



## **STC Test Report**

**Date:** 2016-07-15

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**No.:** DM124239

**Applicant:** Chenghai Udirc Toys Co., Ltd.  
Dengfeng Industrial Zone, Chenghai District, Shantou,  
Guangdong

**Manufacturer:** Chenghai Udirc Toys Co., Ltd.  
Dengfeng Industrial Zone, Chenghai District, Shantou,  
Guangdong

**Description of Sample(s):** Submitted sample(s) said to be  
Product: WiFi Camera Dron  
Brand Name: UDIRC  
Model Number: U818A WIFI  
FCC ID: ZKWWIFI1607121

**Date Sample(s) Received:** 2016-06-28

**Date Tested:** 2016-07-06 to 2016-07-12

**Investigation Requested:** Perform ElectroMagnetic Interference measurement in  
accordance with FCC 47CFR [Codes of Federal Regulations]  
Part 15: 2015 and ANSI C63.10:2013 for FCC Certification.

**Conclusion(s):** The submitted product COMPLIED with the requirements of  
Federal Communications Commission [FCC] Rules and  
Regulations Part 15. The tests were performed in accordance  
with the standards described above and on Section 2.2 in this  
Test Report.

**Remark(s):** WIFI (802.11b, 802.11g, 802.11n20)  
For additional model(s) details, see page 3.

  
LONG Yun Jian, Along  
Authorized Signatory  
ElectroMagnetic Compatibility Department  
For and on behalf of  
STC (Dongguan) Company Limited



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### **1.0 General Details**

#### **1.1 Test Laboratory**

STC (Dongguan) Company Limited  
EMC Laboratory  
68 Fumin Nan Road, Dalang, Dongguan, Guangdong, China  
Telephone: (86 769) 81119888  
Fax: (86 769) 81116222

#### **1.2 Equipment Under Test [EUT]**

##### **Description of Sample(s)**

Product: WiFi Camera Dron  
Manufacturer: Chenghai Udirc Toys Co., Ltd.  
Dengfeng Industrial Zone, Chenghai District, Shantou,  
Guangdong  
Brand Name: UDIRC  
Model Number: U818A WIFI  
Additional Model Number: U842Wifi, U845Wifi, U28W, U31W, U829A WiFi, U841W,  
U42W, U42HW, U30W, U28W, U29W, U30W, U31W,  
U34W, U35W, U36-1, U37W, U40HW, U45W, U46W,  
U47HW, U48HW, U49HW, U50HW, U51HW, U52HW,  
U53HW, U54HW, U55HW, U56HW, U57HW, U58HW,  
U59HW, U60HW  
Rating: 3.7Vd.c. Li-Po Battery

##### **1.2.1 Description of EUT Operation**

The Equipment Under Test (EUT) is a WiFi Camera , the transmission signal is digital modulated with channel frequency range 2412-2462MHz.

#### **1.3 Date of Order**

2016-06-28

#### **1.4 Submitted Sample(s):**

1 Sample

#### **1.5 Test Duration**

2016-07-06 to 2016-07-12

#### **1.6 Country of Origin**

China

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### **2.0 Technical Details**

#### **2.1 Investigations Requested**

Perform Electromagnetic Interference measurements in accordance with FCC 47CFR [Codes of Federal Regulations] Part 15: 2015 Regulations and ANSI C63.10:2013 for FCC Certification.

#### **2.2 Test Standards and Results Summary Tables**

| <b>EMISSION<br/>Results Summary</b>      |                        |                     |                     |                                     |                          |                                     |
|------------------------------------------|------------------------|---------------------|---------------------|-------------------------------------|--------------------------|-------------------------------------|
| Test Condition                           | Test Requirement       | Test Method         | Class /<br>Severity | Test Result                         |                          |                                     |
|                                          |                        |                     |                     | Pass                                | Fail                     | N/A                                 |
| Output Power of<br>Fundamental Emissions | FCC 47CFR 15.247(b)(3) | ANSI<br>C63.10:2013 | N/A                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Radiated Emissions                       | FCC 47CFR 15.209       | ANSI<br>C63.10:2013 | N/A                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Conducted Emissions                      | FCC 47CFR 15.207       | ANSI<br>C63.10:2013 | N/A                 | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Power Spectral Density                   | FCC 47CFR 15.247(e)    | N/A                 | N/A                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| 6dB Bandwidth                            | FCC 47CFR 15.247(a)(2) | N/A                 | N/A                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Band Edge Emissions                      | FCC 47CFR 15.247(d)    | N/A                 | N/A                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| RF Exposure                              | FCC 47CFR 15.247(i)    | N/A                 | N/A                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |

Note: N/A - Not Applicable

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### **3.0 Test Results**

#### **3.1 Emission**

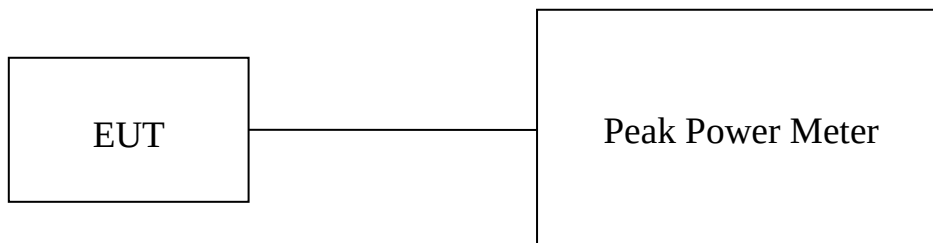
##### **3.1.1 Maximum Peak Output Power**

|                    |                        |
|--------------------|------------------------|
| Test Requirement:  | FCC 47CFR 15.247(b)(3) |
| Test Method:       | N/A                    |
| Test Date:         | 2016-07-12             |
| Mode of Operation: | WiFi mode              |

#### **Test Method:**

The RF output of the EUT was connected to the peak power meter. All the attenuation or cable loss will be added to the measured maximum output power. The results are recorded in mW.

#### **Test Setup:**



Note: a temporary antenna connector was soldered to the RF output.

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**Limits for Peak Output Power of Fundamental & Harmonics Emissions [FCC 47CFR 15.247]:**

For Digital Transmission systems in 2400-2483.5 MHz Band: 1 Watt (30dBm)

| <b>Results of WiFi mode 802.11 b, (2412MHz to 2462MHz) : Pass (TX Unit)</b><br><b>Maximum conducted output power</b> |                        |                     |                           |                           |                            |
|----------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|---------------------------|---------------------------|----------------------------|
| <b>Channel</b>                                                                                                       | <b>Frequency (MHz)</b> | <b>Result (dBm)</b> | <b>Antenna Gain (dBi)</b> | <b>Output Power (dBm)</b> | <b>Output Power (Watt)</b> |
| Low                                                                                                                  | 2412                   | 12.11               | 2.5                       | 14.61                     | 0.028907                   |
| Middle                                                                                                               | 2437                   | 11.82               |                           | 14.32                     | 0.027040                   |
| High                                                                                                                 | 2462                   | 11.64               |                           | 14.14                     | 0.025942                   |

| <b>Results of WiFi mode 802.11 g, (2412MHz to 2462MHz) : Pass (TX Unit)</b><br><b>Maximum conducted output power</b> |      |       |     |       |          |
|----------------------------------------------------------------------------------------------------------------------|------|-------|-----|-------|----------|
| Low                                                                                                                  | 2412 | 14.90 | 2.5 | 17.40 | 0.054954 |
| Middle                                                                                                               | 2437 | 14.56 |     | 17.06 | 0.050816 |
| High                                                                                                                 | 2462 | 14.21 |     | 16.71 | 0.046881 |

| <b>Results of WiFi mode 802.11 n20, (2412MHz to 2462MHz) : Pass (TX Unit)</b><br><b>Maximum conducted output power</b> |      |       |     |       |          |
|------------------------------------------------------------------------------------------------------------------------|------|-------|-----|-------|----------|
| Low                                                                                                                    | 2412 | 14.38 | 2.5 | 16.88 | 0.048753 |
| Middle                                                                                                                 | 2437 | 14.09 |     | 16.59 | 0.045604 |
| High                                                                                                                   | 2462 | 13.75 |     | 16.25 | 0.042170 |

Calculated measurement uncertainty : 30MHz to 1GHz 1.7dB  
1GHz to 26GHz 1.7dB

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### **3.1.2 Radiated Emissions**

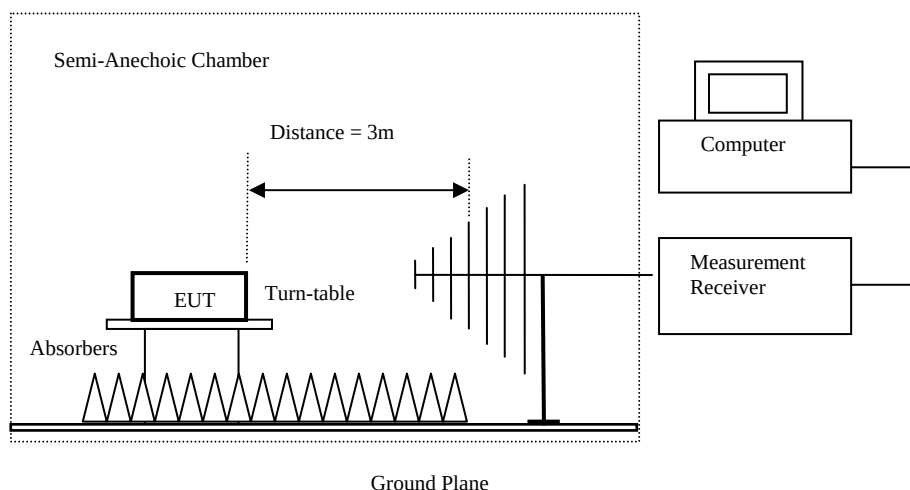
|                    |                    |
|--------------------|--------------------|
| Test Requirement:  | FCC 47CFR 15.209   |
| Test Method:       | ANSI C63.10:2013   |
| Test Date:         | 2016-07-08         |
| Mode of Operation: | Tx mode/ WiFi mode |

#### **Test Method:**

For emission measurements at or below 1 GHz, the sample was placed 0.8m above the ground plane of semi-anechoic Chamber\*. For emission measurements above 1 GHz, the sample was placed 1.5m above the ground plane of semi-anechoic Chamber\*. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

\* Semi-anechoic chamber located on the G/F of “STC (Dongguan) Company Limited” with a metal ground plane filed with the FCC pursuant to section 2.948 of the FCC rules, with Registration Number: 629686.

#### **Test Setup:**



Absorbers placed on top of the ground plane are for measurements above 1000MHz only.

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### Limits for Radiated Emissions [FCC 47 CFR 15.247 Class B]:

| Frequency Range<br>[MHz] | Quasi-Peak Limits<br>[μV/m] |
|--------------------------|-----------------------------|
| 0.009-0.490              | 2400/F (kHz)                |
| 0.490-1.705              | 24000/F (kHz)               |
| 1.705-30                 | 30                          |
| 30-88                    | 100                         |
| 88-216                   | 150                         |
| 216-960                  | 200                         |
| Above960                 | 500                         |

The emission limits shown in the above table are based on measurement employing a CISPR quasi-peak detector and above 1000MHz are based on measurements employing an average detector.

### Result of Wifi mode (2412.0 MHz) (802.11b) (9kHz – 30MHz): Pass

| Field Strength of Spurious Emissions<br>Average Value       |                           |                              |                             |                             |                 |                     |
|-------------------------------------------------------------|---------------------------|------------------------------|-----------------------------|-----------------------------|-----------------|---------------------|
| Frequency<br>MHz                                            | Measured<br>Level<br>dBμV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBμV/m | Field<br>Strength<br>dBμV/m | Limit<br>dBμV/m | E-Field<br>Polarity |
| Emissions detected are more than 20 dB below the FCC Limits |                           |                              |                             |                             |                 |                     |

### Result of Wifi mode (2412.0 MHz) (802.11b) (Above 1GHz): Pass

| Field Strength of Spurious Emissions<br>Peak Value |                               |                              |                             |                        |                  |                     |
|----------------------------------------------------|-------------------------------|------------------------------|-----------------------------|------------------------|------------------|---------------------|
| Frequency<br>MHz                                   | Measured<br>Level @3m<br>dBμV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dBμV/m | E-Field<br>Polarity |
| 4824.0                                             | 14.1                          | 41.5                         | 55.6                        | 74.0                   | 18.4             | Vertical            |
| 4824.0                                             | 14.1                          | 42.4                         | 56.5                        | 74.0                   | 17.5             | Horizontal          |
| 7236.0                                             | 9.6                           | 45.1                         | 54.7                        | 74.0                   | 19.3             | Vertical            |
| 7236.0                                             | 7.9                           | 46.2                         | 54.1                        | 74.0                   | 19.9             | Horizontal          |
| 9648.0                                             | 7.8                           | 48                           | 55.8                        | 74.0                   | 18.2             | Vertical            |
| 9648.0                                             | 5.8                           | 48.8                         | 54.6                        | 74.0                   | 19.4             | Horizontal          |
| 12060.0                                            | 3.9                           | 51.5                         | 55.4                        | 74.0                   | 18.6             | Vertical            |
| 12060.0                                            | 2.9                           | 52.4                         | 55.3                        | 74.0                   | 18.7             | Horizontal          |

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**Result of Wifi mode (2412.0 MHz) (802.11b) (Above 1GHz): Pass**

| Field Strength of Spurious Emissions |                               |                              |                             |                        |                  |                     |
|--------------------------------------|-------------------------------|------------------------------|-----------------------------|------------------------|------------------|---------------------|
| Average Value                        |                               |                              |                             |                        |                  |                     |
| Frequency<br>MHz                     | Measured<br>Level @3m<br>dBuV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBuV/m | Limit<br>@3m<br>dBuV/m | Margin<br>dBuV/m | E-Field<br>Polarity |
| 4824.0                               | 2.0                           | 41.5                         | 43.5                        | 54.0                   | 10.5             | Vertical            |
| 4824.0                               | -0.2                          | 42.4                         | 42.2                        | 54.0                   | 11.8             | Horizontal          |
| 7236.0                               | -2.7                          | 45.1                         | 42.4                        | 54.0                   | 11.6             | Vertical            |
| 7236.0                               | -5.2                          | 46.2                         | 41.0                        | 54.0                   | 13.0             | Horizontal          |
| 9648.0                               | -6.7                          | 48                           | 41.3                        | 54.0                   | 12.7             | Vertical            |
| 9648.0                               | -7.3                          | 48.8                         | 41.5                        | 54.0                   | 12.5             | Horizontal          |
| 12060.0                              | -9.9                          | 51.5                         | 41.6                        | 54.0                   | 12.4             | Vertical            |
| 12060.0                              | -10.2                         | 52.4                         | 42.2                        | 54.0                   | 11.8             | Horizontal          |

**Result of Wifi mode (2437.0 MHz) (802.11b) (9kHz – 30MHz): Pass**

| Field Strength of Spurious Emissions                        |                           |                              |                             |                             |                 |                     |
|-------------------------------------------------------------|---------------------------|------------------------------|-----------------------------|-----------------------------|-----------------|---------------------|
| Average Value                                               |                           |                              |                             |                             |                 |                     |
| Frequency<br>MHz                                            | Measured<br>Level<br>dBμV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBμV/m | Field<br>Strength<br>dBμV/m | Limit<br>dBμV/m | E-Field<br>Polarity |
| Emissions detected are more than 20 dB below the FCC Limits |                           |                              |                             |                             |                 |                     |

**Result of Wifi mode (2437.0 MHz) (802.11b) (Above 1GHz): Pass**

| Field Strength of Spurious Emissions |                               |                              |                             |                        |                  |                     |
|--------------------------------------|-------------------------------|------------------------------|-----------------------------|------------------------|------------------|---------------------|
| Peak Value                           |                               |                              |                             |                        |                  |                     |
| Frequency<br>MHz                     | Measured<br>Level @3m<br>dBμV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dBμV/m | E-Field<br>Polarity |
| 4874.0                               | 15.7                          | 41.6                         | 57.3                        | 74.0                   | 16.7             | Vertical            |
| 4874.0                               | 14.7                          | 42.5                         | 57.2                        | 74.0                   | 16.8             | Horizontal          |
| 7311.0                               | 11.0                          | 45.2                         | 56.2                        | 74.0                   | 17.8             | Vertical            |
| 7311.0                               | 9.8                           | 46.3                         | 56.1                        | 74.0                   | 17.9             | Horizontal          |
| 9748.0                               | 7.1                           | 48.1                         | 55.2                        | 74.0                   | 18.8             | Vertical            |
| 9748.0                               | 7.0                           | 48.9                         | 55.9                        | 74.0                   | 18.1             | Horizontal          |
| 12185.0                              | 3.9                           | 51.6                         | 55.5                        | 74.0                   | 18.5             | Vertical            |
| 12185.0                              | 2.9                           | 52.5                         | 55.4                        | 74.0                   | 18.6             | Horizontal          |

