occupied Bandwidth (MHz) | 6dB RF Bandwidth Limit (MHz) |
| 2412 | 15.153 | 16.3054 | > 0.500 |
| 2437 | 14.342 | 16.3192 | > 0.500 |
| 2462 | 15.159 | 16.3830 | > 0.500 |

| Model Number | DT10 | | | | |
|-----------------|--|-----------|-------------------------------|-----------|------------------------------|
| Test Item | 6dB RF Bandwidth and 99 % Occupied Bandwidth | | | | |
| Test Mode | Mode 4: IEEE 802.11n 2.4GHz 20MHz Link Mode | | | | |
| Date of Test | 08/11/2014 | | Test Site | TE05 | |
| Frequency (MHz) | 6dB RF Bandwidth (MHz) | | 99 % Occupied Bandwidth (MHz) | | 6dB RF Bandwidth Limit (MHz) |
| | Antenna 1 | Antenna 2 | Antenna 1 | Antenna 2 | |
| 2412 | 15.103 | 15.085 | 17.5361 | 17.5465 | > 0.500 |
| 2437 | 15.124 | 15.163 | 17.5352 | 17.5359 | > 0.500 |
| 2462 | 15.167 | 15.032 | 17.5547 | 17.5538 | > 0.500 |

| Model Number | DT10 | | | | |
|-----------------|--|-----------|-------------------------------|-----------|------------------------------|
| Test Item | 6dB RF Bandwidth and 99 % Occupied Bandwidth | | | | |
| Test Mode | Mode 5: IEEE 802.11n 2.4GHz 40MHz Link Mode | | | | |
| Date of Test | 08/11/2014 | | | Test Site | TE05 |
| Frequency (MHz) | 6dB RF Bandwidth (MHz) | | 99 % Occupied Bandwidth (MHz) | | 6dB RF Bandwidth Limit (MHz) |
| | Antenna 1 | Antenna 2 | Antenna 1 | Antenna 2 | |
| 2422 | 36.035 | 35.341 | 35.9746 | 35.8456 | > 0.500 |
| 2437 | 35.698 | 35.079 | 35.8446 | 35.9036 | > 0.500 |
| 2452 | 35.439 | 35.152 | 35.8299 | 35.8366 | > 0.500 |

| Model Number | DT10 | | | |
|-----------------|--|------------------------------|-------------|------|
| Test Item | 6dB RF Bandwidth & 99 % Occupied Bandwidth | | | |
| Test Mode | Mode 6: Bluetooth v4.0 LE Link Mode | | | |
| Date of Test | 08/11/2014 | | Test Site | TE05 |
| Frequency (MHz) | 6dB Bandwidth (kHz) | 99% Occupied Bandwidth (MHz) | Limit (kHz) | |
| 2402 | 759.136 | 1.0644 | > 500 | |
| 2440 | 763.554 | 1.0786 | > 500 | |
| 2480 | 775.968 | 1.0750 | > 500 | |

7.6. Test Graphs

| Mode 2: IEEE 802.11b Link Mode | |
|--------------------------------|---|
| 2412 | <p>Agilent R T</p> <p>Ch Freq 2.412 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 20 dB</p> <p>#Peak Log 10 dB/Offset 11.8 dB</p> <p>Center 2.412 GHz Span 30 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Occupied Bandwidth 13.2169 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error -18.680 kHz</p> <p>x dB Bandwidth 10.182 MHz</p> <p>Freq/Channel</p> <p>Center Freq 2.41200000 GHz</p> <p>Start Freq 2.39700000 GHz</p> <p>Stop Freq 2.42700000 GHz</p> <p>CF Step 3.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| 2437 | <p>Agilent R T</p> <p>Ch Freq 2.437 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 20 dB</p> <p>#Peak Log 10 dB/Offset 11.8 dB</p> <p>Center 2.437 GHz Span 30 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Occupied Bandwidth 13.1802 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error -47.218 kHz</p> <p>x dB Bandwidth 10.107 MHz</p> <p>Freq/Channel</p> <p>Center Freq 2.43700000 GHz</p> <p>Start Freq 2.42200000 GHz</p> <p>Stop Freq 2.45200000 GHz</p> <p>CF Step 3.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| 2462 | <p>Agilent R T</p> <p>Ch Freq 2.462 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 20 dB</p> <p>#Peak Log 10 dB/Offset 11.8 dB</p> <p>Center 2.462 GHz Span 30 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Occupied Bandwidth 13.1380 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error -40.310 kHz</p> <p>x dB Bandwidth 10.088 MHz</p> <p>Freq/Channel</p> <p>Center Freq 2.46200000 GHz</p> <p>Start Freq 2.44700000 GHz</p> <p>Stop Freq 2.47700000 GHz</p> <p>CF Step 3.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |

Mode 3: IEEE 802.11g Link Mode

| | |
|------|--|
| 2412 | <p>Agilent R T</p> <p>Ch Freq 2.412 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 20 dB</p> <p>#Peak Log 10 dB/Offset 11.8 dB</p> <p>Center 2.412 GHz Span 30 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Occupied Bandwidth 16.3054 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error -33.485 kHz x dB Bandwidth 15.153 MHz</p> <p>Freq/Channel</p> <p>Center Freq 2.41200000 GHz</p> <p>Start Freq 2.39700000 GHz</p> <p>Stop Freq 2.42700000 GHz</p> <p>CF Step 3.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| 2437 | <p>Agilent R T</p> <p>Ch Freq 2.437 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 20 dB</p> <p>#Peak Log 10 dB/Offset 11.8 dB</p> <p>Center 2.437 GHz Span 30 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Occupied Bandwidth 16.3192 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error -44.809 kHz x dB Bandwidth 14.342 MHz</p> <p>Freq/Channel</p> <p>Center Freq 2.43700000 GHz</p> <p>Start Freq 2.42200000 GHz</p> <p>Stop Freq 2.45200000 GHz</p> <p>CF Step 3.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| 2462 | <p>Agilent R T</p> <p>Ch Freq 2.462 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 20 dB</p> <p>#Peak Log 10 dB/Offset 11.8 dB</p> <p>Center 2.462 GHz Span 30 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Occupied Bandwidth 16.3830 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error -45.541 kHz x dB Bandwidth 15.159 MHz</p> <p>Freq/Channel</p> <p>Center Freq 2.46200000 GHz</p> <p>Start Freq 2.44700000 GHz</p> <p>Stop Freq 2.47700000 GHz</p> <p>CF Step 3.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |

Mode 4: IEEE 802.11n 2.4GHz 20MHz Link Mode_Antenna 1

| | |
|-------------|--|
| <p>2412</p> | |
| <p>2437</p> | |
| <p>2462</p> | |

Mode 4: IEEE 802.11n 2.4GHz 20MHz Link Mode_Antenna 2

| | |
|-------------|---|
| <p>2412</p> | <p>Agilent R T</p> <p>Ch Freq 2.412 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 20 dB</p> <p>#Peak Log 10 dB/Offset 11.8 dB</p> <p>Center 2.412 GHz Span 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Occupied Bandwidth 17.5465 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error -27.677 kHz x dB Bandwidth 15.085 MHz</p> <p>Freq/Channel</p> <p>Center Freq 2.41200000 GHz</p> <p>Start Freq 2.39700000 GHz</p> <p>Stop Freq 2.42700000 GHz</p> <p>CF Step 3.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| <p>2437</p> | <p>Agilent R T</p> <p>Ch Freq 2.437 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 20 dB</p> <p>#Peak Log 10 dB/Offset 11.8 dB</p> <p>Center 2.437 GHz Span 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Occupied Bandwidth 17.5359 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error -32.250 kHz x dB Bandwidth 15.163 MHz</p> <p>Freq/Channel</p> <p>Center Freq 2.43700000 GHz</p> <p>Start Freq 2.42200000 GHz</p> <p>Stop Freq 2.45200000 GHz</p> <p>CF Step 3.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| <p>2462</p> | <p>Agilent R T</p> <p>Ch Freq 2.462 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 20 dB</p> <p>#Peak Log 10 dB/Offset 11.8 dB</p> <p>Center 2.462 GHz Span 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Occupied Bandwidth 17.5538 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error -25.533 kHz x dB Bandwidth 15.032 MHz</p> <p>Freq/Channel</p> <p>Center Freq 2.46200000 GHz</p> <p>Start Freq 2.44700000 GHz</p> <p>Stop Freq 2.47700000 GHz</p> <p>CF Step 3.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |

Mode 5: IEEE 802.11n 2.4GHz 40MHz Link Mode_Antenna 1

| | |
|-------------|--|
| <p>2422</p> | <p>Agilent R T</p> <p>Ch Freq 2.422 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 20 dB</p> <p>#Peak Log 10 dB/Offst 11.8 dB</p> <p>Center 2.422 GHz Span 50 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 5.18 ms (401 pts)</p> <p>Occupied Bandwidth 35.9746 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error -19.023 kHz x dB Bandwidth 36.035 MHz</p> <p>Freq/Channel</p> <p>Center Freq 2.42200000 GHz</p> <p>Start Freq 2.39700000 GHz</p> <p>Stop Freq 2.44700000 GHz</p> <p>CF Step 5.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| <p>2437</p> | <p>Agilent R T</p> <p>Ch Freq 2.437 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 20 dB</p> <p>#Peak Log 10 dB/Offst 11.8 dB</p> <p>Center 2.437 GHz Span 50 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 5.18 ms (401 pts)</p> <p>Occupied Bandwidth 35.8446 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error -46.639 kHz x dB Bandwidth 35.698 MHz</p> <p>Freq/Channel</p> <p>Center Freq 2.43700000 GHz</p> <p>Start Freq 2.41200000 GHz</p> <p>Stop Freq 2.46200000 GHz</p> <p>CF Step 5.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| <p>2452</p> | <p>Agilent R T</p> <p>Ch Freq 2.452 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 20 dB</p> <p>#Peak Log 10 dB/Offst 11.8 dB</p> <p>Center 2.452 GHz Span 50 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 5.18 ms (401 pts)</p> <p>Occupied Bandwidth 35.8299 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error -55.295 kHz x dB Bandwidth 35.439 MHz</p> <p>Freq/Channel</p> <p>Center Freq 2.45200000 GHz</p> <p>Start Freq 2.42700000 GHz</p> <p>Stop Freq 2.47700000 GHz</p> <p>CF Step 5.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |

