

MEASUREMENT REPORT

FCC PART 15.407 WLAN 802.11a/n

FCC ID: HD5-EDA50211

APPLICANT: Honeywell International Inc
Honeywell Sensing & Productivity Solutions

Application Type: Class II Permissive Change

Product: Mobile Computer

Model No.: EDA50-211

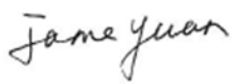
Brand Name: Honeywell

FCC Classification: Unlicensed National Information Infrastructure (UNII)

FCC Rule Part(s): Part 15 Subpart E (Section 15.407)

Test Procedure(s): ANSI C63.10-2013, KDB 789033 D02v01r04

Test Date: July 24 ~ August 06, 2017

Reviewed By : 
(Jame Yuan)

Approved By : 
(Marlin Chen)



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in KDB 789033 D02v01r04. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
1707RSU02604	Rev. 01	Initial report	08-10-2017	Valid

Note: This test report was based on MRT original report number: 1704RSU05704. The EUT change the all antennas of BT/Wi-Fi/NFC/GSM/WCDMA/LTE, and we have assessed the part of radiation emission testing.

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§2.1033 General Information

Applicant:	Honeywell International Inc Honeywell Sensing & Productivity Solutions
Applicant Address:	9680 Old Bailes Rd. Fort Mill, SC 29707 United States
Manufacturer:	Honeywell International Inc Honeywell Sensing & Productivity Solutions
Manufacturer Address:	9680 Old Bailes Rd. Fort Mill, SC 29707 United States
Test Site:	MRT Technology (Suzhou) Co., Ltd
Test Site Address:	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China
MRT Registration No.:	893164
FCC Rule Part(s):	Part 15.407
Model No.:	EDA50-211
FCC ID:	HD5-EDA50211
Test Device Serial No.:	N/A ☐ Production ☒ Pre-Production ☐ Engineering

Test Facility / Accreditations

Measurements were performed at MRT Laboratory located in Tian'edang Rd., Suzhou, China.

- MRT facility is a FCC registered (MRT Reg. No. 893164) test facility with the site description report on file and has met all the requirements specified in Section 2.948 of the FCC Rules.
- MRT facility is an IC registered (MRT Reg. No. 11384A-1) test laboratory with the site description on file at Industry Canada.
- MRT facility is a VCCI registered (R-4179, G-814, C-4664, T-2206) test laboratory with the site description on file at VCCI Council.
- MRT Lab is accredited to ISO 17025 by the American Association for Laboratory Accreditation (A2LA) under the American Association for Laboratory Accreditation Program (A2LA Cert. No. 3628.01) in EMC, Telecommunications and Radio testing for FCC, Industry Canada, EU and TELEC Rules.



1. INTRODUCTION

1.1. Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Industry Canada Certification and Engineering Bureau.

1.2. MRT Test Location

The map below shows the location of the MRT LABORATORY, its proximity to the Taihu Lake. These measurement tests were conducted at the MRT Technology (Suzhou) Co., Ltd. Facility located at D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China. The detailed description of the measurement facility was found to be in compliance with the requirements of § 2.948 according to ANSI C63.4-2009 on September 30, 2013.



2. PRODUCT INFORMATION

2.1. Equipment Description

Product Name:	Mobile Computer
Model No.:	EDA50-211
Brand Name:	Honeywell
Hardware Version:	V2.0
Software Version:	205.01.00.0006.eng
IMEI:	356074080038511
Wi-Fi Specification:	802.11a/b/g/n
Bluetooth Specification:	v4.0 dual mode
GSM Operation Band (s)	E-GSM 850 / DCS 1900
WCDMA Operation Band (s)	Band II / V
LTE Operation Band (s)	FDD Band 2/4/7
NFC:	13.56MHz
GPS:	1575.42MHz
Components	
Adapter	Model No.: ADS-12B-06 05010E Input Power: 100 - 240V ~ 50/60Hz, Max. 0.3A Output Power: 5VDC 2.0A

2.2. Product Specification Subjective to this Report

Frequency Range:	802.11a/n-HT20: 5180~5320MHz, 5500~5720MHz, 5745~5825MHz 802.11n-HT40: 5190~5310MHz, 5510~5710MHz, 5755~5795MHz
Channel Number:	802.11a/n-HT20: 25 802.11n-HT40: 12
Type of Modulation:	802.11a/n: OFDM
Data Rate:	802.11a: 6/9/12/18/24/36/48/54Mbps 802.11n: up to 150Mbps
Maximum Average Output Power:	802.11a: 11.51dBm 802.11n-HT20: 11.26dBm 802.11n-HT40: 11.27dBm
Antenna Type / Antenna Gain:	FPC Antenna / 5.6dBi

Note: For other features of this EUT, test report will be issued separately.

2.3. Working Frequencies for this report

802.11a/n-HT20

Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180 MHz	40	5200 MHz	44	5220 MHz
48	5240 MHz	52	5260 MHz	56	5280 MHz
60	5300 MHz	64	5320 MHz	100	5500 MHz
104	5520 MHz	108	5540 MHz	112	5560 MHz
116	5580 MHz	120	5600 MHz	124	5620 MHz
128	5640 MHz	132	5660 MHz	136	5680 MHz
140	5700 MHz	144	5720 MHz	149	5745 MHz
153	5765 MHz	157	5785 MHz	161	5805 MHz
165	5825 MHz	--	--	--	--

802.11n-HT40

Channel	Frequency	Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz	54	5270 MHz
62	5310 MHz	102	5510 MHz	110	5550 MHz
118	5590 MHz	126	5630 MHz	134	5670 MHz
142	5710 MHz	151	5755 MHz	159	5795 MHz

2.4. Test Mode

Test Mode	Mode 1: Transmit by 802.11a
	Mode 2: Transmit by 802.11n-HT20
	Mode 3: Transmit by 802.11n-HT40

2.5. Description of Test Software

The test utility software used during testing was “QRCT Version3.0.105.0”.

Power Parameter Value

Test Mode	Test Frequency	Power Parameter Value	Test Mode	Test Frequency	Power Parameter Value
802.11a	5180	15.0	802.11n-HT20	5180	15.0
	5220	16.0		5220	16.0
	5240	16.0		5240	15.5
	5260	16.0		5260	15.5
	5300	16.0		5300	15.5
	5320	16.0		5320	15.5
	5500	18.5		5500	18.5
	5600	18.5		5600	19.0
	5700	16.0		5700	15.5
	5720	18.0		5720	18.0
	5745	18.5		5745	18.0
	5785	18.5		5785	18.0
	5825	18.5		5825	18.0
802.11n-HT40	5190	15.0			
	5230	16.0			
	5270	15.0			
	5310	15.0			
	5510	16.0			
	5590	19.0			
	5670	17.0			
	5710	18.0			
	5755	18.0			
	5795	18.0			

2.6. Device Capabilities

This device contains the following capabilities:

2.4GHz WLAN (DTS), 5GHz WLAN (UNII), Bluetooth (v4.0 dual mode), NFC, GSM 850/1900 WCDMA Band II/V LTE FDD Band 2/4/7

Note: 5GHz (NII) operation is possible in 20MHz, 40MHz and 80MHz channel bandwidths. The maximum achievable duty cycles for all modes were determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8MHz, VBW = 50MHz, and detector = average per the guidance of Section B)2)b) of KDB 789033 D02v01r04. The RBW and VBW were both greater than $50/T$, where T is the minimum transmission duration, and the number of sweep points across T was greater than 100. The duty cycles are as follows:

Test Mode	Duty Cycle
802.11a	90.18%
802.11n-HT20	89.52%
802.11n-HT40	83.16%

2.7. Test Configuration

The **Mobile Computer FCC ID: HD5-EDA50211** was tested per the guidance of KDB 789033 D02v01r04. ANSI C63.10-2013 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing.

2.8. EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

2.9. Labeling Requirements

Per 2.1074 & 15.19; Docket 95-19

The label shall be permanently affixed at a conspicuous location on the device; instruction manual or pamphlet supplied to the user and be readily visible to the purchaser at the time of purchase. However, when the device is so small wherein placement of the label with specified statement is not practical, only the FCC ID must be displayed on the device per Section 15.19(a)(5). Please see attachment for FCC ID label and label location.

