



FCC RF Test Report

APPLICANT : Mobekta LLC
EQUIPMENT : Digital Camera Receiver
MODEL NAME : PL67WR
FCC ID : 2AHXE-5310
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

The testing was completed on Jan. 14, 2017. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

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Approved by: Jones Tsai / Manager



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FCC ID : 2AHXE-5310

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR651918-03F	Rev. 01	Initial issue of report	Jan. 23, 2017



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result
3.1	15.403(i)	6dB, 26dB and 99% Occupied Bandwidth	> 500kHz	Pass
3.2	15.407(a)	Maximum Conducted Output Power	≤ 30 dBm	Pass
3.3	15.407(a)	Power Spectral Density	≤ 30 dBm/500kHz	Pass
0	15.407(b)	Unwanted Emissions	15.407(b)(4)(i) &15.209(a)	Pass
3.5	15.207	AC Conducted Emission	15.207(a)	Pass
3.6	15.407(g)	Frequency Stability	Within Operation Band	Pass
3.7	15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass
3.8	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass



1 General Description

1.1 Applicant

Mobekta LLC
2900 Westfork Dr.
Suite 401
Baton Rouge, Louisiana 70827

1.2 Product Feature of Equipment Under Test

Product Feature	
Equipment	Digital Camera Receiver
Model Name	PL67WR
FCC ID	2AHXE-5310
EUT supports Radios application	WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth LE



1.3 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Channel Frequency Range	5745 MHz ~ 5825 MHz <5745 MHz ~ 5825 MHz> <MIMO Ant. 0a+1a> 802.11a : 21.44 dBm / 0.1393 W 802.11n HT20 : 21.66 dBm / 0.1466 W 802.11n HT40 : 21.66 dBm / 0.1466 W 802.11ac VHT20: 21.65 dBm / 0.1462 W 802.11ac VHT40: 21.33 dBm / 0.1358 W 802.11ac VHT80: 20.21 dBm / 0.1050 W <MIMO Ant. 0a+1b> 802.11a : 21.60 dBm / 0.1445 W 802.11n HT20 : 21.60 dBm / 0.1445 W 802.11n HT40 : 21.26 dBm / 0.1337 W 802.11ac VHT20: 21.59 dBm / 0.1442 W 802.11ac VHT40: 21.24 dBm / 0.1330 W 802.11ac VHT80: 20.53 dBm / 0.1130 W <MIMO Ant. 0b+1a> 802.11a : 20.81 dBm / 0.1205 W 802.11n HT20 : 20.94 dBm / 0.1242 W 802.11n HT40 : 20.82 dBm / 0.1208 W 802.11ac VHT20: 20.93 dBm / 0.1239 W 802.11ac VHT40: 20.81 dBm / 0.1205 W 802.11ac VHT80: 20.13 dBm / 0.1030 W <MIMO Ant. 0b+1b> 802.11a : 20.78 dBm / 0.1197 W 802.11n HT20 : 20.97 dBm / 0.1250 W 802.11n HT40 : 20.64 dBm / 0.1159 W 802.11ac VHT20: 20.83 dBm / 0.1211 W 802.11ac VHT40: 20.61 dBm / 0.1151 W 802.11ac VHT80: 20.26 dBm / 0.1062 W
Maximum Output Power	



Standards-related Product Specification											
99% Occupied Bandwidth	<MIMO Ant. 0a+1a> 802.11a : 23.55 MHz 802.11n HT20 : 23.05 MHz 802.11n HT40 : 45.00 MHz 802.11ac VHT80 : 76.20 MHz <MIMO Ant. 0a+1b> 802.11a : 23.65 MHz 802.11n HT20 : 23.85 MHz 802.11n HT40 : 50.90 MHz 802.11ac VHT80 : 76.32 MHz <MIMO Ant. 0b+1a> 802.11a : 24.25 MHz 802.11n HT20 : 23.10 MHz 802.11n HT40 : 48.10 MHz 802.11ac VHT80 : 76.56 MHz <MIMO Ant. 0b+1b> 802.11a : 22.80 MHz 802.11n HT20 : 24.70 MHz 802.11n HT40 : 48.80 MHz 802.11ac VHT80 : 76.56 MHz										
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)										
Antenna Type / Gain	Ant. 0a : Fixed internal Antenna with gain 1.46 dBi Ant. 1a : Fixed internal Antenna with gain 2.61 dBi Ant. 0b : Fixed internal Antenna with gain 1.28 dBi Ant. 1b : Fixed internal Antenna with gain 2.22 dBi										
Antenna Function Description	<table border="1"><tr><td></td><td>Ant. 0a</td><td>Ant. 0b</td><td>Ant. 1a</td><td>Ant. 1b</td></tr><tr><td>802.11 a/n/ac MIMO</td><td>V</td><td>V</td><td>V</td><td>V</td></tr></table>		Ant. 0a	Ant. 0b	Ant. 1a	Ant. 1b	802.11 a/n/ac MIMO	V	V	V	V
	Ant. 0a	Ant. 0b	Ant. 1a	Ant. 1b							
802.11 a/n/ac MIMO	V	V	V	V							

Note: MIMO Ant. 1+2 is a calculated result from sum of the power MIMO Ant. 1 and MIMO Ant. 2.



1.4 Modification of EUT

No modifications are made to the EUT during all test items.

1.5 Testing Location

Sportun Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1022 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	Sportun Site No.	
	TH05-HY	CO05-HY

Note: The test site complies with ANSI C63.4 2014 requirement.

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd Rd. Guishan Dist, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855	
Test Site No.	Sportun Site No.	
	03CH12-HY	

Note: The test site complies with ANSI C63.4 2014 requirement.



1.6 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC Part 15 Subpart E
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ FCC KDB 644545 D03 Guidance for IEEE 802 11ac New Rules v01
- ♦ ANSI C63.10-2013

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



2 Test Configuration of Equipment Under Test

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conducted emission (150 kHz to 30 MHz) and radiated emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5725-5850 MHz Band 4 (U-NII-3)	149	5745	157	5785
	151*	5755	159*	5795
	153	5765	161	5805
	155 [#]	5775	165	5825

Note:

1. The above Frequency and Channel in "*" were 802.11n HT40 and 802.11ac VHT40.
2. The above Frequency and Channel in "#" were 802.11ac VHT80.



2.2 Test Mode

Final test mode of conducted test items and radiated spurious emissions are considering the modulation and worse data rates as below table.

MIMO Antenna

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0

AC Conducted Emission	Mode 1 : WLAN (5GHz) Link + Bluetooth Link + Speaker On + Flash light On + Camera + Adapter
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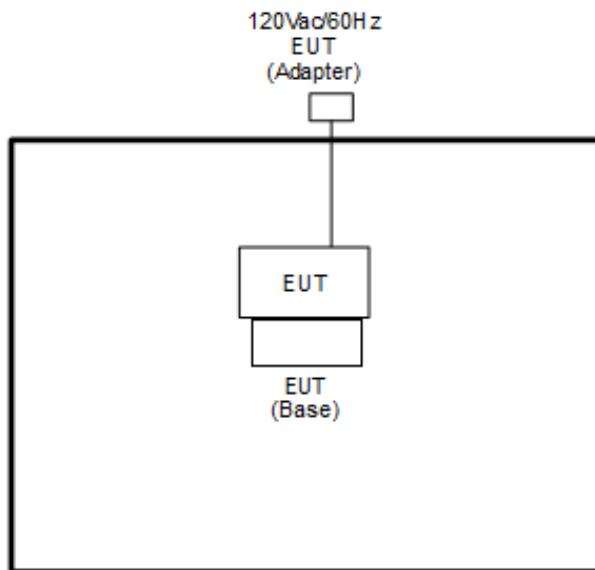
Ch. #		Band IV : 5725-5850 MHz		
		802.11a	802.11n HT20	802.11n HT40
L	Low	149	149	151
M	Middle	157	157	-
H	High	165	165	159

Ch. #		Band IV : 5725-5850 MHz		
		802.11ac VHT20	802.11ac VHT40	802.11ac VHT80
L	Low	149	151	-
M	Middle	157	-	155
H	High	165	159	-

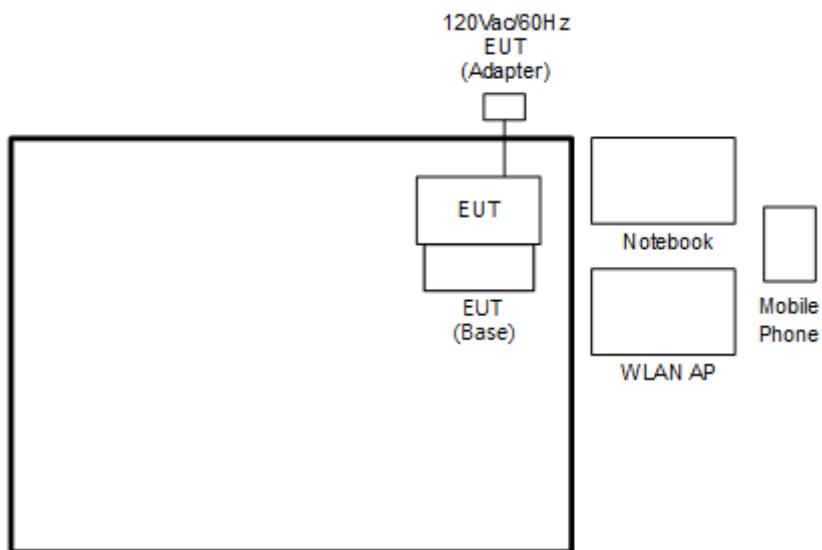


2.3 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>





2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
2.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
3.	Mobile Phone	Apple	A1529	BCG-E2694A	N/A	N/A

2.5 EUT Operation Test Setup

The programmed RF utility “CMD”, is installed in EUT to provide channel selection, power level, data rate and the application type. RF Utility can send transmitting signal for all testing. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product

2.6 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example :

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

$$\text{Offset} = \text{RF cable loss} + \text{attenuator factor}.$$

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

$$\text{Offset(dB)} = \text{RF cable loss(dB)} + \text{attenuator factor(dB)}.$$

$$= 4.2 + 10 = 14.2 \text{ (dB)}$$



3 Test Result

3.1 6dB and 26dB and 99% Occupied Bandwidth Measurement

3.1.1 Description of 6dB and 26dB and 99% Occupied Bandwidth

The minimum 6 dB bandwidth shall be at least 500 kHz.

26dB and 99% Occupied bandwidth are reporting only.

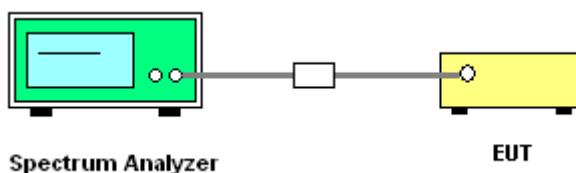
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03.
Section C) Emission bandwidth for the band 5.725-5.85GHz
2. Set RBW = 100kHz.
3. Set the VBW $\geq 3 \times$ RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 6 dB down from the peak of the emission.
7. Measure and record the results in the test report.

3.1.4 Test Setup

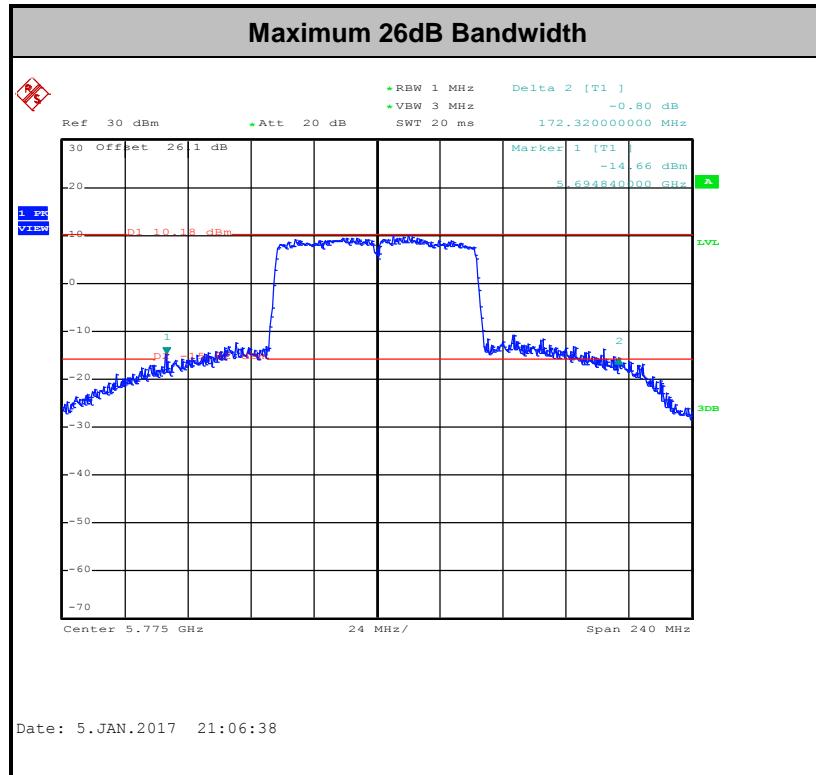
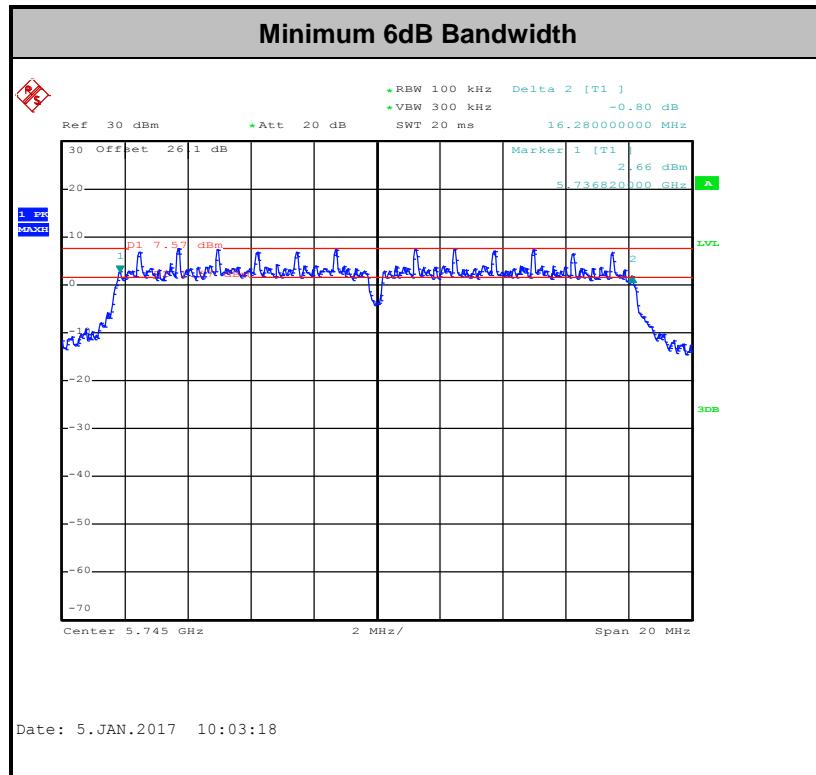


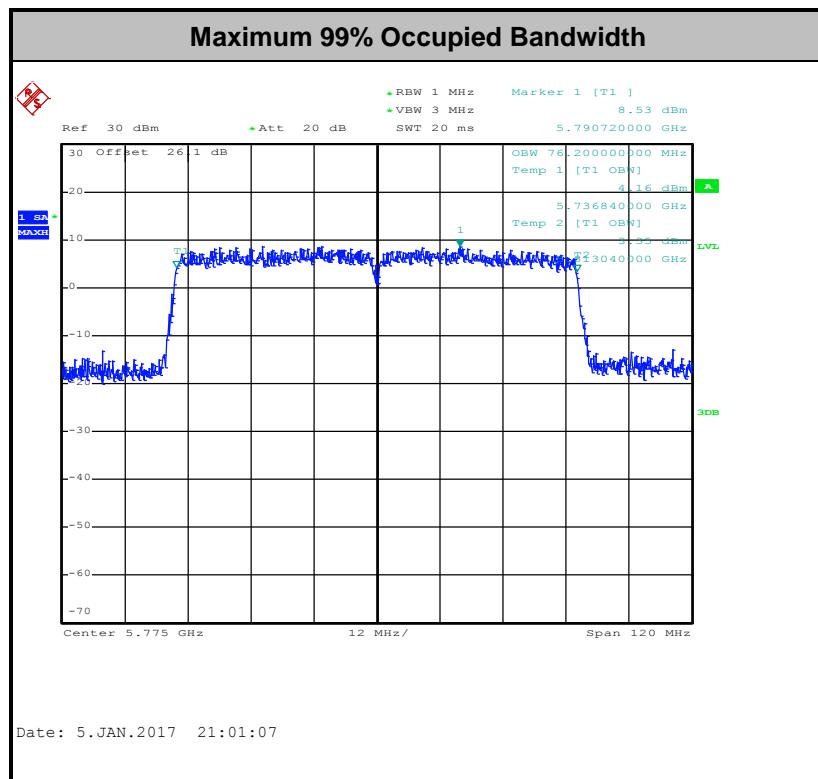
3.1.5 Test Result of 6dB Bandwidth

Please refer to Appendix A.