Mode 5: IEEE 802.11n 2.4GHz 40MHz Link Mode_Antenna 2

| | |
|-------------|---|
| <p>2422</p> | <p>Agilent R T</p> <p>Ch Freq 2.422 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 20 dB</p> <p>#Peak Log 10 dB/Offset 11.8 dB</p> <p>Center 2.422 GHz Span 50 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 5.18 ms (401 pts)</p> <p>Occupied Bandwidth Occ BW % Pwr 99.00 % 35.8456 MHz x dB -6.00 dB</p> <p>Transmit Freq Error -51.385 kHz x dB Bandwidth 35.341 MHz</p> <p>Freq/Channel</p> <p>Center Freq 2.42200000 GHz</p> <p>Start Freq 2.39700000 GHz</p> <p>Stop Freq 2.44700000 GHz</p> <p>CF Step 5.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| <p>2437</p> | <p>Agilent R T</p> <p>Ch Freq 2.437 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 20 dB</p> <p>#Peak Log 10 dB/Offset 11.8 dB</p> <p>Center 2.437 GHz Span 50 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 5.18 ms (401 pts)</p> <p>Occupied Bandwidth Occ BW % Pwr 99.00 % 35.9036 MHz x dB -6.00 dB</p> <p>Transmit Freq Error -31.312 kHz x dB Bandwidth 35.079 MHz</p> <p>Freq/Channel</p> <p>Center Freq 2.43700000 GHz</p> <p>Start Freq 2.41200000 GHz</p> <p>Stop Freq 2.46200000 GHz</p> <p>CF Step 5.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| <p>2452</p> | <p>Agilent R T</p> <p>Ch Freq 2.452 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 20 dB</p> <p>#Peak Log 10 dB/Offset 11.8 dB</p> <p>Center 2.452 GHz Span 50 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 5.18 ms (401 pts)</p> <p>Occupied Bandwidth Occ BW % Pwr 99.00 % 35.8366 MHz x dB -6.00 dB</p> <p>Transmit Freq Error -37.843 kHz x dB Bandwidth 35.152 MHz</p> <p>Freq/Channel</p> <p>Center Freq 2.45200000 GHz</p> <p>Start Freq 2.42700000 GHz</p> <p>Stop Freq 2.47700000 GHz</p> <p>CF Step 5.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |

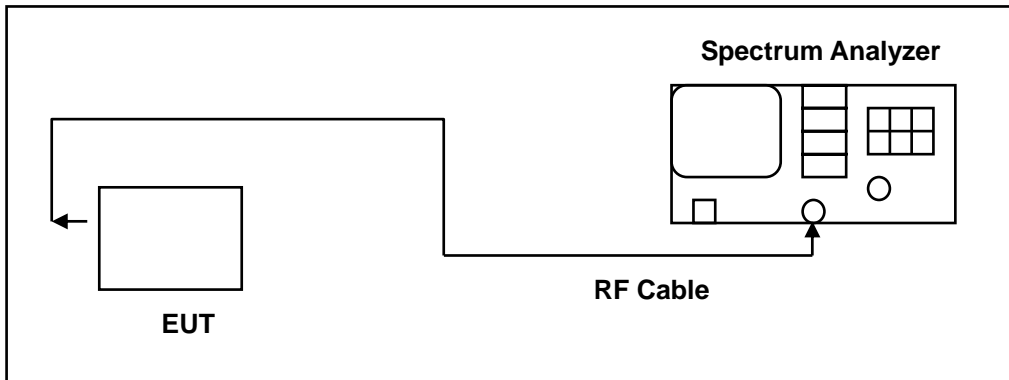
| Mode 6: Bluetooth v4.0 LE Link Mode | |
|-------------------------------------|--|
| 2402 | <p>Agilent R T</p> <p>Ch Freq 2.402 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm #Atten 30 dB</p> <p>#Peak Log 10 dB/Offset 1.8 dB</p> <p>Center 2.402 GHz Span 3 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 5 ms (401 pts)</p> <p>Occupied Bandwidth Occ BW % Pwr 99.00 %</p> <p>1.0644 MHz x dB -6.00 dB</p> <p>Transmit Freq Error -20.714 kHz</p> <p>x dB Bandwidth 759.136 kHz</p> <p>Freq/Channel</p> <p>Center Freq 2.4020000 GHz</p> <p>Start Freq 2.4005000 GHz</p> <p>Stop Freq 2.4035000 GHz</p> <p>CF Step 300.00000 kHz Auto Man</p> <p>Freq Offset 0.0000000 Hz</p> <p>Signal Track On Off</p> |
| 2440 | <p>Agilent R T</p> <p>Ch Freq 2.44 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm #Atten 30 dB</p> <p>#Peak Log 10 dB/Offset 1.8 dB</p> <p>Center 2.44 GHz Span 3 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 5 ms (401 pts)</p> <p>Occupied Bandwidth Occ BW % Pwr 99.00 %</p> <p>1.0786 MHz x dB -6.00 dB</p> <p>Transmit Freq Error -21.199 kHz</p> <p>x dB Bandwidth 763.554 kHz</p> <p>Freq/Channel</p> <p>Center Freq 2.4400000 GHz</p> <p>Start Freq 2.4385000 GHz</p> <p>Stop Freq 2.4415000 GHz</p> <p>CF Step 300.00000 kHz Auto Man</p> <p>Freq Offset 0.0000000 Hz</p> <p>Signal Track On Off</p> |
| 2480 | <p>Agilent R T</p> <p>Ch Freq 2.48 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm #Atten 30 dB</p> <p>#Peak Log 10 dB/Offset 1.8 dB</p> <p>Center 2.48 GHz Span 3 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 5 ms (401 pts)</p> <p>Occupied Bandwidth Occ BW % Pwr 99.00 %</p> <p>1.0750 MHz x dB -6.00 dB</p> <p>Transmit Freq Error -22.028 kHz</p> <p>x dB Bandwidth 775.968 kHz</p> <p>Freq/Channel</p> <p>Center Freq 2.4800000 GHz</p> <p>Start Freq 2.4785000 GHz</p> <p>Stop Freq 2.4815000 GHz</p> <p>CF Step 300.00000 kHz Auto Man</p> <p>Freq Offset 0.0000000 Hz</p> <p>Signal Track On Off</p> |

8 Maximum Power Density Measurement

8.1. Limit

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.

8.2. Test Setup



8.3. Test Instruments

| Equipment | Manufacturer | Model Number | Serial Number | Cal. Date | Remark |
|-------------------|--------------|--------------|---------------|------------|--------|
| Spectrum Analyzer | Agilent | E4445A | MY45300744 | 12/19/2012 | (2) |
| Test Site | ATL | TE05 | TE05 | N.C.R. | ----- |

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years. (3) Calibration period 3 years.

Note: N.C.R. = No Calibration Request.

8.4. Test Procedure

The EUT was setup to ANSI C63.4, 2009; tested to DTS test procedure of KDB558074D01 for compliance to FCC 47CFR 15.247 requirements.

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
4. Set the VBW $\geq 3 \times \text{RBW}$.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level within the RBW.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

8.5. Test Result

| Model Number | DT10 | | |
|-----------------|--------------------------------|-----------|-------------|
| Test Item | Maximum Power Density | | |
| Test Mode | Mode 2: IEEE 802.11b Link Mode | | |
| Date of Test | 08/11/2014 | Test Site | TE05 |
| Frequency (MHz) | Reading (dBm/3KHz) | | Limit (dBm) |
| 2412 | -6.969 | | < 8 |
| 2437 | -7.274 | | < 8 |
| 2462 | -8.280 | | < 8 |

| Model Number | DT10 | | |
|-----------------|--------------------------------|-----------|-------------|
| Test Item | Maximum Power Density | | |
| Test Mode | Mode 3: IEEE 802.11g Link Mode | | |
| Date of Test | 08/11/2014 | Test Site | TE05 |
| Frequency (MHz) | Reading (dBm/3KHz) | | Limit (dBm) |
| 2412 | -11.060 | | < 8 |
| 2437 | -10.430 | | < 8 |
| 2462 | -10.190 | | < 8 |

| Model Number | DT10 | | | |
|-----------------|---|-----------|-----------------------|-------------|
| Test Item | Maximum Power Density | | | |
| Test Mode | Mode 4: IEEE 802.11n 2.4GHz 20MHz Link Mode | | | |
| Date of Test | 08/11/2014 | Test Site | TE05 | |
| Frequency (MHz) | Reading (dBm/3KHz) | | | Limit (dBm) |
| | Antenna 1 | Antenna 2 | Antenna 1 + Antenna 2 | |
| 2412 | -12.070 | -11.710 | -8.876 | < 8 |
| 2437 | -11.800 | -12.660 | -9.198 | < 8 |
| 2462 | -11.150 | -12.130 | -8.602 | < 8 |