3. DESCRIPTION OF TEST

3.1. Evaluation Procedure

The measurement procedures described in the American National Standard for Testing Unlicensed Wireless Devices (ANSI C63.10-2013), and the guidance provided in KDB 789033 D02v01r04 were used in the measurement of the **Mobile Computer FCC ID: HD5-EDA50211**.

Deviation from measurement procedure.....None

3.2. Radiated Emissions

The radiated test facilities consisted of an indoor 3 meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. For measurements above 1GHz absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections. For measurements below 1GHz, the absorbers are removed. A MF Model 210SS turntable is used for radiated measurement. It is a continuously rotatable, remote controlled, metallic turntable and 2 meters (6.56 ft.) in diameter. The turn table is flush with the raised floor of the chamber in order to maintain its function as a ground plane. An 80cm high PVC support structure is placed on top of the turntable.

For all measurements, the spectrum was scanned through all EUT azimuths and from 1 to 4 meter receive antenna height using a broadband antenna from 30MHz up to the upper frequency shown in 15.33(b)(1) depending on the highest frequency generated or used in the device or on which the device operates or tunes. For frequencies above 1GHz, linearly polarized double ridge horn antennas were used. For frequencies below 30MHz, a calibrated loop antenna was used. When exploratory measurements were necessary, they were performed at 1 meter test distance inside the semi-anechoic chamber using broadband antennas, broadband amplifiers, and spectrum analyzers to determine the frequencies and modes producing the maximum emissions. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The test set-up for frequencies below 1GHz was placed on top of the 0.8 meter high, 1 x 1.5 meter table; and test set-up for frequencies 1-40GHz was placed on top of the 1.5 meter high, 1 x 1.5 meter table. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Appropriate precaution was taken to ensure that all emissions from the EUT were maximized and investigated. The system configuration, clock speed, mode of operation or video resolution, if applicable, turntable azimuth, and receive antenna height was noted for each frequency found.

Final measurements were made in the semi-anechoic chamber using calibrated, linearly polarized broadband and horn antennas. The test setup was configured to the setup that produced the worst case emissions. The spectrum analyzer was set to investigate all frequencies required for testing to compare the highest radiated disturbances with respect to the specified limits. The turntable

containing the EUT was rotated through 360 degrees and the height of the receive antenna was varied 1 to 4 meters and stopped at the azimuth and height producing the maximum emission. Each emission was maximized by changing the orientation of the EUT through three orthogonal planes and changing the polarity of the receive antenna, whichever produced the worst-case emissions. According to 3dB Beam-Width of horn antenna, the horn antenna should be always directed to the EUT when rising height.

4. ANTENNA REQUIREMENTS

Excerpt from §15.203 of the FCC Rules/Regulations:

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.”

- The antenna of the **Mobile Computer** is **permanently attached**.
- There are no provisions for connection to an external antenna.

Conclusion:

The **Mobile Computer FCC ID: HD5-EDA50211** unit complies with the requirement of §15.203.

5. TEST EQUIPMENT CALIBRATION DATE

Radiated Emissions - AC2

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Spectrum Analyzer	Agilent	N9038A	MRTSUE06125	1 year	2017/08/19
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2018/06/21
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2018/04/15
Loop Antenna	Schwarzbeck	FMZB1519	MRTSUE06025	1 year	2017/11/21
TRILOG Antenna	Schwarzbeck	VULB9168	MRTSUE06172	1 year	2017/11/19
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	MRTSUE06171	1 year	2017/11/19
Broadband Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06024	1 year	2017/12/30
Digital Thermometer & Hygrometer	Minggao	N/A	MRTSUE06170	1 year	2017/12/14
Anechoic Chamber	RIKEN	Chamber-AC2	MRTSUE06213	1 year	2018/05/10

Software	Version	Function
e3	V 8.3.5	EMI Test Software

6. MEASUREMENT UNCERTAINTY

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Radiated Emission Measurement - AC2
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 9kHz ~ 1GHz: 4.18dB 1GHz ~ 25GHz: 4.76dB

7. TEST RESULT

7.1. Summary

Product Name: Mobile Computer
FCC ID: HD5-EDA50211
FCC Classification: Unlicensed National Information Infrastructure (UNII)
Data Rate / MCS 6Mbps for 802.11a;
Tested: MCS7 for 802.11n-HT20MHz;
MCS7 for 802.11n-HT40MHz;

FCC Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
15.407(b)(1), (2), (3), (4)(i)	Undesirable Emissions	$\leq -27\text{dBm/MHz}$ EIRP Detail see section 7.8	Radiated	Pass	Section 7.2 & 7.3
15.205, 15.209 15.407(b)(5), (6), (7)	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	Emissions in restricted bands must meet the radiated limits detailed in 15.209		Pass	

Notes:

- 1) All modes of operation and data rates were investigated. For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst case emissions.
- 2) The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
- 3) All antenna port conducted emissions testing was performed on a test bench with the antenna port of the EUT connected to the spectrum analyzer through calibrated cables and attenuators.
- 4) For the "Radiated Restricted Band Edge Measurement", only the worst test channel has been shown.

7.2. Radiated Spurious Emission Measurement

7.2.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

7.2.2. Test Procedure Used

KDB 789033 D02v01r04 - Section G

7.2.3. Test Setting

Peak Measurements above 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Quasi-Peak Measurements below 1GHz

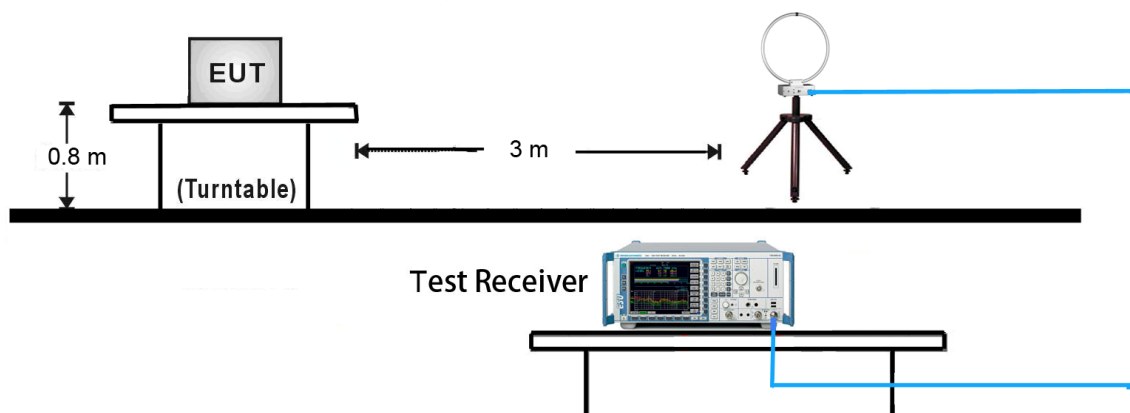
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = 120 kHz
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Average Measurements above 1GHz (Method AD)

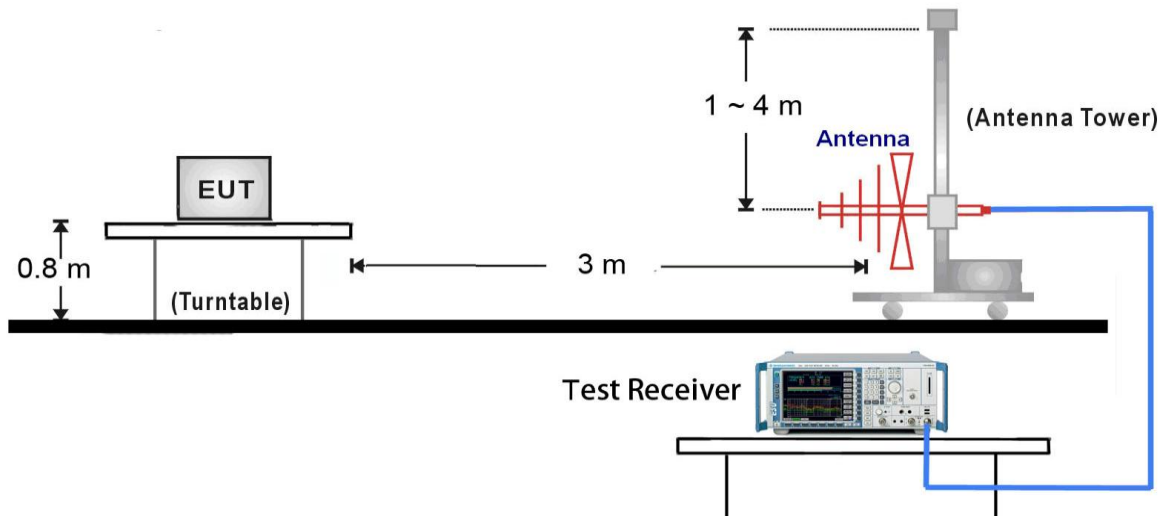
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = power average (Average)
5. Number of measurement points = 1001 (Number of points must be $> 2 \times \text{span}/\text{RBW}$)
6. Sweep time = auto
7. Trace was averaged over at 100 sweeps