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**Result of Wifi mode (2437.0 MHz) (802.11b) (Above 1GHz): Pass**

| Field Strength of Spurious Emissions<br>Average Value |                               |                              |                             |                        |                  |                     |
|-------------------------------------------------------|-------------------------------|------------------------------|-----------------------------|------------------------|------------------|---------------------|
| Frequency<br>MHz                                      | Measured<br>Level @3m<br>dBuV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBuV/m | Limit<br>@3m<br>dBuV/m | Margin<br>dBuV/m | E-Field<br>Polarity |
| 4874.0                                                | 1.5                           | 41.6                         | 43.1                        | 54.0                   | 10.9             | Vertical            |
| 4874.0                                                | 0.4                           | 42.5                         | 42.9                        | 54.0                   | 11.1             | Horizontal          |
| 7311.0                                                | -3.3                          | 45.2                         | 41.9                        | 54.0                   | 12.1             | Vertical            |
| 7311.0                                                | -4.2                          | 46.3                         | 42.1                        | 54.0                   | 11.9             | Horizontal          |
| 9748.0                                                | -6.3                          | 48.1                         | 41.8                        | 54.0                   | 12.2             | Vertical            |
| 9748.0                                                | -6.6                          | 48.9                         | 42.3                        | 54.0                   | 11.7             | Horizontal          |
| 12185.0                                               | -10.2                         | 51.6                         | 41.4                        | 54.0                   | 12.6             | Vertical            |
| 12185.0                                               | -10.4                         | 52.5                         | 42.1                        | 54.0                   | 11.9             | Horizontal          |

**Result of Wifi mode (2462.0 MHz) (802.11b) (9kHz – 30MHz): Pass**

| Field Strength of Spurious Emissions<br>Average Value       |                           |                              |                             |                             |                 |                     |
|-------------------------------------------------------------|---------------------------|------------------------------|-----------------------------|-----------------------------|-----------------|---------------------|
| Frequency<br>MHz                                            | Measured<br>Level<br>dBμV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBμV/m | Field<br>Strength<br>dBμV/m | Limit<br>dBμV/m | E-Field<br>Polarity |
| Emissions detected are more than 20 dB below the FCC Limits |                           |                              |                             |                             |                 |                     |

**Result of Wifi mode (2462.0 MHz) (802.11b) (Above 1GHz): Pass**

| Field Strength of Spurious Emissions<br>Peak Value |                               |                              |                             |                        |                  |                     |
|----------------------------------------------------|-------------------------------|------------------------------|-----------------------------|------------------------|------------------|---------------------|
| Frequency<br>MHz                                   | Measured<br>Level @3m<br>dBμV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dBμV/m | E-Field<br>Polarity |
| 4924.0                                             | 16.0                          | 41.4                         | 57.4                        | 74.0                   | 16.6             | Vertical            |
| 4924.0                                             | 13.7                          | 42.7                         | 56.4                        | 74.0                   | 17.6             | Horizontal          |
| 7386.0                                             | 10.9                          | 45.6                         | 56.5                        | 74.0                   | 17.5             | Vertical            |
| 7386.0                                             | 9.4                           | 46.5                         | 55.9                        | 74.0                   | 18.1             | Horizontal          |
| 9848.0                                             | 7.3                           | 48.6                         | 55.9                        | 74.0                   | 18.1             | Vertical            |
| 9848.0                                             | 5.2                           | 49.7                         | 54.9                        | 74.0                   | 19.1             | Horizontal          |
| 12310.0                                            | 3.5                           | 51.7                         | 55.2                        | 74.0                   | 18.8             | Vertical            |
| 12310.0                                            | 2.8                           | 52.7                         | 55.5                        | 74.0                   | 18.5             | Horizontal          |

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**Result of Wifi mode (2462.0 MHz) (802.11b) (Above 1GHz): Pass**

| Field Strength of Spurious Emissions |                               |                              |                             |                        |                  |                     |
|--------------------------------------|-------------------------------|------------------------------|-----------------------------|------------------------|------------------|---------------------|
| Average Value                        |                               |                              |                             |                        |                  |                     |
| Frequency<br>MHz                     | Measured<br>Level @3m<br>dBuV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBuV/m | Limit<br>@3m<br>dBuV/m | Margin<br>dBuV/m | E-Field<br>Polarity |
| 4924.0                               | 0.9                           | 41.4                         | 42.3                        | 54.0                   | 11.7             | Vertical            |
| 4924.0                               | -0.2                          | 42.7                         | 42.5                        | 54.0                   | 11.5             | Horizontal          |
| 7386.0                               | -4.3                          | 45.6                         | 41.3                        | 54.0                   | 12.7             | Vertical            |
| 7386.0                               | -5.3                          | 46.5                         | 41.2                        | 54.0                   | 12.8             | Horizontal          |
| 9848.0                               | -6.3                          | 48.6                         | 42.3                        | 54.0                   | 11.7             | Vertical            |
| 9848.0                               | -8.2                          | 49.7                         | 41.5                        | 54.0                   | 12.5             | Horizontal          |
| 12310.0                              | -9.9                          | 51.7                         | 41.8                        | 54.0                   | 12.2             | Vertical            |
| 12310.0                              | -10.8                         | 52.7                         | 41.9                        | 54.0                   | 12.1             | Horizontal          |

**Result of Wifi mode (2412.0 MHz) (802.11g) (9kHz – 30MHz): Pass**

| Field Strength of Spurious Emissions                        |                           |                              |                             |                             |                 |                     |
|-------------------------------------------------------------|---------------------------|------------------------------|-----------------------------|-----------------------------|-----------------|---------------------|
| Average Value                                               |                           |                              |                             |                             |                 |                     |
| Frequency<br>MHz                                            | Measured<br>Level<br>dBμV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBμV/m | Field<br>Strength<br>dBμV/m | Limit<br>dBμV/m | E-Field<br>Polarity |
| Emissions detected are more than 20 dB below the FCC Limits |                           |                              |                             |                             |                 |                     |

**Result of Wifi mode (2412.0 MHz) (802.11g) (Above 1GHz): Pass**

| Field Strength of Spurious Emissions |                               |                              |                             |                        |                  |                     |
|--------------------------------------|-------------------------------|------------------------------|-----------------------------|------------------------|------------------|---------------------|
| Peak Value                           |                               |                              |                             |                        |                  |                     |
| Frequency<br>MHz                     | Measured<br>Level @3m<br>dBμV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dBμV/m | E-Field<br>Polarity |
| 4824.0                               | 15.4                          | 41.5                         | 56.9                        | 74.0                   | 17.1             | Vertical            |
| 4824.0                               | 14.2                          | 42.4                         | 56.6                        | 74.0                   | 17.4             | Horizontal          |
| 7236.0                               | 11.7                          | 45.1                         | 56.8                        | 74.0                   | 17.2             | Vertical            |
| 7236.0                               | 9.5                           | 46.2                         | 55.7                        | 74.0                   | 18.3             | Horizontal          |
| 9648.0                               | 7.9                           | 48                           | 55.9                        | 74.0                   | 18.1             | Vertical            |
| 9648.0                               | 5.6                           | 48.8                         | 54.4                        | 74.0                   | 19.6             | Horizontal          |
| 12060.0                              | 3.9                           | 51.5                         | 55.4                        | 74.0                   | 18.6             | Vertical            |
| 12060.0                              | 3.2                           | 52.4                         | 55.6                        | 74.0                   | 18.4             | Horizontal          |

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**Result of Wifi mode (2412.0 MHz) (802.11g) (Above 1GHz): Pass**

| Field Strength of Spurious Emissions<br>Average Value |                               |                              |                             |                        |                  |                     |
|-------------------------------------------------------|-------------------------------|------------------------------|-----------------------------|------------------------|------------------|---------------------|
| Frequency<br>MHz                                      | Measured<br>Level @3m<br>dBuV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBuV/m | Limit<br>@3m<br>dBuV/m | Margin<br>dBuV/m | E-Field<br>Polarity |
| 4824.0                                                | 1.8                           | 41.5                         | 43.3                        | 54.0                   | 10.7             | Vertical            |
| 4824.0                                                | -0.9                          | 42.4                         | 41.5                        | 54.0                   | 12.5             | Horizontal          |
| 7236.0                                                | -3.0                          | 45.1                         | 42.1                        | 54.0                   | 11.9             | Vertical            |
| 7236.0                                                | -4.3                          | 46.2                         | 41.9                        | 54.0                   | 12.1             | Horizontal          |
| 9648.0                                                | -6.9                          | 48                           | 41.1                        | 54.0                   | 12.9             | Vertical            |
| 9648.0                                                | -7.2                          | 48.8                         | 41.6                        | 54.0                   | 12.4             | Horizontal          |
| 12060.0                                               | -9.5                          | 51.5                         | 42.0                        | 54.0                   | 12.0             | Vertical            |
| 12060.0                                               | -9.9                          | 52.4                         | 42.5                        | 54.0                   | 11.5             | Horizontal          |

**Result of Wifi mode (2437.0 MHz) (802.11g) (9kHz – 30MHz): Pass**

| Field Strength of Spurious Emissions<br>Average Value       |                                 |                              |                                   |                                   |                       |                     |
|-------------------------------------------------------------|---------------------------------|------------------------------|-----------------------------------|-----------------------------------|-----------------------|---------------------|
| Frequency<br>MHz                                            | Measured<br>Level<br>dB $\mu$ V | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dB $\mu$ V/m | Field<br>Strength<br>dB $\mu$ V/m | Limit<br>dB $\mu$ V/m | E-Field<br>Polarity |
| Emissions detected are more than 20 dB below the FCC Limits |                                 |                              |                                   |                                   |                       |                     |

**Result of Wifi mode (2437.0 MHz) (802.11g) (Above 1GHz): Pass**

| Field Strength of Spurious Emissions<br>Peak Value |                               |                              |                             |                        |                  |                     |
|----------------------------------------------------|-------------------------------|------------------------------|-----------------------------|------------------------|------------------|---------------------|
| Frequency<br>MHz                                   | Measured<br>Level @3m<br>dBuV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBuV/m | Limit<br>@3m<br>dBuV/m | Margin<br>dBuV/m | E-Field<br>Polarity |
| 4874.0                                             | 15.6                          | 41.6                         | 57.2                        | 74.0                   | 16.8             | Vertical            |
| 4874.0                                             | 14.4                          | 42.5                         | 56.9                        | 74.0                   | 17.1             | Horizontal          |
| 7311.0                                             | 11.5                          | 45.2                         | 56.7                        | 74.0                   | 17.3             | Vertical            |
| 7311.0                                             | 10.1                          | 46.3                         | 56.4                        | 74.0                   | 17.6             | Horizontal          |
| 9748.0                                             | 7.6                           | 48.1                         | 55.7                        | 74.0                   | 18.3             | Vertical            |
| 9748.0                                             | 6.3                           | 48.9                         | 55.2                        | 74.0                   | 18.8             | Horizontal          |
| 12185.0                                            | 4.0                           | 51.6                         | 55.6                        | 74.0                   | 18.4             | Vertical            |
| 12185.0                                            | 3.5                           | 52.5                         | 56.0                        | 74.0                   | 18.0             | Horizontal          |

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**Result of Wifi mode (2437.0 MHz) (802.11g) (Above 1GHz): Pass**

| Field Strength of Spurious Emissions<br>Average Value |                               |                              |                             |                        |                  |                     |
|-------------------------------------------------------|-------------------------------|------------------------------|-----------------------------|------------------------|------------------|---------------------|
| Frequency<br>MHz                                      | Measured<br>Level @3m<br>dBuV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBuV/m | Limit<br>@3m<br>dBuV/m | Margin<br>dBuV/m | E-Field<br>Polarity |
| 4874.0                                                | 2.1                           | 41.6                         | 43.7                        | 54.0                   | 10.3             | Vertical            |
| 4874.0                                                | 0.6                           | 42.5                         | 43.1                        | 54.0                   | 10.9             | Horizontal          |
| 7311.0                                                | -3.3                          | 45.2                         | 41.9                        | 54.0                   | 12.1             | Vertical            |
| 7311.0                                                | -4.6                          | 46.3                         | 41.7                        | 54.0                   | 12.3             | Horizontal          |
| 9748.0                                                | -6.5                          | 48.1                         | 41.6                        | 54.0                   | 12.4             | Vertical            |
| 9748.0                                                | -6.4                          | 48.9                         | 42.5                        | 54.0                   | 11.5             | Horizontal          |
| 12185.0                                               | -10.2                         | 51.6                         | 41.4                        | 54.0                   | 12.6             | Vertical            |
| 12185.0                                               | -10.4                         | 52.5                         | 42.1                        | 54.0                   | 11.9             | Horizontal          |

**Result of Wifi mode (2462.0 MHz) (802.11g) (9kHz – 30MHz): Pass**

| Field Strength of Spurious Emissions<br>Average Value       |                           |                              |                             |                             |                 |                     |
|-------------------------------------------------------------|---------------------------|------------------------------|-----------------------------|-----------------------------|-----------------|---------------------|
| Frequency<br>MHz                                            | Measured<br>Level<br>dBμV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBμV/m | Field<br>Strength<br>dBμV/m | Limit<br>dBμV/m | E-Field<br>Polarity |
| Emissions detected are more than 20 dB below the FCC Limits |                           |                              |                             |                             |                 |                     |

**Result of Wifi mode (2462.0 MHz) (802.11g) (Above 1GHz): Pass**

| Field Strength of Spurious Emissions<br>Peak Value |                               |                              |                             |                        |                  |                     |
|----------------------------------------------------|-------------------------------|------------------------------|-----------------------------|------------------------|------------------|---------------------|
| Frequency<br>MHz                                   | Measured<br>Level @3m<br>dBμV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dBμV/m | E-Field<br>Polarity |
| 4924.0                                             | 16.2                          | 41.4                         | 57.6                        | 74.0                   | 16.4             | Vertical            |
| 4924.0                                             | 13.9                          | 42.7                         | 56.6                        | 74.0                   | 17.4             | Horizontal          |
| 7386.0                                             | 11.5                          | 45.6                         | 57.1                        | 74.0                   | 16.9             | Vertical            |
| 7386.0                                             | 10.0                          | 46.5                         | 56.5                        | 74.0                   | 17.5             | Horizontal          |
| 9848.0                                             | 7.2                           | 48.6                         | 55.8                        | 74.0                   | 18.2             | Vertical            |
| 9848.0                                             | 5.6                           | 49.7                         | 55.3                        | 74.0                   | 18.7             | Horizontal          |
| 12310.0                                            | 3.7                           | 51.7                         | 55.4                        | 74.0                   | 18.6             | Vertical            |
| 12310.0                                            | 2.2                           | 52.7                         | 54.9                        | 74.0                   | 19.1             | Horizontal          |

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**Result of Wifi mode (2462.0 MHz) (802.11g) (Above 1GHz): Pass**

| Field Strength of Spurious Emissions<br>Average Value |                               |                              |                             |                        |                  |                     |
|-------------------------------------------------------|-------------------------------|------------------------------|-----------------------------|------------------------|------------------|---------------------|
| Frequency<br>MHz                                      | Measured<br>Level @3m<br>dBuV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBuV/m | Limit<br>@3m<br>dBuV/m | Margin<br>dBuV/m | E-Field<br>Polarity |
| 4924.0                                                | 1.2                           | 41.4                         | 42.6                        | 54.0                   | 11.4             | Vertical            |
| 4924.0                                                | -0.8                          | 42.7                         | 41.9                        | 54.0                   | 12.1             | Horizontal          |
| 7386.0                                                | -4.3                          | 45.6                         | 41.3                        | 54.0                   | 12.7             | Vertical            |
| 7386.0                                                | -5.3                          | 46.5                         | 41.2                        | 54.0                   | 12.8             | Horizontal          |
| 9848.0                                                | -6.2                          | 48.6                         | 42.4                        | 54.0                   | 11.6             | Vertical            |
| 9848.0                                                | -8.2                          | 49.7                         | 41.5                        | 54.0                   | 12.5             | Horizontal          |
| 12310.0                                               | -9.8                          | 51.7                         | 41.9                        | 54.0                   | 12.1             | Vertical            |
| 12310.0                                               | -11.5                         | 52.7                         | 41.2                        | 54.0                   | 12.8             | Horizontal          |