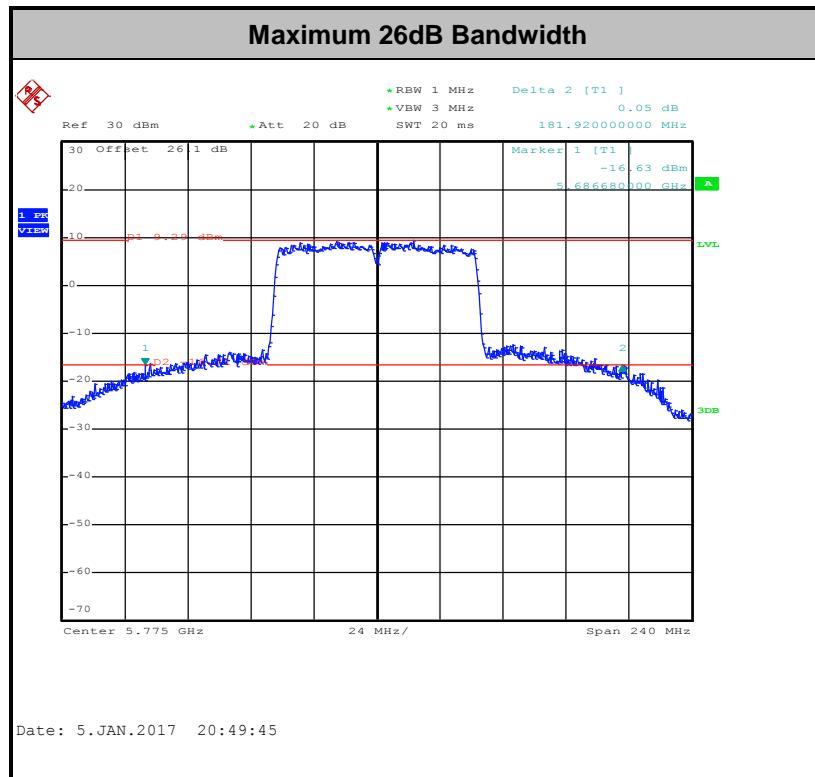
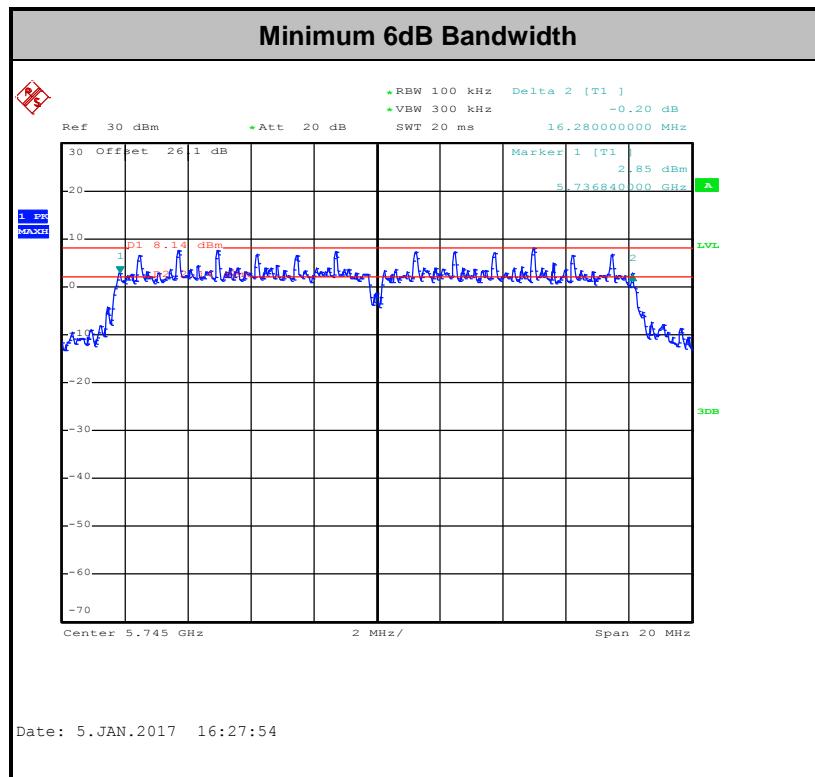
MIMO <Ant. 0a + 1a>

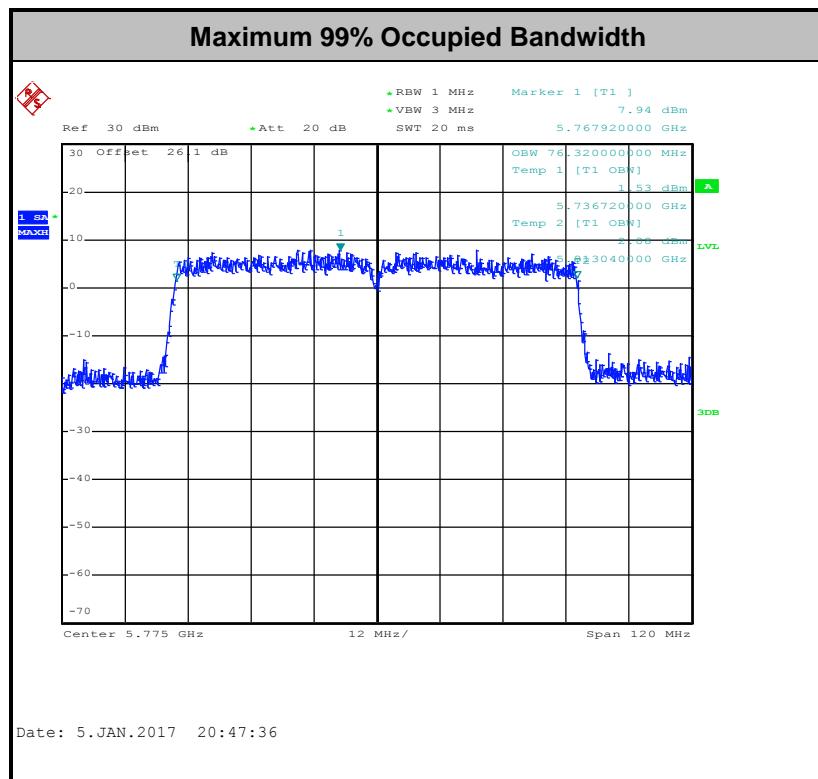






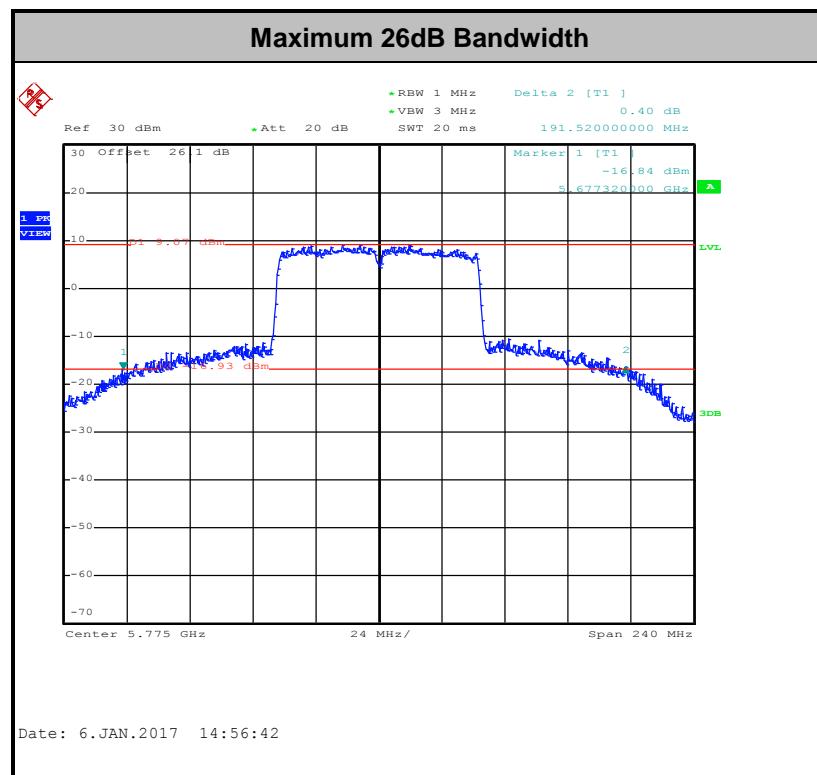
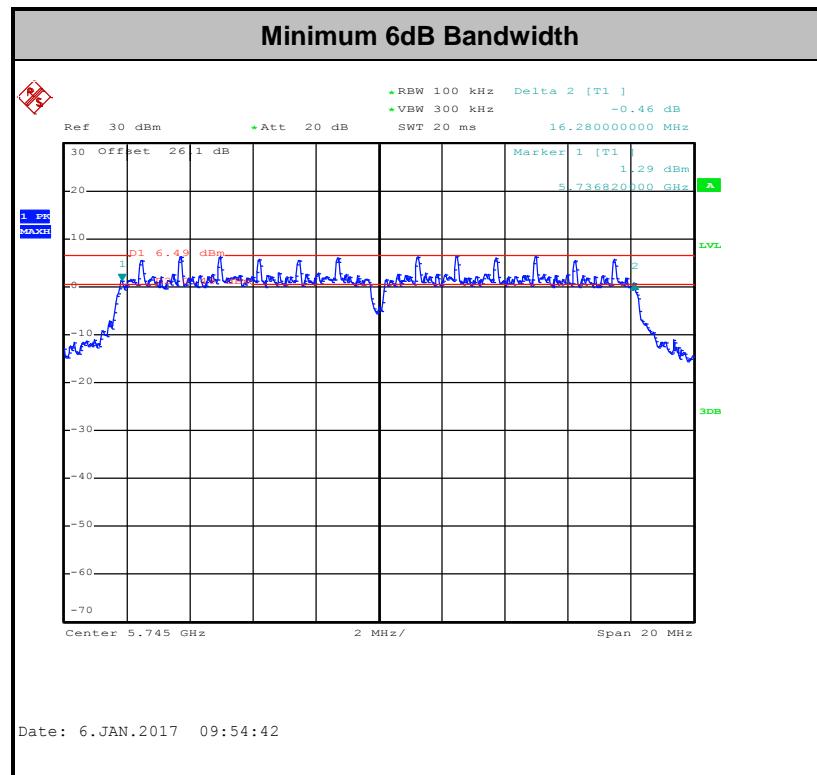
MIMO <Ant. 0a + 1b>

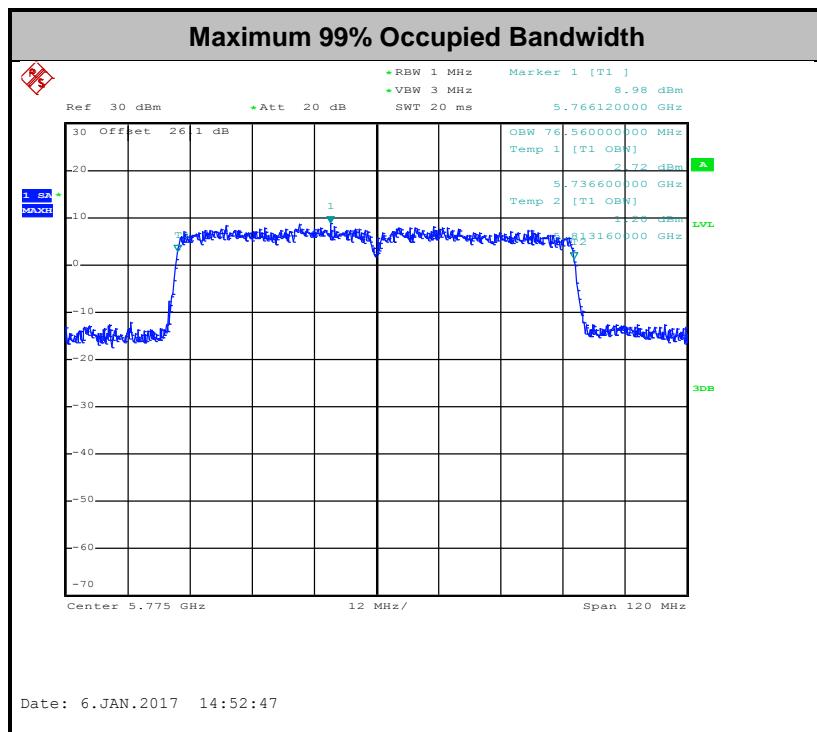






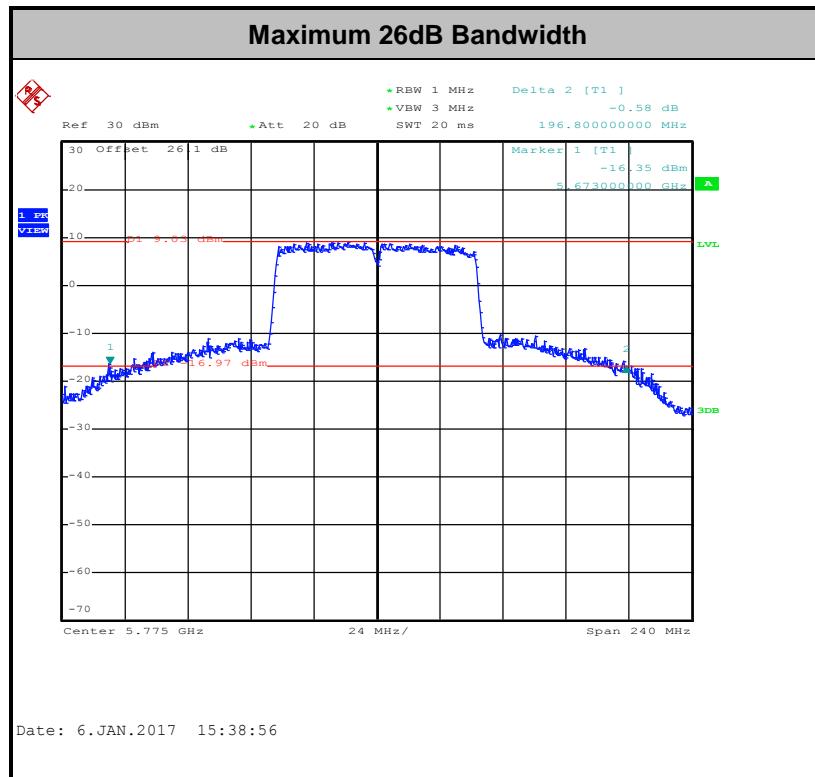
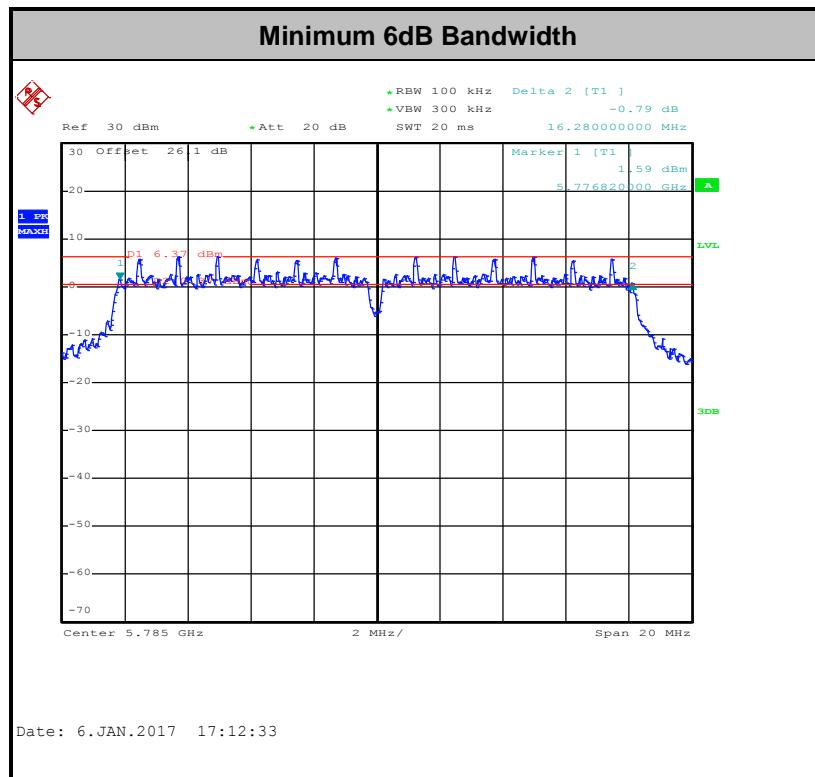
MIMO <Ant. 0b + 1a>

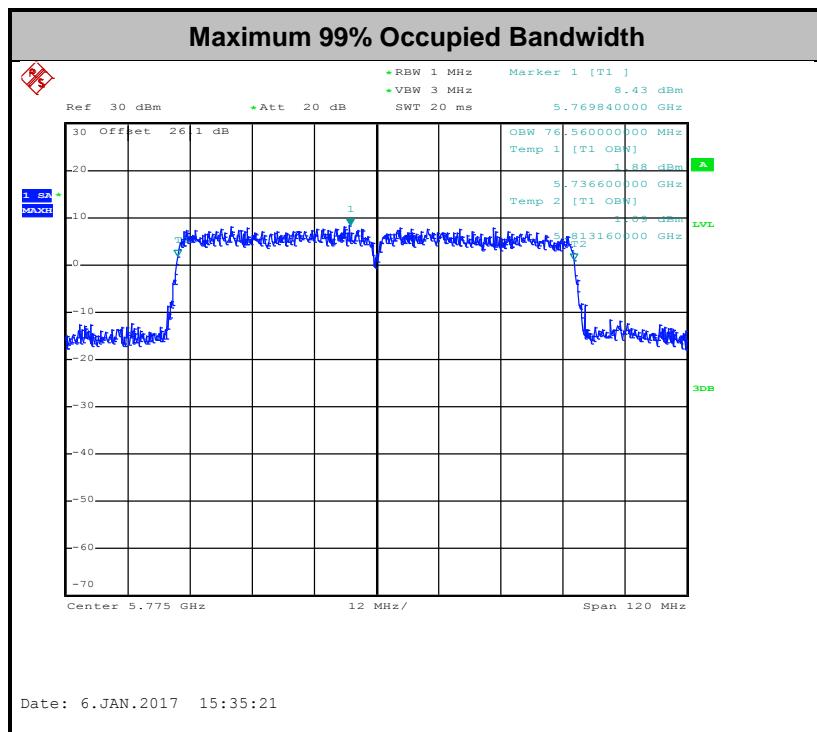






MIMO <Ant. 0b + 1b>





Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

For the band 5.725–5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

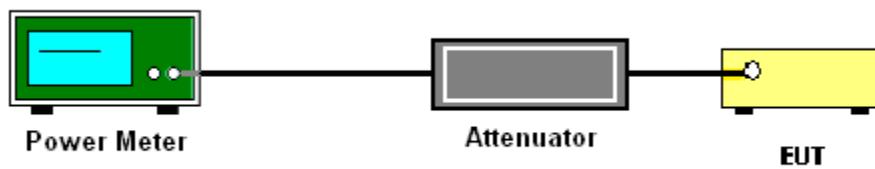
3.2.3 Test Procedures

The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03.

Method PM (Measurement using an RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor, $10 \log(1/x)$, where x is the duty cycle.

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.



3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

For the band 5.725–5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.3.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03.
Section F) Maximum power spectral density.

Method SA-2

(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 300 kHz.
- Set VBW \geq 1 MHz.
- Number of points in sweep \geq 2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Add $10 \log(500\text{kHz}/\text{RBW})$ to the test result.
- Add $10 \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add $10 \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.

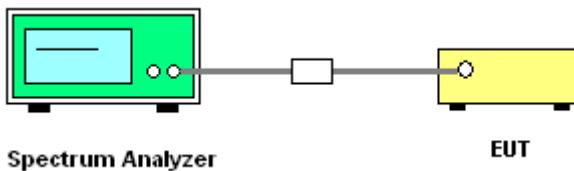


1. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

Method (c): Measure and add $10 \log(N_{ANT})$ dB.

With this technique, spectrum measurements are performed at each output of the device, but rather than summing the spectra or the spectral peaks across the outputs, the quantity $10 \log(N_{ANT})$ dB is added to each spectrum value before comparing to the emission limit. The addition of $10 \log(N_{ANT})$ dB serves to apportion the emission limit among the N_{ANT} outputs so that each output is permitted to contribute no more than $1/N_{ANT}^{\text{th}}$ of the PSD limit.