7.2.4. Test Setup

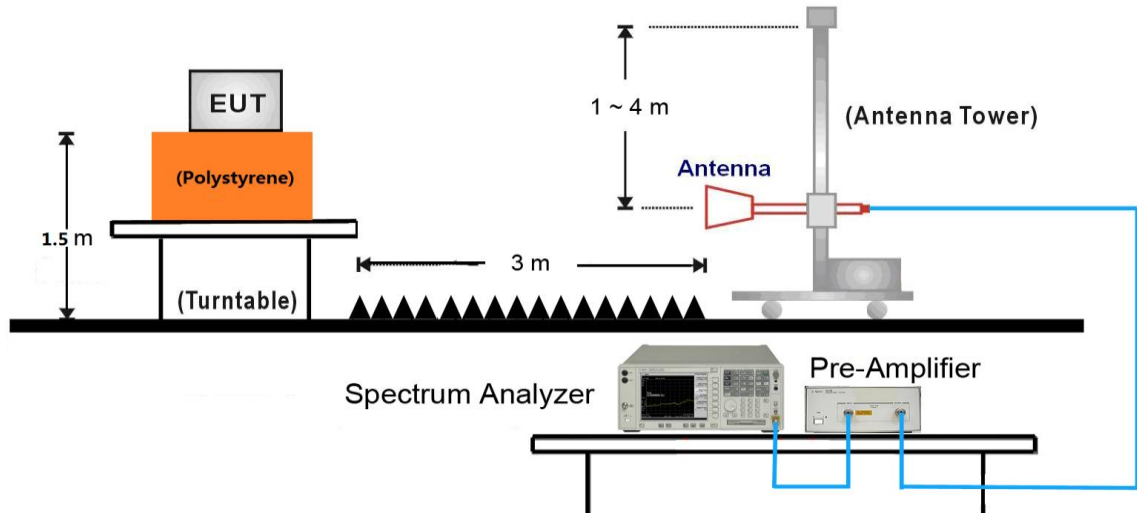
9kHz ~ 30MHz Test Setup:



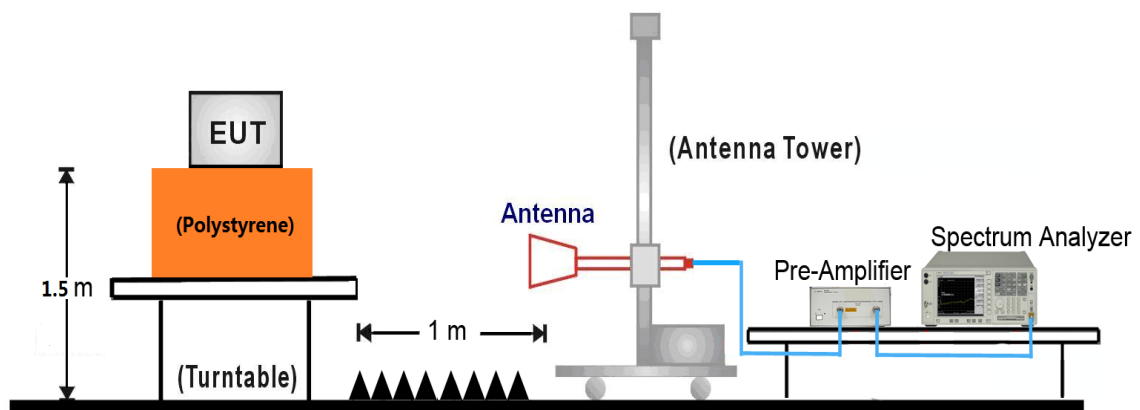
30MHz ~ 1GHz Test Setup:



1GHz ~18GHz Test Setup:



18GHz ~40GHz Test Setup:



7.2.5. Test Result

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11a	Test Channel:	36
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9262.0	32.0	13.1	45.1	68.2	-23.1	Peak	Horizontal
*	10562.5	32.2	15.2	47.4	68.2	-20.8	Peak	Horizontal
	11200.0	31.0	16.9	47.9	74.0	-26.1	Peak	Horizontal
	11795.0	32.3	16.5	48.8	74.0	-25.2	Peak	Horizontal
*	8667.0	32.1	11.3	43.4	68.2	-24.8	Peak	Vertical
*	10520.0	31.7	15.4	47.1	68.2	-21.1	Peak	Vertical
	11676.0	31.5	17.5	49.0	74.0	-25.0	Peak	Vertical
	12441.0	31.5	16.8	48.3	74.0	-25.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11a	Test Channel:	44
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8930.5	31.6	11.7	43.3	68.2	-24.9	Peak	Horizontal
*	9882.5	32.2	13.3	45.5	68.2	-22.7	Peak	Horizontal
	11531.5	31.8	17.2	49.0	74.0	-25.0	Peak	Horizontal
	12390.0	30.9	16.8	47.7	74.0	-26.3	Peak	Horizontal
*	7910.5	31.7	10.6	42.3	68.2	-25.9	Peak	Vertical
*	10307.5	32.0	14.7	46.7	68.2	-21.5	Peak	Vertical
	11506.0	31.0	17.5	48.5	74.0	-25.5	Peak	Vertical
	13316.5	31.7	18.2	49.9	74.0	-24.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11a	Test Channel:	48
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7188.0	33.3	10.6	43.9	68.2	-24.3	Peak	Horizontal
*	8548.0	32.7	11.0	43.7	68.2	-24.5	Peak	Horizontal
	11132.0	31.9	16.8	48.7	74.0	-25.3	Peak	Horizontal
	11548.5	31.3	17.5	48.8	74.0	-25.2	Peak	Horizontal
*	8769.0	32.2	11.8	44.0	68.2	-24.2	Peak	Vertical
*	9636.0	32.6	12.9	45.5	68.2	-22.7	Peak	Vertical
	11565.5	31.2	17.6	48.8	74.0	-25.2	Peak	Vertical
	15535.0	34.3	17.4	51.7	74.0	-22.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11a	Test Channel:	52
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7137.0	32.9	10.4	43.3	68.2	-24.9	Peak	Horizontal
*	9882.5	32.3	13.3	45.6	68.2	-22.6	Peak	Horizontal
	11514.5	31.8	17.4	49.2	74.0	-24.8	Peak	Horizontal
	12050.0	32.1	17.1	49.2	74.0	-24.8	Peak	Horizontal
*	8769.0	31.7	11.8	43.5	68.2	-24.7	Peak	Vertical
*	9636.0	32.2	12.9	45.1	68.2	-23.1	Peak	Vertical
	11557.0	31.2	17.7	48.9	74.0	-25.1	Peak	Vertical
	12449.5	31.5	16.6	48.1	74.0	-25.9	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11a	Test Channel:	60
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8590.5	32.8	11.0	43.8	68.2	-24.4	Peak	Horizontal
*	9636.0	32.6	12.9	45.5	68.2	-22.7	Peak	Horizontal
	11565.5	31.1	17.6	48.7	74.0	-25.3	Peak	Horizontal
	15637.0	32.3	17.1	49.4	74.0	-24.6	Peak	Horizontal
*	8794.5	31.6	11.8	43.4	68.2	-24.8	Peak	Vertical
*	9874.0	32.3	13.4	45.7	68.2	-22.5	Peak	Vertical
	11472.0	32.0	17.1	49.1	74.0	-24.9	Peak	Vertical
	12007.5	32.6	17.1	49.7	74.0	-24.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11a	Test Channel:	64
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8726.5	32.5	11.5	44.0	68.2	-24.2	Peak	Horizontal
*	9644.5	32.9	12.7	45.6	68.2	-22.6	Peak	Horizontal
	11251.0	31.4	16.7	48.1	74.0	-25.9	Peak	Horizontal
	12169.0	32.0	16.7	48.7	74.0	-25.3	Peak	Horizontal
*	8667.0	32.0	11.3	43.3	68.2	-24.9	Peak	Vertical
*	9729.5	33.3	12.4	45.7	68.2	-22.5	Peak	Vertical
	10928.0	31.6	16.4	48.0	74.0	-26.0	Peak	Vertical
	11650.5	31.7	17.4	49.1	74.0	-24.9	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11a	Test Channel:	100
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8718.0	31.6	11.4	43.0	68.2	-25.2	Peak	Horizontal
*	9551.0	32.4	12.8	45.2	68.2	-23.0	Peak	Horizontal
	10834.5	32.9	16.1	49.0	74.0	-25.0	Peak	Horizontal
	11659.0	31.1	17.5	48.6	74.0	-25.4	Peak	Horizontal
*	8701.0	32.1	11.4	43.5	68.2	-24.7	Peak	Vertical
*	9925.0	33.1	13.3	46.4	68.2	-21.8	Peak	Vertical
	10928.0	32.3	16.4	48.7	74.0	-25.3	Peak	Vertical
	11608.0	31.7	17.4	49.1	74.0	-24.9	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11a	Test Channel:	120
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9568.0	33.2	13.0	46.2	68.2	-22.0	Peak	Horizontal
*	10180.0	32.3	14.3	46.6	68.2	-21.6	Peak	Horizontal
	11659.0	31.2	17.5	48.7	74.0	-25.3	Peak	Horizontal
	12058.5	31.2	17.1	48.3	74.0	-25.7	Peak	Horizontal
*	8769.0	32.9	11.8	44.7	68.2	-23.5	Peak	Vertical
*	9593.5	33.3	12.6	45.9	68.2	-22.3	Peak	Vertical
	10894.0	32.3	16.3	48.6	74.0	-25.4	Peak	Vertical
	11608.0	31.7	17.4	49.1	74.0	-24.9	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11a	Test Channel:	140
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8743.5	32.3	11.7	44.0	68.2	-24.2	Peak	Horizontal
*	9916.5	31.8	13.4	45.2	68.2	-23.0	Peak	Horizontal
	10775.0	31.8	15.9	47.7	74.0	-26.3	Peak	Horizontal
	11506.0	31.7	17.5	49.2	74.0	-24.8	Peak	Horizontal
*	8777.5	31.6	11.9	43.5	68.2	-24.7	Peak	Vertical
*	9831.5	33.4	13.2	46.6	68.2	-21.6	Peak	Vertical
	11557.0	31.2	17.7	48.9	74.0	-25.1	Peak	Vertical
	12092.5	32.3	16.9	49.2	74.0	-24.8	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11a	Test Channel:	144
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7842.5	33.0	10.3	43.3	68.2	-24.9	Peak	Horizontal
*	9636.0	32.8	12.9	45.7	68.2	-22.5	Peak	Horizontal
	10766.5	31.8	15.9	47.7	74.0	-26.3	Peak	Horizontal
	11548.5	31.4	17.5	48.9	74.0	-25.1	Peak	Horizontal
*	7919.0	32.4	10.6	43.0	68.2	-25.2	Peak	Vertical
*	8701.0	33.0	11.4	44.4	68.2	-23.8	Peak	Vertical
	10902.5	32.0	16.3	48.3	74.0	-25.7	Peak	Vertical
	11633.5	32.2	17.4	49.6	74.0	-24.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11a	Test Channel:	149
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8811.5	32.7	11.7	44.4	68.2	-23.8	Peak	Horizontal
*	9576.5	32.7	12.8	45.5	68.2	-22.7	Peak	Horizontal
	10936.5	32.1	16.4	48.5	74.0	-25.5	Peak	Horizontal
	12058.5	32.6	17.1	49.7	74.0	-24.3	Peak	Horizontal
*	8701.0	32.0	11.4	43.4	68.2	-24.8	Peak	Vertical
*	9568.0	32.4	13.0	45.4	68.2	-22.8	Peak	Vertical
	11659.0	31.4	17.5	48.9	74.0	-25.1	Peak	Vertical
	12424.0	31.4	16.8	48.2	74.0	-25.8	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11a	Test Channel:	157
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8692.5	31.1	11.3	42.4	68.2	-25.8	Peak	Horizontal
*	9755.0	32.5	13.0	45.5	68.2	-22.7	Peak	Horizontal
	10894.0	30.1	16.3	46.4	74.0	-27.6	Peak	Horizontal
	11557.0	29.9	17.7	47.6	74.0	-26.4	Peak	Horizontal
*	8692.5	31.2	11.3	42.5	68.2	-25.7	Peak	Vertical
*	9916.5	32.4	13.4	45.8	68.2	-22.4	Peak	Vertical
	10868.5	32.1	16.2	48.3	74.0	-25.7	Peak	Vertical
	11557.0	32.0	17.7	49.7	74.0	-24.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11a	Test Channel:	165
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8667.0	32.1	11.3	43.4	68.2	-24.8	Peak	Horizontal
*	9882.5	31.9	13.3	45.2	68.2	-23.0	Peak	Horizontal
	10894.0	31.8	16.3	48.1	74.0	-25.9	Peak	Horizontal
	11548.5	31.1	17.5	48.6	74.0	-25.4	Peak	Horizontal
*	9636.0	32.6	12.9	45.5	68.2	-22.7	Peak	Vertical
*	10358.5	32.0	14.9	46.9	68.2	-21.3	Peak	Vertical
	12160.5	31.5	16.8	48.3	74.0	-25.7	Peak	Vertical
	15654.0	33.6	17.3	50.9	74.0	-23.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT20	Test Channel:	36
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7808.5	33.5	10.4	43.9	68.2	-24.3	Peak	Horizontal
*	9755.0	32.5	13.0	45.5	68.2	-22.7	Peak	Horizontal
	11557.0	31.2	17.7	48.9	74.0	-25.1	Peak	Horizontal
	12143.5	31.7	16.9	48.6	74.0	-25.4	Peak	Horizontal
*	8769.0	32.2	11.8	44.0	68.2	-24.2	Peak	Vertical
*	9627.5	33.2	12.7	45.9	68.2	-22.3	Peak	Vertical
	10868.5	31.7	16.2	47.9	74.0	-26.1	Peak	Vertical
	11506.0	31.2	17.5	48.7	74.0	-25.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT20	Test Channel:	44
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8692.5	31.4	11.3	42.7	68.2	-25.5	Peak	Horizontal
*	9755.0	31.7	13.0	44.7	68.2	-23.5	Peak	Horizontal
	10902.5	31.6	16.3	47.9	74.0	-26.1	Peak	Horizontal
	11599.5	30.9	17.1	48.0	74.0	-26.0	Peak	Horizontal
*	9636.0	32.7	12.9	45.6	68.2	-22.6	Peak	Vertical
*	10341.5	32.2	14.8	47.0	68.2	-21.2	Peak	Vertical
	10817.5	32.0	16.1	48.1	74.0	-25.9	Peak	Vertical
	11616.5	31.5	17.5	49.0	74.0	-25.0	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT20	Test Channel:	48
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8743.5	31.9	11.7	43.6	68.2	-24.6	Peak	Horizontal
*	9627.5	33.8	12.7	46.5	68.2	-21.7	Peak	Horizontal
	10902.5	31.5	16.3	47.8	74.0	-26.2	Peak	Horizontal
	11599.5	31.5	17.1	48.6	74.0	-25.4	Peak	Horizontal
*	8777.5	32.2	11.9	44.1	68.2	-24.1	Peak	Vertical
*	9568.0	32.6	13.0	45.6	68.2	-22.6	Peak	Vertical
	11064.0	32.7	16.4	49.1	74.0	-24.9	Peak	Vertical
	11506.0	31.4	17.5	48.9	74.0	-25.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT20	Test Channel:	52
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8777.5	31.7	11.9	43.6	68.2	-24.6	Peak	Horizontal
*	9755.0	32.8	13.0	45.8	68.2	-22.4	Peak	Horizontal
	10868.5	31.7	16.2	47.9	74.0	-26.1	Peak	Horizontal
	11548.5	32.5	17.5	50.0	74.0	-24.0	Peak	Horizontal
*	8573.5	32.3	11.0	43.3	68.2	-24.9	Peak	Vertical
*	9780.5	33.1	12.7	45.8	68.2	-22.4	Peak	Vertical
	11123.5	31.1	16.6	47.7	74.0	-26.3	Peak	Vertical
	11557.0	31.0	17.7	48.7	74.0	-25.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT20	Test Channel:	60
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8658.5	33.0	11.1	44.1	68.2	-24.1	Peak	Horizontal
*	9644.5	32.8	12.7	45.5	68.2	-22.7	Peak	Horizontal
	11557.0	31.3	17.7	49.0	74.0	-25.0	Peak	Horizontal
	12075.5	31.4	17.0	48.4	74.0	-25.6	Peak	Horizontal
*	8624.5	31.5	11.2	42.7	68.2	-25.5	Peak	Vertical
*	9695.5	32.8	12.4	45.2	68.2	-23.0	Peak	Vertical
	11132.0	30.9	16.8	47.7	74.0	-26.3	Peak	Vertical
	11574.0	31.4	17.4	48.8	74.0	-25.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT20	Test Channel:	64