**Result of Wifi mode (2412.0 MHz) (802.11n20) (9kHz – 30MHz): Pass**

| Field Strength of Spurious Emissions<br>Average Value       |                           |                              |                             |                             |                 |                     |
|-------------------------------------------------------------|---------------------------|------------------------------|-----------------------------|-----------------------------|-----------------|---------------------|
| Frequency<br>MHz                                            | Measured<br>Level<br>dBμV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBμV/m | Field<br>Strength<br>dBμV/m | Limit<br>dBμV/m | E-Field<br>Polarity |
| Emissions detected are more than 20 dB below the FCC Limits |                           |                              |                             |                             |                 |                     |

**Result of Wifi mode (2412.0 MHz) (802.11n20) (Above 1GHz): Pass**

| Field Strength of Spurious Emissions<br>Peak Value |                               |                              |                             |                        |                  |                     |
|----------------------------------------------------|-------------------------------|------------------------------|-----------------------------|------------------------|------------------|---------------------|
| Frequency<br>MHz                                   | Measured<br>Level @3m<br>dBμV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dBμV/m | E-Field<br>Polarity |
| 4824.0                                             | 15.4                          | 41.5                         | 56.9                        | 74.0                   | 17.1             | Vertical            |
| 4824.0                                             | 15.3                          | 42.4                         | 57.7                        | 74.0                   | 16.3             | Horizontal          |
| 7236.0                                             | 11.3                          | 45.1                         | 56.4                        | 74.0                   | 17.6             | Vertical            |
| 7236.0                                             | 11.0                          | 46.2                         | 57.2                        | 74.0                   | 16.8             | Horizontal          |
| 9648.0                                             | 7.9                           | 48                           | 55.9                        | 74.0                   | 18.1             | Vertical            |
| 9648.0                                             | 5.7                           | 48.8                         | 54.5                        | 74.0                   | 19.5             | Horizontal          |
| 12060.0                                            | 4.6                           | 51.5                         | 56.1                        | 74.0                   | 17.9             | Vertical            |
| 12060.0                                            | 3.0                           | 52.4                         | 55.4                        | 74.0                   | 18.6             | Horizontal          |

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Result of Wifi mode (2412.0 MHz) (802.11n20) (Above 1GHz): Pass

| Field Strength of Spurious Emissions |                               |                              |                             |                        |                  |                     |
|--------------------------------------|-------------------------------|------------------------------|-----------------------------|------------------------|------------------|---------------------|
| Average Value                        |                               |                              |                             |                        |                  |                     |
| Frequency<br>MHz                     | Measured<br>Level @3m<br>dBuV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBuV/m | Limit<br>@3m<br>dBuV/m | Margin<br>dBuV/m | E-Field<br>Polarity |
| 4824.0                               | 2.1                           | 41.5                         | 43.6                        | 54.0                   | 10.4             | Vertical            |
| 4824.0                               | -0.3                          | 42.4                         | 42.1                        | 54.0                   | 11.9             | Horizontal          |
| 7236.0                               | -2.6                          | 45.1                         | 42.5                        | 54.0                   | 11.5             | Vertical            |
| 7236.0                               | -4.5                          | 46.2                         | 41.7                        | 54.0                   | 12.3             | Horizontal          |
| 9648.0                               | -6.3                          | 48                           | 41.7                        | 54.0                   | 12.3             | Vertical            |
| 9648.0                               | -7.8                          | 48.8                         | 41.0                        | 54.0                   | 13.0             | Horizontal          |
| 12060.0                              | -9.5                          | 51.5                         | 42.0                        | 54.0                   | 12.0             | Vertical            |
| 12060.0                              | -10.1                         | 52.4                         | 42.3                        | 54.0                   | 11.7             | Horizontal          |

Result of Wifi mode (2437.0 MHz) (802.11n20) (9kHz – 30MHz): Pass

| Field Strength of Spurious Emissions                        |                           |                              |                             |                             |                 |                     |
|-------------------------------------------------------------|---------------------------|------------------------------|-----------------------------|-----------------------------|-----------------|---------------------|
| Average Value                                               |                           |                              |                             |                             |                 |                     |
| Frequency<br>MHz                                            | Measured<br>Level<br>dBμV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBμV/m | Field<br>Strength<br>dBμV/m | Limit<br>dBμV/m | E-Field<br>Polarity |
| Emissions detected are more than 20 dB below the FCC Limits |                           |                              |                             |                             |                 |                     |

Result of Wifi mode (2437.0 MHz) (802.11n20) (Above 1GHz): Pass

| Field Strength of Spurious Emissions |                               |                              |                             |                        |                  |                     |
|--------------------------------------|-------------------------------|------------------------------|-----------------------------|------------------------|------------------|---------------------|
| Peak Value                           |                               |                              |                             |                        |                  |                     |
| Frequency<br>MHz                     | Measured<br>Level @3m<br>dBμV | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dBμV/m | E-Field<br>Polarity |
| 4874.0                               | 15.8                          | 41.6                         | 57.4                        | 74.0                   | 16.6             | Vertical            |
| 4874.0                               | 14.3                          | 42.5                         | 56.8                        | 74.0                   | 17.2             | Horizontal          |
| 7311.0                               | 11.6                          | 45.2                         | 56.8                        | 74.0                   | 17.2             | Vertical            |
| 7311.0                               | 11.1                          | 46.3                         | 57.4                        | 74.0                   | 16.6             | Horizontal          |
| 9748.0                               | 7.8                           | 48.1                         | 55.9                        | 74.0                   | 18.1             | Vertical            |
| 9748.0                               | 7.2                           | 48.9                         | 56.1                        | 74.0                   | 17.9             | Horizontal          |
| 12185.0                              | 3.7                           | 51.6                         | 55.3                        | 74.0                   | 18.7             | Vertical            |
| 12185.0                              | 3.8                           | 52.5                         | 56.3                        | 74.0                   | 17.7             | Horizontal          |

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**Result of Wifi mode (2437.0 MHz) (802.11n20) (Above 1GHz): Pass**

| Field Strength of Spurious Emissions |           |            |          |        |        |            |
|--------------------------------------|-----------|------------|----------|--------|--------|------------|
| Average Value                        |           |            |          |        |        |            |
| Frequency                            | Measured  | Correction | Field    | Limit  | Margin | E-Field    |
| MHz                                  | Level @3m | Factor     | Strength | @3m    |        | Polarity   |
|                                      | dBuV      | dB/m       | dBuV/m   | dBuV/m | dBuV/m |            |
| 4874.0                               | 2.1       | 41.6       | 43.7     | 54.0   | 10.3   | Vertical   |
| 4874.0                               | 0.4       | 42.5       | 42.9     | 54.0   | 11.1   | Horizontal |
| 7311.0                               | -3.6      | 45.2       | 41.6     | 54.0   | 12.4   | Vertical   |
| 7311.0                               | -4.2      | 46.3       | 42.1     | 54.0   | 11.9   | Horizontal |
| 9748.0                               | -6.1      | 48.1       | 42.0     | 54.0   | 12.0   | Vertical   |
| 9748.0                               | -6.5      | 48.9       | 42.4     | 54.0   | 11.6   | Horizontal |
| 12185.0                              | -10.0     | 51.6       | 41.6     | 54.0   | 12.4   | Vertical   |
| 12185.0                              | -10.8     | 52.5       | 41.7     | 54.0   | 12.3   | Horizontal |

**Result of Wifi mode (2462.0 MHz) (802.11n20) (9kHz – 30MHz): Pass**

| Field Strength of Spurious Emissions                        |          |            |          |          |        |          |
|-------------------------------------------------------------|----------|------------|----------|----------|--------|----------|
| Average Value                                               |          |            |          |          |        |          |
| Frequency                                                   | Measured | Correction | Field    | Field    | Limit  | E-Field  |
| MHz                                                         | Level    | Factor     | Strength | Strength |        | Polarity |
|                                                             | dBμV     | dB/m       | dBμV/m   | dBμV/m   | dBμV/m |          |
| Emissions detected are more than 20 dB below the FCC Limits |          |            |          |          |        |          |

**Result of Wifi mode (2462.0 MHz) (802.11n20) (Above 1GHz): Pass**

| Field Strength of Spurious Emissions |           |            |          |        |        |            |
|--------------------------------------|-----------|------------|----------|--------|--------|------------|
| Peak Value                           |           |            |          |        |        |            |
| Frequency                            | Measured  | Correction | Field    | Limit  | Margin | E-Field    |
| MHz                                  | Level @3m | Factor     | Strength | @3m    |        | Polarity   |
|                                      | dBμV      | dB/m       | dBμV/m   | dBμV/m | dBμV/m |            |
| 4924.0                               | 15.7      | 41.4       | 57.1     | 74.0   | 16.9   | Vertical   |
| 4924.0                               | 14.9      | 42.7       | 57.6     | 74.0   | 16.4   | Horizontal |
| 7386.0                               | 11.1      | 45.6       | 56.7     | 74.0   | 17.3   | Vertical   |
| 7386.0                               | 9.6       | 46.5       | 56.1     | 74.0   | 17.9   | Horizontal |
| 9848.0                               | 7.2       | 48.6       | 55.8     | 74.0   | 18.2   | Vertical   |
| 9848.0                               | 5.1       | 49.7       | 54.8     | 74.0   | 19.2   | Horizontal |
| 12310.0                              | 3.5       | 51.7       | 55.2     | 74.0   | 18.8   | Vertical   |
| 12310.0                              | 2.7       | 52.7       | 55.4     | 74.0   | 18.6   | Horizontal |

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## STC Test Report

Date: 2016-07-15

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No.: DM124239

### Limits for Radiated Emissions [FCC 47 CFR 15.209 Class B]:

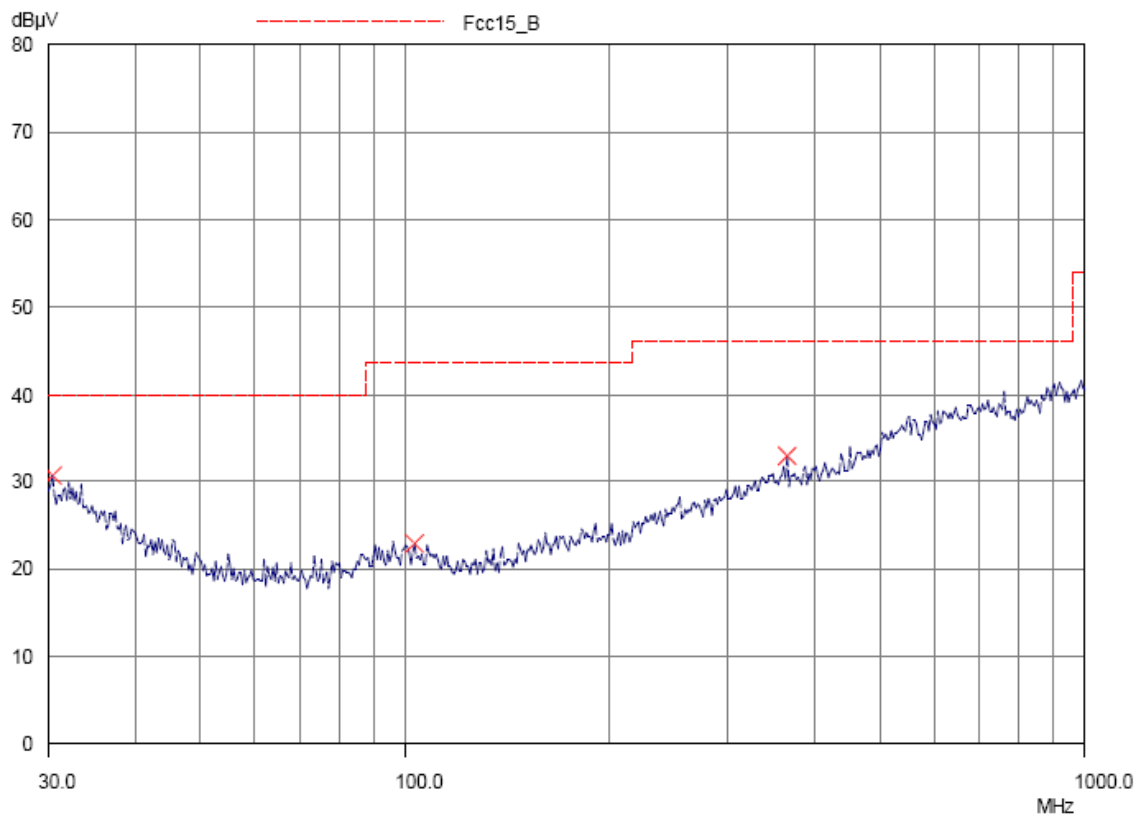
| Frequency Range<br>[MHz] | Quasi-Peak Limits<br>[ $\mu\text{V/m}$ ] |
|--------------------------|------------------------------------------|
| 0.009-0.490              | 2400/F (kHz)                             |
| 0.490-1.705              | 24000/F (kHz)                            |
| 1.705-30                 | 30                                       |
| 30-88                    | 100                                      |
| 88-216                   | 150                                      |
| 216-960                  | 200                                      |
| Above960                 | 500                                      |

The emission limits shown in the above table are based on measurement employing a CISPR quasi-peak detector and above 1000MHz are based on measurements employing an average detector.

### Result of WiFi mode (2412MHz, 802.11b) (30MHz – 1GHz): Pass

Please refer to the following table for result details

Horizontal



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**Result of WiFi mode (2412MHz, 802.11b) (30MHz – 1GHz): Pass**

| <b>Radiated Emissions<br/>Quasi-Peak</b> |                     |                              |                              |                              |                              |
|------------------------------------------|---------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Emission<br>Frequency<br>MHz             | E-Field<br>Polarity | Level<br>@3m<br>dB $\mu$ V/m | Limit<br>@3m<br>dB $\mu$ V/m | Level<br>@3m<br>dB $\mu$ V/m | Limit<br>@3m<br>dB $\mu$ V/m |
| 30.2                                     | Horizontal          | 30.7                         | 40.0                         | 34.3                         | 100                          |
| 103.5                                    | Horizontal          | 22.9                         | 43.5                         | 14.0                         | 150                          |
| 363.4                                    | Horizontal          | 32.9                         | 46.0                         | 44.2                         | 200                          |

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### Limits for Radiated Emissions [FCC 47 CFR 15.209 Class B]:

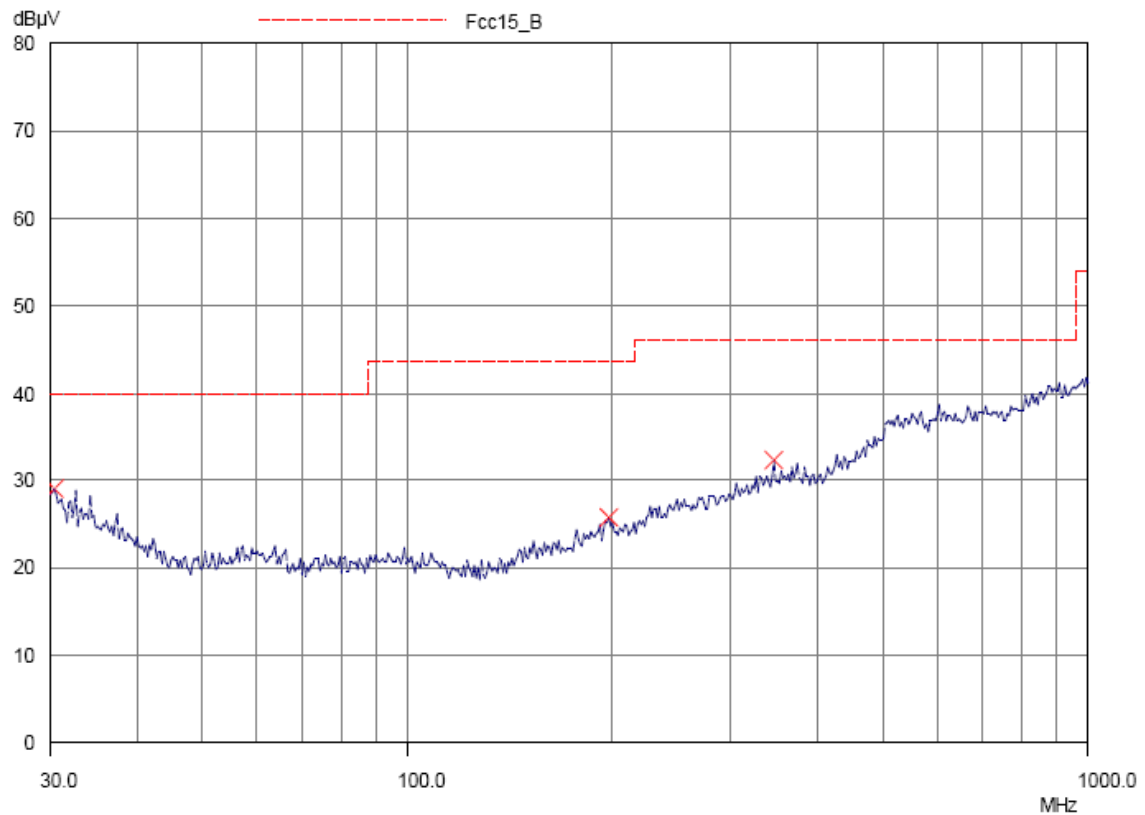
| Frequency Range | Quasi-Peak Limits |
|-----------------|-------------------|
| [MHz]           | [ $\mu$ V/m]      |
| 0.009-0.490     | 2400/F (kHz)      |
| 0.490-1.705     | 24000/F (kHz)     |
| 1.705-30        | 30                |
| 30-88           | 100               |
| 88-216          | 150               |
| 216-960         | 200               |
| Above960        | 500               |

The emission limits shown in the above table are based on measurement employing a CISPR quasi-peak detector and above 1000MHz are based on measurements employing an average detector.