3.3.4 Test Setup



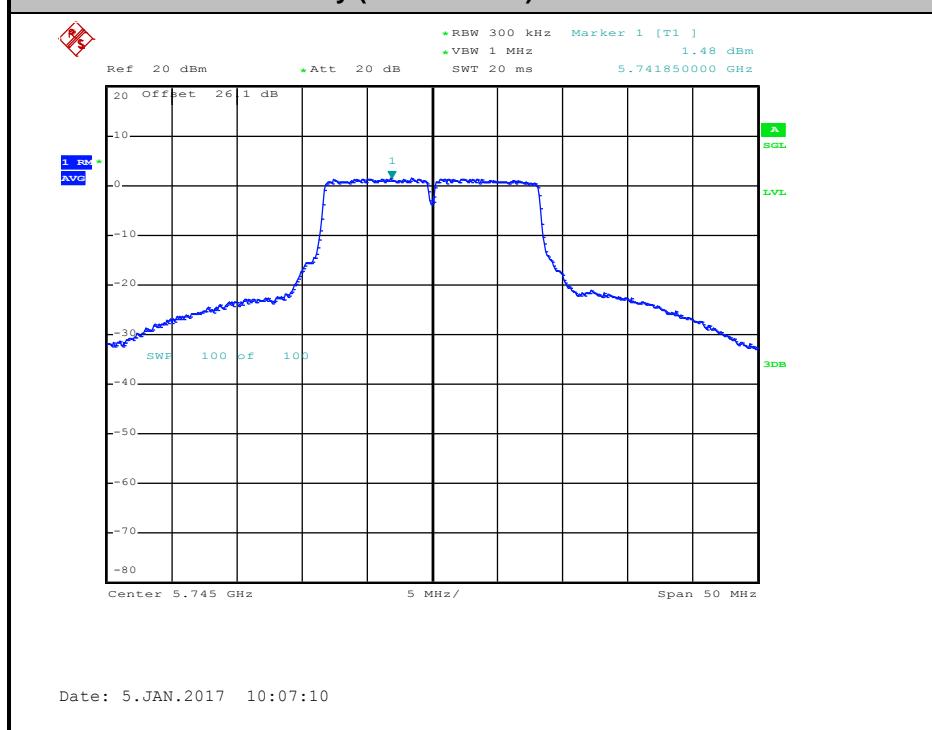
3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

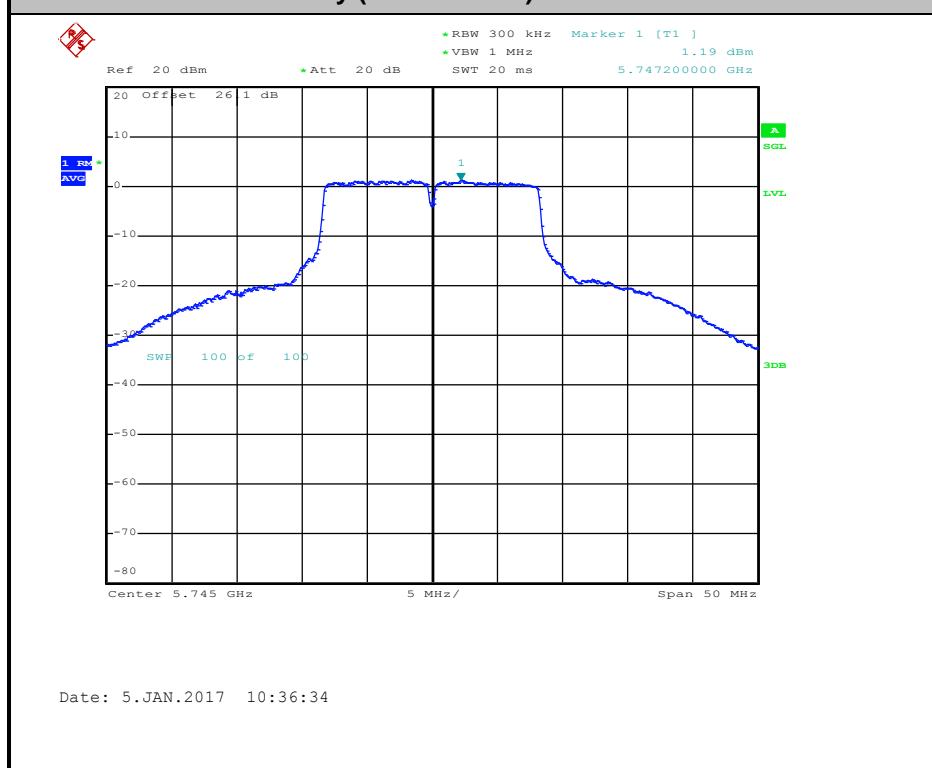


MIMO <Ant. 0a + 1a>

Worst Case Power Density (dBm/300kHz) for MIMO Ant. 0a



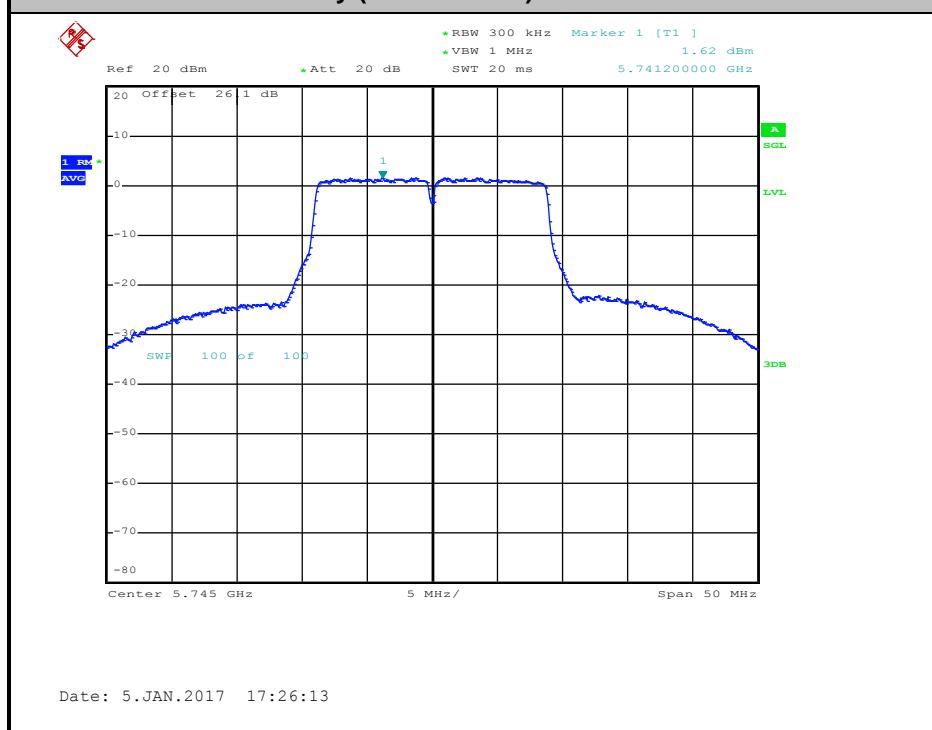
Worst Case Power Density (dBm/300kHz) for MIMO Ant. 1a



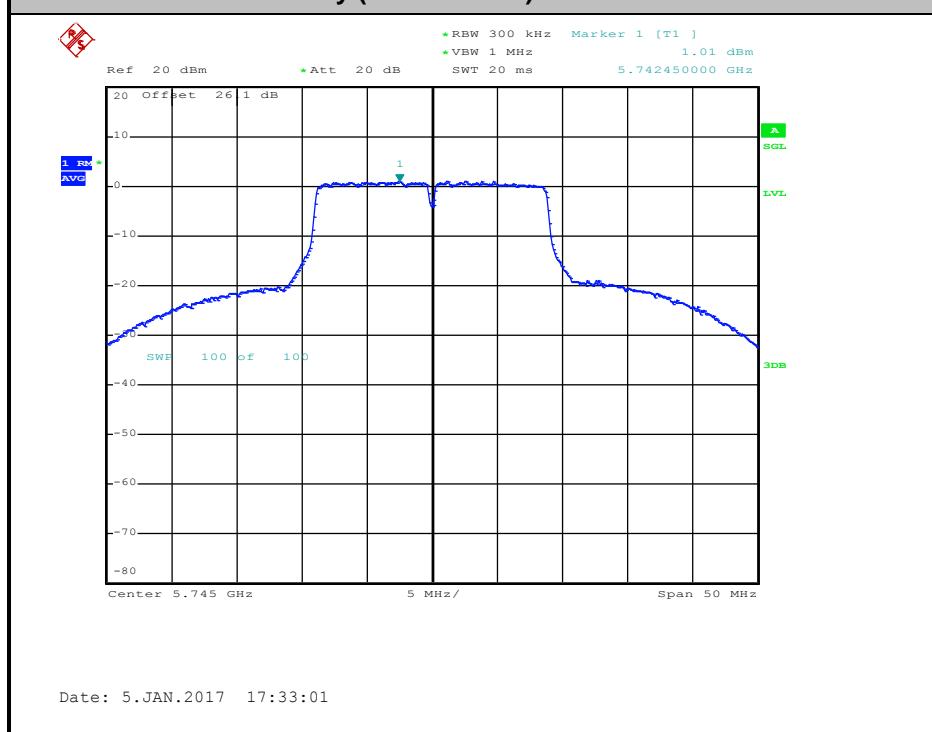


MIMO <Ant. 0a + 1b>

Worst Case Power Density (dBm/300kHz) for MIMO Ant. 0a



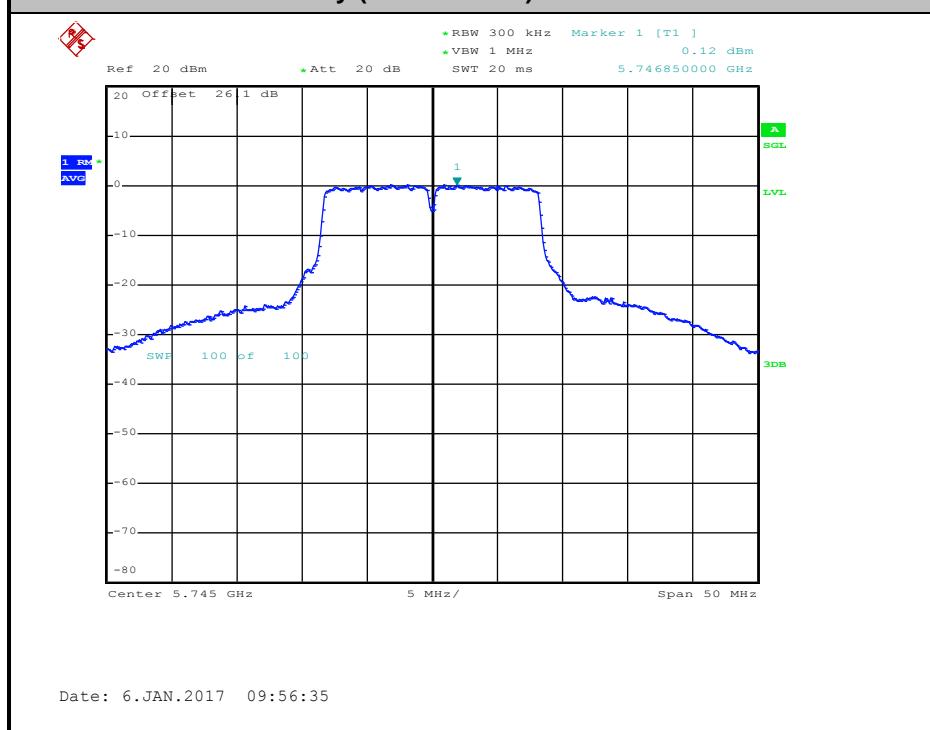
Worst Case Power Density (dBm/300kHz) for MIMO Ant. 1b





MIMO <Ant. 0b + 1a>

Worst Case Power Density (dBm/300kHz) for MIMO Ant. 0b



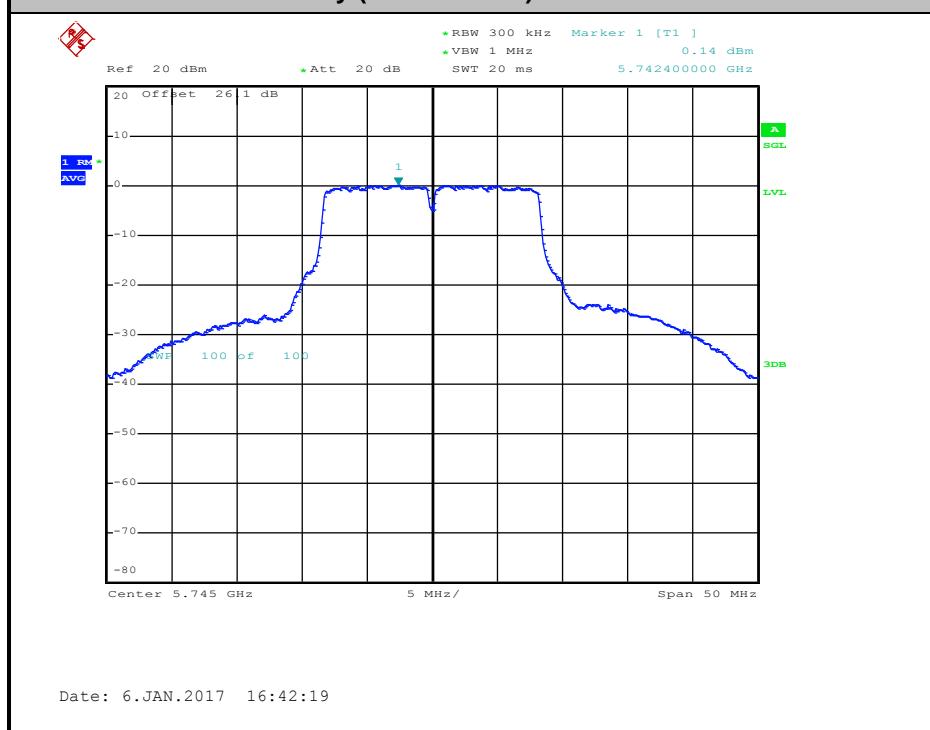
Worst Case Power Density (dBm/300kHz) for MIMO Ant. 1a



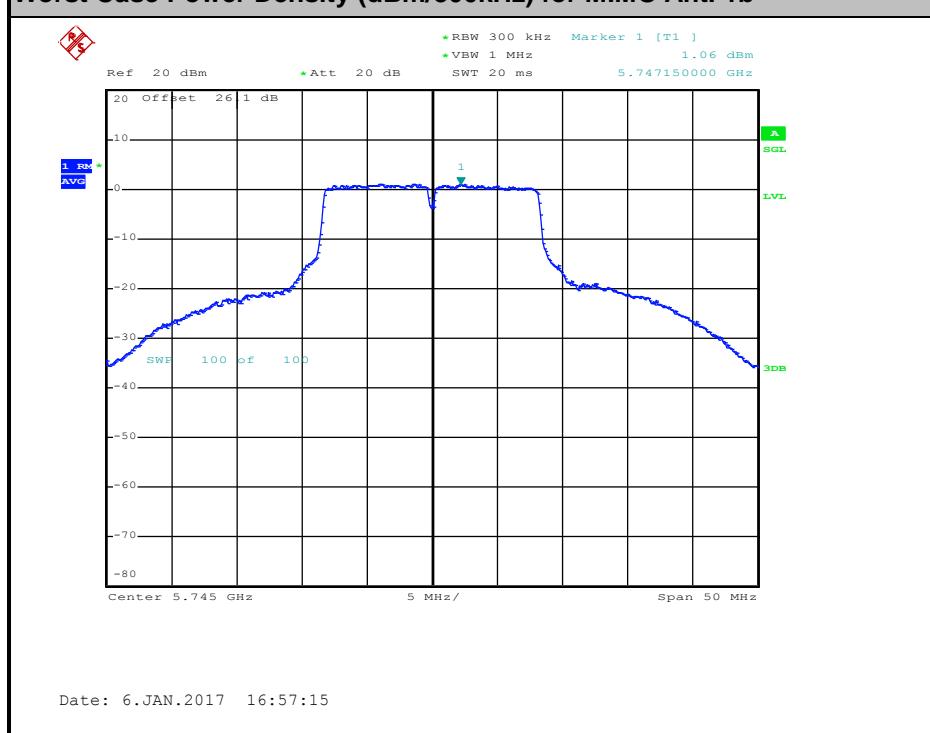


MIMO <Ant. 0b + 1b>

Worst Case Power Density (dBm/300kHz) for MIMO Ant. 0b



Worst Case Power Density (dBm/300kHz) for MIMO Ant. 1b





3.4 Unwanted Emissions Measurement

This section as specified in FCC Part 15.407(b) is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement. The unwanted emissions shall comply with 15.407(b)(1) to (6), and restricted bands per FCC Part15.205.

3.4.1 Limit of Unwanted Emissions

- (1) For transmitters operating in the 5.725-5.85 GHz band:

15.407(b)(4)(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

- (2) Unwanted spurious emissions fallen in restricted bands per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 as below table,

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

Note: The following formula is used to convert the EIRP to field strength.

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V}/\text{m}, \text{ where } P \text{ is the eirp (Watts)}$$



EIRP (dBm)	Field Strength at 3m (dB μ V/m)
-17	78.3
-27	68.3

(3) KDB 789033 D02 General UNII Test Procedures New Rules v01r03 G)2)c) As specified in 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a peak 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 average and peak limits of 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz peak emission limit.