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8633.0	32.2	11.2	43.4	68.2	-24.8	Peak	Horizontal
*	9644.5	33.1	12.7	45.8	68.2	-22.4	Peak	Horizontal
	11225.5	31.1	16.9	48.0	74.0	-26.0	Peak	Horizontal
	12058.5	31.9	17.1	49.0	74.0	-25.0	Peak	Horizontal
*	8743.5	31.9	11.7	43.6	68.2	-24.6	Peak	Vertical
*	9653.0	33.2	12.5	45.7	68.2	-22.5	Peak	Vertical
	11540.0	31.4	17.3	48.7	74.0	-25.3	Peak	Vertical
	12458.0	32.3	16.5	48.8	74.0	-25.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT20	Test Channel:	100
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8777.5	31.8	11.9	43.7	68.2	-24.5	Peak	Horizontal
*	10171.5	33.3	14.0	47.3	68.2	-20.9	Peak	Horizontal
	11506.0	31.2	17.5	48.7	74.0	-25.3	Peak	Horizontal
	12143.5	31.1	16.9	48.0	74.0	-26.0	Peak	Horizontal
*	8769.0	31.6	11.8	43.4	68.2	-24.8	Peak	Vertical
*	9644.5	32.7	12.7	45.4	68.2	-22.8	Peak	Vertical
	10868.5	31.4	16.2	47.6	74.0	-26.4	Peak	Vertical
	11676.0	31.0	17.5	48.5	74.0	-25.5	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT20	Test Channel:	120
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8531.0	32.1	11.0	43.1	68.2	-25.1	Peak	Horizontal
*	9891.0	33.2	13.2	46.4	68.2	-21.8	Peak	Horizontal
	10732.5	31.8	15.9	47.7	74.0	-26.3	Peak	Horizontal
	11463.5	32.6	17.2	49.8	74.0	-24.2	Peak	Horizontal
*	8718.0	32.5	11.4	43.9	68.2	-24.3	Peak	Vertical
*	9755.0	32.1	13.0	45.1	68.2	-23.1	Peak	Vertical
	11166.0	31.1	16.9	48.0	74.0	-26.0	Peak	Vertical
	11659.0	30.8	17.5	48.3	74.0	-25.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT20	Test Channel:	140
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8650.0	32.7	11.0	43.7	68.2	-24.5	Peak	Horizontal
*	9636.0	32.6	12.9	45.5	68.2	-22.7	Peak	Horizontal
	11081.0	31.5	16.8	48.3	74.0	-25.7	Peak	Horizontal
	11582.5	31.3	17.2	48.5	74.0	-25.5	Peak	Horizontal
*	8650.0	32.8	11.0	43.8	68.2	-24.4	Peak	Vertical
*	9763.5	32.9	12.8	45.7	68.2	-22.5	Peak	Vertical
	11591.0	31.5	16.9	48.4	74.0	-25.6	Peak	Vertical
	12152.0	31.7	16.9	48.6	74.0	-25.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT20	Test Channel:	144
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7961.5	32.9	10.8	43.7	68.2	-24.5	Peak	Horizontal
*	8769.0	32.1	11.8	43.9	68.2	-24.3	Peak	Horizontal
	10800.5	31.7	15.9	47.6	74.0	-26.4	Peak	Horizontal
	12041.5	32.2	17.0	49.2	74.0	-24.8	Peak	Horizontal
*	7817.0	33.0	10.4	43.4	68.2	-24.8	Peak	Vertical
*	8556.5	32.4	10.9	43.3	68.2	-24.9	Peak	Vertical
	10749.5	31.8	15.7	47.5	74.0	-26.5	Peak	Vertical
	11557.0	31.2	17.7	48.9	74.0	-25.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT20	Test Channel:	149
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9576.5	32.8	12.8	45.6	68.2	-22.6	Peak	Horizontal
*	10409.5	32.9	14.8	47.7	68.2	-20.5	Peak	Horizontal
	10877.0	31.4	16.3	47.7	74.0	-26.3	Peak	Horizontal
	11514.5	31.8	17.4	49.2	74.0	-24.8	Peak	Horizontal
*	8735.0	31.4	11.6	43.0	68.2	-25.2	Peak	Vertical
*	9882.5	32.8	13.3	46.1	68.2	-22.1	Peak	Vertical
	10741.0	31.8	15.9	47.7	74.0	-26.3	Peak	Vertical
	11565.5	31.1	17.6	48.7	74.0	-25.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT20	Test Channel:	157
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	9542.5	33.2	12.7	45.9	68.2	-22.3	Peak	Horizontal
*	10528.5	33.4	15.3	48.7	68.2	-19.5	Peak	Horizontal
	11548.5	31.6	17.5	49.1	74.0	-24.9	Peak	Horizontal
	12152.0	31.7	16.9	48.6	74.0	-25.4	Peak	Horizontal
*	8769.0	31.9	11.8	43.7	68.2	-24.5	Peak	Vertical
*	10129.0	33.0	13.6	46.6	68.2	-21.6	Peak	Vertical
	10800.5	32.2	15.9	48.1	74.0	-25.9	Peak	Vertical
	11506.0	31.3	17.5	48.8	74.0	-25.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT20	Test Channel:	165
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8599.0	31.8	11.0	42.8	68.2	-25.4	Peak	Horizontal
*	10299.0	31.5	14.8	46.3	68.2	-21.9	Peak	Horizontal
	11455.0	31.9	17.3	49.2	74.0	-24.8	Peak	Horizontal
	13367.5	31.4	19.1	50.5	74.0	-23.5	Peak	Horizontal
*	8616.0	32.6	11.2	43.8	68.2	-24.4	Peak	Vertical
*	10146.0	32.4	13.8	46.2	68.2	-22.0	Peak	Vertical
	11506.0	31.5	17.5	49.0	74.0	-25.0	Peak	Vertical
	12058.5	31.2	17.1	48.3	74.0	-25.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT40	Test Channel:	38
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8531.0	32.6	11.0	43.6	68.2	-24.6	Peak	Horizontal
*	9619.0	32.7	12.4	45.1	68.2	-23.1	Peak	Horizontal
	11123.5	31.6	16.6	48.2	74.0	-25.8	Peak	Horizontal
	11616.5	31.7	17.5	49.2	74.0	-24.8	Peak	Horizontal
*	9568.0	33.4	13.0	46.4	68.2	-21.8	Peak	Vertical
*	10554.0	33.4	15.3	48.7	68.2	-19.5	Peak	Vertical
	11599.5	31.8	17.1	48.9	74.0	-25.1	Peak	Vertical
	12109.5	31.8	16.9	48.7	74.0	-25.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT40	Test Channel:	46
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8709.5	32.0	11.3	43.3	68.2	-24.9	Peak	Horizontal
*	9619.0	33.5	12.4	45.9	68.2	-22.3	Peak	Horizontal
	11098.0	31.0	16.9	47.9	74.0	-26.1	Peak	Horizontal
	11659.0	30.7	17.5	48.2	74.0	-25.8	Peak	Horizontal
*	8718.0	32.1	11.4	43.5	68.2	-24.7	Peak	Vertical
*	9874.0	32.8	13.4	46.2	68.2	-22.0	Peak	Vertical
	11531.5	31.7	17.2	48.9	74.0	-25.1	Peak	Vertical
	12067.0	31.3	17.0	48.3	74.0	-25.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT40	Test Channel:	54
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8667.0	31.7	11.3	43.0	68.2	-25.2	Peak	Horizontal
*	10146.0	32.3	13.8	46.1	68.2	-22.1	Peak	Horizontal
	11514.5	31.0	17.4	48.4	74.0	-25.6	Peak	Horizontal
	12016.0	31.3	17.2	48.5	74.0	-25.5	Peak	Horizontal
*	8769.0	31.8	11.8	43.6	68.2	-24.6	Peak	Vertical
*	9882.5	32.5	13.3	45.8	68.2	-22.4	Peak	Vertical
	11208.5	31.2	17.0	48.2	74.0	-25.8	Peak	Vertical
	11582.5	31.8	17.2	49.0	74.0	-25.0	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT40	Test Channel:	62
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8667.0	32.9	11.3	44.2	68.2	-24.0	Peak	Horizontal
*	10239.5	32.2	14.4	46.6	68.2	-21.6	Peak	Horizontal
	11633.5	30.9	17.4	48.3	74.0	-25.7	Peak	Horizontal
	12075.5	31.5	17.0	48.5	74.0	-25.5	Peak	Horizontal
*	8726.5	32.9	11.5	44.4	68.2	-23.8	Peak	Vertical
*	10129.0	32.3	13.6	45.9	68.2	-22.3	Peak	Vertical
	11608.0	32.0	17.4	49.4	74.0	-24.6	Peak	Vertical
	12016.0	31.8	17.2	49.0	74.0	-25.0	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT40	Test Channel:	102
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8590.5	31.6	11.0	42.6	68.2	-25.6	Peak	Horizontal
*	9755.0	30.9	13.0	43.9	68.2	-24.3	Peak	Horizontal
	10911.0	31.6	16.4	48.0	74.0	-26.0	Peak	Horizontal
	11616.5	30.5	17.5	48.0	74.0	-26.0	Peak	Horizontal
*	8616.0	31.6	11.2	42.8	68.2	-25.4	Peak	Vertical
*	10171.5	32.8	14.0	46.8	68.2	-21.4	Peak	Vertical
	11557.0	31.2	17.7	48.9	74.0	-25.1	Peak	Vertical
	12016.0	31.2	17.2	48.4	74.0	-25.6	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT40	Test Channel:	118
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8522.5	32.4	10.9	43.3	68.2	-24.9	Peak	Horizontal
*	10231.0	32.0	14.4	46.4	68.2	-21.8	Peak	Horizontal
	11506.0	31.3	17.5	48.8	74.0	-25.2	Peak	Horizontal
	12135.0	31.8	16.9	48.7	74.0	-25.3	Peak	Horizontal
*	8675.5	32.6	11.2	43.8	68.2	-24.4	Peak	Vertical
*	9627.5	32.6	12.7	45.3	68.2	-22.9	Peak	Vertical
	10911.0	31.7	16.4	48.1	74.0	-25.9	Peak	Vertical
	11650.5	32.0	17.4	49.4	74.0	-24.6	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT40	Test Channel:	134
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8760.5	31.9	11.6	43.5	68.2	-24.7	Peak	Horizontal
*	9602.0	32.7	12.6	45.3	68.2	-22.9	Peak	Horizontal
	11531.5	31.3	17.2	48.5	74.0	-25.5	Peak	Horizontal
	12118.0	31.3	17.0	48.3	74.0	-25.7	Peak	Horizontal
*	8701.0	32.3	11.4	43.7	68.2	-24.5	Peak	Vertical
*	10248.0	32.7	14.3	47.0	68.2	-21.2	Peak	Vertical
	11531.5	31.8	17.2	49.0	74.0	-25.0	Peak	Vertical
	12466.5	31.8	16.5	48.3	74.0	-25.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT40	Test Channel:	142
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7834.0	33.9	10.3	44.2	68.2	-24.0	Peak	Horizontal
*	8505.5	32.8	10.8	43.6	68.2	-24.6	Peak	Horizontal
	10826.0	31.4	16.3	47.7	74.0	-26.3	Peak	Horizontal
	11497.5	31.7	17.3	49.0	74.0	-25.0	Peak	Horizontal
*	7800.0	33.4	10.3	43.7	68.2	-24.5	Peak	Vertical
*	8641.5	32.6	11.1	43.7	68.2	-24.5	Peak	Vertical
	11089.5	31.6	17.0	48.6	74.0	-25.4	Peak	Vertical
	12126.5	32.1	17.0	49.1	74.0	-24.9	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT40	Test Channel:	151
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8590.5	32.7	11.0	43.7	68.2	-24.5	Peak	Horizontal
*	9627.5	33.0	12.7	45.7	68.2	-22.5	Peak	Horizontal
	11531.5	31.8	17.2	49.0	74.0	-25.0	Peak	Horizontal
	12084.0	31.7	16.9	48.6	74.0	-25.4	Peak	Horizontal
*	8667.0	32.0	11.3	43.3	68.2	-24.9	Peak	Vertical
*	9644.5	33.0	12.7	45.7	68.2	-22.5	Peak	Vertical
	11667.5	31.0	17.6	48.6	74.0	-25.4	Peak	Vertical
	12390.0	32.1	16.8	48.9	74.0	-25.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product:	Mobile Computer	Temperature:	25°C
Test Engineer:	Snake Ni	Relative Humidity:	51 ~ 56%
Test Site:	AC2	Test data:	2017/07/28
Test Mode:	802.11n-HT40	Test Channel:	159
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	8573.5	33.4	11.0	44.4	68.2	-23.8	Peak	Horizontal
*	9874.0	32.2	13.4	45.6	68.2	-22.6	Peak	Horizontal
	11463.5	31.4	17.2	48.6	74.0	-25.4	Peak	Horizontal
	12084.0	31.3	16.9	48.2	74.0	-25.8	Peak	Horizontal
*	8735.0	31.9	11.6	43.5	68.2	-24.7	Peak	Vertical
*	10154.5	33.1	13.8	46.9	68.2	-21.3	Peak	Vertical
	11548.5	31.1	17.5	48.6	74.0	-25.4	Peak	Vertical
	12441.0	30.8	16.8	47.6	74.0	-26.4	Peak	Vertical