### Result of WiFi mode (2412MHz, 802.11b) (30MHz – 1GHz): Pass

Please refer to the following table for result details

Vertical



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**Result of WiFi mode (2412MHz, 802.11b) (30MHz – 1GHz): Pass**

| <b>Radiated Emissions</b>    |                     |                              |                              |                              |                              |
|------------------------------|---------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| <b>Quasi-Peak</b>            |                     |                              |                              |                              |                              |
| Emission<br>Frequency<br>MHz | E-Field<br>Polarity | Level<br>@3m<br>dB $\mu$ V/m | Limit<br>@3m<br>dB $\mu$ V/m | Level<br>@3m<br>dB $\mu$ V/m | Limit<br>@3m<br>dB $\mu$ V/m |
| 30.3                         | Vertical            | 29.1                         | 40.0                         | 28.5                         | 100                          |
| 197.3                        | Vertical            | 25.7                         | 43.5                         | 19.3                         | 150                          |
| 344.4                        | Vertical            | 32.2                         | 46.0                         | 40.7                         | 200                          |

Remarks:

Calculated measurement uncertainty (30MHz – 1GHz): 4.9dB

Emissions in the vertical and horizontal polarizations have been investigated and the worst-case test results are recorded in this report.

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## **STC Test Report**

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### **3.1.3 Power Spectral Density**

Test Requirement: FCC 47CFR 15.247(e)  
Test Method: ANSI C63.10:2013  
Test Date: 2016-07-05  
Mode of Operation: WiFi mode

#### **Test Method:**

The RF output of the EUT was connected to the spectrum analyzer. Set the fundamental frequency as the center frequency of the spectral analyzer. Use RBW=3kHz , VBW= 10KHz , Set the span to 1.5 times the DTS channel bandwidth. Detector = peak, Sweep time = auto couple , Trace mode = max hold. Measure the Power Spectral Density (PSD) and record the results in dBm.

#### **Test Setup:**

As Test Setup of clause 3.1.1 in this test report.

#### **Test Limit:**

The maximum power spectral density (PSD) shall not exceeded 8dBm in any 3kHz band.

Scale the observed power level to an equivalent value in 3 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where  $BWCF=10\log(3\text{ kHz}/100\text{ kHz}=-15.2\text{dB})$

#### **Results of WiFi Mode 802.11 b (Tx:2412MHz to 2462MHz) : Pass (TX Unit)**

##### **Maximum power spectral density**

| <b>Transmitter Frequency<br/>(MHz)</b> | <b>Maximum Power spectral density<br/>level / 3kHz band<br/>(dBm)</b> | <b>Maximum Power spectral density<br/>/ 3kHz band limit</b> |
|----------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------|
| 2412.0                                 | -15.78                                                                | <b>8dBm</b>                                                 |
| 2437.0                                 | -16.51                                                                | <b>8dBm</b>                                                 |
| 2462.0                                 | -16.90                                                                | <b>8dBm</b>                                                 |

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## **STC Test Report**

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**Results of WiFi Mode 802.11 g (Tx:2412MHz to 2462MHz) : Pass (TX Unit)**

**Maximum power spectral density**

| <b>Transmitter Frequency<br/>(MHz)</b> | <b>Maximum Power spectral density<br/>level / 3kHz band<br/>(dBm)</b> | <b>Maximum Power spectral density<br/>/ 3kHz band limit</b> |
|----------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------|
| 2412.0                                 | -18.95                                                                | <b>8dBm</b>                                                 |
| 2437.0                                 | -19.30                                                                | <b>8dBm</b>                                                 |
| 2462.0                                 | -19.77                                                                | <b>8dBm</b>                                                 |

**Results of WiFi Mode 802.11 n20 (Tx:2412MHz to 2462MHz) : Pass (TX Unit)**

**Maximum power spectral density**

| <b>Transmitter Frequency<br/>(MHz)</b> | <b>Maximum Power spectral density<br/>level / 3kHz band<br/>(dBm)</b> | <b>Maximum Power spectral density<br/>/ 3kHz band limit</b> |
|----------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------|
| 2412.0                                 | -20.31                                                                | <b>8dBm</b>                                                 |
| 2437.0                                 | -20.36                                                                | <b>8dBm</b>                                                 |
| 2462.0                                 | -19.74                                                                | <b>8dBm</b>                                                 |

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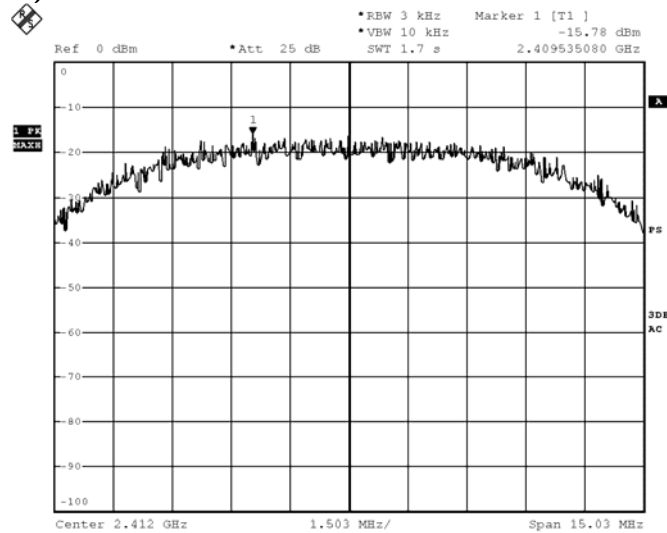
Date: 2016-07-15

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WiFi mode 802.11 b, (Tx: 2412MHz to 2462MHz)

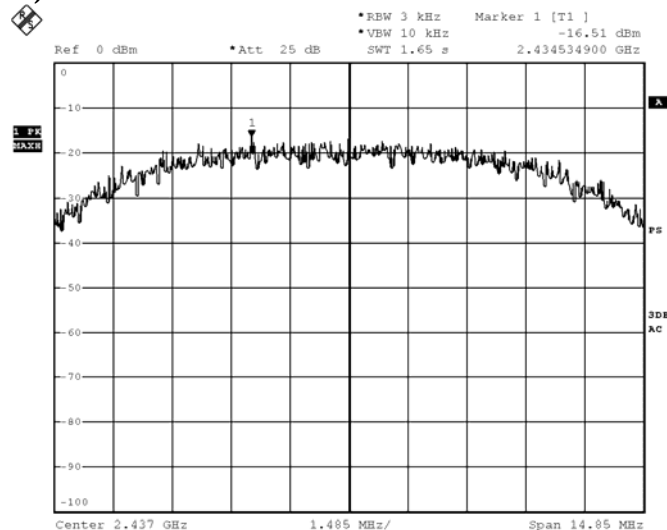
CH 1 (2412.0 MHz)



BMP

Date: 5.JUL.2016 17:30:02

CH 6 (2437.0 MHz)



BMP

Date: 5.JUL.2016 17:31:38

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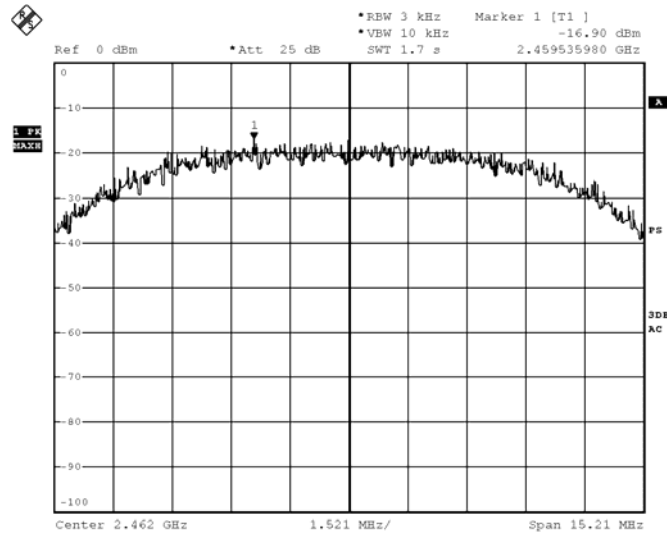
## STC Test Report

Date: 2016-07-15

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CH 11 (2462.0 MHz)

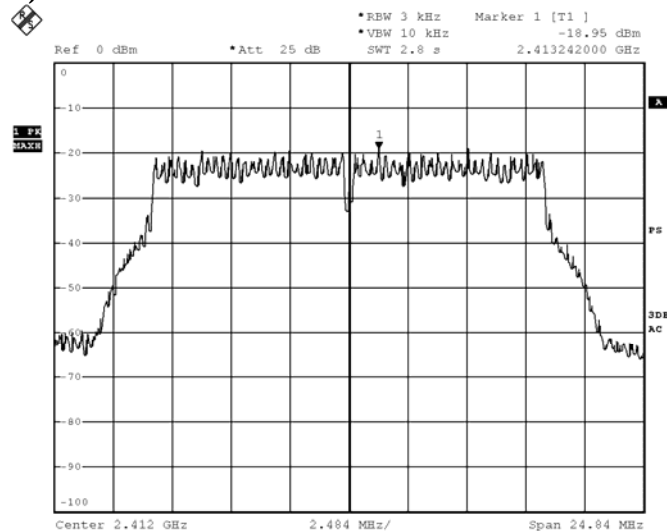


BMP

Date: 5.JUL.2016 17:37:42

WiFi mode 802.11 g, (Tx:2412MHz to 2462MHz)

Ch 1 (2412.0 MHz)



BMP

Date: 5.JUL.2016 17:20:25

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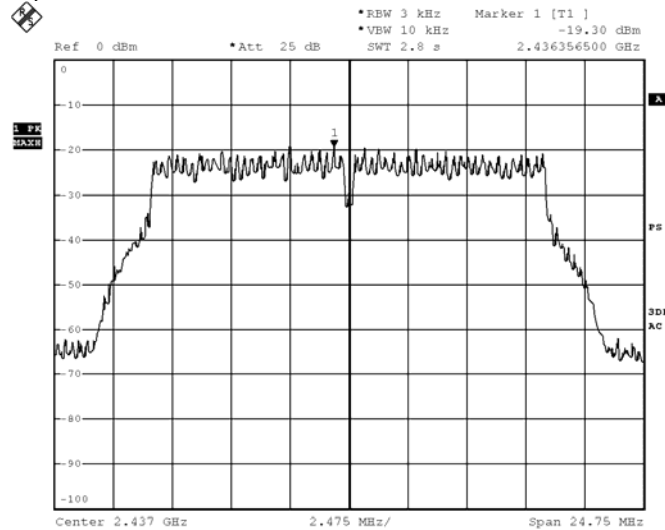


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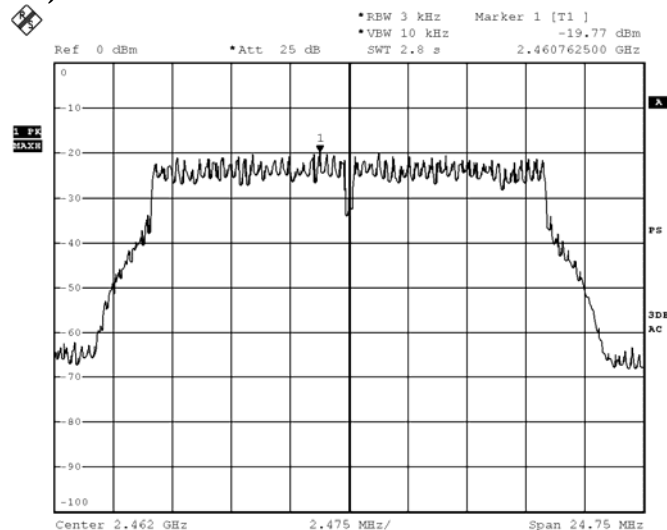
### CH 6 (2437.0 MHz)



BMP

Date: 5.JUL.2016 17:24:01

### CH 11 (2462.0 MHz)



BMP

Date: 5.JUL.2016 17:27:43

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Date: 5.JUL.2016 17:15:59

Date: 5.JUL.2016 17:12:39

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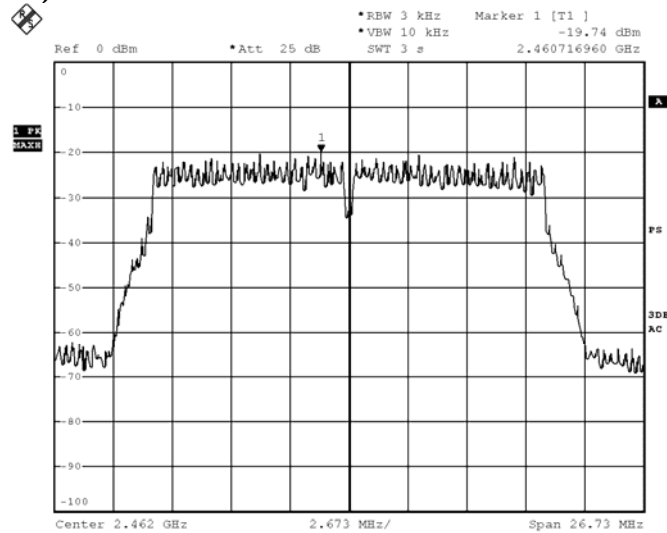
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Ch 11 (2462.0 MHz)



BMP

Date: 5.JUL.2016 17:07:05

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## **STC Test Report**

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### **3.1.4 6dB Spectrum Bandwidth Measurement**

|                    |                        |
|--------------------|------------------------|
| Test Requirement:  | FCC 47CFR 15.247(a)(2) |
| Test Method:       | ANSI C63.10:2013       |
| Test Date:         | 2016-07-05             |
| Mode of Operation: | WiFi mode              |

#### **Test Method:**

The bandwidth is measured at an amplitude level reduced from the reference level by a specified ratio. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst-case (i.e. the widest) bandwidth.

#### **Test Setup:**

As Test Setup of clause 3.1.1 in this test report.