3.4.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

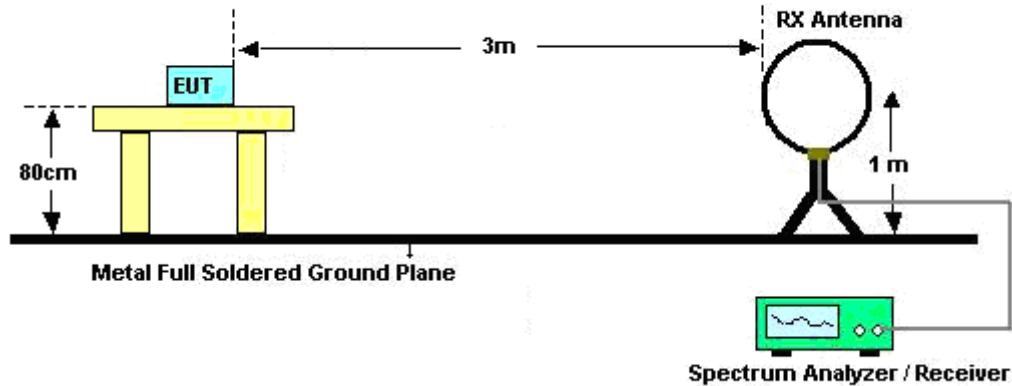
3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03. Section G) Unwanted emissions measurement.
 - (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW \geq 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold
 - (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz
 - RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW \geq 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

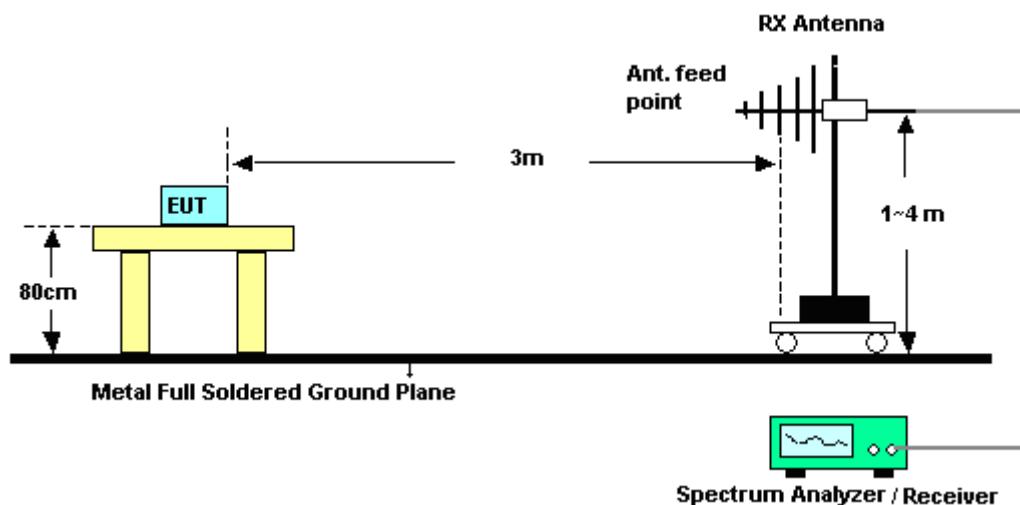
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.4.4 Test Setup

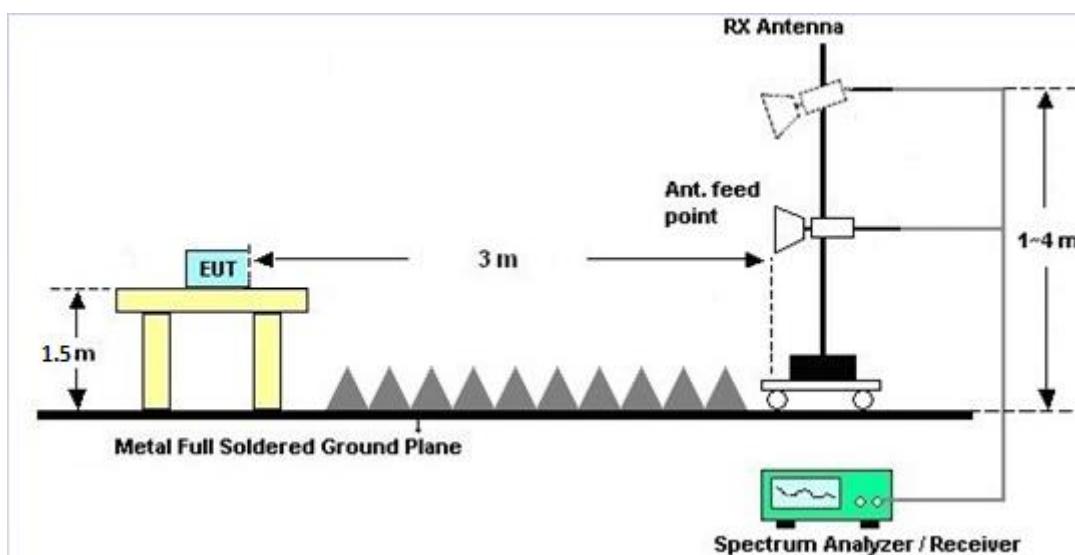
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz





3.4.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix B and C.

3.4.7 Duty Cycle

Please refer to Appendix D.

3.4.8 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic)

Please refer to Appendix B and C.



3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

3.5.2 Measuring Instruments

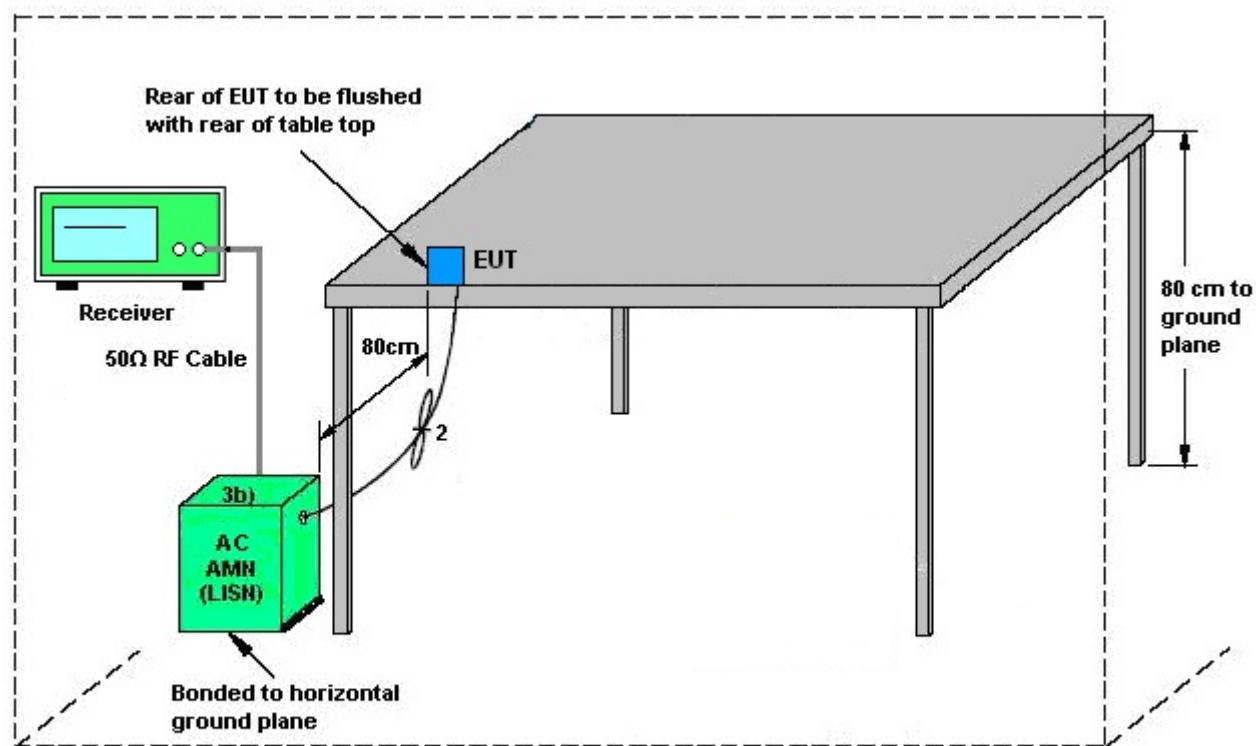
The measuring equipment is listed in the section 4 of this test report.

3.5.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.



3.5.4 Test Setup



AMN = Artificial mains network (LISH)

AE = Associated equipment

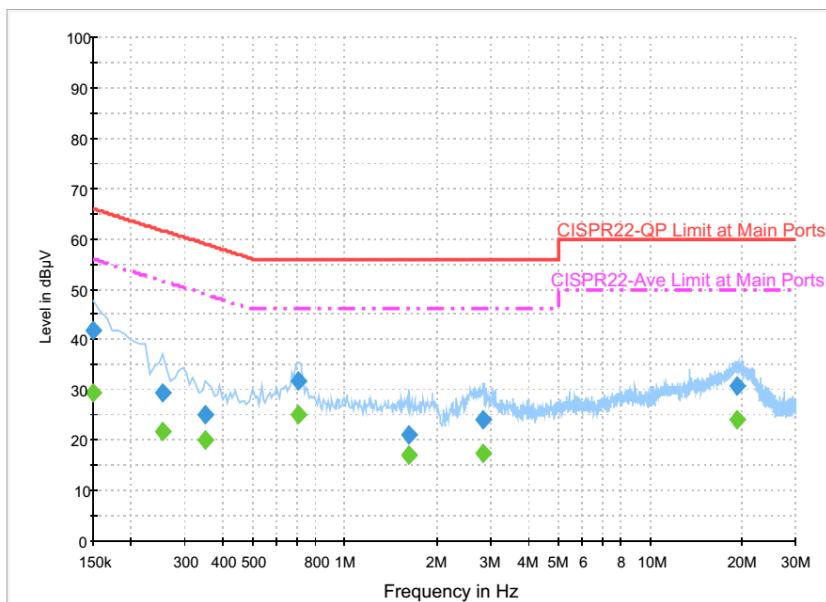
EUT = Equipment under test

ISH = Impedance stabilization network



3.5.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	22~23°C
Test Engineer :	Kai-Chun Chu	Relative Humidity :	48~49%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	WLAN (5GHz) Link + Bluetooth Link + Speaker On + Flash light On + Camera + Adapter		



Final Result : QuasiPeak

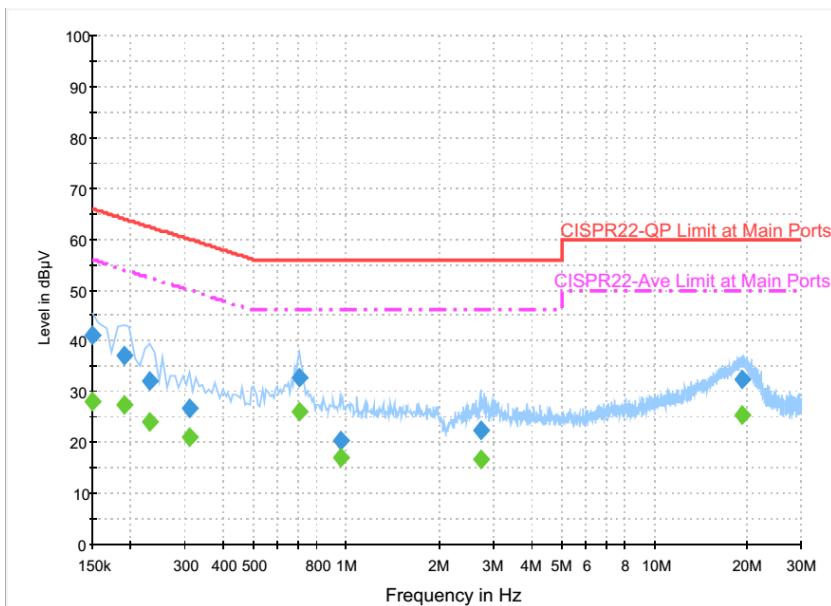
Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	41.8	Off	L1	19.6	24.2	66.0
0.254000	29.3	Off	L1	19.6	32.3	61.6
0.350000	25.1	Off	L1	19.6	33.9	59.0
0.702000	31.8	Off	L1	19.6	24.2	56.0
1.630000	21.1	Off	L1	19.6	34.9	56.0
2.846000	24.1	Off	L1	19.5	31.9	56.0
19.366000	30.9	Off	L1	20.6	29.1	60.0

Final Result : Average

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	29.4	Off	L1	19.6	26.6	56.0
0.254000	21.8	Off	L1	19.6	29.8	51.6
0.350000	19.9	Off	L1	19.6	29.1	49.0
0.702000	25.2	Off	L1	19.6	20.8	46.0
1.630000	17.1	Off	L1	19.6	28.9	46.0
2.846000	17.3	Off	L1	19.5	28.7	46.0
19.366000	24.2	Off	L1	20.6	25.8	50.0



Test Mode :	Mode 1	Temperature :	22~23°C
Test Engineer :	Kai-Chun Chu	Relative Humidity :	48~49%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	WLAN (5GHz) Link + Bluetooth Link + Speaker On + Flash light On + Camera + Adapter		



Final Result : QuasiPeak

Frequency (MHz)	QuasiPeak (dB μ V)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.150000	41.0	Off	N	19.6	25.0	66.0
0.190000	37.2	Off	N	19.6	26.8	64.0
0.230000	32.2	Off	N	19.6	30.2	62.4
0.310000	26.8	Off	N	19.6	33.2	60.0
0.702000	32.8	Off	N	19.6	23.2	56.0
0.958000	20.5	Off	N	19.6	35.5	56.0
2.726000	22.6	Off	N	19.4	33.4	56.0
19.366000	32.4	Off	N	20.7	27.6	60.0

Final Result : Average

Frequency (MHz)	Average (dB μ V)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.150000	28.1	Off	N	19.6	27.9	56.0
0.190000	27.4	Off	N	19.6	26.6	54.0
0.230000	24.2	Off	N	19.6	28.2	52.4
0.310000	21.0	Off	N	19.6	29.0	50.0
0.702000	25.9	Off	N	19.6	20.1	46.0
0.958000	17.1	Off	N	19.6	28.9	46.0
2.726000	16.8	Off	N	19.4	29.2	46.0
19.366000	25.5	Off	N	20.7	24.5	50.0



3.6 Frequency Stability Measurement

3.6.1 Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

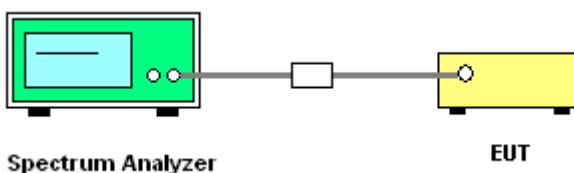
3.6.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.6.3 Test Procedures

1. To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
2. The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10dB lower than the measured peak value.
3. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

3.6.4 Test Setup



3.6.5 Test Result of Frequency Stability

Please refer to Appendix A.



3.7 Automatically Discontinue Transmission

3.7.1 Limit of Automatically Discontinue Transmission

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

3.7.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.7.3 Test Result of Automatically Discontinue Transmission

EUT is verified this characteristic during the function check of normal sample associated with an access point:

- A. Information start: make EUT supply information to the access point.
- B. Information stop: stop supplying information to the access point.

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving.

- C. Information start: make EUT supply information to the access point again.

The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

5745MHz



Note : The control / signalling information during the period B is precluded.



3.8 Antenna Requirements

3.8.1 Standard Applicable

According to FCC 47 CFR Section 15.407(a)(1)(2) ,if transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.8.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.8.3 Antenna Gain

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain = $10 \log(N_{ANT}/N_{SS}=1)$ dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain;

The EUT supports CDD mode.

For power, the directional gain G_{ANT} is set equal to the antenna having the highest gain, i.e., F)2)f)i).

For PSD, the directional gain calculation is following F)2)f)ii) of KDB 662911 D01 v02r01.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain “DG” is calculated as following table.



<MIMO Ant. 0a + 1a>

			DG for Power	DG for PSD	Power Limit Reduction	PSD Limit Reduction
	Ant 0a (dBi)	Ant 1a (dBi)	(dBi)	(dBi)	(dB)	(dB)
Band IV	1.46	2.61	2.61	5.06	0.00	0.00

<MIMO Ant. 0a + 1b>

			DG for Power	DG for PSD	Power Limit Reduction	PSD Limit Reduction
	Ant 0a (dBi)	Ant 1b (dBi)	(dBi)	(dBi)	(dB)	(dB)
Band IV	1.46	2.22	2.22	4.86	0.00	0.00

<MIMO Ant. 0b + 1a>

			DG for Power	DG for PSD	Power Limit Reduction	PSD Limit Reduction
	Ant 0b (dBi)	Ant 1a (dBi)	(dBi)	(dBi)	(dB)	(dB)
Band IV	1.28	2.61	2.61	4.98	0.00	0.00

<MIMO Ant. 0b + 1b>

			DG for Power	DG for PSD	Power Limit Reduction	PSD Limit Reduction
	Ant 0b (dBi)	Ant 1b (dBi)	(dBi)	(dBi)	(dB)	(dB)
Band IV	1.28	2.22	2.22	4.77	0.00	0.00

Power limit reduction = Composite gain – 6dBi, (min = 0)

PSD limit reduction = Composite gain + PSD Array gain – 6dBi, (min = 0)



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	1218006	300MHz~40GHz	Oct. 06, 2016	Dec. 19, 2016 ~ Jan. 14, 2017	Oct. 05, 2017	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1207363	300MHz~40GHz	Oct. 06, 2016	Dec. 19, 2016 ~ Jan. 14, 2017	Oct. 05, 2017	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Nov. 25, 2016	Dec. 19, 2016 ~ Jan. 14, 2017	Nov. 24, 2017	Conducted (TH05-HY)
Temperature Chamber	ESPEC	SH-641	92013720	-40°C ~90°C	Sep. 01, 2016	Dec. 19, 2016 ~ Jan. 14, 2017	Aug. 31, 2017	Conducted (TH05-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL890001	1V~20V 0.5A~4A	Oct. 03, 2016	Dec. 19, 2016 ~ Jan. 14, 2017	Oct. 02, 2017	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Dec. 30, 2016	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 30, 2016	Dec. 30, 2016	Aug. 29, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 29, 2016	Dec. 30, 2016	Nov. 28, 2017	Conduction (CO05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Oct. 20, 2016	Dec. 21, 2016 ~ Jan. 03, 2017	Oct. 19, 2018	Radiation (03CH12-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Nov. 10, 2016	Dec. 21, 2016 ~ Jan. 03, 2017	Nov. 09, 2017	Radiation (03CH12-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Mar. 21, 2016	Dec. 21, 2016 ~ Jan. 03, 2017	Mar. 20, 2017	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	37059&01	30MHz~1GHz	Oct. 15, 2016	Dec. 21, 2016 ~ Jan. 03, 2017	Oct. 14, 2017	Radiation (03CH12-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY53290053	20Hz to 26.5GHz	Jan. 20, 2016	Dec. 21, 2016 ~ Jan. 03, 2017	Jan. 19, 2017	Radiation (03CH12-HY)
Preamplifier	MITEQ	TTA0204	1872107	2GHz~40GHz	Feb. 15, 2016	Dec. 21, 2016 ~ Jan. 03, 2017	Feb. 14, 2017	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1328	1GHz ~ 18GHz	Oct. 25, 2016	Dec. 21, 2016 ~ Jan. 03, 2017	Oct. 24, 2017	Radiation (03CH12-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1815698	1GHz~18GHz	Dec. 01, 2016	Dec. 21, 2016 ~ Jan. 03, 2017	Nov. 30, 2017	Radiation (03CH12-HY)
Preamplifier	Keysight	83017A	MY53270148	1GHz~26.5GHz	Jan. 30, 2016	Dec. 21, 2016 ~ Jan. 03, 2017	Jan. 29, 2017	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Dec. 21, 2016 ~ Jan. 03, 2017	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Dec. 21, 2016 ~ Jan. 03, 2017	N/A	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170576	18GHz ~ 40GHz	Apr. 15, 2016	Dec. 21, 2016 ~ Jan. 03, 2017	Apr. 14, 2017	Radiation (03CH12-HY)