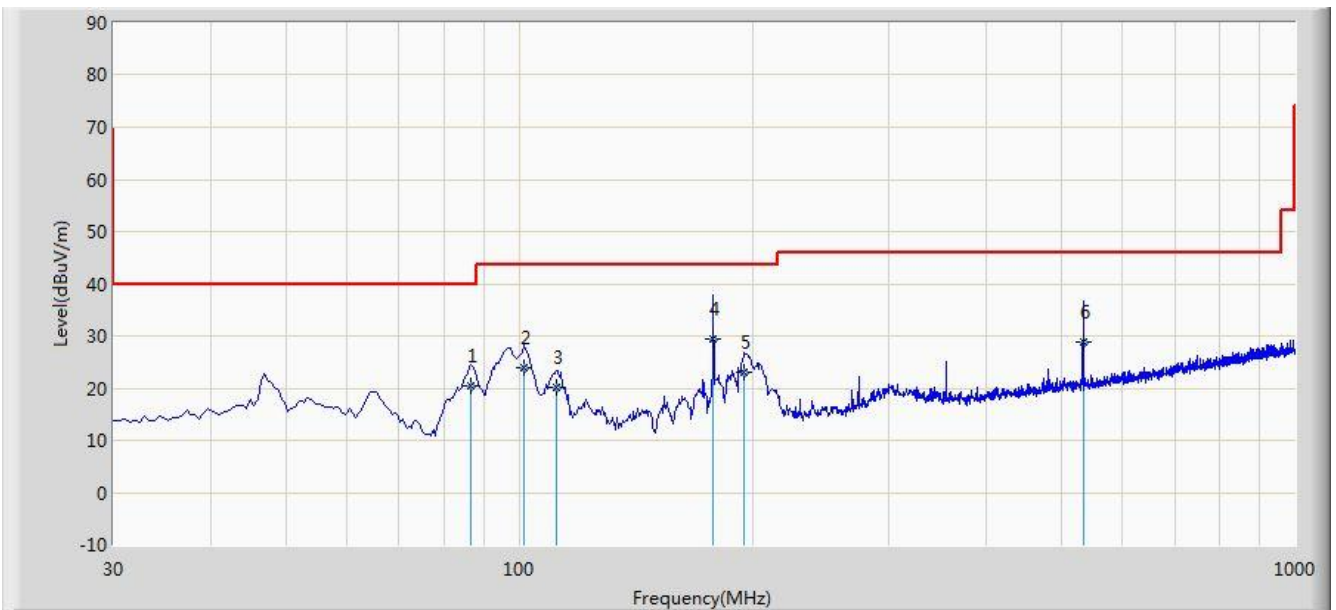
Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