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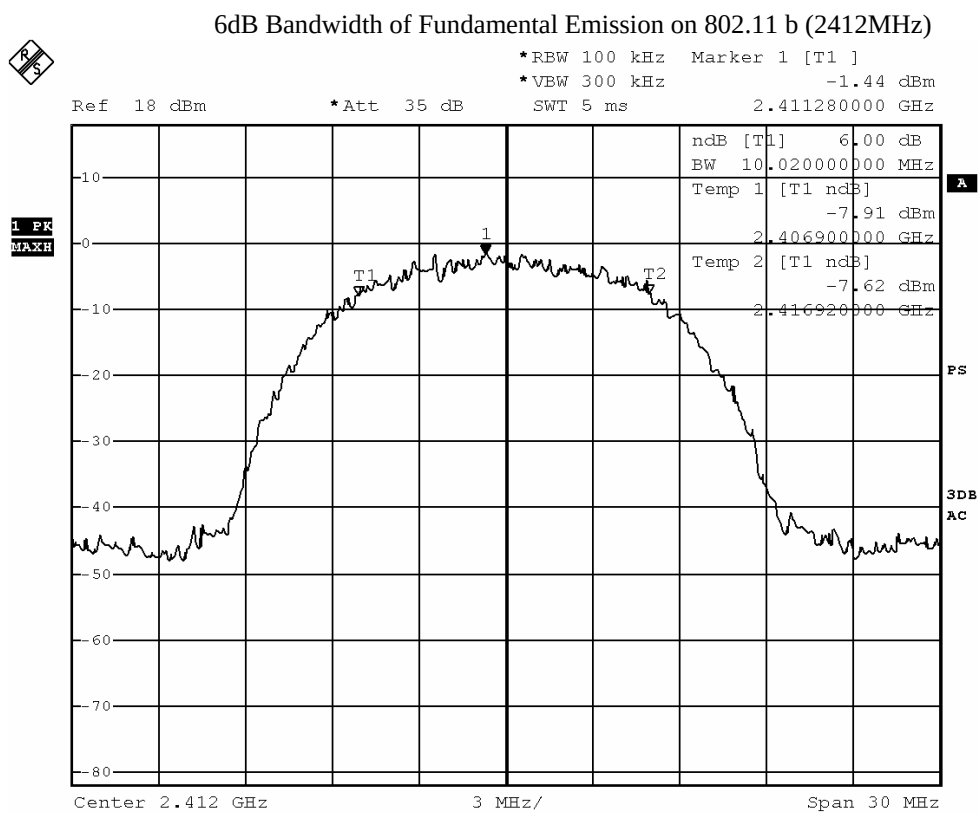
Date: 2016-07-15

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### Limits for 6dB Spectrum Bandwidth Measurement:

| Center Frequency<br>[MHz] | 6dB Bandwidth<br>[MHz] | FCC Limits<br>[kHz] |
|---------------------------|------------------------|---------------------|
| 2412.0                    | 10.02                  | > 500               |



BMP

Date: 5.JUL.2016 16:44:54

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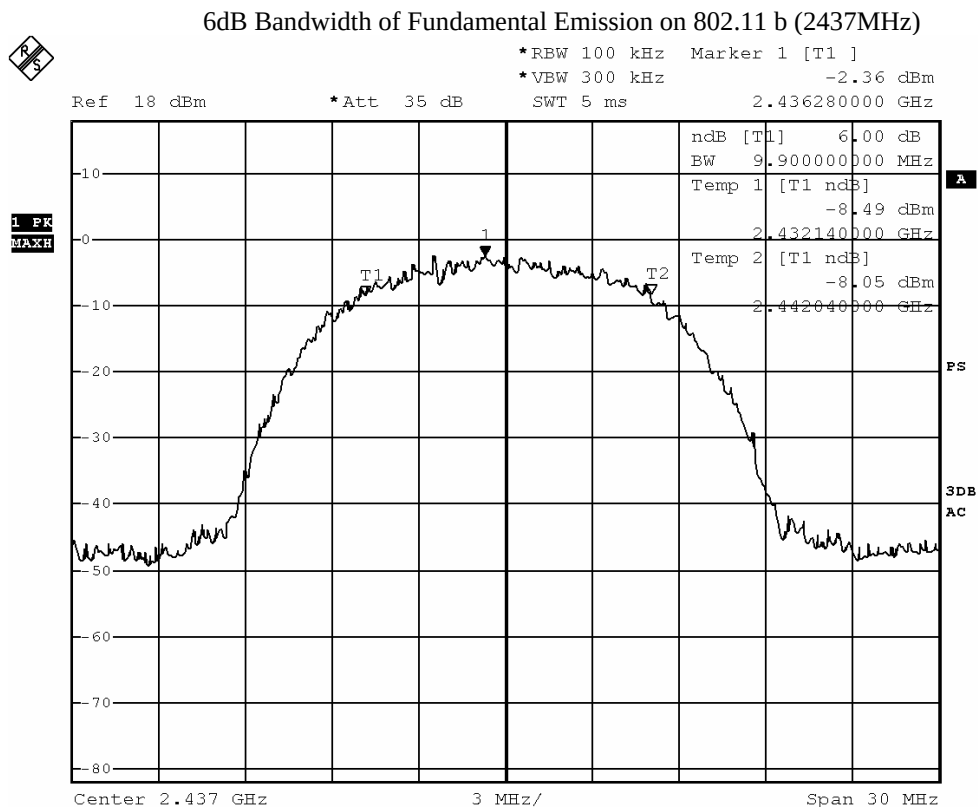
Date: 2016-07-15

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### Limits for 6dB Spectrum Bandwidth Measurement:

| Frequency Range<br>[MHz] | 6dB Bandwidth<br>[MHz] | FCC Limits<br>[kHz] |
|--------------------------|------------------------|---------------------|
| 2437.0                   | 9.90                   | > 500               |



BMP

Date: 5.JUL.2016 16:43:28

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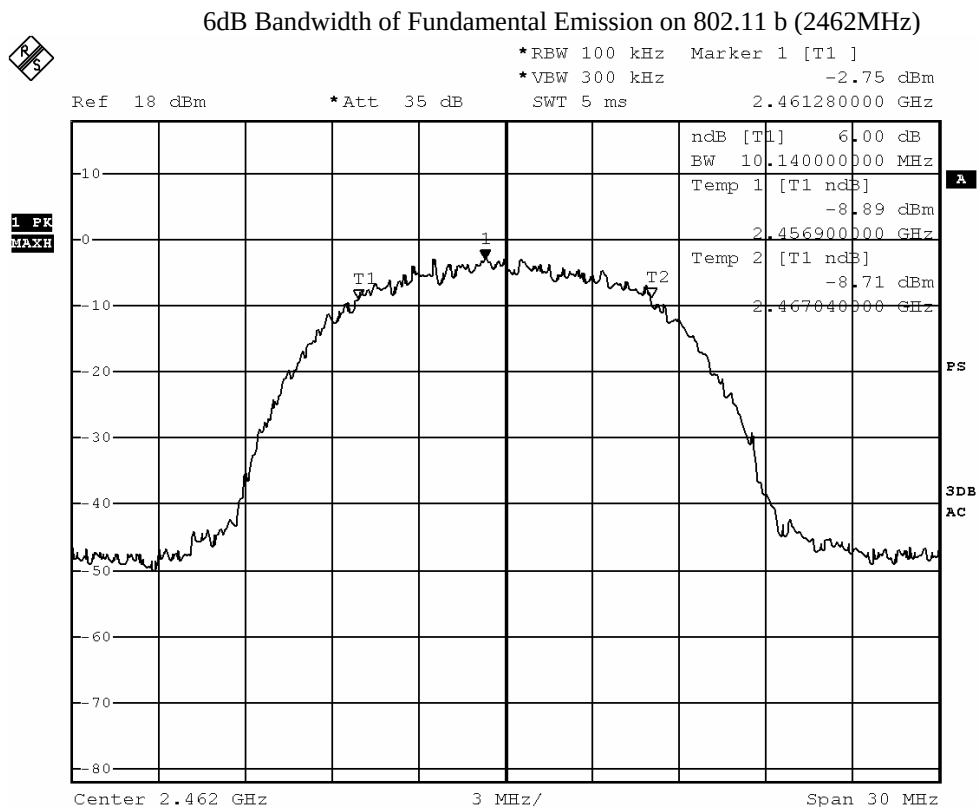
Date: 2016-07-15

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### Limits for 6dB Spectrum Bandwidth Measurement:

| Frequency Range<br>[MHz] | 6dB Bandwidth<br>[MHz] | FCC Limits<br>[kHz] |
|--------------------------|------------------------|---------------------|
| 2462.0                   | 10.14                  | > 500               |



BMP

Date: 5.JUL.2016 16:41:47

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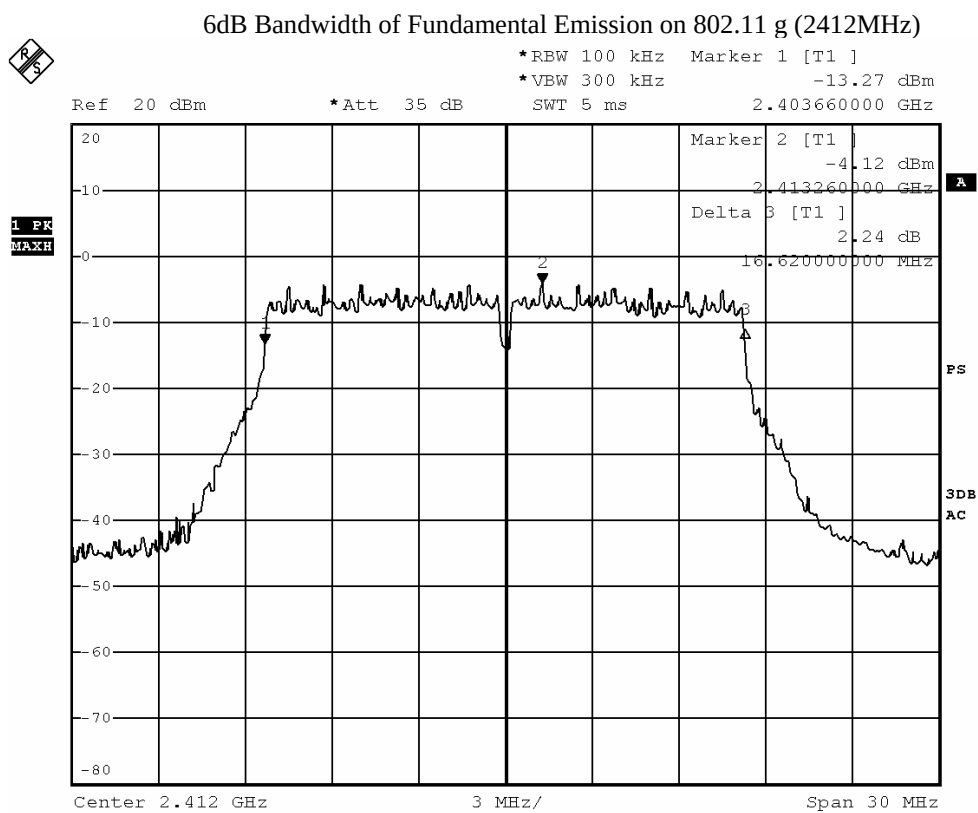
Date: 2016-07-15

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### Limits for 6dB Spectrum Bandwidth Measurement:

| Center Frequency<br>[MHz] | 6dB Bandwidth<br>[MHz] | FCC Limits<br>[kHz] |
|---------------------------|------------------------|---------------------|
| 2412.0                    | 16.62                  | > 500               |



BMP

Date: 5.JUL.2016 16:47:36

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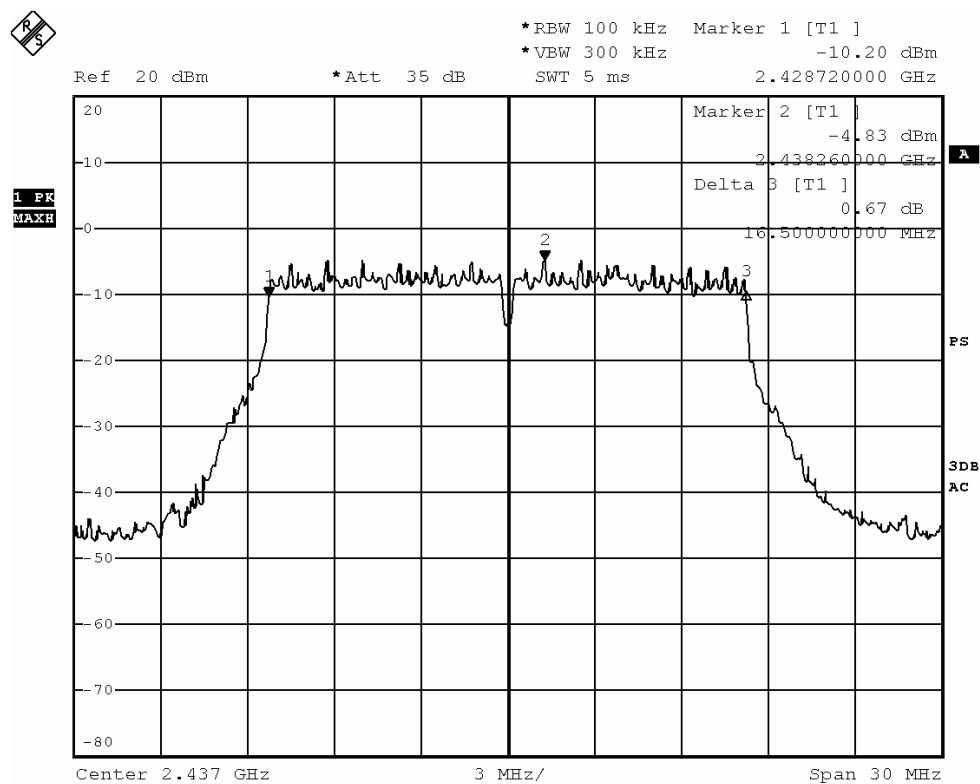
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### Limits for 6dB Spectrum Bandwidth Measurement:

| Frequency Range<br>[MHz] | 6dB Bandwidth<br>[MHz] | FCC Limits<br>[kHz] |
|--------------------------|------------------------|---------------------|
| 2437.0                   | 16.50                  | > 500               |

### 6dB Bandwidth of Fundamental Emission on 802.11 g (2437MHz)



BMP

Date: 5.JUL.2016 16:50:01

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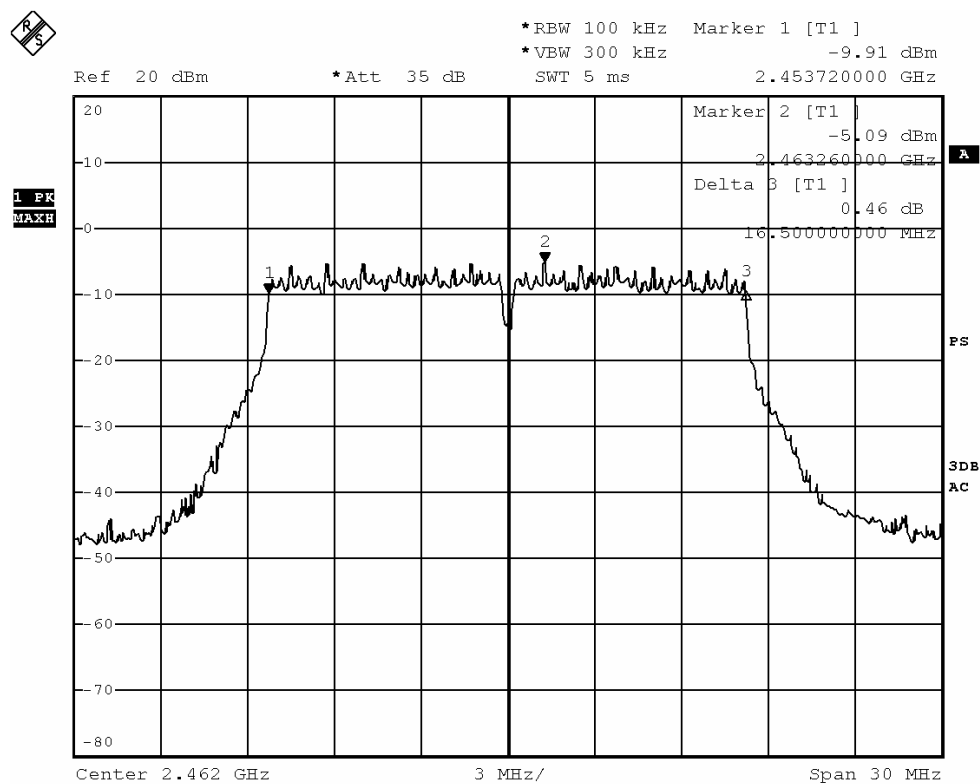
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### Limits for 6dB Spectrum Bandwidth Measurement:

| Frequency Range<br>[MHz] | 6dB Bandwidth<br>[MHz] | FCC Limits<br>[kHz] |
|--------------------------|------------------------|---------------------|
| 2462.0                   | 16.50                  | > 500               |

### 6dB Bandwidth of Fundamental Emission on 802.11 g (2462MHz)



BMP

Date: 5.JUL.2016 16:52:48

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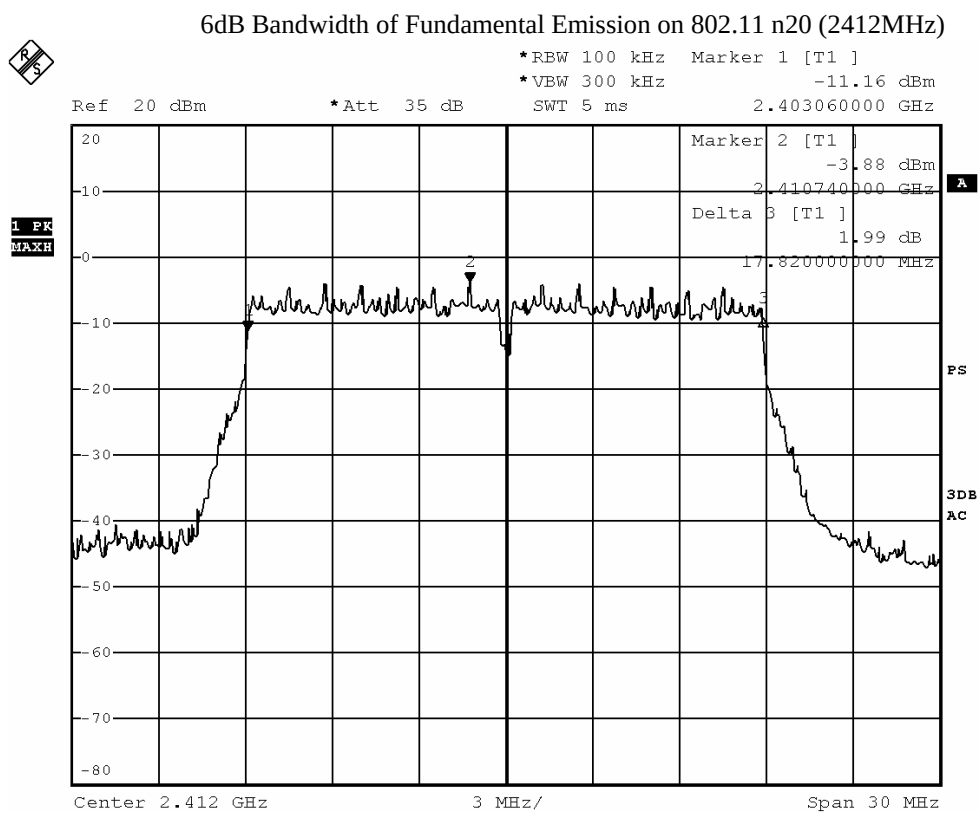
Date: 2016-07-15