5 Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_{C(y)}$)	2.7
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_{C(y)}$)	5.1
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_{C(y)}$)	5.2
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_{C(y)}$)	4.7
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Appendix A. Conducted Test Results

Test Engineer:	Tommy Lee	Temperature:	21~25	°C
Test Date:	2016/12/19~2017/01/14	Relative Humidity:	51~54	%

TEST RESULTS DATA
6dB and 26dB EBW and 99% OBW

Band IV													
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)		Pass/Fail
					0a	1a	0a	1a	0a	1a	0a	1a	
11a	6Mbps	2	149	5745	19.80	23.55	40.64	44.96	16.28	16.32	0.5	Pass	
11a	6Mbps	2	157	5785	18.95	20.25	37.60	43.04	16.32	16.32	0.5	Pass	
11a	6Mbps	2	165	5825	18.70	19.80	35.36	40.80	16.32	16.32	0.5	Pass	
HT20	MCS0	2	149	5745	19.90	23.05	47.36	48.48	17.56	17.54	0.5	Pass	
HT20	MCS0	2	157	5785	19.75	20.85	45.76	48.48	17.56	17.56	0.5	Pass	
HT20	MCS0	2	165	5825	19.90	20.85	45.28	46.56	17.56	17.56	0.5	Pass	
HT40	MCS0	2	151	5755	37.70	45.00	97.60	95.04	36.24	36.40	0.5	Pass	
HT40	MCS0	2	159	5795	37.30	43.60	94.08	97.92	36.24	36.40	0.5	Pass	
VHT80	MCS0	2	155	5775	76.20	76.08	172.32	140.64	75.36	76.32	0.5	Pass	

TEST RESULTS DATA
Average Power Table

Band IV														
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					0a	1a	0a	1a	SUM	0a	1a	0a	1a	
11a	6Mbps	2	149	5745	0.32	0.32	18.72	18.11	21.44	30.00	30.00	2.61	2.61	Pass
11a	6Mbps	2	157	5785	0.32	0.32	18.06	17.59	20.84	30.00	30.00	2.61	2.61	Pass
11a	6Mbps	2	165	5825	0.32	0.32	17.76	17.30	20.55	30.00	30.00	2.61	2.61	Pass
HT20	MCS0	2	149	5745	0.34	0.34	18.92	18.35	21.66	30.00	30.00	2.61	2.61	Pass
HT20	MCS0	2	157	5785	0.34	0.34	18.40	18.15	21.29	30.00	30.00	2.61	2.61	Pass
HT20	MCS0	2	165	5825	0.34	0.34	18.65	18.08	21.39	30.00	30.00	2.61	2.61	Pass
HT40	MCS0	2	151	5755	0.61	0.67	18.81	18.48	21.66	30.00	30.00	2.61	2.61	Pass
HT40	MCS0	2	159	5795	0.61	0.67	18.68	18.27	21.49	30.00	30.00	2.61	2.61	Pass
VHT20	MCS0	2	149	5745	0.34	0.34	18.91	18.34	21.65	30.00	30.00	2.61	2.61	Pass
VHT20	MCS0	2	157	5785	0.34	0.34	18.04	18.02	21.04	30.00	30.00	2.61	2.61	Pass
VHT20	MCS0	2	165	5825	0.34	0.34	18.06	17.84	20.96	30.00	30.00	2.61	2.61	Pass
VHT40	MCS0	2	151	5755	0.60	0.67	18.41	18.22	21.33	30.00	30.00	2.61	2.61	Pass
VHT40	MCS0	2	159	5795	0.60	0.67	18.09	18.22	21.17	30.00	30.00	2.61	2.61	Pass
VHT80	MCS0	2	155	5775	1.14	1.20	17.81	16.50	20.21	30.00	30.00	2.61	2.61	Pass

TEST RESULTS DATA
Power Spectral Density

Band IV																
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		10log (500kHz /RBW) Factor (dB)		Average Power Density (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
					0a	1a	0a	1a	0a	1a	SUM	0a	1a	0a	1a	
11a	6Mbps	2	149	5745	0.32	0.32	2.22		7.03	30.00		5.06			Pass	
11a	6Mbps	2	157	5785	0.32	0.32	2.22		6.48	30.00		5.06			Pass	
11a	6Mbps	2	165	5825	0.32	0.32	2.22		6.17	30.00		5.06			Pass	
HT20	MCS0	2	149	5745	0.34	0.34	2.22		6.80	30.00		5.06			Pass	
HT20	MCS0	2	157	5785	0.34	0.34	2.22		6.46	30.00		5.06			Pass	
HT20	MCS0	2	165	5825	0.34	0.34	2.22		6.41	30.00		5.06			Pass	
HT40	MCS0	2	151	5755	0.61	0.67	2.22		3.83	30.00		5.06			Pass	
HT40	MCS0	2	159	5795	0.61	0.67	2.22		3.55	30.00		5.06			Pass	
VHT80	MCS0	2	155	5775	1.14	1.20	2.22		1.42	30.00		5.06			Pass	

TEST RESULTS DATA
Frequency Stability

Band IV										
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	0a	149	5745	5744.950	-0.050	-8.70	35	120	
11a	6Mbps	0a	149	5745	5745.000	0.000	0.00	0	120	
11a	6Mbps	0a	149	5745	5745.000	0.000	0.00	20	138	
11a	6Mbps	0a	149	5745	5745.000	0.000	0.00	20	102	
11a	6Mbps	0a	149	5745	5745.000	0.000	0.00	20	120	

TEST RESULTS DATA
6dB and 26dB EBW and 99% OBW

Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Band IV								Pass/Fail	
					99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)			
					0a	1b	0a	1b	0a	1b	0a	1b		
11a	6Mbps	2	149	5745	19.40	23.65	38.24	45.12	16.32	16.28	0.5	Pass		
11a	6Mbps	2	157	5785	18.75	20.60	37.76	43.20	16.28	16.32	0.5	Pass		
11a	6Mbps	2	165	5825	18.70	21.80	35.84	44.00	16.28	16.32	0.5	Pass		
HT20	MCS0	2	149	5745	19.70	23.85	47.04	48.64	17.56	17.56	0.5	Pass		
HT20	MCS0	2	157	5785	19.65	21.75	41.60	48.16	17.56	17.56	0.5	Pass		
HT20	MCS0	2	165	5825	19.85	21.80	47.04	48.00	17.56	17.60	0.5	Pass		
HT40	MCS0	2	151	5755	38.60	50.90	97.60	100.16	36.32	36.32	0.5	Pass		
HT40	MCS0	2	159	5795	37.80	49.10	94.08	99.84	36.32	36.32	0.5	Pass		
VHT80	MCS0	2	155	5775	76.08	76.32	167.52	181.92	75.36	75.68	0.5	Pass		

TEST RESULTS DATA
Average Power Table

Band IV														
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					0a	1b	0a	1b	SUM	0a	1b	0a	1b	
11a	6Mbps	2	149	5745	0.32	0.29	18.90	18.25	21.60	30.00	2.22			Pass
11a	6Mbps	2	157	5785	0.32	0.29	18.17	17.74	20.97	30.00	2.22			Pass
11a	6Mbps	2	165	5825	0.32	0.29	18.00	17.45	20.75	30.00	2.22			Pass
HT20	MCS0	2	149	5745	0.34	0.31	18.89	18.26	21.60	30.00	2.22			Pass
HT20	MCS0	2	157	5785	0.34	0.31	18.20	18.05	21.14	30.00	2.22			Pass
HT20	MCS0	2	165	5825	0.34	0.31	17.89	17.62	20.77	30.00	2.22			Pass
HT40	MCS0	2	151	5755	0.67	0.61	18.48	18.00	21.26	30.00	2.22			Pass
HT40	MCS0	2	159	5795	0.67	0.61	18.27	17.87	21.09	30.00	2.22			Pass
VHT20	MCS0	2	149	5745	0.34	0.31	18.78	18.36	21.59	30.00	2.22			Pass
VHT20	MCS0	2	157	5785	0.34	0.31	18.24	17.97	21.12	30.00	2.22			Pass
VHT20	MCS0	2	165	5825	0.34	0.31	17.83	17.67	20.76	30.00	2.22			Pass
VHT40	MCS0	2	151	5755	0.67	0.66	18.42	18.03	21.24	30.00	2.22			Pass
VHT40	MCS0	2	159	5795	0.67	0.66	18.13	17.86	21.01	30.00	2.22			Pass
VHT80	MCS0	2	155	5775	1.20	1.14	17.96	17.04	20.53	30.00	2.22			Pass

TEST RESULTS DATA
Power Spectral Density

Band IV																
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		10log (500kHz /RBW) Factor (dB)		Average Power Density (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
					0a	1b	0a	1b	0a	1b	SUM	0a	1b	0a	1b	
11a	6Mbps	2	149	5745	0.32	0.29	2.22		7.11	30.00		4.86		Pass		
11a	6Mbps	2	157	5785	0.32	0.29	2.22		6.62	30.00		4.86		Pass		
11a	6Mbps	2	165	5825	0.32	0.29	2.22		6.50	30.00		4.86		Pass		
HT20	MCS0	2	149	5745	0.34	0.31	2.22		7.19	30.00		4.86		Pass		
HT20	MCS0	2	157	5785	0.34	0.31	2.22		6.71	30.00		4.86		Pass		
HT20	MCS0	2	165	5825	0.34	0.31	2.22		6.36	30.00		4.86		Pass		
HT40	MCS0	2	151	5755	0.67	0.61	2.22		4.13	30.00		4.86		Pass		
HT40	MCS0	2	159	5795	0.67	0.61	2.22		4.17	30.00		4.86		Pass		
VHT80	MCS0	2	155	5775	1.20	1.14	2.22		1.17	30.00		4.86		Pass		

TEST RESULTS DATA
Frequency Stability

Band IV										
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1b	149	5745	5744.950	-0.050	-8.70	35	120	
11a	6Mbps	1b	149	5745	5745.000	0.000	0.00	0	120	
11a	6Mbps	1b	149	5745	5744.950	-0.050	-8.70	20	138	
11a	6Mbps	1b	149	5745	5744.950	-0.050	-8.70	20	102	
11a	6Mbps	1b	149	5745	5744.950	-0.050	-8.70	20	120	

<Ant. 0b & Ant. 1A>

TEST RESULTS DATA
6dB and 26dB EBW and 99% OBW

Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)		Pass/Fail
					0b	1a	0b	1a	0b	1a	0b	1a	
11a	6Mbps	2	149	5745	19.95	24.25	40.96	46.56	16.28	16.32	0.5	Pass	
11a	6Mbps	2	157	5785	19.45	21.35	39.04	43.20	16.28	16.28	0.5	Pass	
11a	6Mbps	2	165	5825	19.35	20.50	38.88	41.28	16.28	16.32	0.5	Pass	
HT20	MCS0	2	149	5745	19.95	23.10	47.84	49.12	17.56	17.56	0.5	Pass	
HT20	MCS0	2	157	5785	19.75	22.30	46.24	48.16	17.56	17.56	0.5	Pass	
HT20	MCS0	2	165	5825	19.80	22.15	46.72	48.80	17.56	17.60	0.5	Pass	
HT40	MCS0	2	151	5755	38.00	48.10	94.40	99.52	36.32	36.32	0.5	Pass	
HT40	MCS0	2	159	5795	38.10	46.10	96.64	97.92	36.32	36.40	0.5	Pass	
VHT80	MCS0	2	155	5775	76.20	76.56	174.72	191.52	75.20	75.68	0.5	Pass	

TEST RESULTS DATA
Average Power Table

Band IV														
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					0b	1a	0b	1a	SUM	0b	1a	0b	1a	
11a	6Mbps	2	149	5745	0.32	0.32	17.28	18.26	20.81	30.00	30.00	2.61	2.61	Pass
11a	6Mbps	2	157	5785	0.32	0.32	17.30	17.94	20.64	30.00	30.00	2.61	2.61	Pass
11a	6Mbps	2	165	5825	0.32	0.32	16.93	17.63	20.31	30.00	30.00	2.61	2.61	Pass
HT20	MCS0	2	149	5745	0.34	0.34	17.34	18.45	20.94	30.00	30.00	2.61	2.61	Pass
HT20	MCS0	2	157	5785	0.34	0.34	17.45	17.95	20.72	30.00	30.00	2.61	2.61	Pass
HT20	MCS0	2	165	5825	0.34	0.34	17.15	17.64	20.41	30.00	30.00	2.61	2.61	Pass
HT40	MCS0	2	151	5755	0.60	0.67	17.26	18.30	20.82	30.00	30.00	2.61	2.61	Pass
HT40	MCS0	2	159	5795	0.60	0.67	17.41	17.88	20.66	30.00	30.00	2.61	2.61	Pass
VHT20	MCS0	2	149	5745	0.34	0.34	17.33	18.44	20.93	30.00	30.00	2.61	2.61	Pass
VHT20	MCS0	2	157	5785	0.34	0.34	17.38	17.99	20.71	30.00	30.00	2.61	2.61	Pass
VHT20	MCS0	2	165	5825	0.34	0.34	16.97	17.76	20.39	30.00	30.00	2.61	2.61	Pass
VHT40	MCS0	2	151	5755	0.64	0.67	17.25	18.29	20.81	30.00	30.00	2.61	2.61	Pass
VHT40	MCS0	2	159	5795	0.64	0.67	17.25	17.98	20.64	30.00	30.00	2.61	2.61	Pass
VHT80	MCS0	2	155	5775	1.20	1.20	16.75	17.47	20.13	30.00	30.00	2.61	2.61	Pass

TEST RESULTS DATA
Power Spectral Density

Band IV																
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		10log (500kHz /RBW) Factor (dB)		Average Power Density (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
					0b	1a	0b	1a	0b	1a	SUM	0b	1a	0b	1a	
11a	6Mbps	2	149	5745	0.32	0.32	2.22		6.67	30.00		4.98		Pass		
11a	6Mbps	2	157	5785	0.32	0.32	2.22		5.96	30.00		4.98		Pass		
11a	6Mbps	2	165	5825	0.32	0.32	2.22		5.70	30.00		4.98		Pass		
HT20	MCS0	2	149	5745	0.34	0.34	2.22		6.04	30.00		4.98		Pass		
HT20	MCS0	2	157	5785	0.34	0.34	2.22		5.75	30.00		4.98		Pass		
HT20	MCS0	2	165	5825	0.34	0.34	2.22		5.47	30.00		4.98		Pass		
HT40	MCS0	2	151	5755	0.60	0.67	2.22		3.28	30.00		4.98		Pass		
HT40	MCS0	2	159	5795	0.60	0.67	2.22		2.92	30.00		4.98		Pass		
VHT80	MCS0	2	155	5775	1.20	1.20	2.22		3.23	30.00		4.98		Pass		

TEST RESULTS DATA
Frequency Stability

Band IV										
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1a	149	5745	5744.950	-0.050	-8.70	35	120	
11a	6Mbps	1a	149	5745	5745.000	0.000	0.00	0	120	
11a	6Mbps	1a	149	5745	5744.950	-0.050	-8.70	20	138	
11a	6Mbps	1a	149	5745	5744.950	-0.050	-8.70	20	102	
11a	6Mbps	1a	149	5745	5744.950	-0.050	-8.70	20	120	

<Ant. 0b & Ant. 1b>

TEST RESULTS DATA
6dB and 26dB EBW and 99% OBW

Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)		Pass/Fail
					0b	1b	0b	1b	0b	1b	0b	1b	
					11a	6Mbps	2	149	5745	19.30	22.80	38.88	44.32
11a	6Mbps	2	157	5785	19.60	21.05	40.48	43.36	16.28	16.32	0.5	Pass	Pass
11a	6Mbps	2	165	5825	19.20	20.90	39.36	42.72	16.28	16.32	0.5	Pass	Pass
HT20	MCS0	2	149	5745	20.15	24.70	47.84	48.64	17.56	17.56	0.5	Pass	Pass
HT20	MCS0	2	157	5785	19.85	23.25	47.04	48.80	17.56	17.56	0.5	Pass	Pass
HT20	MCS0	2	165	5825	19.95	21.65	46.56	47.84	17.56	17.56	0.5	Pass	Pass
HT40	MCS0	2	151	5755	37.80	48.60	96.96	97.28	36.32	36.32	0.5	Pass	Pass
HT40	MCS0	2	159	5795	37.90	48.80	93.76	102.08	36.32	36.32	0.5	Pass	Pass
VHT80	MCS0	2	155	5775	76.20	76.56	183.84	196.80	75.20	75.20	0.5	Pass	Pass

TEST RESULTS DATA
Average Power Table

Band IV														
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					0b	1b	0b	1b	SUM	0b	1b	0b	1b	
11a	6Mbps	2	149	5745	0.29	0.32	17.24	18.23	20.78	30.00	30.00	2.22	2.22	Pass
11a	6Mbps	2	157	5785	0.29	0.32	17.33	18.10	20.74	30.00	30.00	2.22	2.22	Pass
11a	6Mbps	2	165	5825	0.29	0.32	17.00	17.73	20.39	30.00	30.00	2.22	2.22	Pass
HT20	MCS0	2	149	5745	0.35	0.34	17.40	18.45	20.97	30.00	30.00	2.22	2.22	Pass
HT20	MCS0	2	157	5785	0.35	0.34	17.41	18.05	20.75	30.00	30.00	2.22	2.22	Pass
HT20	MCS0	2	165	5825	0.35	0.34	17.06	17.75	20.43	30.00	30.00	2.22	2.22	Pass
HT40	MCS0	2	151	5755	0.60	0.67	17.12	18.08	20.64	30.00	30.00	2.22	2.22	Pass
HT40	MCS0	2	159	5795	0.60	0.67	17.21	17.88	20.57	30.00	30.00	2.22	2.22	Pass
VHT20	MCS0	2	149	5745	0.31	0.31	17.27	18.31	20.83	30.00	30.00	2.22	2.22	Pass
VHT20	MCS0	2	157	5785	0.31	0.31	17.23	18.11	20.71	30.00	30.00	2.22	2.22	Pass
VHT20	MCS0	2	165	5825	0.31	0.31	16.88	17.86	20.41	30.00	30.00	2.22	2.22	Pass
VHT40	MCS0	2	151	5755	0.60	0.84	16.94	18.18	20.61	30.00	30.00	2.22	2.22	Pass
VHT40	MCS0	2	159	5795	0.60	0.84	17.13	17.94	20.56	30.00	30.00	2.22	2.22	Pass
VHT80	MCS0	2	155	5775	1.20	1.14	16.93	17.54	20.26	30.00	30.00	2.22	2.22	Pass