The worst case of Radiated Emission below 1GHz:

Site: AC2	Time: 2017/08/06 - 03:20
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Worst Mode: Transmit by 802.11a at channel 5500MHz	



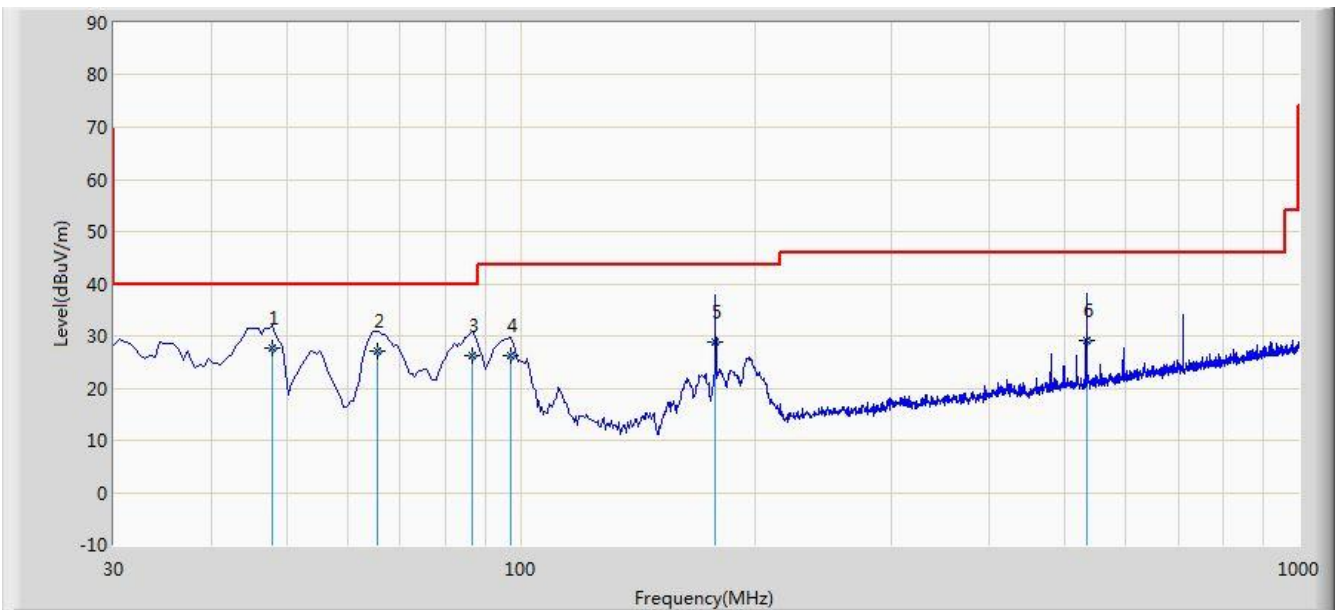
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			86.745	20.445	10.009	-19.555	40.000	10.437	QP
2			101.295	23.795	10.647	-19.705	43.500	13.149	QP
3			111.965	20.081	7.486	-23.419	43.500	12.595	QP
4		*	177.925	29.445	18.668	-14.055	43.500	10.776	QP
5			195.385	22.979	10.864	-20.521	43.500	12.115	QP
6			533.430	28.890	10.059	-17.110	46.000	18.832	QP

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

Site: AC2	Time: 2017/08/06 - 03:21
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Worst Mode: Transmit by 802.11a at channel 5500MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	47.945	27.815	12.846	-12.185	40.000	14.969	QP
2			65.405	27.068	14.646	-12.932	40.000	12.422	QP
3			86.745	26.305	15.869	-13.695	40.000	10.437	QP
4			96.930	26.131	13.545	-17.369	43.500	12.585	QP
5			177.925	28.895	18.118	-14.605	43.500	10.776	QP
6			533.430	29.115	10.284	-16.885	46.000	18.832	QP

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

7.3. Radiated Restricted Band Edge Measurement

7.3.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.25 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41	--	--	--

For 15.407(b) requirement:

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not

exceed an e.i.r.p. of -27 dBm/MHz.

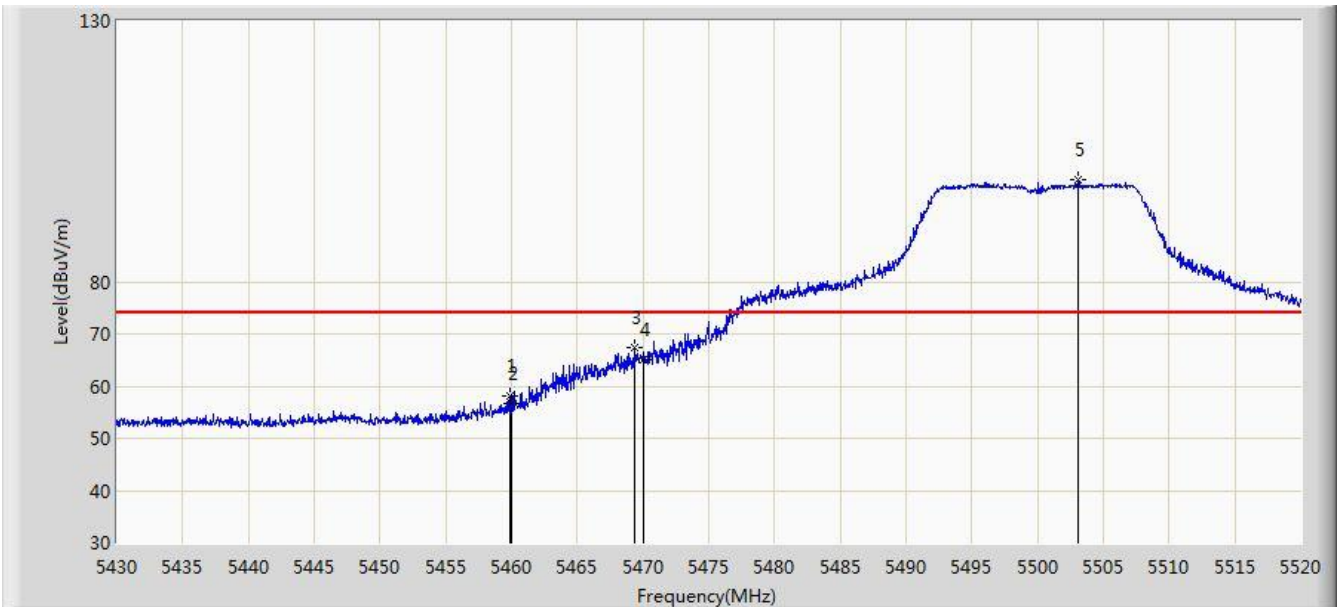
Refer to KDB 789033 D02v01r04 G2)c), as specified in § 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a maximum emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in § 15.407(b)(4)). However, an out-of-band emission that complies with both the peak and average limits of § 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz maximum emission limit.