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### Limits for 6dB Spectrum Bandwidth Measurement:

| Center Frequency<br>[MHz] | 6dB Bandwidth<br>[MHz] | FCC Limits<br>[kHz] |
|---------------------------|------------------------|---------------------|
| 2412.0                    | 17.82                  | > 500               |



BMP

Date: 5.JUL.2016 16:56:32

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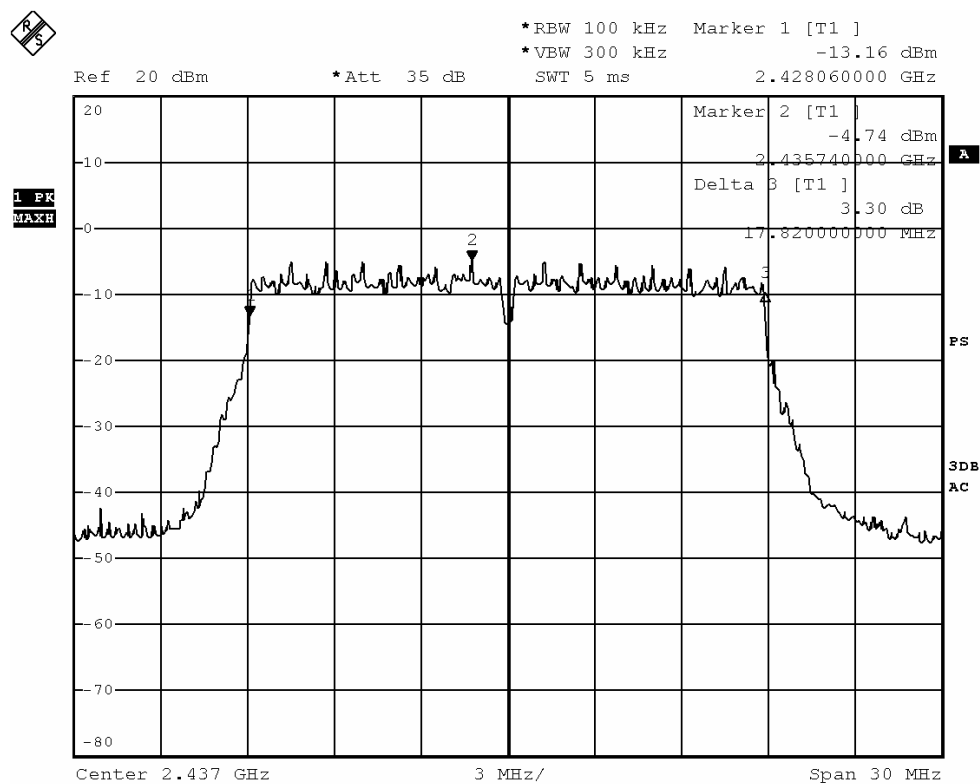
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### Limits for 6dB Spectrum Bandwidth Measurement:

| Frequency Range<br>[MHz] | 6dB Bandwidth<br>[MHz] | FCC Limits<br>[kHz] |
|--------------------------|------------------------|---------------------|
| 2437.0                   | 17.82                  | > 500               |

### 6dB Bandwidth of Fundamental Emission on 802.11 n20 (2437MHz)



BMP

Date: 5.JUL.2016 17:00:51

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## STC Test Report

Date: 2016-07-15

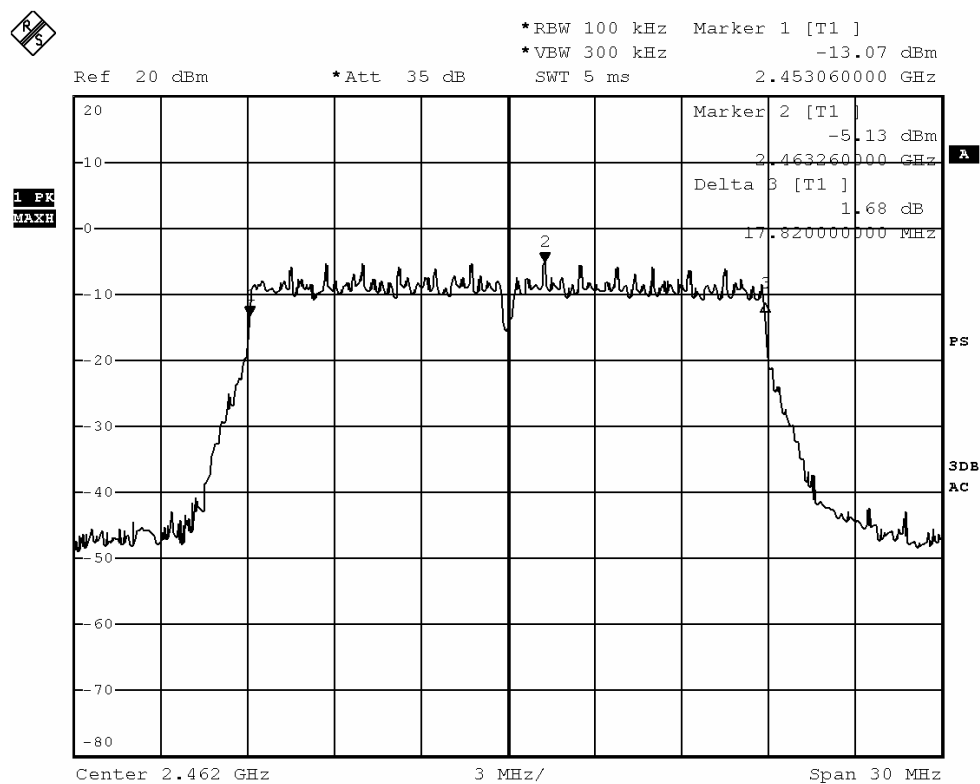
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No.: DM124239

### Limits for 6dB Spectrum Bandwidth Measurement:

| Frequency Range<br>[MHz] | 6dB Bandwidth<br>[MHz] | FCC Limits<br>[kHz] |
|--------------------------|------------------------|---------------------|
| 2462.0                   | 17.82                  | > 500               |

### 6dB Bandwidth of Fundamental Emission on 802.11 n20 (2462MHz)



BMP

Date: 5.JUL.2016 17:03:04

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## **STC Test Report**

**Date: 2016-07-15**

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**No.: DM124239**

### **3.1.5 Band Edges Measurement**

|                    |                  |
|--------------------|------------------|
| Test Requirement:  | FCC 47CFR 15.247 |
| Test Method:       | ANSI C63.10:2013 |
| Test Date:         | 2016-07-05       |
| Mode of Operation: | WiFi mode        |

#### **Test Method:**

The band edge is measured at an amplitude level reduced from the reference level by a specified ratio. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. The RBW and VBW are set to 100kHz for this measurement.

#### **Test Setup:**

As Test Setup of clause 3.1.2 in this test report.

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## STC Test Report

Date: 2016-07-15

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No.: DM124239

### Band-edge Compliance of RF Conducted Emissions Measurement:

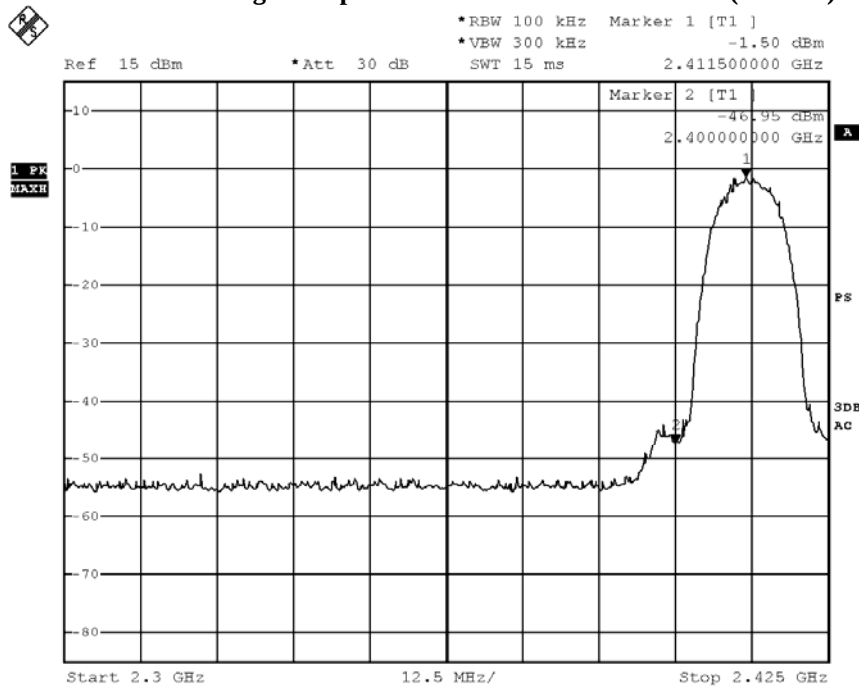
#### Limit :

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, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required.

Remark: Emissions under the fixed frequency mode and hopping mode have been investigated, the worst-case measurement results were recorded in the test report

| Frequency Range                  | Radiated Emission Attenuated below the Fundamental |
|----------------------------------|----------------------------------------------------|
| [MHz]                            | [dB]                                               |
| 2400 – Lowest Fundamental (2412) | 45.45                                              |

### Band-edge Compliance of RF Emissions – Lowest (802.11b)



BMP

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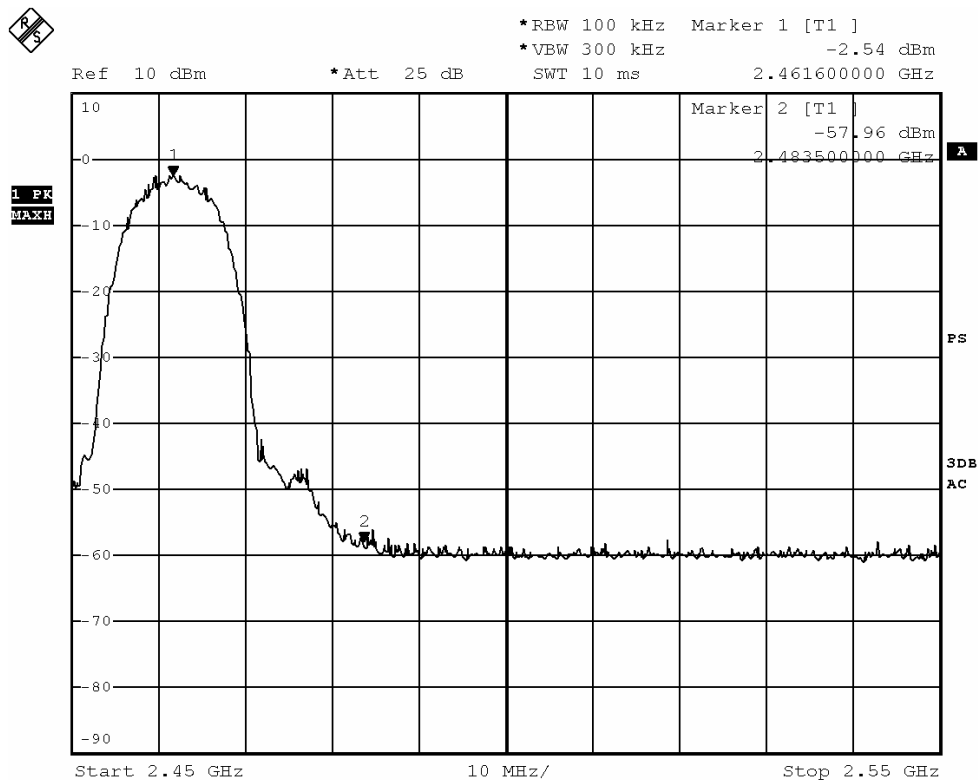
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### Band-edge Compliance of RF Conducted Emissions Measurement:

| Frequency Range<br>[MHz]            | Radiated Emission Attenuated below the<br>Fundamental<br>[dB] |
|-------------------------------------|---------------------------------------------------------------|
| 2483.5 - Highest Fundamental (2462) | 55.42                                                         |

### Band-edge Compliance of RF Emissions – Highest (802.11b)



BMP

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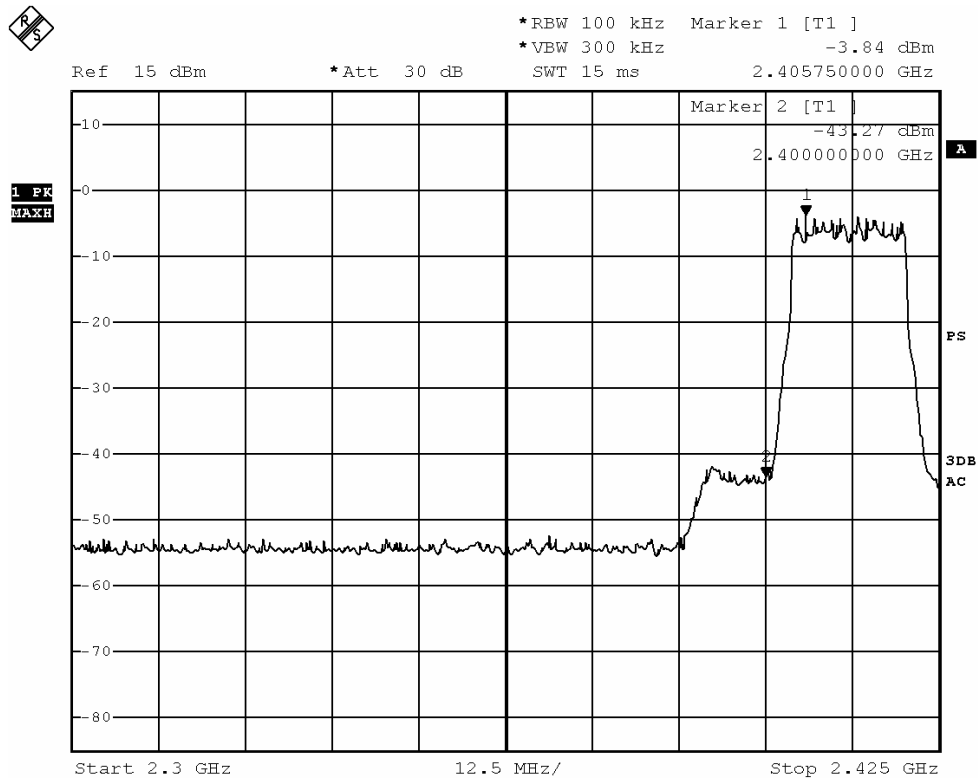
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### Band-edge Compliance of RF Conducted Emissions Measurement:

| Frequency Range<br>[MHz]         | Radiated Emission Attenuated below the<br>Fundamental<br>[dB] |
|----------------------------------|---------------------------------------------------------------|
| 2400 – Lowest Fundamental (2412) | 39.43                                                         |