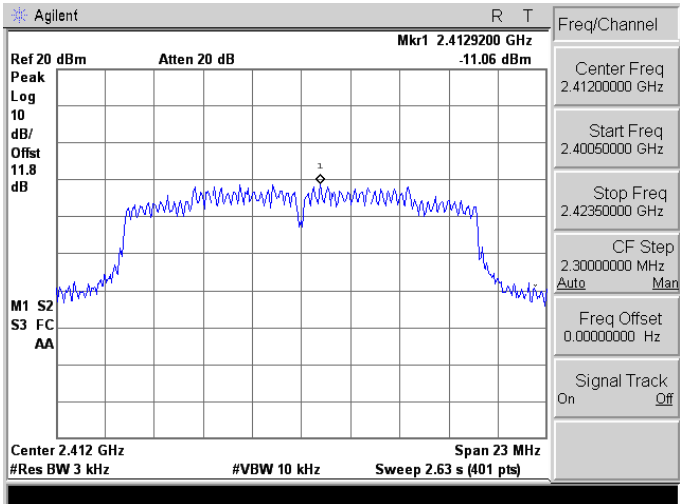
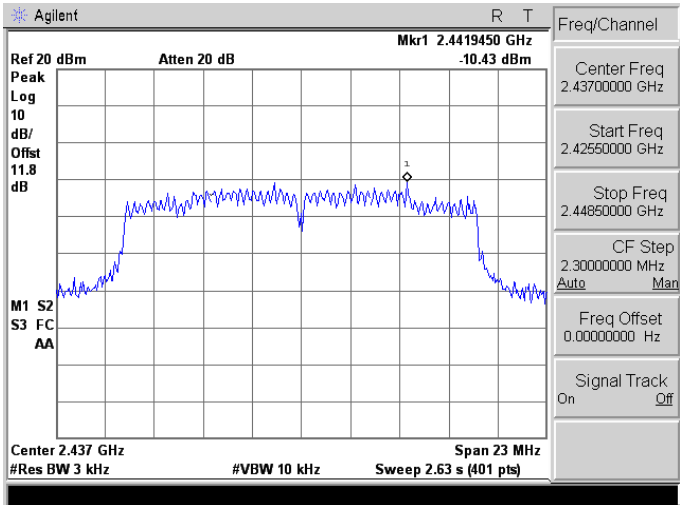
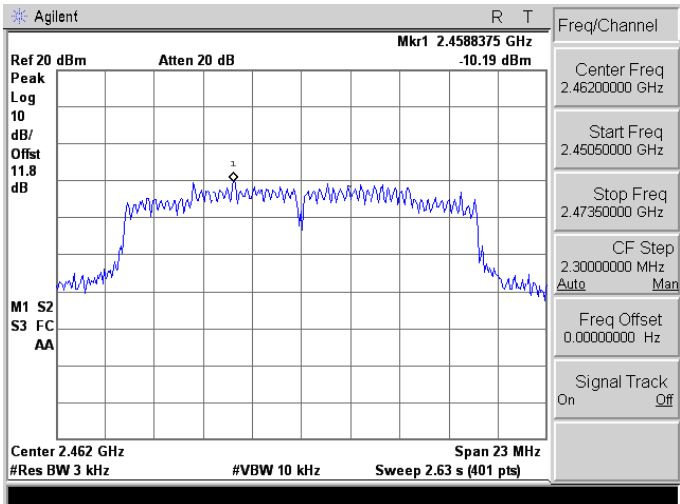
| Model Number | DT10 | | | |
|-----------------|---|-----------|-----------------------|-------------|
| Test Item | Maximum Power Density | | | |
| Test Mode | Mode 5: IEEE 802.11n 2.4GHz 40MHz Link Mode | | | |
| Date of Test | 08/11/2014 | Test Site | TE05 | |
| Frequency (MHz) | Reading (dBm/3KHz) | | | Limit (dBm) |
| | Antenna 1 | Antenna 2 | Antenna 1 + Antenna 2 | |
| 2422 | -17.560 | -18.470 | -14.981 | < 8 |
| 2437 | -18.970 | -19.130 | -16.039 | < 8 |
| 2452 | -18.720 | -18.600 | -15.649 | < 8 |

| Model Number | DT10 | | | |
|-----------------|-------------------------------------|-----------|-----------------------|-------------|
| Test Item | Maximum Power Density | | | |
| Test Mode | Mode 6: Bluetooth v4.0 LE Link Mode | | | |
| Date of Test | 08/11/2014 | Test Site | TE05 | |
| Frequency (MHz) | Reading (dBm/3KHz) | | | Limit (dBm) |
| | Antenna 1 | Antenna 2 | Antenna 1 + Antenna 2 | |
| 2402 | | -8.693 | | < 8 |
| 2440 | | -8.568 | | < 8 |
| 2480 | | -7.764 | | < 8 |

8.6. Test Graphs

| Mode 2: IEEE 802.11b Link Mode | |
|--------------------------------|---|
| 2412 | <p>Agilent R T</p> <p>Ref 20 dBm Atten 20 dB Mkr1 2.41467 GHz -6.969 dBm</p> <p>Peak Log 10 dB/Offset 11.8 dB</p> <p>M1 S2 S3 FC AA</p> <p>Center 2.412 GHz Span 15.5 MHz #Res BW 3 kHz #VBW 10 kHz Sweep 1.773 s (401 pts)</p> <p>Freq/Channel</p> <p>Center Freq 2.41200000 GHz</p> <p>Start Freq 2.40425000 GHz</p> <p>Stop Freq 2.41975000 GHz</p> <p>CF Step 1.55000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| 2437 | <p>Agilent R T</p> <p>Ref 20 dBm Atten 20 dB Mkr1 2.43894 GHz -7.274 dBm</p> <p>Peak Log 10 dB/Offset 11.8 dB</p> <p>M1 S2 S3 FC AA</p> <p>Center 2.437 GHz Span 15.5 MHz #Res BW 3 kHz #VBW 10 kHz Sweep 1.773 s (401 pts)</p> <p>Freq/Channel</p> <p>Center Freq 2.43700000 GHz</p> <p>Start Freq 2.42925000 GHz</p> <p>Stop Freq 2.44475000 GHz</p> <p>CF Step 1.55000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| 2462 | <p>Agilent R T</p> <p>Ref 20 dBm Atten 20 dB Mkr1 2.46382 GHz -8.28 dBm</p> <p>Peak Log 10 dB/Offset 11.8 dB</p> <p>M1 S2 S3 FC AA</p> <p>Center 2.462 GHz Span 15.5 MHz #Res BW 3 kHz #VBW 10 kHz Sweep 1.773 s (401 pts)</p> <p>Freq/Channel</p> <p>Center Freq 2.46200000 GHz</p> <p>Start Freq 2.45425000 GHz</p> <p>Stop Freq 2.46975000 GHz</p> <p>CF Step 1.55000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |

Mode 3: IEEE 802.11g Link Mode

| | |
|-------------|--|
| <p>2412</p> |  |
| <p>2437</p> |  |
| <p>2462</p> |  |

Mode 4: IEEE 802.11n 2.4GHz 20MHz Link Mode_Antenna 1

| | |
|-------------|--|
| <p>2412</p> | |
| <p>2437</p> | |
| <p>2462</p> | |

Mode 4: IEEE 802.11n 2.4GHz 20MHz Link Mode_Antenna 2

| | |
|-------------|--|
| <p>2412</p> | <p>Agilent R T Ref 20 dBm Atten 20 dB Mkr1 2.4082625 GHz Peak Log 10 dB/Offset 11.8 dB M1 S2 S3 FC AA Center 2.412 GHz Span 23 MHz #Res BW 3 kHz #VBW 10 kHz Sweep 2.63 s (401 pts)</p> <p>Freq/Channel Center Freq 2.41200000 GHz Start Freq 2.40050000 GHz Stop Freq 2.42350000 GHz CF Step 2.30000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off</p> |
| <p>2437</p> | <p>Agilent R T Ref 20 dBm Atten 20 dB Mkr1 2.4357350 GHz Peak Log 10 dB/Offset 11.8 dB M1 S2 S3 FC AA Center 2.437 GHz Span 23 MHz #Res BW 3 kHz #VBW 10 kHz Sweep 2.63 s (401 pts)</p> <p>Freq/Channel Center Freq 2.43700000 GHz Start Freq 2.42550000 GHz Stop Freq 2.44850000 GHz CF Step 2.30000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off</p> |
| <p>2462</p> | <p>Agilent R T Ref 20 dBm Atten 20 dB Mkr1 2.4670025 GHz Peak Log 10 dB/Offset 11.8 dB M1 S2 S3 FC AA Center 2.462 GHz Span 23 MHz #Res BW 3 kHz #VBW 10 kHz Sweep 2.63 s (401 pts)</p> <p>Freq/Channel Center Freq 2.46200000 GHz Start Freq 2.45050000 GHz Stop Freq 2.47350000 GHz CF Step 2.30000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off</p> |

Mode 5: IEEE 802.11n 2.4GHz 40MHz Link Mode_Antenna 1

| | |
|-------------|--|
| <p>2422</p> | |
| <p>2437</p> | |
| <p>2452</p> | |

Mode 5: IEEE 802.11n 2.4GHz 40MHz Link Mode_Antenna 2

| | |
|-------------|--|
| <p>2422</p> | <p>Agilent R T</p> <p>Ref 20 dBm Atten 20 dB Mkr1 2.409445 GHz -18.47 dBm</p> <p>Peak Log 10 dB/Offset 11.8 dB</p> <p>M1 S2 S3 FC AA</p> <p>Center 2.422 GHz Span 54 MHz #Res BW 3 kHz #VBW 10 kHz Sweep 6.176 s (401 pts)</p> <p>Freq/Channel</p> <p>Center Freq 2.42200000 GHz</p> <p>Start Freq 2.39500000 GHz</p> <p>Stop Freq 2.44900000 GHz</p> <p>CF Step 5.40000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| <p>2437</p> | <p>Agilent R T</p> <p>Ref 20 dBm Atten 20 dB Mkr1 2.424580 GHz -19.13 dBm</p> <p>Peak Log 10 dB/Offset 11.8 dB</p> <p>M1 S2 S3 FC AA</p> <p>Center 2.437 GHz Span 54 MHz #Res BW 3 kHz #VBW 10 kHz Sweep 6.176 s (401 pts)</p> <p>Freq/Channel</p> <p>Center Freq 2.43700000 GHz</p> <p>Start Freq 2.41000000 GHz</p> <p>Stop Freq 2.46400000 GHz</p> <p>CF Step 5.40000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| <p>2452</p> | <p>Agilent R T</p> <p>Ref 20 dBm Atten 20 dB Mkr1 2.454565 GHz -18.5 dBm</p> <p>Peak Log 10 dB/Offset 11.8 dB</p> <p>M1 S2 S3 FC AA</p> <p>Center 2.452 GHz Span 54 MHz #Res BW 3 kHz #VBW 10 kHz Sweep 6.176 s (401 pts)</p> <p>Freq/Channel</p> <p>Center Freq 2.45200000 GHz</p> <p>Start Freq 2.42500000 GHz</p> <p>Stop Freq 2.47900000 GHz</p> <p>CF Step 5.40000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |

Mode 6: Bluetooth v4.0 LE Link Mode

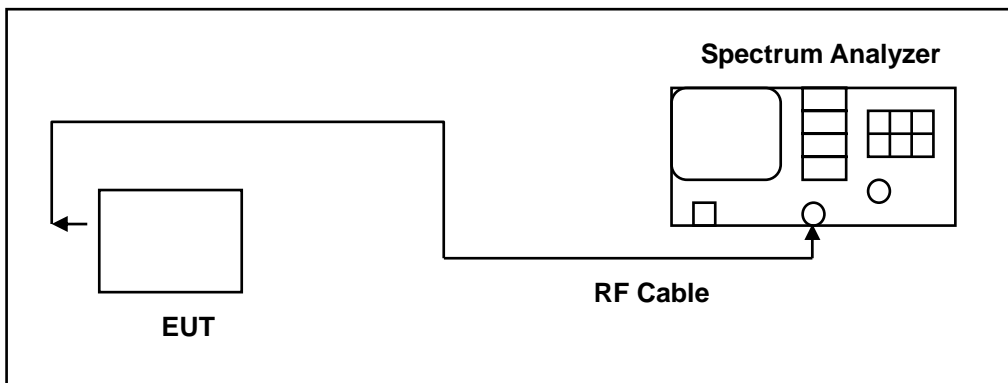
| | |
|-------------|--|
| <p>2402</p> | |
| <p>2440</p> | |
| <p>2480</p> | |

9 Out of Band Conducted Emissions Measurement

9.1. Limit

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

9.2. Test Setup



9.3. Test Instruments

| Equipment | Manufacturer | Model Number | Serial Number | Cal. Date | Remark |
|-------------------|--------------|--------------|---------------|------------|--------|
| Spectrum Analyzer | Agilent | E4445A | MY45300744 | 12/19/2012 | (2) |
| Spectrum Analyzer | Agilent | E4408B | MY45107753 | 07/24/2014 | (1) |
| Test Site | ATL | TE05 | TE05 | N.C.R. | ----- |

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years. (3) Calibration period 3 years.

Note: N.C.R. = No Calibration Request.

9.4. Test Procedure

In any 100 kHz bandwidth outside the EUT pass band, the RF power produced by the modulation products of the spreading sequence, the information sequence, and the carrier frequency shall be at least 20 dB below that of the maximum in-band 100 kHz emission, antenna output of the EUT was coupled directly to spectrum analyzer; if an external attenuator and/or cable was used, these losses are compensated for with the analyzer OFFSET function.

All other types of emissions from the EUT shall meet the general limits for radiated frequencies outside the pass band.

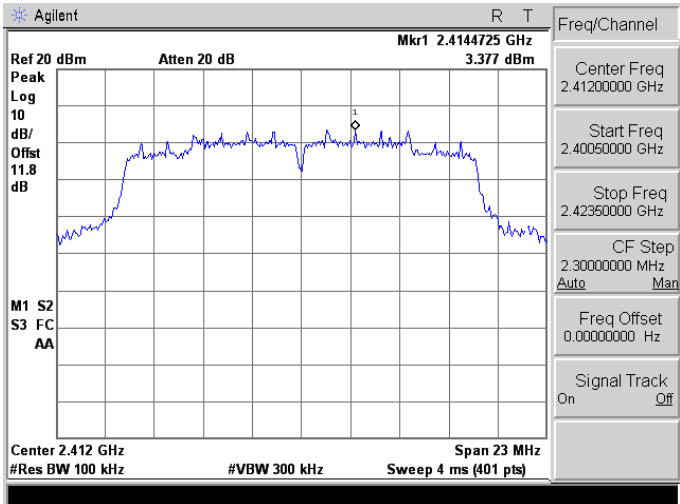
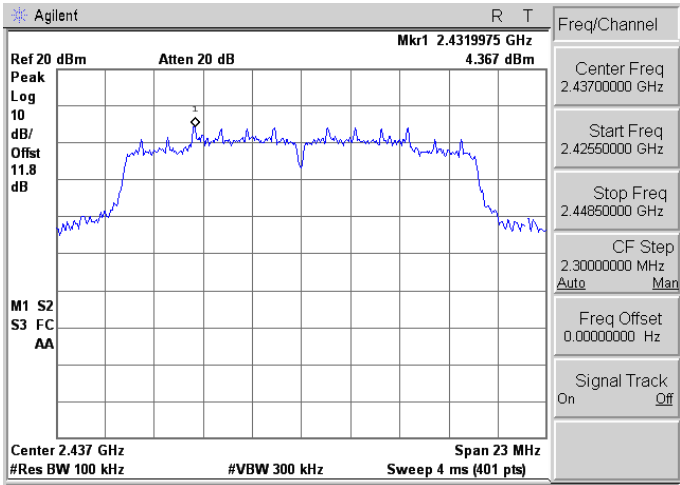
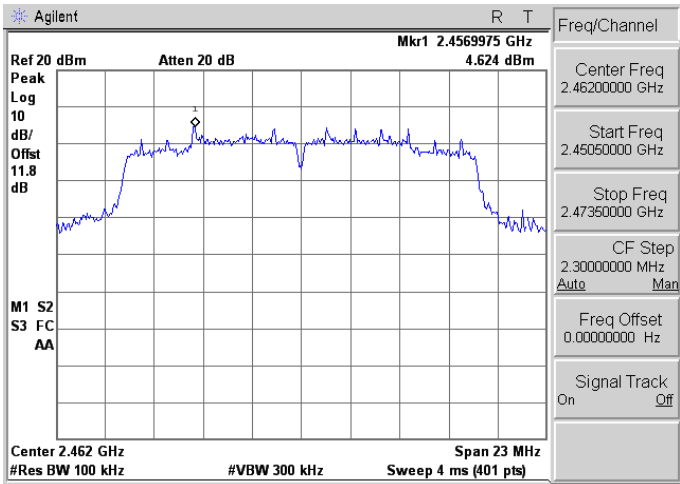
The test was performed at 3 channels.

9.5. Test Graphs

Reference level

| Mode 2: IEEE 802.11b Link Mode | |
|--------------------------------|---|
| 2412 | <p>Agilent R T Ref 20 dBm Atten 20 dB Mkr1 2.41347 GHz 7.101 dBm Peak Log 10 dB/Offset 11.8 dB M1 S2 S3 FC AA Center 2.412 GHz Span 15.5 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Freq/Channel Center Freq 2.41200000 GHz Start Freq 2.40425000 GHz Stop Freq 2.41975000 GHz CF Step 1.55000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off</p> |
| 2437 | <p>Agilent R T Ref 20 dBm Atten 20 dB Mkr1 2.43545 GHz 6.679 dBm Peak Log 10 dB/Offset 11.8 dB M1 S2 S3 FC AA Center 2.437 GHz Span 15.5 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Freq/Channel Center Freq 2.43700000 GHz Start Freq 2.42925000 GHz Stop Freq 2.44475000 GHz CF Step 1.55000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off</p> |
| 2462 | <p>Agilent R T Ref 20 dBm Atten 20 dB Mkr1 2.45999 GHz 7.276 dBm Peak Log 10 dB/Offset 11.8 dB M1 S2 S3 FC AA Center 2.462 GHz Span 15.5 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Freq/Channel Center Freq 2.46200000 GHz Start Freq 2.45425000 GHz Stop Freq 2.46975000 GHz CF Step 1.55000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off</p> |

Mode 3: IEEE 802.11g Link Mode

| | |
|------|---|
| 2412 |  <p>Agilent R T Mkr1 2.4144725 GHz 3.377 dBm Ref 20 dBm Atten 20 dB Peak Log 10 dB/Offset 11.8 dB M1 S2 S3 FC AA Center 2.412 GHz Span 23 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Freq/Channel Center Freq 2.41200000 GHz Start Freq 2.40050000 GHz Stop Freq 2.42350000 GHz CF Step 2.30000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off</p> |
| 2437 |  <p>Agilent R T Mkr1 2.4319975 GHz 4.367 dBm Ref 20 dBm Atten 20 dB Peak Log 10 dB/Offset 11.8 dB M1 S2 S3 FC AA Center 2.437 GHz Span 23 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Freq/Channel Center Freq 2.43700000 GHz Start Freq 2.42550000 GHz Stop Freq 2.44850000 GHz CF Step 2.30000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off</p> |
| 2462 |  <p>Agilent R T Mkr1 2.4569975 GHz 4.624 dBm Ref 20 dBm Atten 20 dB Peak Log 10 dB/Offset 11.8 dB M1 S2 S3 FC AA Center 2.462 GHz Span 23 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Freq/Channel Center Freq 2.46200000 GHz Start Freq 2.45050000 GHz Stop Freq 2.47350000 GHz CF Step 2.30000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off</p> |

Mode 4: IEEE 802.11n 2.4GHz 20MHz Link Mode_Antenna 1

| | |
|-------------|--|
| <p>2412</p> | <p>Agilent R T</p> <p>Ref 20 dBm Atten 20 dB Mkr1 2.4169450 GHz 3.604 dBm</p> <p>Peak Log 10 dB/Offset 11.8 dB</p> <p>M1 S2 S3 FC AA</p> <p>Center 2.412 GHz Span 23 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Freq/Channel</p> <p>Center Freq 2.41200000 GHz</p> <p>Start Freq 2.40050000 GHz</p> <p>Stop Freq 2.42350000 GHz</p> <p>CF Step 2.30000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| <p>2437</p> | <p>Agilent R T</p> <p>Ref 20 dBm Atten 20 dB Mkr1 2.4419450 GHz 5.087 dBm</p> <p>Peak Log 10 dB/Offset 11.8 dB</p> <p>M1 S2 S3 FC AA</p> <p>Center 2.437 GHz Span 23 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Freq/Channel</p> <p>Center Freq 2.43700000 GHz</p> <p>Start Freq 2.42550000 GHz</p> <p>Stop Freq 2.44850000 GHz</p> <p>CF Step 2.30000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| <p>2462</p> | <p>Agilent R T</p> <p>Ref 20 dBm Atten 20 dB Mkr1 2.4669450 GHz 3.707 dBm</p> <p>Peak Log 10 dB/Offset 11.8 dB</p> <p>M1 S2 S3 FC AA</p> <p>Center 2.462 GHz Span 23 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Freq/Channel</p> <p>Center Freq 2.46200000 GHz</p> <p>Start Freq 2.45050000 GHz</p> <p>Stop Freq 2.47350000 GHz</p> <p>CF Step 2.30000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |

Mode 4: IEEE 802.11n 2.4GHz 20MHz Link Mode_Antenna 2

| | |
|-------------|--|
| <p>2412</p> | |
| <p>2437</p> | |
| <p>2462</p> | |

Mode 5: IEEE 802.11n 2.4GHz 40MHz Link Mode_Antenna 1

| | |
|-------------|--|
| <p>2422</p> | <p>Agilent R T</p> <p>Ref 20 dBm Atten 20 dB Mkr1 2.419435 GHz Peak 3.234 dBm</p> <p>Log 10 dB/Offst 11.8 dB</p> <p>M1 S2 S3 FC AA</p> <p>Center 2.422 GHz Span 54 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 5.594 ms (401 pts)</p> <p>Freq/Channel</p> <p>Center Freq 2.42200000 GHz</p> <p>Start Freq 2.39500000 GHz</p> <p>Stop Freq 2.44900000 GHz</p> <p>CF Step 5.40000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| <p>2437</p> | <p>Agilent R T</p> <p>Ref 20 dBm Atten 20 dB Mkr1 2.430790 GHz Peak 3.165 dBm</p> <p>Log 10 dB/Offst 11.8 dB</p> <p>M1 S2 S3 FC AA</p> <p>Center 2.437 GHz Span 54 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 5.594 ms (401 pts)</p> <p>Freq/Channel</p> <p>Center Freq 2.43700000 GHz</p> <p>Start Freq 2.41000000 GHz</p> <p>Stop Freq 2.46400000 GHz</p> <p>CF Step 5.40000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| <p>2452</p> | <p>Agilent R T</p> <p>Ref 20 dBm Atten 20 dB Mkr1 2.443225 GHz Peak 4.151 dBm</p> <p>Log 10 dB/Offst 11.8 dB</p> <p>M1 S2 S3 FC AA</p> <p>Center 2.452 GHz Span 54 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 5.594 ms (401 pts)</p> <p>Freq/Channel</p> <p>Center Freq 2.45200000 GHz</p> <p>Start Freq 2.42500000 GHz</p> <p>Stop Freq 2.47900000 GHz</p> <p>CF Step 5.40000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |

Mode 5: IEEE 802.11n 2.4GHz 40MHz Link Mode_Antenna 2

| | |
|-------------|---|
| <p>2422</p> | <p>Agilent R T</p> <p>Ref 20 dBm Atten 20 dB Mkr1 2.424430 GHz -3.946 dBm</p> <p>Center 2.422 GHz Span 54 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 5.594 ms (401 pts)</p> <p>Freq/Channel Center Freq 2.42200000 GHz Start Freq 2.39500000 GHz Stop Freq 2.44900000 GHz CF Step 5.40000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off</p> |
| <p>2437</p> | <p>Agilent R T</p> <p>Ref 20 dBm Atten 20 dB Mkr1 2.434435 GHz -3.862 dBm</p> <p>Center 2.437 GHz Span 54 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 5.594 ms (401 pts)</p> <p>Freq/Channel Center Freq 2.43700000 GHz Start Freq 2.41000000 GHz Stop Freq 2.46400000 GHz CF Step 5.40000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off</p> |
| <p>2452</p> | <p>Agilent R T</p> <p>Ref 20 dBm Atten 20 dB Mkr1 2.454430 GHz -3.929 dBm</p> <p>Center 2.452 GHz Span 54 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 5.594 ms (401 pts)</p> <p>Peak Search Meas Tools Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2</p> |

Mode 6: Bluetooth v4.0 LE Link Mode

| | |
|------|--|
| 2402 | |
| 2440 | |
| 2480 | |

Out of Band Conducted Emissions

Mode 2: IEEE 802.11b Link Mode

| | |
|-------------|--|
| <p>2412</p> | |
| <p>2437</p> | |
| <p>2462</p> | |

Mode 3: IEEE 802.11g Link Mode

| 2412 | <p>Agilent R T Ref 20 dBm Atten 20 dB Mkr1 2.41 GHz 0.297 dBm Peak Log 10 dB/Offset 11.8 dB DI -16.6 dBm Start 30 MHz Stop 26.5 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.742 s (401 pts) <table border="1"> <thead> <tr> <th>Marker</th> <th>Trace</th> <th>Type</th> <th>X Axis</th> <th>Amplitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>(1)</td> <td>Freq</td> <td>2.41 GHz</td> <td>0.297 dBm</td> </tr> </tbody> </table> Freq/Channel Center Freq 13.2650000 GHz Start Freq 30.0000000 MHz Stop Freq 26.5000000 GHz CF Step 2.64700000 GHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off</p> | Marker | Trace | Type | X Axis | Amplitude | 1 | (1) | Freq | 2.41 GHz | 0.297 dBm |
|--------|--|--------|----------|-----------|--------|-----------|---|-----|------|----------|-----------|
| Marker | Trace | Type | X Axis | Amplitude | | | | | | | |
| 1 | (1) | Freq | 2.41 GHz | 0.297 dBm | | | | | | | |
| 2437 | <p>Agilent R T Ref 20 dBm Atten 20 dB Mkr1 2.44 GHz 2.112 dBm Peak Log 10 dB/Offset 11.8 dB DI -15.6 dBm Start 30 MHz Stop 26.5 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.742 s (401 pts) <table border="1"> <thead> <tr> <th>Marker</th> <th>Trace</th> <th>Type</th> <th>X Axis</th> <th>Amplitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>(1)</td> <td>Freq</td> <td>2.44 GHz</td> <td>2.112 dBm</td> </tr> </tbody> </table> Freq/Channel Center Freq 13.2650000 GHz Start Freq 30.0000000 MHz Stop Freq 26.5000000 GHz CF Step 2.64700000 GHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off</p> | Marker | Trace | Type | X Axis | Amplitude | 1 | (1) | Freq | 2.44 GHz | 2.112 dBm |
| Marker | Trace | Type | X Axis | Amplitude | | | | | | | |
| 1 | (1) | Freq | 2.44 GHz | 2.112 dBm | | | | | | | |
| 2462 | <p>Agilent R T Ref 20 dBm Atten 20 dB Mkr1 2.46 GHz 1.86 dBm Peak Log 10 dB/Offset 11.8 dB DI -15.4 dBm Start 30 MHz Stop 26.5 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.742 s (401 pts) <table border="1"> <thead> <tr> <th>Marker</th> <th>Trace</th> <th>Type</th> <th>X Axis</th> <th>Amplitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>(1)</td> <td>Freq</td> <td>2.46 GHz</td> <td>1.86 dBm</td> </tr> </tbody> </table> Freq/Channel Center Freq 13.2650000 GHz Start Freq 30.0000000 MHz Stop Freq 26.5000000 GHz CF Step 2.64700000 GHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off</p> | Marker | Trace | Type | X Axis | Amplitude | 1 | (1) | Freq | 2.46 GHz | 1.86 dBm |
| Marker | Trace | Type | X Axis | Amplitude | | | | | | | |
| 1 | (1) | Freq | 2.46 GHz | 1.86 dBm | | | | | | | |

Mode 4: IEEE 802.11n 2.4GHz 20MHz Link Mode_Antenna 1

| | |
|-------------|--|
| <p>2412</p> | |
| <p>2437</p> | |
| <p>2462</p> | |

Mode 4: IEEE 802.11n 2.4GHz 20MHz Link Mode_Antenna 2

| <p>2412</p> | <p>Agilent R T Ref 20 dBm Atten 20 dB Mkr1 2.41 GHz 2.114 dBm Peak Log 10 dB/Offset 11.8 dB DI -16.2 dBm Start 30 MHz Stop 26.5 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.742 s (401 pts) <table border="1"> <thead> <tr> <th>Marker</th> <th>Trace</th> <th>Type</th> <th>X Axis</th> <th>Amplitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>(1)</td> <td>Freq</td> <td>2.41 GHz</td> <td>2.114 dBm</td> </tr> </tbody> </table> Freq/Channel Center Freq 13.2650000 GHz Start Freq 30.0000000 MHz Stop Freq 26.5000000 GHz CF Step 2.64700000 GHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off</p> | Marker | Trace | Type | X Axis | Amplitude | 1 | (1) | Freq | 2.41 GHz | 2.114 dBm |
|-------------|---|--------|----------|-----------|--------|-----------|---|-----|------|----------|-----------|
| Marker | Trace | Type | X Axis | Amplitude | | | | | | | |
| 1 | (1) | Freq | 2.41 GHz | 2.114 dBm | | | | | | | |
| <p>2437</p> | <p>Agilent R T Ref 20 dBm Atten 20 dB Mkr1 2.44 GHz 0.801 dBm Peak Log 10 dB/Offset 11.8 dB DI -16.2 dBm Start 30 MHz Stop 26.5 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.742 s (401 pts) <table border="1"> <thead> <tr> <th>Marker</th> <th>Trace</th> <th>Type</th> <th>X Axis</th> <th>Amplitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>(1)</td> <td>Freq</td> <td>2.44 GHz</td> <td>0.801 dBm</td> </tr> </tbody> </table> Freq/Channel Center Freq 13.2650000 GHz Start Freq 30.0000000 MHz Stop Freq 26.5000000 GHz CF Step 2.64700000 GHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off</p> | Marker | Trace | Type | X Axis | Amplitude | 1 | (1) | Freq | 2.44 GHz | 0.801 dBm |
| Marker | Trace | Type | X Axis | Amplitude | | | | | | | |
| 1 | (1) | Freq | 2.44 GHz | 0.801 dBm | | | | | | | |
| <p>2462</p> | <p>Agilent R T Ref 20 dBm Atten 20 dB Mkr1 2.46 GHz 2.242 dBm Peak Log 10 dB/Offset 11.8 dB DI -17.2 dBm Start 30 MHz Stop 26.5 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.742 s (401 pts) <table border="1"> <thead> <tr> <th>Marker</th> <th>Trace</th> <th>Type</th> <th>X Axis</th> <th>Amplitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>(1)</td> <td>Freq</td> <td>2.46 GHz</td> <td>2.242 dBm</td> </tr> </tbody> </table> Freq/Channel Center Freq 13.2650000 GHz Start Freq 30.0000000 MHz Stop Freq 26.5000000 GHz CF Step 2.64700000 GHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off</p> | Marker | Trace | Type | X Axis | Amplitude | 1 | (1) | Freq | 2.46 GHz | 2.242 dBm |
| Marker | Trace | Type | X Axis | Amplitude | | | | | | | |
| 1 | (1) | Freq | 2.46 GHz | 2.242 dBm | | | | | | | |