TEST RESULTS DATA
Power Spectral Density

Band IV																
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		10log (500kHz /RBW) Factor (dB)		Average Power Density (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
					0b	1b	0b	1b	0b	1b	SUM	0b	1b	0b	1b	
11a	6Mbps	2	149	5745	0.29	0.32	2.22		6.61	30.00		4.77		Pass		
11a	6Mbps	2	157	5785	0.29	0.32	2.22		6.10	30.00		4.77		Pass		
11a	6Mbps	2	165	5825	0.29	0.32	2.22		5.87	30.00		4.77		Pass		
HT20	MCS0	2	149	5745	0.35	0.34	2.22		6.32	30.00		4.77		Pass		
HT20	MCS0	2	157	5785	0.35	0.34	2.22		5.82	30.00		4.77		Pass		
HT20	MCS0	2	165	5825	0.35	0.34	2.22		5.66	30.00		4.77		Pass		
HT40	MCS0	2	151	5755	0.60	0.67	2.22		3.37	30.00		4.77		Pass		
HT40	MCS0	2	159	5795	0.60	0.67	2.22		2.95	30.00		4.77		Pass		
VHT80	MCS0	2	155	5775	1.20	1.14	2.22		0.01	30.00		4.77		Pass		

TEST RESULTS DATA
Frequency Stability

Band IV										
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	0b	149	5745	5744.950	-0.050	-8.70	35	120	
11a	6Mbps	0b	149	5745	5745.000	0.000	0.00	0	120	
11a	6Mbps	0b	149	5745	5744.950	-0.050	-8.70	20	138	
11a	6Mbps	0b	149	5745	5744.950	-0.050	-8.70	20	102	
11a	6Mbps	0b	149	5745	5744.950	-0.050	-8.70	20	120	



Appendix B. Radiated Spurious Emission

Test Engineer :	Karl Hou, Nick Yu, Peter Chiu, and Rover Lee	Temperature :	22~25°C
		Relative Humidity :	53~56%

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz	0a+1a	5641.2	52.85	-15.35	68.2	39.26	32.8	11.79	31	203	63	P	H
	*	5696.6	70.13	-32.56	102.69	56.37	32.95	11.82	31.01	203	63	P	H
	*	5719.2	78.66	-31.92	110.58	64.83	33.01	11.84	31.02	203	63	P	H
	*	5724.4	85.6	-35.23	120.83	71.75	33.03	11.84	31.02	203	63	P	H
	*	5745	115.5	-	-	101.58	33.09	11.86	31.03	203	63	P	H
	*	5745	107.27	-	-	93.35	33.09	11.86	31.03	203	63	A	H
	*												H
	*												H
	*												
	5643	53.59	-14.61	68.2	40	32.8	11.79	31	297	57	P	V	
	5695.4	72.33	-29.48	101.81	58.57	32.95	11.82	31.01	297	57	P	V	
	5720	79.83	-30.97	110.8	65.99	33.02	11.84	31.02	297	57	P	V	
	5724.6	86.75	-34.54	121.29	72.9	33.03	11.84	31.02	297	57	P	V	



WIFI Ant. 0a+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak (P/A)	Avg. (H/V)
802.11a CH 157 5785MHz		5624.4	53.37	-14.83	68.2	39.82	32.75	11.79	30.99	273	52	P	H
		5697.4	55.35	-47.93	103.28	41.59	32.95	11.82	31.01	273	52	P	H
		5718	57.31	-52.93	110.24	43.48	33.01	11.84	31.02	273	52	P	H
		5721.6	60.07	-54.38	114.45	46.23	33.02	11.84	31.02	273	52	P	H
	*	5785	115.77	-	-	101.74	33.2	11.88	31.05	273	52	P	H
	*	5785	108.51	-	-	94.48	33.2	11.88	31.05	273	52	A	H
		5852.2	60.3	-56.88	117.18	45.94	33.39	12.03	31.06	273	52	P	H
		5855.6	60.43	-50.2	110.63	46.06	33.4	12.03	31.06	273	52	P	H
		5877.2	54.32	-49.25	103.57	39.76	33.46	12.17	31.07	273	52	P	H
		5945	53.08	-15.12	68.2	38.07	33.65	12.45	31.09	273	52	P	H
													H
													H
		5650	52.93	-15.27	68.2	39.32	32.82	11.79	31	266	73	P	V
		5699.6	54.3	-50.61	104.91	40.53	32.96	11.82	31.01	266	73	P	V
		5718.8	57.84	-52.62	110.46	44.01	33.01	11.84	31.02	266	73	P	V
		5724.2	64.68	-55.7	120.38	50.83	33.03	11.84	31.02	266	73	P	V
	*	5785	115.67	-	-	101.64	33.2	11.88	31.05	266	73	P	V
	*	5785	107.94	-	-	93.91	33.2	11.88	31.05	266	73	A	V
		5853.4	60.41	-54.04	114.45	46.05	33.39	12.03	31.06	266	73	P	V
		5856.8	59.08	-51.22	110.3	44.71	33.4	12.03	31.06	266	73	P	V
		5882.8	55.82	-43.59	99.41	41.25	33.47	12.17	31.07	266	73	P	V
		5937.4	53.98	-14.22	68.2	39.14	33.62	12.31	31.09	266	73	P	V
													V
													V



WIFI Ant. 0a+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 165 5825MHz	*	5825	116.32	-	-	102.03	33.31	12.03	31.05	271	49	P	H
	*	5825	108.74	-	-	94.45	33.31	12.03	31.05	271	49	A	H
		5853.6	77.47	-36.52	113.99	63.11	33.39	12.03	31.06	271	49	P	H
		5858	74.8	-35.16	109.96	60.44	33.4	12.03	31.07	271	49	P	H
		5876.2	66.16	-38.15	104.31	51.61	33.45	12.17	31.07	271	49	P	H
		5947.8	53.75	-14.45	68.2	38.74	33.65	12.45	31.09	271	49	P	H
													H
													H
	*	5825	115.81	-	-	101.52	33.31	12.03	31.05	270	96	P	V
	*	5825	107.96	-	-	93.67	33.31	12.03	31.05	270	96	A	V
		5854	74.84	-38.24	113.08	60.48	33.39	12.03	31.06	270	96	P	V
		5864.4	74.34	-33.83	108.17	59.82	33.42	12.17	31.07	270	96	P	V
		5875	66.73	-38.47	105.2	52.18	33.45	12.17	31.07	270	96	P	V
		5926.8	53.25	-14.95	68.2	38.43	33.6	12.31	31.09	270	96	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 0a+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		11490	62.03	-11.97	74	61.21	40.2	18.4	57.78	289	353	P	H
		11490	52.29	-1.71	54	51.47	40.2	18.4	57.78	289	353	A	H
		17235	53.06	-15.14	68.2	45.14	41.92	23.14	57.14	100	0	P	H
													H
		11490	63.01	-10.99	74	62.19	40.2	18.4	57.78	394	22	P	V
		11490	52.44	-1.56	54	51.62	40.2	18.4	57.78	394	22	A	V
		17235	52.39	-15.81	68.2	44.47	41.92	23.14	57.14	100	0	P	V
													V
802.11a CH 157 5785MHz		11570	61.84	-12.16	74	61.09	40.06	18.49	57.8	293	359	P	H
		11570	52.1	-1.9	54	51.35	40.06	18.49	57.8	293	359	A	H
		17355	50.23	-17.97	68.2	42.36	42.18	23.25	57.56	100	0	P	H
													H
		11570	63.12	-10.88	74	62.37	40.06	18.49	57.8	380	20	P	V
		11570	53.22	-0.78	54	52.47	40.06	18.49	57.8	380	20	A	V
		17355	50.35	-17.85	68.2	42.48	42.18	23.25	57.56	100	0	P	V
													V
802.11a CH 165 5825MHz		11650	61.75	-12.25	74	61.07	39.9	18.58	57.8	289	358	P	H
		11650	51.65	-2.35	54	50.97	39.9	18.58	57.8	289	358	A	H
		17475	49.64	-18.56	68.2	41.82	42.44	23.36	57.98	100	0	P	H
													H
		11650	63.61	-10.39	74	62.93	39.9	18.58	57.8	393	18	P	V
		11650	53.34	-0.66	54	52.66	39.9	18.58	57.8	393	18	A	V
		17475	49.91	-18.29	68.2	42.09	42.44	23.36	57.98	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 0a+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 149 5745MHz		5648.2	53.53	-14.67	68.2	39.93	32.81	11.79	31	266	56	P	H
		5695.8	71.27	-30.83	102.1	57.51	32.95	11.82	31.01	266	56	P	H
		5716	80.19	-29.49	109.68	66.37	33	11.84	31.02	266	56	P	H
		5723.8	86.92	-32.54	119.46	73.07	33.03	11.84	31.02	266	56	P	H
	*	5745	115.85	-	-	101.93	33.09	11.86	31.03	266	56	P	H
	*	5745	107.53	-	-	93.61	33.09	11.86	31.03	266	56	A	H
													H
													H
		5634	53.41	-14.79	68.2	39.84	32.78	11.79	31	298	57	P	V
		5699.2	71.38	-33.23	104.61	57.61	32.96	11.82	31.01	298	57	P	V
		5719.6	80.37	-30.32	110.69	66.54	33.01	11.84	31.02	298	57	P	V
		5724.4	88.77	-32.06	120.83	74.92	33.03	11.84	31.02	298	57	P	V
	*	5745	116.36	-	-	102.44	33.09	11.86	31.03	298	57	P	V
	*	5745	107.56	-	-	93.64	33.09	11.86	31.03	298	57	A	V
													V
													V



WIFI Ant. 0a+1a	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak (P/A)	Avg. (H/V)
802.11n		5623.8	53.24	-14.96	68.2	39.69	32.75	11.79	30.99	205	58	P	H
		5700	55.72	-49.48	105.2	41.95	32.96	11.82	31.01	205	58	P	H
		5719.4	61.52	-49.11	110.63	47.69	33.01	11.84	31.02	205	58	P	H
		5724.6	63.65	-57.64	121.29	49.8	33.03	11.84	31.02	205	58	P	H
	*	5785	115.09	-	-	101.06	33.2	11.88	31.05	205	58	P	H
	*	5785	107.55	-	-	93.52	33.2	11.88	31.05	205	58	A	H
		5850.6	66.84	-53.99	120.83	52.49	33.38	12.03	31.06	205	58	P	H
		5857.4	63.5	-46.63	110.13	49.13	33.4	12.03	31.06	205	58	P	H
		5875.6	59.8	-44.95	104.75	45.25	33.45	12.17	31.07	205	58	P	H
		5948.4	53.79	-14.41	68.2	38.77	33.66	12.45	31.09	205	58	P	H
													H
	HT20												H
	CH 157												
5785MHz		5633.4	54.81	-13.39	68.2	41.25	32.77	11.79	31	288	83	P	V
		5689.4	55.69	-41.69	97.38	41.95	32.93	11.82	31.01	288	83	P	V
		5716.8	61.59	-48.32	109.91	47.76	33.01	11.84	31.02	288	83	P	V
		5724.2	65.83	-54.55	120.38	51.98	33.03	11.84	31.02	288	83	P	V
	*	5785	116.04	-	-	102.01	33.2	11.88	31.05	288	83	P	V
	*	5785	108.61	-	-	94.58	33.2	11.88	31.05	288	83	A	V
		5851.8	65.63	-52.47	118.1	51.27	33.39	12.03	31.06	288	83	P	V
		5859.4	66.02	-43.55	109.57	51.65	33.41	12.03	31.07	288	83	P	V
		5875.2	57.16	-47.89	105.05	42.61	33.45	12.17	31.07	288	83	P	V
		5932.2	53.73	-14.47	68.2	38.9	33.61	12.31	31.09	288	83	P	V
													V
													V



WIFI Ant. 0a+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n	*	5825	118.53	-	-	104.24	33.31	12.03	31.05	269	54	P	H
	*	5825	110.38	-	-	96.09	33.31	12.03	31.05	269	54	A	H
		5850.8	81.09	-39.29	120.38	66.74	33.38	12.03	31.06	269	54	P	H
		5855.8	78.37	-32.21	110.58	64	33.4	12.03	31.06	269	54	P	H
		5875.8	71.58	-33.03	104.61	57.03	33.45	12.17	31.07	269	54	P	H
		5930.6	55.44	-12.76	68.2	40.61	33.61	12.31	31.09	269	54	P	H
													H
													H
HT20													
CH 165	*	5825	116.84	-	-	102.55	33.31	12.03	31.05	302	56	P	V
5825MHz	*	5825	108.87	-	-	94.58	33.31	12.03	31.05	302	56	A	V
		5850	81.04	-41.16	122.2	66.69	33.38	12.03	31.06	302	56	P	V
		5857	78.24	-32	110.24	63.87	33.4	12.03	31.06	302	56	P	V
		5879.6	69.89	-31.89	101.78	55.33	33.46	12.17	31.07	302	56	P	V
		5935.2	55.62	-12.58	68.2	40.78	33.62	12.31	31.09	302	56	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 0a+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 149 5745MHz		11490	61.85	-12.15	74	61.03	40.2	18.4	57.78	289	353	P	H
		11490	51.55	-2.45	54	50.73	40.2	18.4	57.78	289	353	A	H
		17235	50.95	-17.25	68.2	43.03	41.92	23.14	57.14	100	0	P	H
													H
		11490	62.68	-11.32	74	61.86	40.2	18.4	57.78	386	17	P	V
		11490	52.56	-1.44	54	51.74	40.2	18.4	57.78	386	17	A	V
		17235	50.56	-17.64	68.2	42.64	41.92	23.14	57.14	100	0	P	V
													V
802.11n HT20 CH 157 5785MHz		11570	60.98	-13.02	74	60.23	40.06	18.49	57.8	362	351	P	H
		11570	51.37	-2.63	54	50.62	40.06	18.49	57.8	362	351	A	H
		17355	50.92	-17.28	68.2	43.05	42.18	23.25	57.56	100	0	P	H
													H
		11570	62.6	-11.4	74	61.85	40.06	18.49	57.8	398	19	P	V
		11570	53.25	-0.75	54	52.5	40.06	18.49	57.8	398	19	A	V
		17355	51.85	-16.35	68.2	43.98	42.18	23.25	57.56	100	0	P	V
													V
802.11n HT20 CH 165 5825MHz		11650	62.97	-11.03	74	62.29	39.9	18.58	57.8	288	354	P	H
		11650	53.01	-0.99	54	52.33	39.9	18.58	57.8	288	354	A	H
		17475	51.87	-16.33	68.2	44.05	42.44	23.36	57.98	100	0	P	H
													H
		11650	63.25	-10.75	74	62.57	39.9	18.58	57.8	384	20	P	V
		11650	53.37	-0.63	54	52.69	39.9	18.58	57.8	384	20	A	V
		17475	52.15	-16.05	68.2	44.33	42.44	23.36	57.98	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 0a+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 151 5755MHz		5643.8	62	-6.2	68.2	48.41	32.8	11.79	31	274	53	P	H
		5699	77.54	-26.92	104.46	63.77	32.96	11.82	31.01	274	53	P	H
		5718.4	90.54	-19.81	110.35	76.71	33.01	11.84	31.02	274	53	P	H
		5723.8	91.8	-27.66	119.46	77.95	33.03	11.84	31.02	274	53	P	H
	*	5755	113.33	-	-	99.39	33.11	11.86	31.03	274	53	P	H
	*	5755	105.86	-	-	91.92	33.11	11.86	31.03	274	53	A	H
		5852.8	68.64	-47.18	115.82	54.28	33.39	12.03	31.06	274	53	P	H
		5856.4	66.44	-43.97	110.41	52.07	33.4	12.03	31.06	274	53	P	H
		5876	66.24	-38.22	104.46	51.69	33.45	12.17	31.07	274	53	P	H
		5929.8	57.13	-11.07	68.2	42.31	33.6	12.31	31.09	274	53	P	H
													H
													H
		5645	61.89	-6.31	68.2	48.29	32.81	11.79	31	273	75	P	V
		5698	76.28	-27.45	103.73	62.52	32.95	11.82	31.01	273	75	P	V
		5719	89.17	-21.35	110.52	75.34	33.01	11.84	31.02	273	75	P	V
		5724.2	91.21	-29.17	120.38	77.36	33.03	11.84	31.02	273	75	P	V
	*	5755	113.37	-	-	99.43	33.11	11.86	31.03	273	75	P	V
	*	5755	105.71	-	-	91.77	33.11	11.86	31.03	273	75	A	V
		5852.6	68.59	-47.68	116.27	54.23	33.39	12.03	31.06	273	75	P	V
		5857.6	67.52	-42.55	110.07	53.15	33.4	12.03	31.06	273	75	P	V
		5879.2	62.98	-39.1	102.08	48.42	33.46	12.17	31.07	273	75	P	V
		5927.2	54.84	-13.36	68.2	40.02	33.6	12.31	31.09	273	75	P	V
													V
													V



WIFI Ant. 0a+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak (P/A)	Avg. (H/V)
		5649.4	56.74	-11.46	68.2	43.13	32.82	11.79	31	273	47	P	H
		5696.2	66.24	-36.16	102.4	52.48	32.95	11.82	31.01	273	47	P	H
		5716	70.22	-39.46	109.68	56.4	33	11.84	31.02	273	47	P	H
		5723	72.76	-44.88	117.64	58.92	33.02	11.84	31.02	273	47	P	H
	*	5795	114.04	-	-	99.98	33.23	11.88	31.05	273	47	P	H
	*	5795	106.27	-	-	92.21	33.23	11.88	31.05	273	47	A	H
		5851	79.36	-40.56	119.92	65.01	33.38	12.03	31.06	273	47	P	H
		5864	77.96	-30.32	108.28	63.44	33.42	12.17	31.07	273	47	P	H
		5876	70.54	-33.92	104.46	55.99	33.45	12.17	31.07	273	47	P	H
		5927.4	61.33	-6.87	68.2	46.51	33.6	12.31	31.09	273	47	P	H
802.11n													H
HT40													H
CH 159		5645.4	56.27	-11.93	68.2	42.67	32.81	11.79	31	255	87	P	V
5795MHz		5697.4	65.91	-37.37	103.28	52.15	32.95	11.82	31.01	255	87	P	V
		5719.2	69.82	-40.76	110.58	55.99	33.01	11.84	31.02	255	87	P	V
		5721.8	70.76	-44.14	114.9	56.92	33.02	11.84	31.02	255	87	P	V
	*	5795	113.69	-	-	99.63	33.23	11.88	31.05	255	87	P	V
	*	5795	106.1	-	-	92.04	33.23	11.88	31.05	255	87	A	V
		5852.6	80.38	-35.89	116.27	66.02	33.39	12.03	31.06	255	87	P	V
		5859.6	75.65	-33.86	109.51	61.28	33.41	12.03	31.07	255	87	P	V
		5876.6	69.01	-35	104.01	54.46	33.45	12.17	31.07	255	87	P	V
		5947.2	59.94	-8.26	68.2	44.93	33.65	12.45	31.09	255	87	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 0a+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 151 5755MHz		11510	58.17	-15.83	74	57.34	40.18	18.45	57.8	366	356	P	H
		11510	48.81	-5.19	54	47.98	40.18	18.45	57.8	366	356	A	H
		17265	49.37	-18.83	68.2	41.48	41.98	23.17	57.26	100	0	P	H
													H
		11510	58.57	-15.43	74	57.74	40.18	18.45	57.8	390	27	P	V
		11510	49.11	-4.89	54	48.28	40.18	18.45	57.8	390	27	A	V
		17265	51.5	-16.7	68.2	43.61	41.98	23.17	57.26	100	0	P	V
													V
802.11n HT40 CH 159 5795MHz		11590	59.62	-14.38	74	58.86	40.02	18.54	57.8	357	359	P	H
		11590	49.69	-4.31	54	48.93	40.02	18.54	57.8	357	359	A	H
		17385	52.4	-15.8	68.2	44.54	42.25	23.29	57.68	100	0	P	H
													H
		11590	58.58	-15.42	74	57.82	40.02	18.54	57.8	390	360	P	V
		11590	48.29	-5.71	54	47.53	40.02	18.54	57.8	390	360	A	V
		17385	52.94	-15.26	68.2	45.08	42.25	23.29	57.68	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 0a+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5647.8	66.33	-1.87	68.2	52.73	32.81	11.79	31	274	55	P	H
		5697.2	76.46	-26.68	103.14	62.7	32.95	11.82	31.01	274	55	P	H
		5718.6	80.21	-30.2	110.41	66.38	33.01	11.84	31.02	274	55	P	H
		5721	78.95	-34.13	113.08	65.11	33.02	11.84	31.02	274	55	P	H
802.11ac VHT80 CH 155 5775MHz	*	5775	108.22	-	-	94.23	33.17	11.86	31.04	274	55	P	H
	*	5775	101.72	-	-	87.73	33.17	11.86	31.04	274	55	A	H
		5851	78.05	-41.87	119.92	63.7	33.38	12.03	31.06	274	55	P	H
		5861.2	79.24	-29.82	109.06	64.73	33.41	12.17	31.07	274	55	P	H
		5875.4	75.8	-29.1	104.9	61.25	33.45	12.17	31.07	274	55	P	H
		5933.4	64.81	-3.39	68.2	49.98	33.61	12.31	31.09	274	55	P	H
													H
													H
Remark	1.	No other spurious found.											
	2.	All results are PASS against Peak and Average limit line.											



Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 0a+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.
802.11ac		11550	54.27	-19.73	74	53.48	40.1	18.49	57.8	375	358	P	H
		11550	47.41	-6.59	54	46.62	40.1	18.49	57.8	375	358	A	H
		17325	53.22	-14.98	68.2	45.33	42.12	23.21	57.44	100	0	P	H
VHT80													H
5775MHz	CH 155	11550	55.15	-18.85	74	54.36	40.1	18.49	57.8	379	23	P	V
		11550	48.51	-5.49	54	47.72	40.1	18.49	57.8	379	23	A	V
		17325	54.48	-13.72	68.2	46.59	42.12	23.21	57.44	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

5GHz WIFI 802.11n HT20 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
0a+1a		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
5GHz 802.11n HT20 LF		30	22.97	-17.03	40	28.55	26.1	0.78	32.46	-	-	P	H
		108.57	28.9	-14.6	43.5	42.69	17.21	1.43	32.43	-	-	P	H
		221.97	25.16	-20.84	46	39.34	16.36	1.83	32.37	-	-	P	H
		578.6	26.51	-19.49	46	30.53	25.08	3.3	32.4	-	-	P	H
		791.4	30.39	-15.61	46	30.64	27.83	4.14	32.22	-	-	P	H
		942.6	32.84	-13.16	46	29.46	29.82	4.75	31.19	100	0	P	H
													H
													H
													H
													H
													H
													H
													H
													H
Remark	1.	No other spurious found.											
	2.	All results are PASS against limit line.											

**Note symbol**

*	Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is over limit line.
P/A	Peak or Average
H/V	Horizontal or Vertical



A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
0a+1a		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Level(dB μ V/m) =

$$\text{Antenna Factor(dB/m)} + \text{Cable Loss(dB)} + \text{Read Level(dB μ V)} - \text{Preamp Factor(dB)}$$

2. Over Limit(dB) = Level(dB μ V/m) – Limit Line(dB μ V/m)

For Peak Limit @ 2390MHz:

1. Level(dB μ V/m)

$$= \text{Antenna Factor(dB/m)} + \text{Cable Loss(dB)} + \text{Read Level(dB μ V)} - \text{Preamp Factor(dB)}$$

$$= 32.22(\text{dB/m}) + 4.58(\text{dB}) + 54.51(\text{dB μ V}) - 35.86 (\text{dB})$$

$$= 55.45 (\text{dB μ V/m})$$

2. Over Limit(dB)

$$= \text{Level(dB μ V/m)} - \text{Limit Line(dB μ V/m)}$$

$$= 55.45(\text{dB μ V/m}) - 74(\text{dB μ V/m})$$

$$= -18.55(\text{dB})$$

For Average Limit @ 2390MHz:

1. Level(dB μ V/m)

$$= \text{Antenna Factor(dB/m)} + \text{Cable Loss(dB)} + \text{Read Level(dB μ V)} - \text{Preamp Factor(dB)}$$

$$= 32.22(\text{dB/m}) + 4.58(\text{dB}) + 42.6(\text{dB μ V}) - 35.86 (\text{dB})$$

$$= 43.54 (\text{dB μ V/m})$$

2. Over Limit(dB)

$$= \text{Level(dB μ V/m)} - \text{Limit Line(dB μ V/m)}$$

$$= 43.54(\text{dB μ V/m}) - 54(\text{dB μ V/m})$$

$$= -10.46(\text{dB})$$

Both peak and average measured complies with the limit line, so test result is “PASS”.



Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
0a+1b		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		5606.6	53.53	-14.67	68.2	40.05	32.7	11.77	30.99	278	55	P	H
		5697.6	70.75	-32.68	103.43	56.99	32.95	11.82	31.01	278	55	P	H
		5719.6	79.34	-31.35	110.69	65.51	33.01	11.84	31.02	278	55	P	H
		5724.4	88.44	-32.39	120.83	74.59	33.03	11.84	31.02	278	55	P	H
	*	5745	116.71	-	-	102.79	33.09	11.86	31.03	278	55	P	H
	*	5745	108.82	-	-	94.9	33.09	11.86	31.03	278	55	A	H
													H
													H
		5643.6	53.67	-14.53	68.2	40.08	32.8	11.79	31	269	305	P	V
		5698	72.31	-31.42	103.73	58.55	32.95	11.82	31.01	269	305	P	V
		5718.4	78.27	-32.08	110.35	64.44	33.01	11.84	31.02	269	305	P	V
		5725	86.03	-36.17	122.2	72.18	33.03	11.84	31.02	269	305	P	V
	*	5745	116.03	-	-	102.11	33.09	11.86	31.03	269	305	P	V
	*	5745	108.02	-	-	94.1	33.09	11.86	31.03	269	305	A	V
													V
													V



WIFI Ant. 0a+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak (P/A)	Avg. (H/V)
802.11a CH 157 5785MHz		5628.6	52.94	-15.26	68.2	39.39	32.76	11.79	31	283	53	P	H
		5699	57.02	-47.44	104.46	43.25	32.96	11.82	31.01	283	53	P	H
		5710	59.66	-48.34	108	45.85	32.99	11.84	31.02	283	53	P	H
		5722.8	63.32	-53.86	117.18	49.48	33.02	11.84	31.02	283	53	P	H
	*	5785	116.89	-	-	102.86	33.2	11.88	31.05	283	53	P	H
	*	5785	109.15	-	-	95.12	33.2	11.88	31.05	283	53	A	H
		5852.4	62.65	-54.08	116.73	48.29	33.39	12.03	31.06	283	53	P	H
		5860	60.32	-49.08	109.4	45.95	33.41	12.03	31.07	283	53	P	H
		5875.4	54.66	-50.24	104.9	40.11	33.45	12.17	31.07	283	53	P	H
		5936.8	52.37	-15.83	68.2	37.53	33.62	12.31	31.09	283	53	P	H
													H
													H
		5625.2	53.82	-14.38	68.2	40.27	32.75	11.79	30.99	291	88	P	V
		5693.8	55.57	-45.06	100.63	41.82	32.94	11.82	31.01	291	88	P	V
		5719.6	57.32	-53.37	110.69	43.49	33.01	11.84	31.02	291	88	P	V
		5724.2	61.23	-59.15	120.38	47.38	33.03	11.84	31.02	291	88	P	V
	*	5785	116.72	-	-	102.69	33.2	11.88	31.05	291	88	P	V
	*	5785	109.1	-	-	95.07	33.2	11.88	31.05	291	88	A	V
		5854	61.35	-51.73	113.08	46.99	33.39	12.03	31.06	291	88	P	V
		5855.2	60.95	-49.79	110.74	46.59	33.39	12.03	31.06	291	88	P	V
		5878	56.02	-46.95	102.97	41.46	33.46	12.17	31.07	291	88	P	V
		5948.6	52.82	-15.38	68.2	37.8	33.66	12.45	31.09	291	88	P	V
													V
													V



WIFI Ant. 0a+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
	*	5825	116.88	-	-	102.59	33.31	12.03	31.05	397	47	P	H
	*	5825	109.26	-	-	94.97	33.31	12.03	31.05	397	47	A	H
		5852	79.13	-38.51	117.64	64.77	33.39	12.03	31.06	397	47	P	H
		5856	76.83	-33.69	110.52	62.46	33.4	12.03	31.06	397	47	P	H
		5877.2	68.34	-35.23	103.57	53.78	33.46	12.17	31.07	397	47	P	H
		5933.6	53.49	-14.71	68.2	38.66	33.61	12.31	31.09	397	47	P	H
													H
													H
802.11a													
CH 165	*	5825	116.39	-	-	102.1	33.31	12.03	31.05	303	86	P	V
5825MHz	*	5825	108.37	-	-	94.08	33.31	12.03	31.05	303	86	A	V
		5853	77.59	-37.77	115.36	63.23	33.39	12.03	31.06	303	86	P	V
		5863.6	75.74	-32.65	108.39	61.22	33.42	12.17	31.07	303	86	P	V
		5879.2	70.57	-31.51	102.08	56.01	33.46	12.17	31.07	303	86	P	V
		5930.8	53.1	-15.1	68.2	38.27	33.61	12.31	31.09	303	86	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 0a+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		11490	62.13	-11.87	74	61.31	40.2	18.4	57.78	371	0	P	H
		11490	51.95	-2.05	54	51.13	40.2	18.4	57.78	371	0	A	H
		17235	51.89	-16.31	68.2	43.97	41.92	23.14	57.14	100	0	P	H
													H
		11490	62.86	-11.14	74	62.04	40.2	18.4	57.78	350	27	P	V
		11490	52.68	-1.32	54	51.86	40.2	18.4	57.78	350	27	A	V
		17235	54.67	-13.53	68.2	46.75	41.92	23.14	57.14	100	0	P	V
													V
802.11a CH 157 5785MHz		11570	62.66	-11.34	74	61.91	40.06	18.49	57.8	357	359	P	H
		11570	52.45	-1.55	54	51.7	40.06	18.49	57.8	357	359	A	H
		17355	51.58	-16.62	68.2	43.71	42.18	23.25	57.56	100	0	P	H
													H
		11570	63.84	-10.16	74	63.09	40.06	18.49	57.8	371	23	P	V
		11570	53.25	-0.75	54	52.5	40.06	18.49	57.8	371	23	A	V
		17355	54	-14.2	68.2	46.13	42.18	23.25	57.56	100	0	P	V
													V
802.11a CH 165 5825MHz		11650	62.03	-11.97	74	61.35	39.9	18.58	57.8	363	358	P	H
		11650	52.01	-1.99	54	51.33	39.9	18.58	57.8	363	358	A	H
		17475	50.99	-17.21	68.2	43.17	42.44	23.36	57.98	100	0	P	H
													H
		11650	64.04	-9.96	74	63.36	39.9	18.58	57.8	400	25	P	V
		11650	53.43	-0.57	54	52.75	39.9	18.58	57.8	400	25	A	V
		17475	52.24	-15.96	68.2	44.42	42.44	23.36	57.98	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 0a+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 149 5745MHz		5644	53.65	-14.55	68.2	40.06	32.8	11.79	31	280	55	P	H
		5699.8	72.01	-33.04	105.05	58.24	32.96	11.82	31.01	280	55	P	H
		5720	80.86	-29.94	110.8	67.02	33.02	11.84	31.02	280	55	P	H
		5724	92.54	-27.38	119.92	78.69	33.03	11.84	31.02	280	55	P	H
	*	5745	115.99	-	-	102.07	33.09	11.86	31.03	280	55	P	H
	*	5745	108.26	-	-	94.34	33.09	11.86	31.03	280	55	A	H
													H
													H
		5624.8	53.34	-14.86	68.2	39.79	32.75	11.79	30.99	294	89	P	V
		5699.2	73.23	-31.38	104.61	59.46	32.96	11.82	31.01	294	89	P	V
		5719.4	79.93	-30.7	110.63	66.1	33.01	11.84	31.02	294	89	P	V
		5724.2	89.96	-30.42	120.38	76.11	33.03	11.84	31.02	294	89	P	V
	*	5745	115.87	-	-	101.95	33.09	11.86	31.03	294	89	P	V
	*	5745	108.11	-	-	94.19	33.09	11.86	31.03	294	89	A	V
													V
													V



WIFI Ant. 0a+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak (P/A)	Avg. (H/V)
802.11n		5640.2	52.69	-15.51	68.2	39.11	32.79	11.79	31	278	55	P	H
		5698	56.04	-47.69	103.73	42.28	32.95	11.82	31.01	278	55	P	H
		5719.6	63.65	-47.04	110.69	49.82	33.01	11.84	31.02	278	55	P	H
		5725	67.29	-54.91	122.2	53.44	33.03	11.84	31.02	278	55	P	H
	*	5785	116.24	-	-	102.21	33.2	11.88	31.05	278	55	P	H
	*	5785	108.59	-	-	94.56	33.2	11.88	31.05	278	55	A	H
		5850	68.64	-53.56	122.2	54.29	33.38	12.03	31.06	278	55	P	H
		5857.8	63.75	-46.26	110.01	49.39	33.4	12.03	31.07	278	55	P	H
		5876	59.14	-45.32	104.46	44.59	33.45	12.17	31.07	278	55	P	H
		5941.2	52.68	-15.52	68.2	37.68	33.64	12.45	31.09	278	55	P	H
													H
	HT20												H
	CH 157												
5785MHz		5628.6	53.68	-14.52	68.2	40.13	32.76	11.79	31	292	90	P	V
		5694.8	54.72	-46.65	101.37	40.96	32.95	11.82	31.01	292	90	P	V
		5719.2	61.09	-49.49	110.58	47.26	33.01	11.84	31.02	292	90	P	V
		5722	64.55	-50.81	115.36	50.71	33.02	11.84	31.02	292	90	P	V
	*	5785	115.79	-	-	101.76	33.2	11.88	31.05	292	90	P	V
	*	5785	108.33	-	-	94.3	33.2	11.88	31.05	292	90	A	V
		5851.8	64.16	-53.94	118.1	49.8	33.39	12.03	31.06	292	90	P	V
		5856.4	64.89	-45.52	110.41	50.52	33.4	12.03	31.06	292	90	P	V
		5876.2	58.03	-46.28	104.31	43.48	33.45	12.17	31.07	292	90	P	V
		5934	54.02	-14.18	68.2	39.18	33.62	12.31	31.09	292	90	P	V
													V
													V



WIFI Ant. 0a+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n	*	5825	116.45	-	-	102.16	33.31	12.03	31.05	280	51	P	H
	*	5825	108.56	-	-	94.27	33.31	12.03	31.05	280	51	A	H
		5850	81.32	-40.88	122.2	66.97	33.38	12.03	31.06	280	51	P	H
		5861	77.54	-31.58	109.12	63.03	33.41	12.17	31.07	280	51	P	H
		5876.2	70.93	-33.38	104.31	56.38	33.45	12.17	31.07	280	51	P	H
		5926.6	55.83	-12.37	68.2	41.02	33.59	12.31	31.09	280	51	P	H
													H
													H
HT20													
CH 165	*	5825	116.06	-	-	101.77	33.31	12.03	31.05	286	91	P	V
5825MHz	*	5825	108.66	-	-	94.37	33.31	12.03	31.05	286	91	A	V
		5850.8	79.69	-40.69	120.38	65.34	33.38	12.03	31.06	286	91	P	V
		5858.6	77.6	-32.19	109.79	63.24	33.4	12.03	31.07	286	91	P	V
		5876.4	69.35	-34.81	104.16	54.8	33.45	12.17	31.07	286	91	P	V
		5925	56.21	-11.99	68.2	41.4	33.59	12.31	31.09	286	91	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 0a+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 149 5745MHz		11490	61.93	-12.07	74	61.11	40.2	18.4	57.78	357	356	P	H
		11490	51.08	-2.92	54	50.26	40.2	18.4	57.78	357	356	A	H
		17235	50.92	-17.28	68.2	43	41.92	23.14	57.14	100	0	P	H
													H
		11490	62.49	-11.51	74	61.67	40.2	18.4	57.78	394	21	P	V
		11490	52.28	-1.72	54	51.46	40.2	18.4	57.78	394	21	A	V
		17235	55.1	-13.1	68.2	47.18	41.92	23.14	57.14	100	0	P	V
													V
802.11n HT20 CH 157 5785MHz		11570	61.21	-12.79	74	60.46	40.06	18.49	57.8	366	0	P	H
		11570	50.17	-3.83	54	49.42	40.06	18.49	57.8	366	0	A	H
		17355	51.21	-16.99	68.2	43.35	42.17	23.25	57.56	100	0	P	H
													H
		11570	63.32	-10.68	74	62.57	40.06	18.49	57.8	396	23	P	V
		11570	51.95	-2.05	54	51.2	40.06	18.49	57.8	396	23	A	V
		17355	52.33	-15.87	68.2	44.47	42.17	23.25	57.56	100	0	P	V
													V
802.11n HT20 CH 165 5825MHz		11650	61.54	-12.46	74	60.86	39.9	18.58	57.8	246	0	P	H
		11650	50.88	-3.12	54	50.2	39.9	18.58	57.8	246	0	A	H
		17475	50.7	-17.5	68.2	42.88	42.44	23.36	57.98	100	0	P	H
													H
		11650	63.75	-10.25	74	63.07	39.9	18.58	57.8	400	24	P	V
		11650	52.77	-1.23	54	52.09	39.9	18.58	57.8	400	24	A	V
		17475	51.68	-16.52	68.2	43.86	42.44	23.36	57.98	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 0a+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5649.8	60.6	-7.6	68.2	46.99	32.82	11.79	31	283	47	P	H
		5696.8	74.45	-28.39	102.84	60.69	32.95	11.82	31.01	283	47	P	H
		5719	89.65	-20.87	110.52	75.82	33.01	11.84	31.02	283	47	P	H
		5724	89.38	-30.54	119.92	75.53	33.03	11.84	31.02	283	47	P	H
802.11n HT40 CH 151 5755MHz	*	5755	112.39	-	-	98.45	33.11	11.86	31.03	283	47	P	H
	*	5755	105.01	-	-	91.07	33.11	11.86	31.03	283	47	A	H
		5851.2	67.01	-52.45	119.46	52.66	33.38	12.03	31.06	283	47	P	H
		5855	66.11	-44.69	110.8	51.75	33.39	12.03	31.06	283	47	P	H
		5875.8	64.22	-40.39	104.61	49.67	33.45	12.17	31.07	283	47	P	H
		5932.8	55.52	-12.68	68.2	40.69	33.61	12.31	31.09	283	47	P	H
													H
													H