### Band-edge Compliance of RF Emissions – Lowest (802.11g)



BMP

Date: 5.JUL.2016 18:00:26

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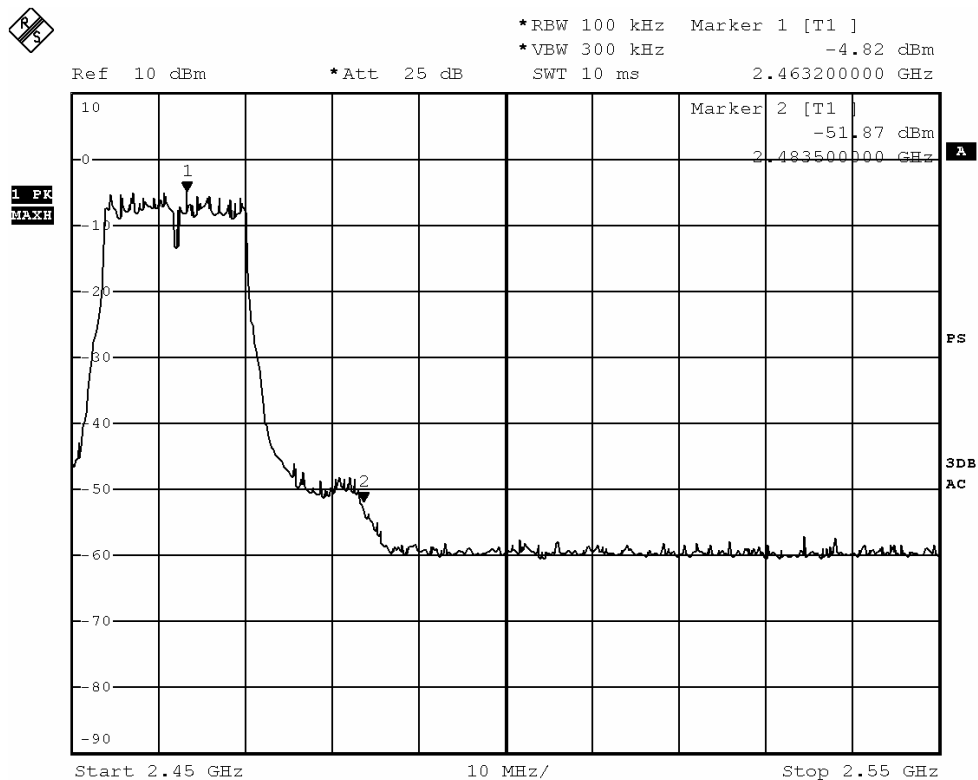
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### Band-edge Compliance of RF Conducted Emissions Measurement:

| Frequency Range<br>[MHz]            | Radiated Emission Attenuated below the<br>Fundamental<br>[dB] |
|-------------------------------------|---------------------------------------------------------------|
| 2483.5 - Highest Fundamental (2462) | 47.05                                                         |

### Band-edge Compliance of RF Emissions – Highest (802.11g)



BMP

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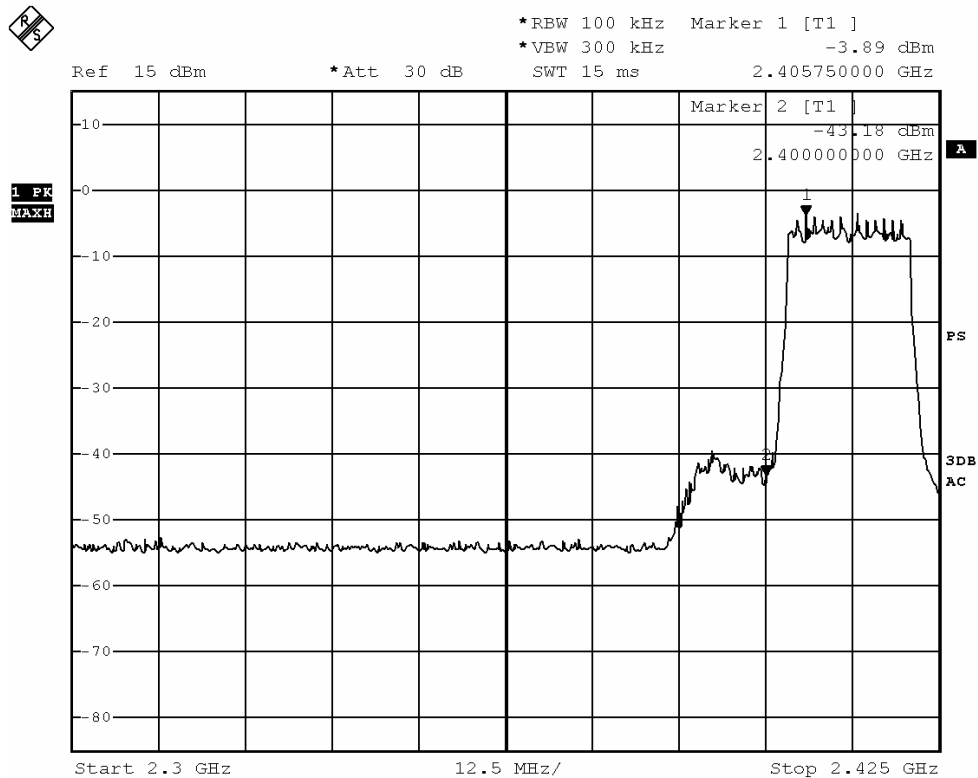
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### Band-edge Compliance of RF Conducted Emissions Measurement:

| Frequency Range<br>[MHz]         | Radiated Emission Attenuated below the<br>Fundamental<br>[dB] |
|----------------------------------|---------------------------------------------------------------|
| 2400 – Lowest Fundamental (2412) | 39.29                                                         |

### Band-edge Compliance of RF Emissions – Lowest (802.11n20)



BMP

Date: 5.JUL.2016 18:06:28

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Date: 2016-07-15

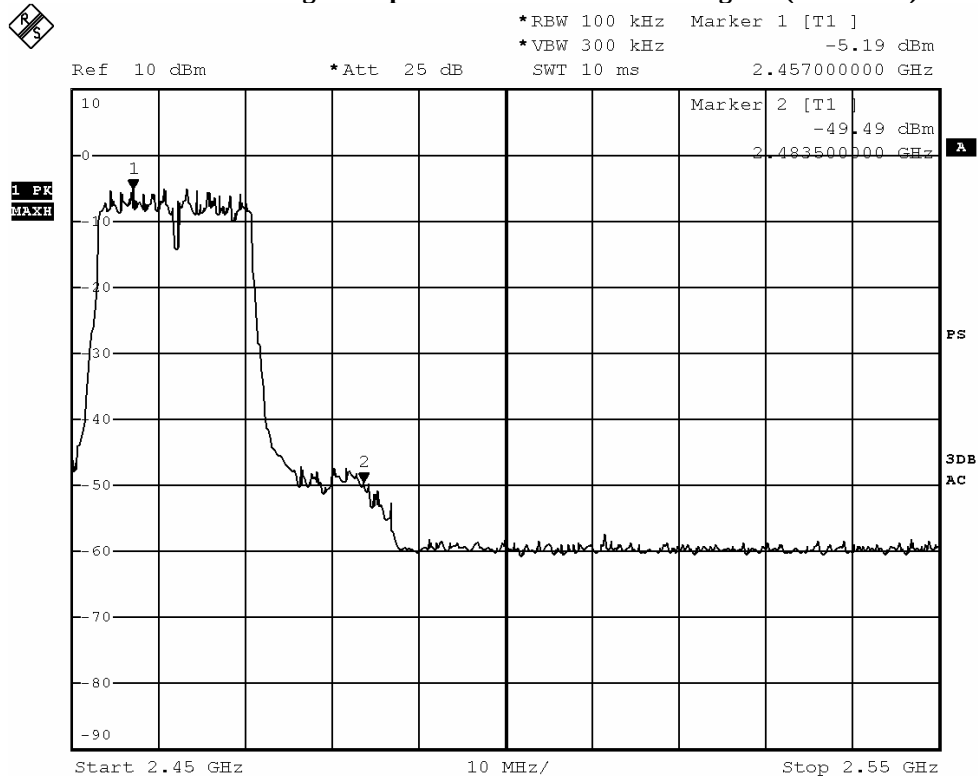
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No.: DM124239

### Band-edge Compliance of RF Conducted Emissions Measurement:

| Frequency Range<br>[MHz]            | Radiated Emission Attenuated below the<br>Fundamental<br>[dB] |
|-------------------------------------|---------------------------------------------------------------|
| 2483.5 - Highest Fundamental (2462) | 44.30                                                         |

### Band-edge Compliance of RF Emissions – Highest (802.11n20)



BMP

Date: 5.JUL.2016 17:47:07

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## STC Test Report

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**Band-edge Compliance of RF Radiated Emissions Measurement:**

**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, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 5.205(c)).

**Result: Band-edge Compliance of RF Radiated Emissions (Lowest)-802.11b**

| Field Strength of Band-edge Compliance<br>Peak Value |                                     |                              |                                   |                              |                        |                     |
|------------------------------------------------------|-------------------------------------|------------------------------|-----------------------------------|------------------------------|------------------------|---------------------|
| Frequency<br>MHz                                     | Measured<br>Level @3m<br>dB $\mu$ V | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dB $\mu$ V/m | Limit<br>@3m<br>dB $\mu$ V/m | Margin<br>dB $\mu$ V/m | E-Field<br>Polarity |
| 2390.0                                               | 20.1                                | 36.8                         | 56.9                              | 74.0                         | 17.1                   | Vertical            |

| Field Strength of Band-edge Compliance<br>Average Value |                                     |                              |                                   |                              |                        |                     |
|---------------------------------------------------------|-------------------------------------|------------------------------|-----------------------------------|------------------------------|------------------------|---------------------|
| Frequency<br>MHz                                        | Measured<br>Level @3m<br>dB $\mu$ V | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dB $\mu$ V/m | Limit<br>@3m<br>dB $\mu$ V/m | Margin<br>dB $\mu$ V/m | E-Field<br>Polarity |
| 2390.0                                                  | 2.7                                 | 36.8                         | 39.5                              | 54.0                         | 14.5                   | Vertical            |

**Result: Band-edge Compliance of RF Radiated Emissions (Highest) -802.11b**

| Field Strength of Band-edge Compliance<br>Peak Value |                                     |                              |                                   |                              |                        |                     |
|------------------------------------------------------|-------------------------------------|------------------------------|-----------------------------------|------------------------------|------------------------|---------------------|
| Frequency<br>MHz                                     | Measured<br>Level @3m<br>dB $\mu$ V | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dB $\mu$ V/m | Limit<br>@3m<br>dB $\mu$ V/m | Margin<br>dB $\mu$ V/m | E-Field<br>Polarity |
| 2483.5                                               | 13.2                                | 36.4                         | 49.6                              | 74.0                         | 24.4                   | Horizontal          |

| Field Strength of Band-edge Compliance<br>Average Value |                                     |                              |                                   |                              |                        |                     |
|---------------------------------------------------------|-------------------------------------|------------------------------|-----------------------------------|------------------------------|------------------------|---------------------|
| Frequency<br>MHz                                        | Measured<br>Level @3m<br>dB $\mu$ V | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dB $\mu$ V/m | Limit<br>@3m<br>dB $\mu$ V/m | Margin<br>dB $\mu$ V/m | E-Field<br>Polarity |
| 2483.5                                                  | 2.9                                 | 36.4                         | 39.3                              | 54.0                         | 14.7                   | Horizontal          |

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## **STC Test Report**

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**Result: Band-edge Compliance of RF Radiated Emissions (Lowest)-802.11g**

| Field Strength of Band-edge Compliance<br>Peak Value |                                     |                              |                                   |                              |                        |                     |
|------------------------------------------------------|-------------------------------------|------------------------------|-----------------------------------|------------------------------|------------------------|---------------------|
| Frequency<br>MHz                                     | Measured<br>Level @3m<br>dB $\mu$ V | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dB $\mu$ V/m | Limit<br>@3m<br>dB $\mu$ V/m | Margin<br>dB $\mu$ V/m | E-Field<br>Polarity |
| 2390.0                                               | 25.3                                | 36.8                         | 62.1                              | 74.0                         | 11.9                   | Vertical            |

| Field Strength of Band-edge Compliance<br>Average Value |                                     |                              |                                   |                              |                        |                     |
|---------------------------------------------------------|-------------------------------------|------------------------------|-----------------------------------|------------------------------|------------------------|---------------------|
| Frequency<br>MHz                                        | Measured<br>Level @3m<br>dB $\mu$ V | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dB $\mu$ V/m | Limit<br>@3m<br>dB $\mu$ V/m | Margin<br>dB $\mu$ V/m | E-Field<br>Polarity |
| 2390.0                                                  | 4.9                                 | 36.8                         | 41.7                              | 54.0                         | 12.3                   | Vertical            |

**Result: Band-edge Compliance of RF Radiated Emissions (Highest) -802.11g**

| Field Strength of Band-edge Compliance<br>Peak Value |                                     |                              |                                   |                              |                        |                     |
|------------------------------------------------------|-------------------------------------|------------------------------|-----------------------------------|------------------------------|------------------------|---------------------|
| Frequency<br>MHz                                     | Measured<br>Level @3m<br>dB $\mu$ V | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dB $\mu$ V/m | Limit<br>@3m<br>dB $\mu$ V/m | Margin<br>dB $\mu$ V/m | E-Field<br>Polarity |
| 2483.5                                               | 20.2                                | 36.4                         | 56.6                              | 74.0                         | 17.4                   | Horizontal          |

| Field Strength of Band-edge Compliance<br>Average Value |                                     |                              |                                   |                              |                        |                     |
|---------------------------------------------------------|-------------------------------------|------------------------------|-----------------------------------|------------------------------|------------------------|---------------------|
| Frequency<br>MHz                                        | Measured<br>Level @3m<br>dB $\mu$ V | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dB $\mu$ V/m | Limit<br>@3m<br>dB $\mu$ V/m | Margin<br>dB $\mu$ V/m | E-Field<br>Polarity |
| 2483.5                                                  | 3.0                                 | 36.4                         | 39.4                              | 54.0                         | 14.6                   | Horizontal          |

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Result: Band-edge Compliance of RF Radiated Emissions (Lowest)-802.11n20

| Field Strength of Band-edge Compliance<br>Peak Value |                                     |                              |                                   |                              |                        |                     |
|------------------------------------------------------|-------------------------------------|------------------------------|-----------------------------------|------------------------------|------------------------|---------------------|
| Frequency<br>MHz                                     | Measured<br>Level @3m<br>dB $\mu$ V | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dB $\mu$ V/m | Limit<br>@3m<br>dB $\mu$ V/m | Margin<br>dB $\mu$ V/m | E-Field<br>Polarity |
| 2390.0                                               | 26.3                                | 36.8                         | 63.1                              | 74.0                         | 10.9                   | Vertical            |

| Field Strength of Band-edge Compliance<br>Average Value |                                     |                              |                                   |                              |                        |                     |
|---------------------------------------------------------|-------------------------------------|------------------------------|-----------------------------------|------------------------------|------------------------|---------------------|
| Frequency<br>MHz                                        | Measured<br>Level @3m<br>dB $\mu$ V | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dB $\mu$ V/m | Limit<br>@3m<br>dB $\mu$ V/m | Margin<br>dB $\mu$ V/m | E-Field<br>Polarity |
| 2390.0                                                  | 5.5                                 | 36.8                         | 42.3                              | 54.0                         | 11.7                   | Vertical            |

Result: Band-edge Compliance of RF Radiated Emissions (Highest) -802.11n20

| Field Strength of Band-edge Compliance<br>Peak Value |                                     |                              |                                   |                              |                        |                     |
|------------------------------------------------------|-------------------------------------|------------------------------|-----------------------------------|------------------------------|------------------------|---------------------|
| Frequency<br>MHz                                     | Measured<br>Level @3m<br>dB $\mu$ V | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dB $\mu$ V/m | Limit<br>@3m<br>dB $\mu$ V/m | Margin<br>dB $\mu$ V/m | E-Field<br>Polarity |
| 2483.5                                               | 20.5                                | 36.4                         | 56.9                              | 74.0                         | 17.1                   | Horizontal          |

| Field Strength of Band-edge Compliance<br>Average Value |                                     |                              |                                   |                              |                        |                     |
|---------------------------------------------------------|-------------------------------------|------------------------------|-----------------------------------|------------------------------|------------------------|---------------------|
| Frequency<br>MHz                                        | Measured<br>Level @3m<br>dB $\mu$ V | Correction<br>Factor<br>dB/m | Field<br>Strength<br>dB $\mu$ V/m | Limit<br>@3m<br>dB $\mu$ V/m | Margin<br>dB $\mu$ V/m | E-Field<br>Polarity |
| 2483.5                                                  | 4.3                                 | 36.4                         | 40.7                              | 54.0                         | 13.3                   | Horizontal          |