Mode 5: IEEE 802.11n 2.4GHz 40MHz Link Mode_Antenna 1

| | |
|-------------|--|
| <p>2422</p> | |
| <p>2437</p> | |
| <p>2452</p> | |

Mode 5: IEEE 802.11n 2.4GHz 40MHz Link Mode_Antenna 2

| | |
|-------------|--|
| <p>2422</p> | |
| <p>2437</p> | |
| <p>2452</p> | |

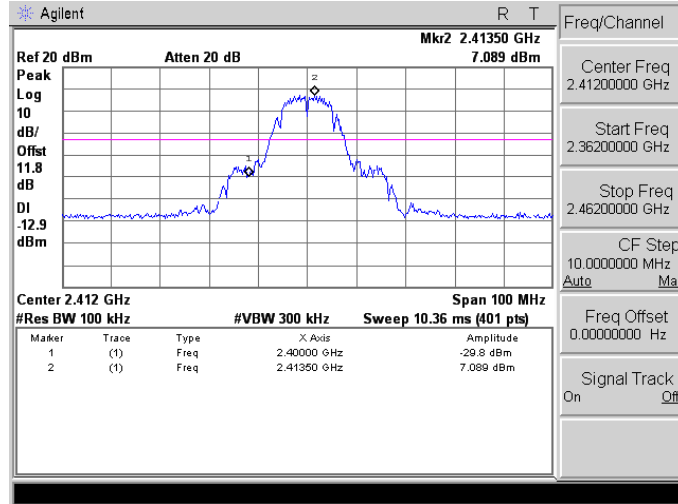
Mode 6: Bluetooth v4.0 LE Link Mode

| | |
|-------------|--|
| <p>2402</p> | |
| <p>2440</p> | |
| <p>2480</p> | |

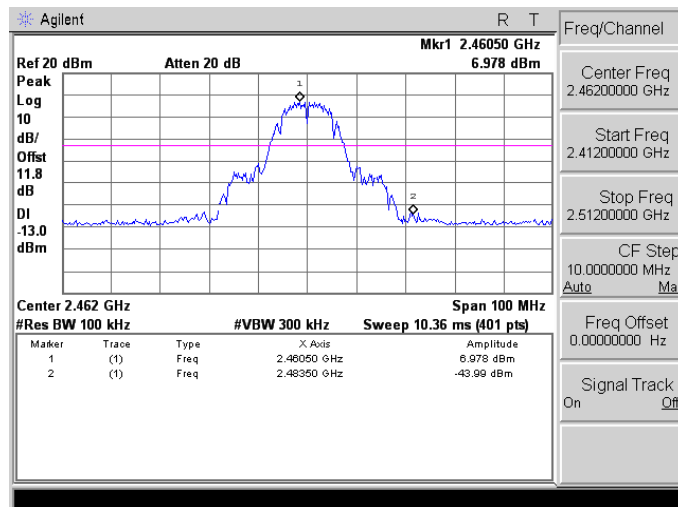
Conducted Band Edge

Mode 2: IEEE 802.11b Link Mode

2412

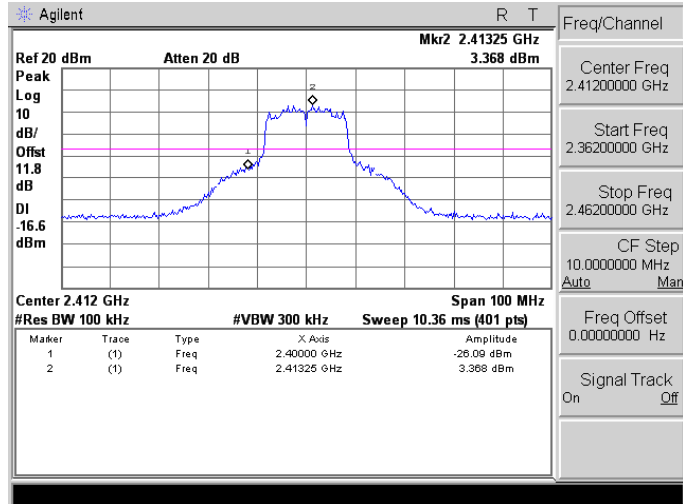


2462

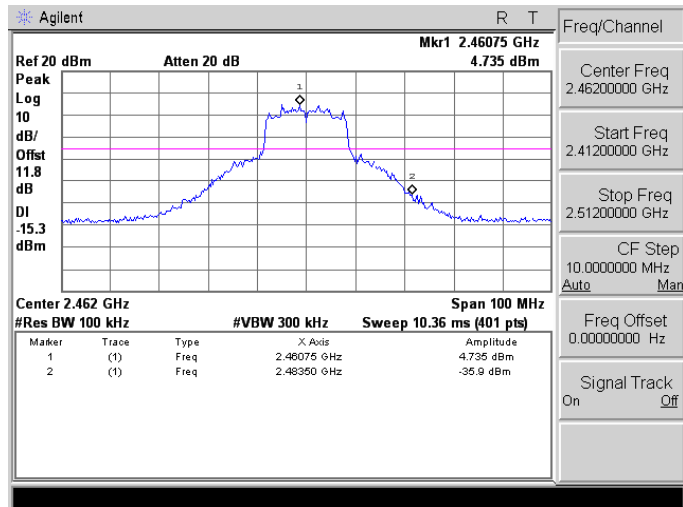


Mode 3: IEEE 802.11g Link Mode

2412

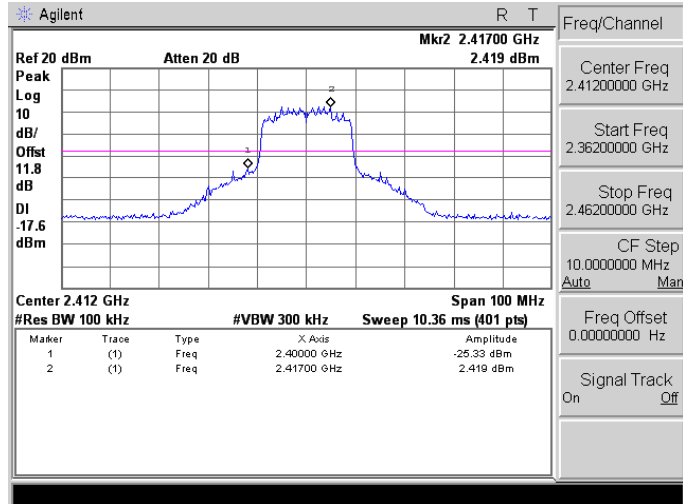


2462

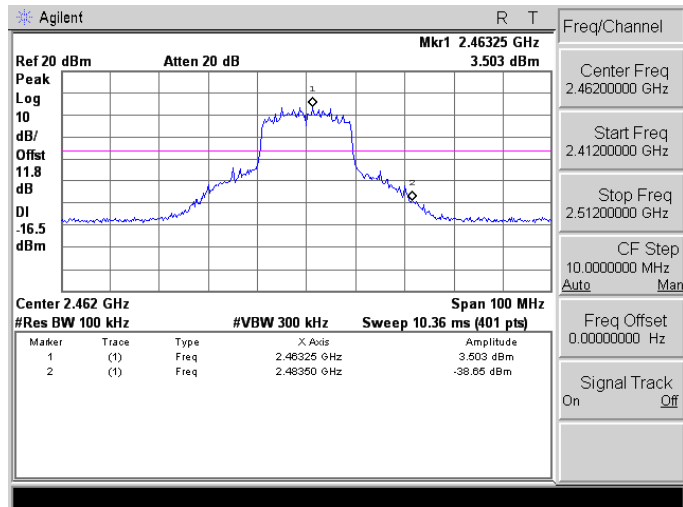


Mode 4: IEEE 802.11n 2.4GHz 20MHz Link Mode_Antenna 1

2412

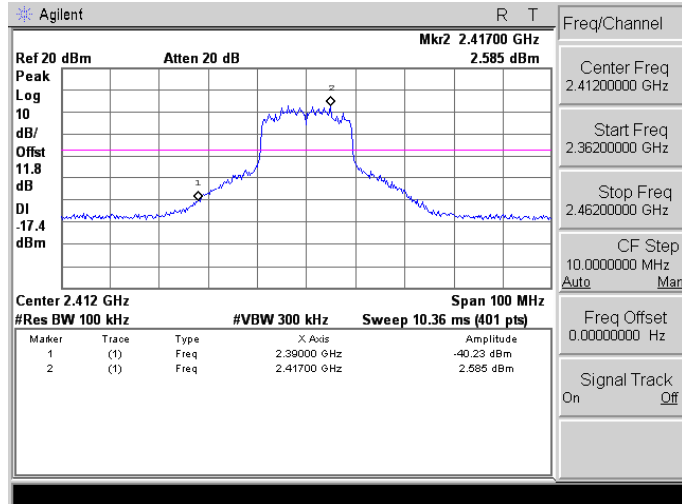


2462

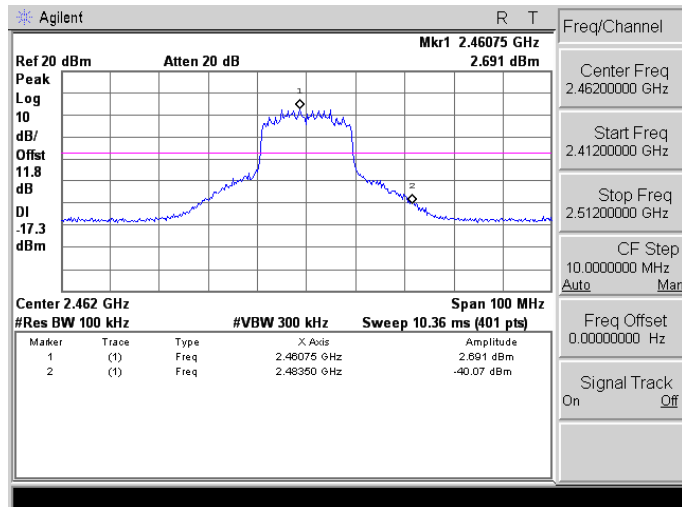


Mode 4: IEEE 802.11n 2.4GHz 20MHz Link Mode_Antenna 2

2412

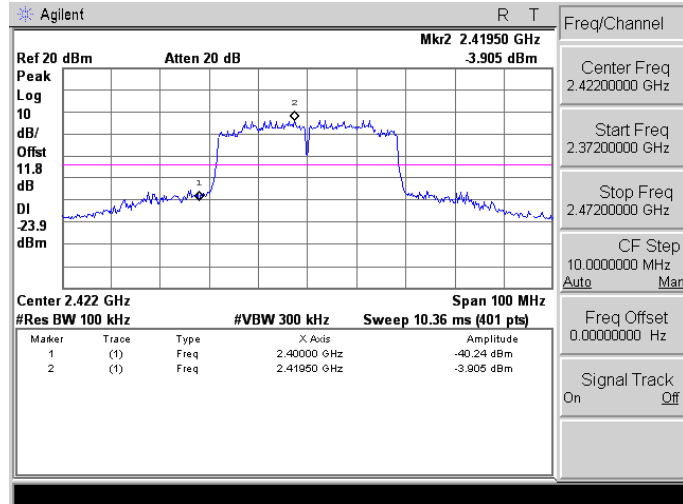


2462

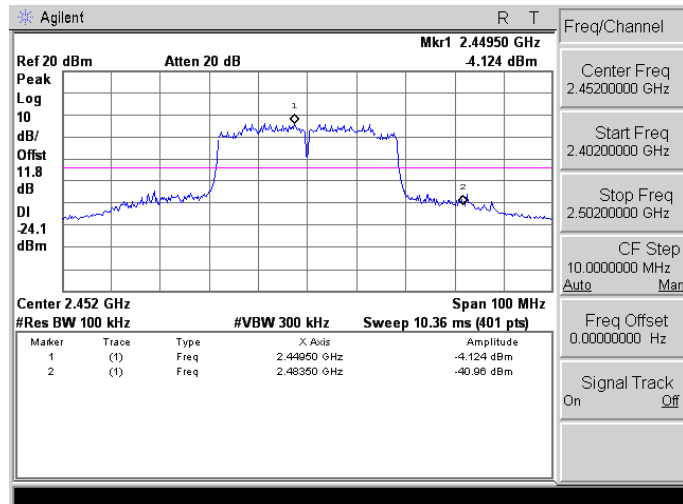


Mode 5: IEEE 802.11n 2.4GHz 40MHz Link Mode_Antenna 1

2422

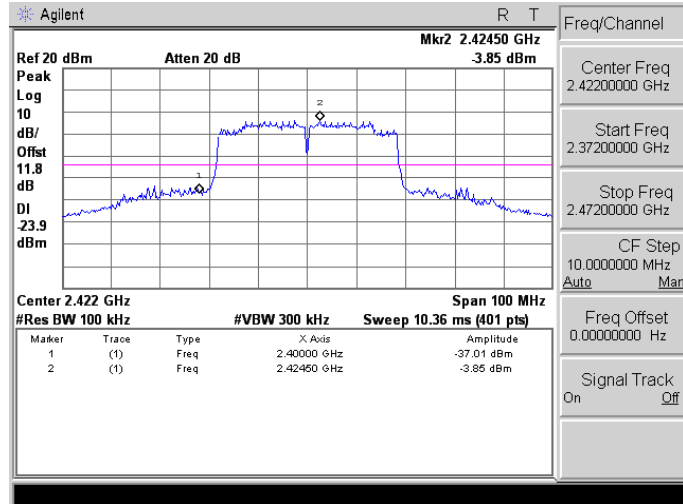


2452

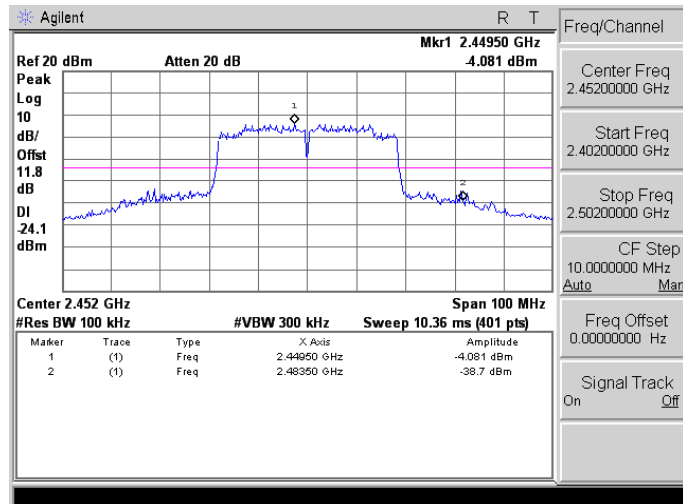


Mode 5: IEEE 802.11n 2.4GHz 40MHz Link Mode_Antenna 2

2422



2452

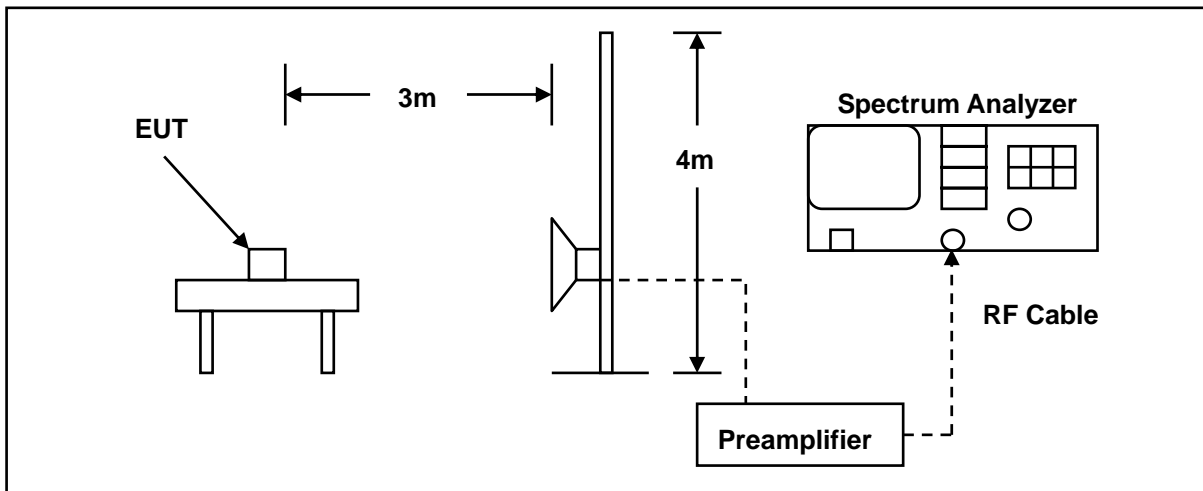


10 Band Edges Measurement

10.1.Limit

In any 100 kHz bandwidth outside the intentional radiation frequency band, the radio frequency power shall be at least 20 dB below the highest level of the radiated power. In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission limits.

10.2.Test Setup



10.3.Test Instruments