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

7.3.2. Test Result of Radiated Restricted Band Edge

Site: AC2	Time: 2017/08/06 - 06:52
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5500MHz	

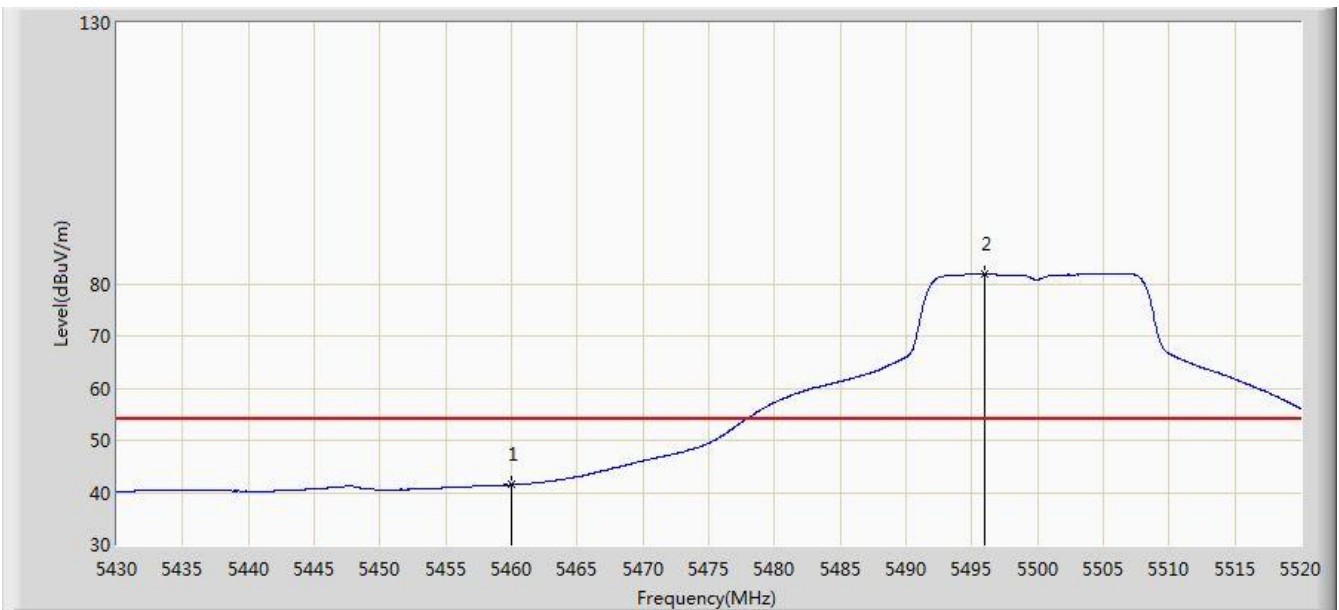


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5459.835	58.244	55.056	-15.756	74.000	3.188	PK
2			5460.000	56.740	53.547	-17.260	74.000	3.194	PK
3			5469.375	67.305	63.797	-6.695	74.000	3.509	PK
4			5470.000	65.180	61.651	-8.820	74.000	3.529	PK
5		*	5503.035	99.496	96.411	N/A	N/A	3.085	PK

Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/06 - 06:59
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5500MHz	

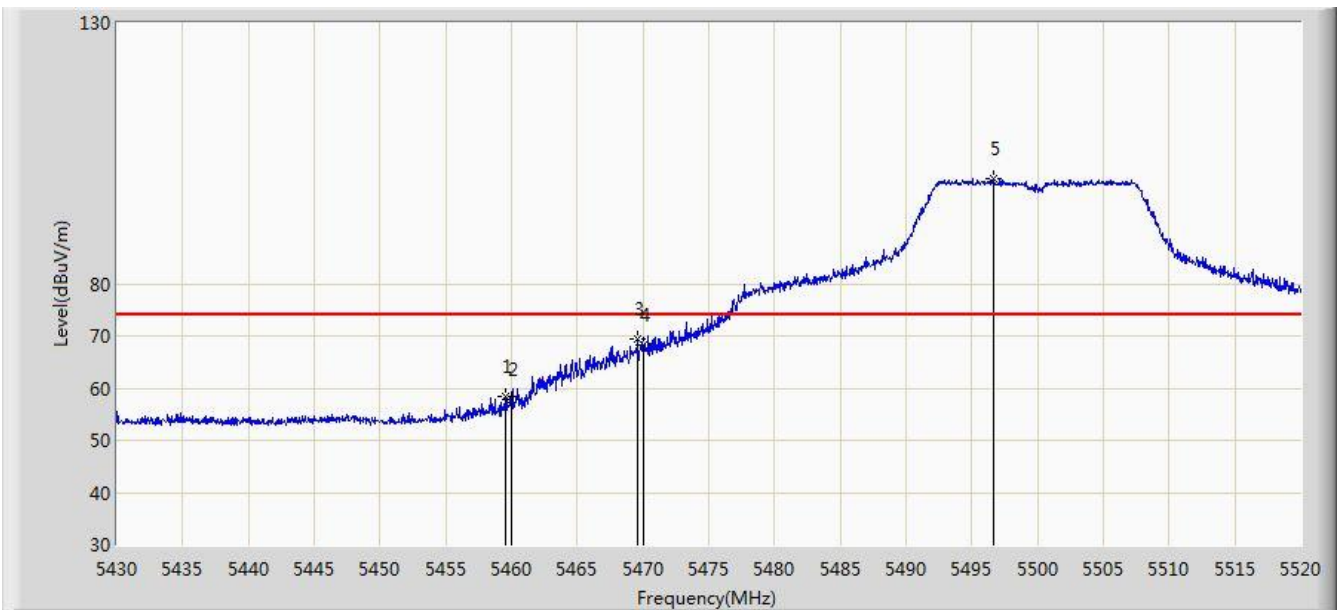


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	41.450	38.257	-12.550	54.000	3.194	AV
2		*	5496.015	81.853	78.701	N/A	N/A	3.152	AV

Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/06 - 07:00
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5500MHz	

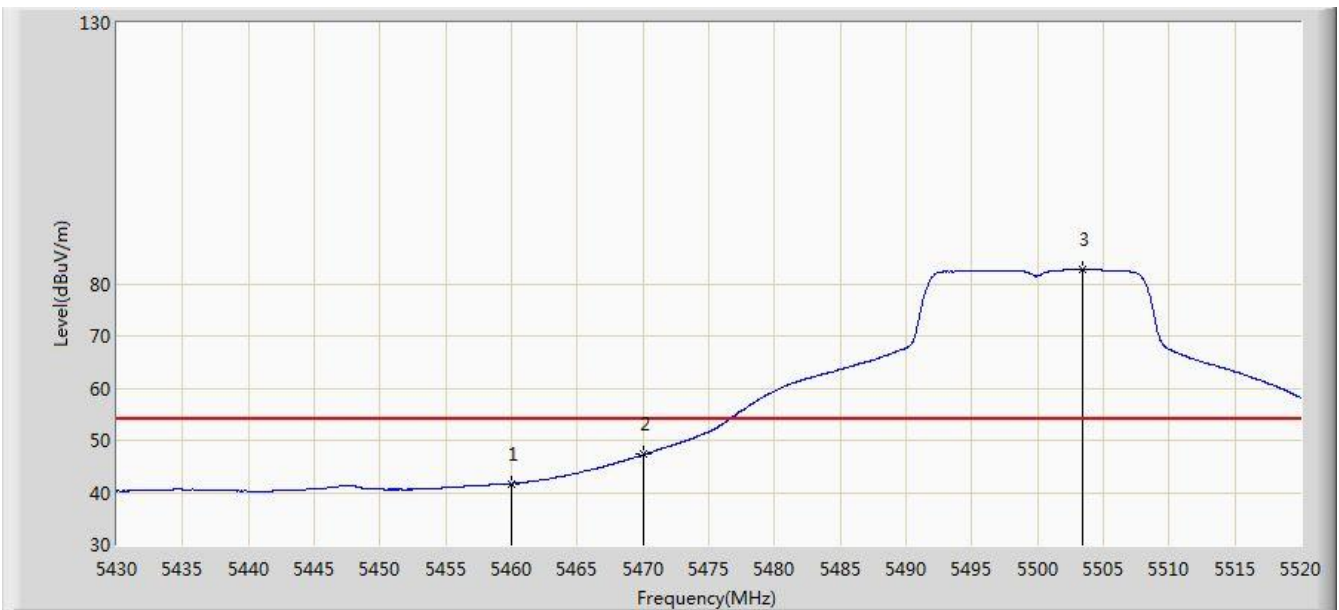


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5459.520	58.335	55.158	-15.665	74.000	3.176	PK
2			5460.000	57.814	54.621	-16.186	74.000	3.194	PK
3			5469.600	69.523	66.007	-4.477	74.000	3.516	PK
4			5470.000	68.131	64.602	-5.869	74.000	3.529	PK
5		*	5496.600	100.073	96.927	N/A	N/A	3.146	PK

Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/08/06 - 07:06
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at Channel 5500MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5460.000	41.728	38.535	-12.272	54.000	3.194	AV
2			5470.000	47.266	43.737	-6.734	54.000	3.529	AV
3		*	5503.440	82.760	79.679	N/A	N/A	3.081	AV

Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

8. CONCLUSION

The data collected relate only the item(s) tested and show that the **Mobile Computer** is in compliance with Part 15E of the FCC Rules.

The End