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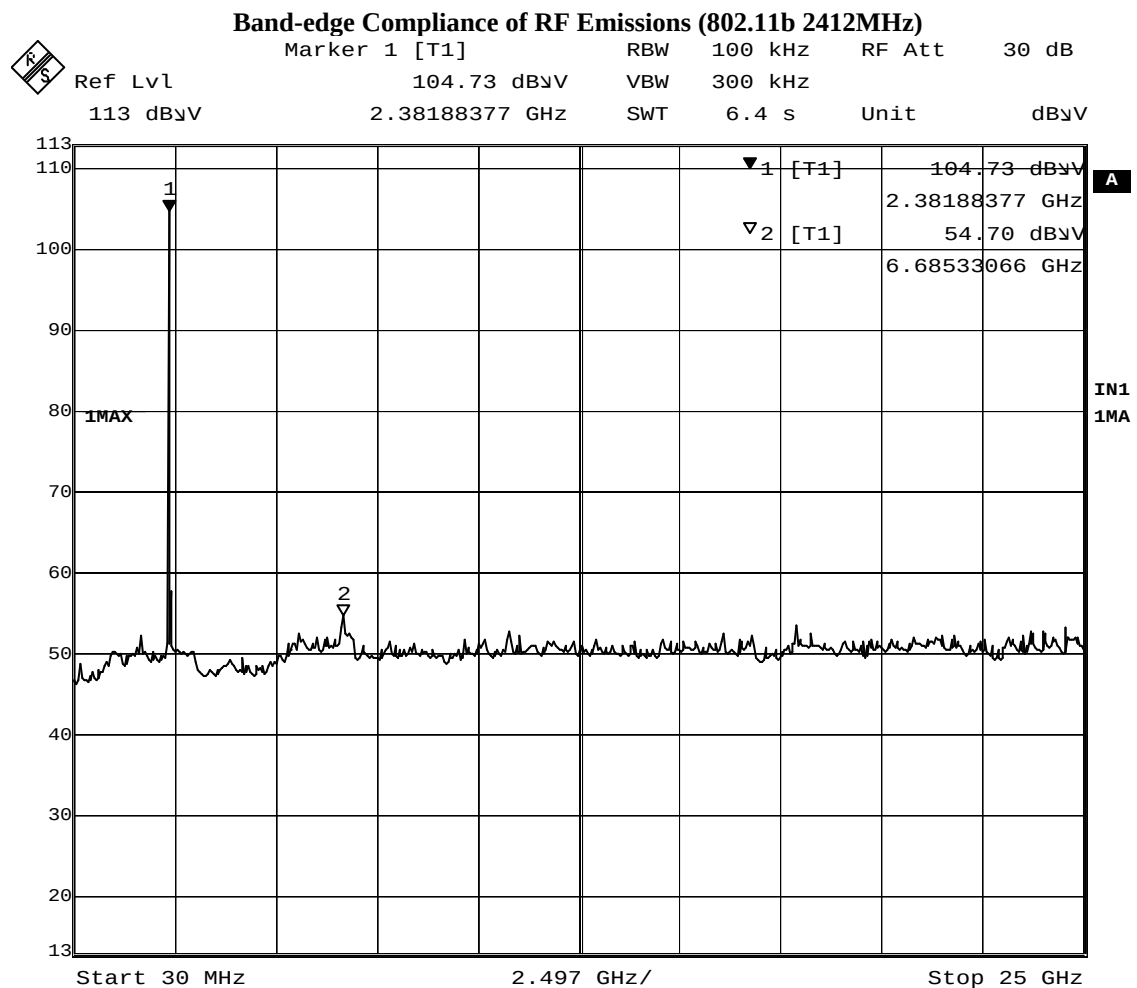
No.: DM124239

### Band-edge Compliance of RF Conducted Emissions Measurement:

#### 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, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required.

Remark: Emissions under the fixed frequency mode and hopping mode have been investigated, the worst-case measurement results were recorded in the test report



Date: 6. JUL. 2016 01:37:51

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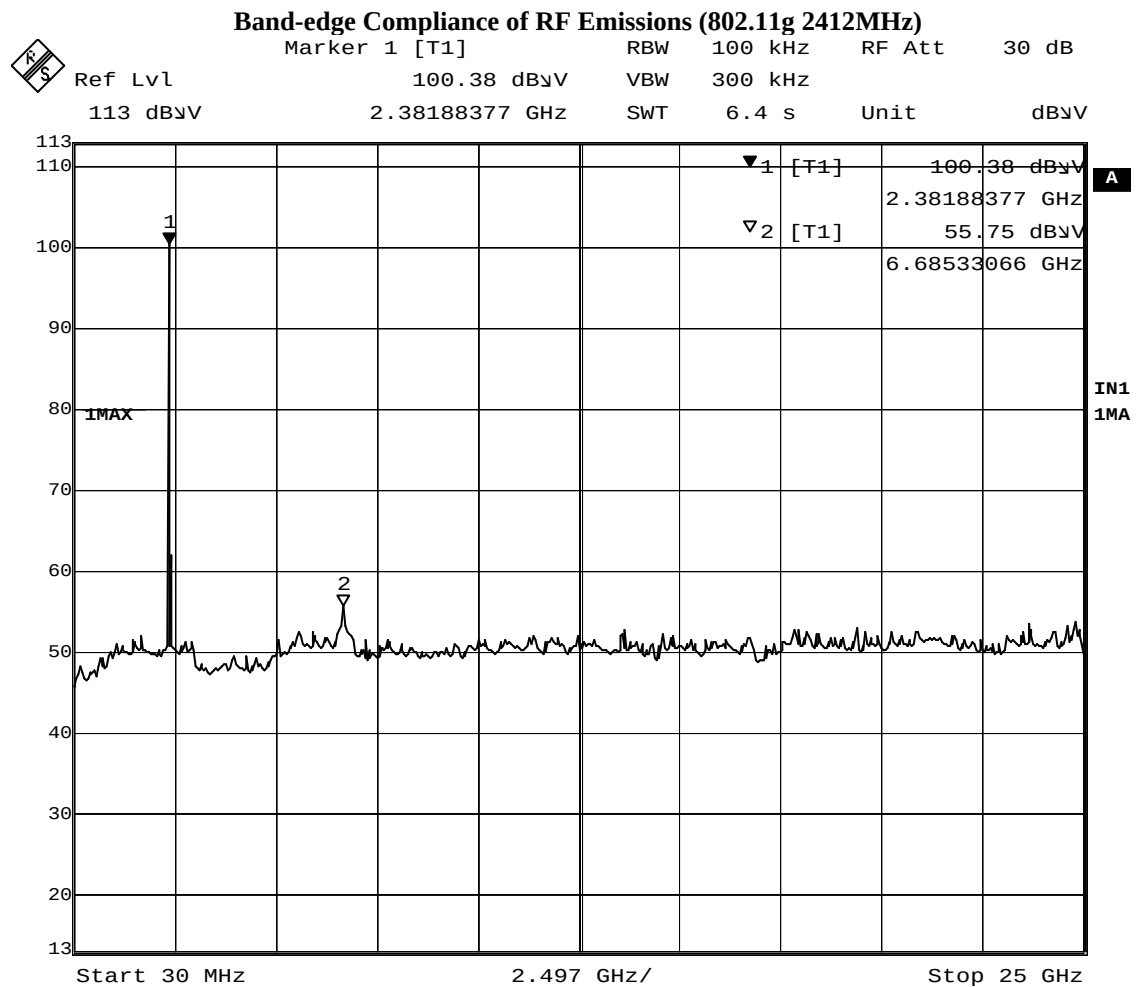


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Date: 6.JUL.2016 01:41:59

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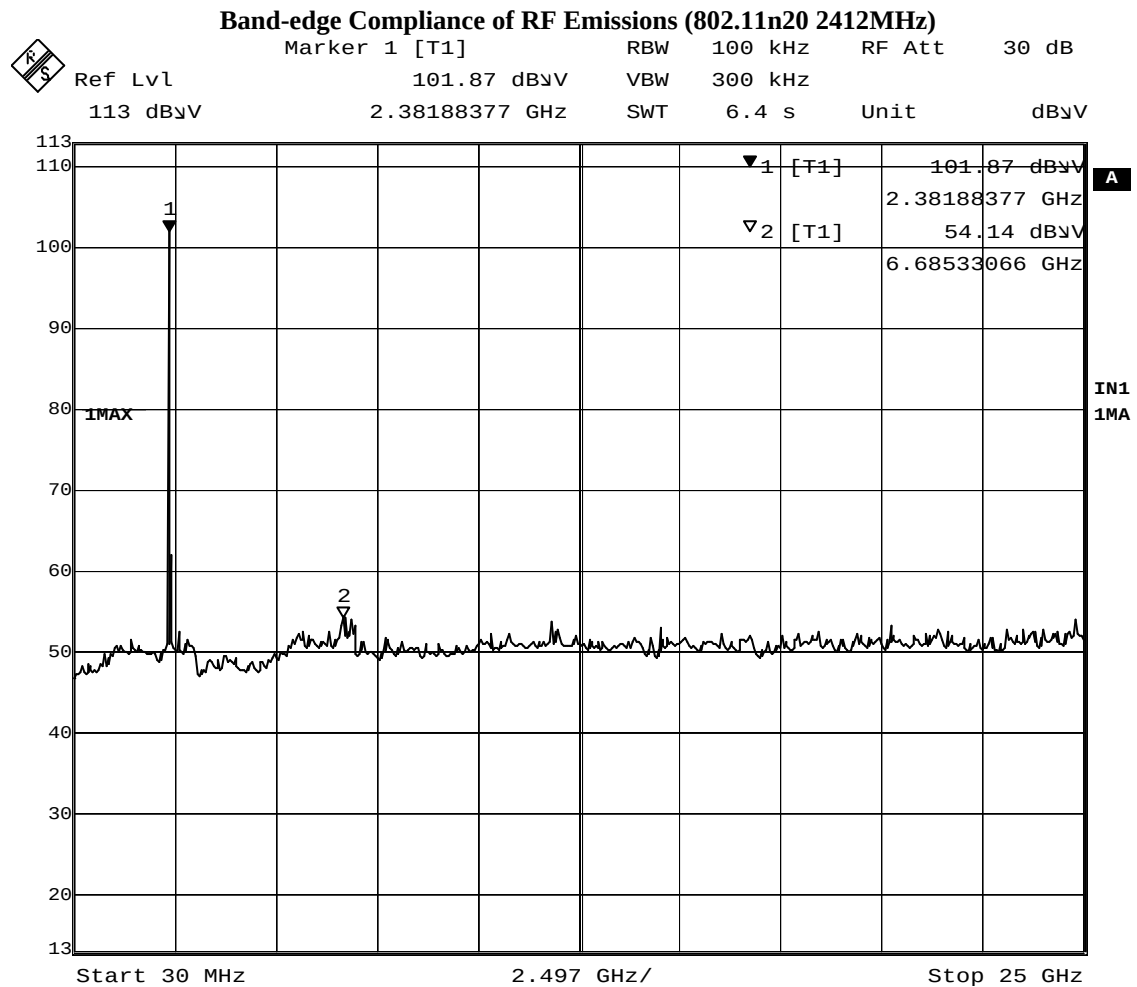


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Date: 6.JUL.2016 01:45:37

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## **STC Test Report**

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### **3.1.6 RF Exposure**

Test Requirement: FCC 47CFR 15.247(i)  
Test Date: 2016-07-08  
Mode of Operation: WiFi mode

#### **Test Method:**

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines.

#### **Test Results:**

The EUT complied with the requirement(s) of this section.  
EUT meets the requirements of these sections as proven through MPE calculation  
The MPE calculation for EUT @ 20cm  
Based on the highest P = 54.954 mW

$$\begin{aligned} P_d &= PG / 4\pi R^2 = (54.954 \times 1.78) / 12.566 \times (20)^2 \\ &= (97.818) / 12.566 \times 400 = 97.818 / 5026.4 \\ &= 0.0195 \text{ mW/cm}^2 \end{aligned}$$

where:

- \*Pd = power density in mW/cm<sup>2</sup>
- \* G = Antenna numeric gain (1.78); Log G = g/10 ( g = 2.5dBi ).
- \* P = Conducted RF power to antenna (54.954 mW).
- \* R = Minimum allowable distance.(20 cm)

- \*The power density Pd = 0.0195mW/cm<sup>2</sup> is less than 1 mW/cm<sup>2</sup> (listed MPE limit)
- \*The SAR evaluation is not needed ( this is a desk top device, R> 20 cm )
- \* The EUT( antenna ) must be 0.2 meters away from the General Population.

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## STC Test Report

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### Appendix A

#### List of Measurement Equipment

| EQP NO. | DESCRIPTION                                  | MANUFACTURER              | MODEL NO.         | SERIAL NO.     | LAST CAL   | DUE CAL    |
|---------|----------------------------------------------|---------------------------|-------------------|----------------|------------|------------|
| EMD004  | LISN                                         | ROHDE & SCHWARZ           | ESH3-Z5           | 100102         | 2016.3.29  | 2017.3.29  |
| EMD022  | EMI Test Receiver                            | ROHDE & SCHWARZ           | ESCS30            | 100314         | 2016.3.29  | 2017.3.29  |
| EMD035  | EMI Test Receiver                            | ROHDE & SCHWARZ           | ESCI              | 100441         | 2016.3.29  | 2017.3.29  |
| EMD036  | EMI Test Receiver                            | ROHDE & SCHWARZ           | ESIB 26           | 100388         | 2016.3.29  | 2017.3.29  |
| EMD041  | TWO-LINE V-NETWORK                           | ROHDE & SCHWARZ           | ENV216            | 100261         | 2016.3.29  | 2017.3.29  |
| EMD061  | Biconilog Antenna                            | ETS.LINDGREN              | 3142C             | 00060439       | 2014.11.29 | 2016.11.29 |
| EMD062  | Double-Ridged Waveguide (1GHz – 18GHz)       | ETS.LINDGREN              | 3117              | 00075933       | 2014.11.15 | 2016.11.15 |
| EMD084  | MULTI-DVICE CONTROLLER                       | ETS.LINDGREN              | 2090              | 00060107       | N/A        | N/A        |
| EMD088  | Video Contol Unit                            | ETS.LINDGREN              | Y21953A           | 2601073        | N/A        | N/A        |
| EMD093  | Monitor                                      | ViewSonic                 | VA9036            | Q8X064201876   | N/A        | N/A        |
| EMD102  | Intelligent Frequency                        | Ainuo Instrument Co., Ltd | AN97005SS         | 79707454       | N/A        | N/A        |
| EMD103  | Intelligent Frequency                        | Ainuo Instrument Co., Ltd | AN97005SS         | 79707455       | N/A        | N/A        |
| EMD105  | FACT-3 EMC Chamber                           | ETS.LINDGREN              | FACT-3            | 3803           | N/A        | N/A        |
| EMD106  | Shielding Room #1                            | ETS.LINDGREN              | RFD-100           | 3802           | N/A        | N/A        |
| EMD111  | Power meter                                  | ROHDE & SCHWARZ           | NRVD              | 102051         | 2016.3.29  | 2017.3.29  |
|         | 100V Insertion Unit                          | ROHDE & SCHWARZ           | URV5-Z4           | 100464         | 2016.3.29  | 2017.3.29  |
| EMD113  | Pre-Amplifier                                | ROHDE & SCHWARZ           | N/A               | 1129588        | 2016.3.29  | 2017.3.29  |
| EMD124  | Loop Antenna                                 | ETS-Lindgren              | 6502              | 00104905       | 2016.05.23 | 2017.05.23 |
| EMD131  | Standard Gain Horn Antenna (18GHz – 26.5GHz) | Chengdu AINFO Inc.        | JXTXLB-42-15-C-KF | J2021100721001 | 2015.04.09 | 2017.04.09 |
| RE01    | RF cable                                     | N/A                       | N/A               | N/A            | 2014-9-28  | 2016-9-27  |
| RE02    | RF cable                                     | N/A                       | N/A               | N/A            | 2014-9-28  | 2016-9-27  |

Remarks:-

N/A Not Applicable or Not Available

#### STC (Dongguan) Company Limited

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## **STC Test Report**

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### **Appendix B**

#### **Photographs of EUT**

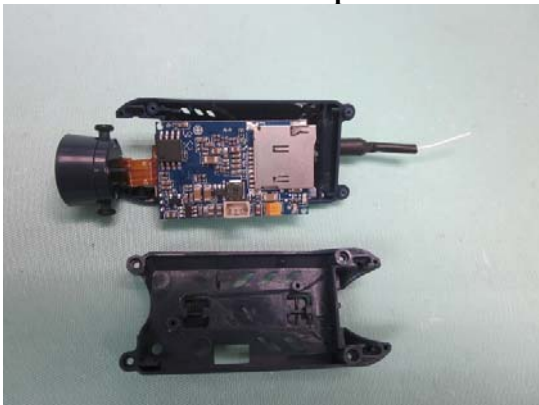
**Front View of the product**



**Rear View of the product**



**Inside View of the product**



**Inner Circuit Top View**



**Inner Circuit Bottom View**



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## **STC Test Report**

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**Photographs of EUT**

**Measurement of Radiated Emission Test Set Up**



**Measurement of Radiated Emission Test Set Up**



**\*\*\*\*\* End of Test Report \*\*\*\*\***

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