| 3 Meter Chamber | | | | | |
|---------------------------|--------------------------------|--------------|---------------|------------|--------|
| Equipment | Manufacturer | Model Number | Serial Number | Cal. Date | Remark |
| RF Pre-selector | Agilent | N9039A | MY46520256 | 01/10/2014 | (2) |
| Spectrum Analyzer | Agilent | E4446A | MY46180578 | 01/10/2014 | (1) |
| Pre Amplifier | Agilent | 8449B | 3008A02237 | 02/21/2014 | (1) |
| Pre Amplifier | Agilent | 8447D | 2944A10961 | 02/21/2014 | (1) |
| Horn Antenna (1~18GHz) | SCHWARZBECK MESS-ELEKTRONIK | BBHA9120D | 9120D-550 | 06/11/2014 | (1) |
| Test Site | ATL | TE01 | 888001 | 08/28/2013 | (1) |

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years. (3) Calibration period 3 years.

Note: N.C.R. = No Calibration Request.

10.4. Test Procedure

The EUT was setup to ANSI C63.4, 2009; tested to DTS test procedure of KDB558074D01 for compliance to FCC 47CFR 15.247 requirements.

The emissions on the harmonics frequencies, the limits, and the margin of compliance are presented. These tests were made when the transmitter was in full radiated power. The additional test was performed to show compliance with the requirement at the band-edge frequency 2483.5 MHz and up to 2500 MHz and at 2390.0 MHz.

The transmitter was configured with the worst case antenna and setup to transmit at the highest channel. Then the field strength was measured at 2483.5 MHz.

The transmitter was then configured with the worst case antenna and setup to transmit at the lowest channel. Then the field strength was measured at 2390.0 MHz. These tests were performed at 4 different bit rates.

For measurements the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

10.5. Test Result

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 2 | | | Date: | 08/12/2014 | | |
| Frequency: | 2412 MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 2388.870 | 56.53 | -1.96 | 54.57 | 74.00 | -19.43 | peak | H |
| 2388.870 | 43.87 | -1.96 | 41.91 | 54.00 | -12.09 | AVG | H |
| 2390.000 | 52.71 | -1.94 | 50.77 | 74.00 | -23.23 | peak | H |
| 2384.360 | 61.27 | -1.97 | 59.30 | 74.00 | -14.70 | peak | V |
| 2384.360 | 50.11 | -1.97 | 48.14 | 54.00 | -5.86 | AVG | V |
| 2390.000 | 62.37 | -1.94 | 60.43 | 74.00 | -13.57 | peak | V |
| 2390.000 | 52.29 | -1.94 | 50.35 | 54.00 | -3.65 | AVG | V |

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 2 | | | Date: | 08/12/2014 | | |
| Frequency: | 2462 MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 2483.500 | 52.00 | -1.52 | 50.48 | 74.00 | -23.52 | peak | H |
| 2485.320 | 54.68 | -1.51 | 53.17 | 74.00 | -20.83 | peak | H |
| 2485.320 | 45.38 | -1.51 | 43.87 | 54.00 | -10.13 | AVG | H |
| 2483.500 | 55.62 | -1.52 | 54.10 | 74.00 | -19.90 | peak | V |
| 2483.500 | 51.95 | -1.52 | 50.43 | 54.00 | -3.57 | AVG | V |
| 2485.000 | 61.48 | -1.51 | 59.97 | 74.00 | -14.03 | peak | V |
| 2485.000 | 49.73 | -1.51 | 48.22 | 54.00 | -5.78 | AVG | V |

| Standard: | | FCC Part 15C | | Test Distance: | | 3m | |
|-----------------|----------------|-----------------------|-----------------|----------------------|-------------|--------------|------------------|
| Test item: | | Radiated Emission | | Power: | | AC 120V/60Hz | |
| Model Number: | | DT10 | | Temp.(°C)/Hum.(%RH): | | 26(°C)/60%RH | |
| Mode: | | 3 | | Date: | | 08/12/2014 | |
| Frequency: | | 2412 MHz | | Test By: | | Eric Ou Yang | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 2389.420 | 63.28 | -1.95 | 61.33 | 74.00 | -12.67 | peak | H |
| 2389.420 | 46.26 | -1.95 | 44.31 | 54.00 | -9.69 | AVG | H |
| 2390.000 | 62.99 | -1.94 | 61.05 | 74.00 | -12.95 | peak | H |
| 2390.000 | 47.47 | -1.94 | 45.53 | 54.00 | -8.47 | AVG | H |
| 2388.760 | 74.37 | -1.96 | 72.41 | 74.00 | -1.59 | peak | V |
| 2388.760 | 50.80 | -1.96 | 48.84 | 54.00 | -5.16 | AVG | V |
| 2390.000 | 73.80 | -1.94 | 71.86 | 74.00 | -2.14 | peak | V |
| 2390.000 | 52.87 | -1.94 | 50.93 | 54.00 | -3.07 | AVG | V |

| Standard: | | FCC Part 15C | | Test Distance: | | 3m | |
|-----------------|----------------|-----------------------|-----------------|----------------------|-------------|--------------|------------------|
| Test item: | | Radiated Emission | | Power: | | AC 120V/60Hz | |
| Model Number: | | DT10 | | Temp.(°C)/Hum.(%RH): | | 26(°C)/60%RH | |
| Mode: | | 3 | | Date: | | 08/12/2014 | |
| Frequency: | | 2462 MHz | | Test By: | | Eric Ou Yang | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 2483.500 | 60.20 | -1.52 | 58.68 | 74.00 | -15.32 | peak | H |
| 2483.500 | 47.43 | -1.52 | 45.91 | 54.00 | -8.09 | AVG | H |
| 2483.960 | 64.59 | -1.51 | 63.08 | 74.00 | -10.92 | peak | H |
| 2483.960 | 46.21 | -1.51 | 44.70 | 54.00 | -9.30 | AVG | H |
| 2483.500 | 66.55 | -1.52 | 65.03 | 74.00 | -8.97 | peak | V |
| 2483.500 | 51.58 | -1.52 | 50.06 | 54.00 | -3.94 | AVG | V |
| 2483.880 | 69.48 | -1.51 | 67.97 | 74.00 | -6.03 | peak | V |
| 2483.880 | 50.72 | -1.51 | 49.21 | 54.00 | -4.79 | AVG | V |

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 4 | | | Date: | 08/12/2014 | | |
| Frequency: | 2412 MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 2389.420 | 61.60 | -1.95 | 59.65 | 74.00 | -14.35 | peak | H |
| 2389.420 | 47.26 | -1.95 | 45.31 | 54.00 | -8.69 | AVG | H |
| 2390.000 | 61.56 | -1.94 | 59.62 | 74.00 | -14.38 | peak | H |
| 2390.000 | 48.40 | -1.94 | 46.46 | 54.00 | -7.54 | AVG | H |
| 2389.420 | 66.13 | -1.95 | 64.18 | 74.00 | -9.82 | peak | V |
| 2389.420 | 50.75 | -1.95 | 48.80 | 54.00 | -5.20 | AVG | V |
| 2390.000 | 67.25 | -1.94 | 65.31 | 74.00 | -8.69 | peak | V |
| 2390.000 | 52.11 | -1.94 | 50.17 | 54.00 | -3.83 | AVG | V |

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 4 | | | Date: | 08/12/2014 | | |
| Frequency: | 2462 MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 2483.500 | 62.40 | -1.52 | 60.88 | 74.00 | -13.12 | peak | H |
| 2483.500 | 48.89 | -1.52 | 47.37 | 54.00 | -6.63 | AVG | H |
| 2484.040 | 63.79 | -1.51 | 62.28 | 74.00 | -11.72 | peak | H |
| 2484.040 | 47.63 | -1.51 | 46.12 | 54.00 | -7.88 | AVG | H |
| 2483.500 | 68.23 | -1.52 | 66.71 | 74.00 | -7.29 | peak | V |
| 2483.500 | 51.64 | -1.52 | 50.12 | 54.00 | -3.88 | AVG | V |
| 2483.920 | 67.29 | -1.51 | 65.78 | 74.00 | -8.22 | peak | V |
| 2483.920 | 50.68 | -1.51 | 49.17 | 54.00 | -4.83 | AVG | V |

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 5 | | | Date: | 08/12/2014 | | |
| Frequency: | 2422 MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 2387.640 | 66.48 | -1.96 | 64.52 | 74.00 | -9.48 | peak | H |
| 2387.640 | 47.82 | -1.96 | 45.86 | 54.00 | -8.14 | AVG | H |
| 2390.000 | 65.62 | -1.94 | 63.68 | 74.00 | -10.32 | peak | H |
| 2390.000 | 48.98 | -1.94 | 47.04 | 54.00 | -6.96 | AVG | H |
| 2389.440 | 72.31 | -1.95 | 70.36 | 74.00 | -3.64 | peak | V |
| 2389.440 | 53.16 | -1.95 | 51.21 | 54.00 | -2.79 | AVG | V |
| 2390.000 | 68.34 | -1.94 | 66.40 | 74.00 | -7.60 | peak | V |
| 2390.000 | 53.23 | -1.94 | 51.29 | 54.00 | -2.71 | AVG | V |

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 5 | | | Date: | 08/12/2014 | | |
| Frequency: | 2452 MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 2483.500 | 60.38 | -1.52 | 58.86 | 74.00 | -15.14 | peak | H |
| 2483.500 | 48.60 | -1.52 | 47.08 | 54.00 | -6.92 | AVG | H |
| 2485.550 | 63.50 | -1.51 | 61.99 | 74.00 | -12.01 | peak | H |
| 2485.550 | 48.56 | -1.51 | 47.05 | 54.00 | -6.95 | AVG | H |
| 2483.500 | 65.33 | -1.52 | 63.81 | 74.00 | -10.19 | peak | V |
| 2483.500 | 52.95 | -1.52 | 51.43 | 54.00 | -2.57 | AVG | V |
| 2484.700 | 68.26 | -1.51 | 66.75 | 74.00 | -7.25 | peak | V |
| 2484.700 | 52.78 | -1.51 | 51.27 | 54.00 | -2.73 | AVG | V |

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 6 | | | Date: | 08/16/2014 | | |
| Frequency: | 2402 MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 2321.550 | 46.28 | -2.26 | 44.02 | 74.00 | -29.98 | peak | H |
| 2390.000 | 37.71 | -1.94 | 35.77 | 74.00 | -38.23 | peak | H |
| 2322.100 | 44.44 | -2.25 | 42.19 | 74.00 | -31.81 | peak | V |
| 2390.000 | 38.42 | -1.94 | 36.48 | 74.00 | -37.52 | peak | V |

| Standard: | FCC Part 15C | | | Test Distance: | 3m | | |
|-----------------|-------------------|-----------------------|-----------------|----------------------|--------------|--------|------------------|
| Test item: | Radiated Emission | | | Power: | AC 120V/60Hz | | |
| Model Number: | DT10 | | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH | | |
| Mode: | 6 | | | Date: | 08/16/2014 | | |
| Frequency: | 2480 MHz | | | Test By: | Eric Ou Yang | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 2483.500 | 51.35 | -1.52 | 49.83 | 74.00 | -24.17 | peak | H |
| 2483.660 | 48.74 | -1.52 | 47.22 | 74.00 | -26.78 | peak | H |
| 2483.500 | 51.05 | -1.52 | 49.53 | 74.00 | -24.47 | peak | V |
| 2483.580 | 49.51 | -1.52 | 47.99 | 74.00 | -26.01 | peak | V |

11 Antenna Measurement

11.1.Limit

For intentional device, according to 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And According to 15.247 (b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

11.2.Antenna Connector Construction

The antenna used in this product is PCB antenna. And the maximum Gain of this antenna is as below:

| Band | Antenna Port | Type | Max. Gain |
|------------------|------------------|--------------|-----------|
| WLAN | Antenna 1 (MAIN) | PIFA Antenna | 0.55 dBi |
| WLAN / Bluetooth | Antenna 2 (AUX) | PIFA Antenna | 1.81 dBi |