WIFI Ant. 0a+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak (P/A)	Avg. (H/V)	
		5644.6	55.44	-12.76	68.2	41.85	32.8	11.79	31	279	45	P	H	
		5697.4	64.76	-38.52	103.28	51	32.95	11.82	31.01	279	45	P	H	
		5718.6	70.14	-40.27	110.41	56.31	33.01	11.84	31.02	279	45	P	H	
		5723.4	70.84	-47.71	118.55	56.99	33.03	11.84	31.02	279	45	P	H	
802.11n	*	5795	113.62	-	-	99.56	33.23	11.88	31.05	279	45	P	H	
	*	5795	105.71	-	-	91.65	33.23	11.88	31.05	279	45	A	H	
		5851.2	80.08	-39.38	119.46	65.73	33.38	12.03	31.06	279	45	P	H	
		5857.2	77.04	-33.14	110.18	62.67	33.4	12.03	31.06	279	45	P	H	
		5880	69.7	-31.79	101.49	55.14	33.46	12.17	31.07	279	45	P	H	
		5926.2	59.17	-9.03	68.2	44.36	33.59	12.31	31.09	279	45	P	H	
													H	
	HT40												H	
	CH 159													
	5795MHz	5645.6	55.09	-13.11	68.2	41.49	32.81	11.79	31	288	88	P	V	
		5697.4	66.56	-36.72	103.28	52.8	32.95	11.82	31.01	288	88	P	V	
		5717.4	69.93	-40.14	110.07	56.1	33.01	11.84	31.02	288	88	P	V	
		5723.6	72.28	-46.73	119.01	58.43	33.03	11.84	31.02	288	88	P	V	
		*	5795	112.62	-	-	98.56	33.23	11.88	31.05	288	88	P	V
		*	5795	104.62	-	-	90.56	33.23	11.88	31.05	288	88	A	V
			5851.2	75.91	-43.55	119.46	61.56	33.38	12.03	31.06	288	88	P	V
			5855	75.3	-35.5	110.8	60.94	33.39	12.03	31.06	288	88	P	V
			5876.2	70.62	-33.69	104.31	56.07	33.45	12.17	31.07	288	88	P	V
			5927.4	61.53	-6.67	68.2	46.71	33.6	12.31	31.09	288	88	P	V
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 4 5725~5850MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 0a+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 151 5755MHz		11510	58.2	-15.8	74	57.37	40.18	18.45	57.8	369	0	P	H
		11510	47.89	-6.11	54	47.06	40.18	18.45	57.8	369	0	A	H
		17265	49.4	-18.8	68.2	41.51	41.98	23.17	57.26	100	0	P	H
													H
		11510	59.02	-14.98	74	58.19	40.18	18.45	57.8	400	29	P	V
		11510	49.14	-4.86	54	48.31	40.18	18.45	57.8	400	29	A	V
		17265	51.49	-16.71	68.2	43.6	41.98	23.17	57.26	100	0	P	V
													V
802.11n HT40 CH 159 5795MHz		11590	59.62	-14.38	74	58.86	40.02	18.54	57.8	357	0	P	H
		11590	48.43	-5.57	54	47.67	40.02	18.54	57.8	357	0	A	H
		17385	51.06	-17.14	68.2	43.2	42.25	23.29	57.68	100	0	P	H
													H
		11590	60.03	-13.97	74	59.27	40.02	18.54	57.8	396	24	P	V
		11590	50.1	-3.9	54	49.34	40.02	18.54	57.8	396	24	A	V
		17385	52.85	-15.35	68.2	44.99	42.25	23.29	57.68	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 0a+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80		5648.4	66.52	-1.68	68.2	52.91	32.82	11.79	31	274	52	P	H
		5698.6	79.08	-25.09	104.17	65.31	32.96	11.82	31.01	274	52	P	H
		5719.2	81.96	-28.62	110.58	68.13	33.01	11.84	31.02	274	52	P	H
		5722.4	80.64	-35.63	116.27	66.8	33.02	11.84	31.02	274	52	P	H
	*	5775	108.62	-	-	94.63	33.17	11.86	31.04	274	52	P	H
	*	5775	101.44	-	-	87.45	33.17	11.86	31.04	274	52	A	H
		5855	80.44	-30.36	110.8	66.08	33.39	12.03	31.06	274	52	P	H
		5867.4	80.73	-26.6	107.33	66.2	33.43	12.17	31.07	274	52	P	H
		5875.4	74.41	-30.49	104.9	59.86	33.45	12.17	31.07	274	52	P	H
		5937.2	63.96	-4.24	68.2	49.12	33.62	12.31	31.09	274	52	P	H
													H
													H
CH 155 5775MHz		5645.4	66.75	-1.45	68.2	53.15	32.81	11.79	31	281	88	P	V
		5696.8	77.78	-25.06	102.84	64.02	32.95	11.82	31.01	281	88	P	V
		5718.2	81.43	-28.87	110.3	67.6	33.01	11.84	31.02	281	88	P	V
		5723.8	80.29	-39.17	119.46	66.44	33.03	11.84	31.02	281	88	P	V
	*	5775	108.01	-	-	94.02	33.17	11.86	31.04	281	88	P	V
	*	5775	101.43	-	-	87.44	33.17	11.86	31.04	281	88	A	V
		5853.4	80.13	-34.32	114.45	65.77	33.39	12.03	31.06	281	88	P	V
		5859.8	79.22	-30.23	109.45	64.85	33.41	12.03	31.07	281	88	P	V
		5876.8	74.44	-29.42	103.86	59.88	33.46	12.17	31.07	281	88	P	V
		5926.6	65.51	-2.69	68.2	50.7	33.59	12.31	31.09	281	88	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 0a+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.
802.11ac		11550	54.98	-19.02	74	54.19	40.1	18.49	57.8	329	359	P	H
		11550	46.78	-7.22	54	45.99	40.1	18.49	57.8	329	359	A	H
		17325	51.13	-17.07	68.2	43.24	42.12	23.21	57.44	100	0	P	H
VHT80													H
CH 155 5775MHz		11550	50.96	-23.04	74	50.17	40.1	18.49	57.8	100	0	P	V
		17325	50.09	-18.11	68.2	42.2	42.12	23.21	57.44	100	0	P	V
		17325	47.19	-26.81	74	39.48	41.94	23.21	57.44	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

5GHz WIFI 802.11a (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
0a+1b		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
5GHz 802.11a LF		31.08	23.85	-16.15	40	29.99	25.54	0.78	32.46	-	-	P	H
		90.21	21.6	-21.9	43.5	37.88	15.1	1.06	32.44	-	-	P	H
		108.03	28.78	-14.72	43.5	42.66	17.12	1.43	32.43	-	-	P	H
		223.32	24.24	-21.76	46	38.34	16.44	1.83	32.37	-	-	P	H
		524.7	27.55	-18.45	46	32.41	24.35	3.19	32.4	-	-	P	H
		955.2	33.12	-12.88	46	29.46	30	4.75	31.09	100	0	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
Remark	1.	No other spurious found.											
	2.	All results are PASS against limit line.											

**Note symbol**

*	Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is over limit line.
P/A	Peak or Average
H/V	Horizontal or Vertical



A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
0a+1b		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Level(dB μ V/m) =

$$= \text{Antenna Factor(dB/m)} + \text{Cable Loss(dB)} + \text{Read Level(dB μ V)} - \text{Preamp Factor(dB)}$$

2. Over Limit(dB) = Level(dB μ V/m) – Limit Line(dB μ V/m)

For Peak Limit @ 2390MHz:

1. Level(dB μ V/m)

$$= \text{Antenna Factor(dB/m)} + \text{Cable Loss(dB)} + \text{Read Level(dB μ V)} - \text{Preamp Factor(dB)}$$

$$= 32.22(\text{dB/m}) + 4.58(\text{dB}) + 54.51(\text{dB μ V}) - 35.86 (\text{dB})$$

$$= 55.45 (\text{dB μ V/m})$$

2. Over Limit(dB)

$$= \text{Level(dB μ V/m)} - \text{Limit Line(dB μ V/m)}$$

$$= 55.45(\text{dB μ V/m}) - 74(\text{dB μ V/m})$$

$$= -18.55(\text{dB})$$

For Average Limit @ 2390MHz:

1. Level(dB μ V/m)

$$= \text{Antenna Factor(dB/m)} + \text{Cable Loss(dB)} + \text{Read Level(dB μ V)} - \text{Preamp Factor(dB)}$$

$$= 32.22(\text{dB/m}) + 4.58(\text{dB}) + 42.6(\text{dB μ V}) - 35.86 (\text{dB})$$

$$= 43.54 (\text{dB μ V/m})$$

2. Over Limit(dB)

$$= \text{Level(dB μ V/m)} - \text{Limit Line(dB μ V/m)}$$

$$= 43.54(\text{dB μ V/m}) - 54(\text{dB μ V/m})$$

$$= -10.46(\text{dB})$$

Both peak and average measured complies with the limit line, so test result is “PASS”.



Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
0b+1a		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		5639.8	53.01	-15.19	68.2	39.43	32.79	11.79	31	100	86	P	H
		5699.8	68.51	-36.54	105.05	54.74	32.96	11.82	31.01	100	86	P	H
		5717.8	77.23	-32.95	110.18	63.4	33.01	11.84	31.02	100	86	P	H
		5725	83.94	-38.26	122.2	70.09	33.03	11.84	31.02	100	86	P	H
	*	5745	114.91	-	-	100.99	33.09	11.86	31.03	100	86	P	H
	*	5745	106.61	-	-	92.69	33.09	11.86	31.03	100	86	A	H
													H
													H
		5642.2	54.12	-14.08	68.2	40.53	32.8	11.79	31	294	60	P	V
		5697.8	72.23	-31.35	103.58	58.47	32.95	11.82	31.01	294	60	P	V
		5720	79.03	-31.77	110.8	65.19	33.02	11.84	31.02	294	60	P	V
		5724.4	87.3	-33.53	120.83	73.45	33.03	11.84	31.02	294	60	P	V
	*	5745	115.8	-	-	101.88	33.09	11.86	31.03	294	60	P	V
	*	5745	107.43	-	-	93.51	33.09	11.86	31.03	294	60	A	V
													V
													V



WIFI Ant. 0b+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak (P/A)	Avg. (H/V)
802.11a CH 157 5785MHz		5622.6	54.39	-13.81	68.2	40.85	32.74	11.79	30.99	101	87	P	H
		5699.2	53.51	-51.1	104.61	39.74	32.96	11.82	31.01	101	87	P	H
		5715.2	56.32	-53.14	109.46	42.5	33	11.84	31.02	101	87	P	H
		5720.8	56.77	-55.85	112.62	42.93	33.02	11.84	31.02	101	87	P	H
	*	5785	112.67	-	-	98.64	33.2	11.88	31.05	101	87	P	H
	*	5785	104.46	-	-	90.43	33.2	11.88	31.05	101	87	A	H
		5853.8	53.1	-60.44	113.54	38.74	33.39	12.03	31.06	101	87	P	H
		5857.8	53.35	-56.66	110.01	38.99	33.4	12.03	31.07	101	87	P	H
		5893.4	52.04	-39.51	91.55	37.45	33.5	12.17	31.08	101	87	P	H
		5949.6	51.98	-16.22	68.2	36.96	33.66	12.45	31.09	101	87	P	H
													H
													H
		5619.4	54.36	-13.84	68.2	40.85	32.73	11.77	30.99	301	61	P	V
		5693.6	53.44	-47.04	100.48	39.69	32.94	11.82	31.01	301	61	P	V
		5718.4	56.36	-53.99	110.35	42.53	33.01	11.84	31.02	301	61	P	V
		5720.8	57.95	-54.67	112.62	44.11	33.02	11.84	31.02	301	61	P	V
	*	5785	114.18	-	-	100.15	33.2	11.88	31.05	301	61	P	V
	*	5785	105.82	-	-	91.79	33.2	11.88	31.05	301	61	A	V
		5851.2	54.47	-64.99	119.46	40.12	33.38	12.03	31.06	301	61	P	V
		5855.2	55.68	-55.06	110.74	41.32	33.39	12.03	31.06	301	61	P	V
		5877.6	53.4	-49.87	103.27	38.84	33.46	12.17	31.07	301	61	P	V
		5925	51.96	-16.24	68.2	37.15	33.59	12.31	31.09	301	61	P	V
													V
													V



WIFI Ant. 0b+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 165 5825MHz	*	5825	113.11	-	-	98.82	33.31	12.03	31.05	400	237	P	H
	*	5825	104.83	-	-	90.54	33.31	12.03	31.05	400	237	A	H
		5854	70.18	-42.9	113.08	55.82	33.39	12.03	31.06	400	237	P	H
		5858.4	67.47	-42.38	109.85	53.11	33.4	12.03	31.07	400	237	P	H
		5875.6	57.81	-46.94	104.75	43.26	33.45	12.17	31.07	400	237	P	H
		5947.4	52.46	-15.74	68.2	37.45	33.65	12.45	31.09	400	237	P	H
													H
													H
	*	5825	114.12	-	-	99.83	33.31	12.03	31.05	296	62	P	V
	*	5825	105.63	-	-	91.34	33.31	12.03	31.05	296	62	A	V
		5850	72.35	-49.85	122.2	58	33.38	12.03	31.06	296	59	P	V
		5858.4	69.1	-40.75	109.85	54.74	33.4	12.03	31.07	296	59	P	V
		5876.4	60.67	-43.49	104.16	46.12	33.45	12.17	31.07	296	59	P	V
		5929.6	52.01	-16.19	68.2	37.19	33.6	12.31	31.09	296	62	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 0b+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		11490	58.64	-15.36	74	57.82	40.2	18.4	57.78	360	0	P	H
		11490	48.34	-5.66	54	47.52	40.2	18.4	57.78	360	0	A	H
		17235	50.12	-18.08	68.2	42.2	41.92	23.14	57.14	100	0	P	H
													H
		11490	58.32	-15.68	74	57.5	40.2	18.4	57.78	280	331	P	V
		11490	48.01	-5.99	54	47.19	40.2	18.4	57.78	280	331	A	V
		17235	49.63	-18.57	68.2	41.71	41.92	23.14	57.14	100	0	P	V
													V
802.11a CH 157 5785MHz		11570	58.5	-15.5	74	57.75	40.06	18.49	57.8	327	356	P	H
		11570	47.13	-6.87	54	46.38	40.06	18.49	57.8	327	356	A	H
		17355	50.43	-17.77	68.2	42.56	42.18	23.25	57.56	100	0	P	H
													H
		11570	58.3	-15.7	74	57.55	40.06	18.49	57.8	388	328	P	V
		11570	47.49	-6.51	54	46.74	40.06	18.49	57.8	388	328	A	V
		17355	50.85	-17.35	68.2	42.98	42.18	23.25	57.56	100	0	P	V
													V
802.11a CH 165 5825MHz		11650	57.07	-16.93	74	56.39	39.9	18.58	57.8	286	359	P	H
		11650	47.12	-6.88	54	46.44	39.9	18.58	57.8	286	359	A	H
		17475	49.14	-19.06	68.2	41.32	42.44	23.36	57.98	100	0	P	H
													H
		11650	58.09	-15.91	74	57.41	39.9	18.58	57.8	374	330	P	V
		11650	47.52	-6.48	54	46.84	39.9	18.58	57.8	374	330	A	V
		17475	49.51	-18.69	68.2	41.69	42.44	23.36	57.98	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 0b+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 149 5745MHz		5623.6	53.37	-14.83	68.2	39.82	32.75	11.79	30.99	377	230	P	H
		5697.4	68.55	-34.73	103.28	54.79	32.95	11.82	31.01	377	230	P	H
		5719.8	77.82	-32.92	110.74	63.98	33.02	11.84	31.02	377	230	P	H
		5723.6	85.81	-33.2	119.01	71.96	33.03	11.84	31.02	377	230	P	H
	*	5745	115.07	-	-	101.15	33.09	11.86	31.03	377	230	P	H
	*	5745	106.46	-	-	92.54	33.09	11.86	31.03	377	230	A	H
													H
													H
		5650	53.99	-14.21	68.2	40.38	32.82	11.79	31	299	60	P	V
		5698.4	69.49	-34.53	104.02	55.72	32.96	11.82	31.01	299	60	P	V
		5720	78.69	-32.11	110.8	64.85	33.02	11.84	31.02	299	60	P	V
		5725	85.71	-36.49	122.2	71.86	33.03	11.84	31.02	299	60	P	V
	*	5745	114.48	-	-	100.56	33.09	11.86	31.03	299	60	P	V
	*	5745	105.26	-	-	91.34	33.09	11.86	31.03	299	60	A	V
													V
													V



WIFI Ant. 0b+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak (P/A)	Avg. (H/V)
		5627.6	53.76	-14.44	68.2	40.2	32.76	11.79	30.99	390	234	P	H
		5679	53.71	-35.99	89.7	40	32.9	11.82	31.01	390	234	P	H
		5719	56.7	-53.82	110.52	42.87	33.01	11.84	31.02	390	234	P	H
		5722.8	58.54	-58.64	117.18	44.7	33.02	11.84	31.02	390	234	P	H
802.11n	*	5785	115.58	-	-	101.55	33.2	11.88	31.05	390	234	P	H
	*	5785	106	-	-	91.97	33.2	11.88	31.05	390	234	A	H
		5851.4	55.72	-63.29	119.01	41.37	33.38	12.03	31.06	390	234	P	H
		5859.6	54.67	-54.84	109.51	40.3	33.41	12.03	31.07	390	234	P	H
		5880	53.26	-48.23	101.49	38.7	33.46	12.17	31.07	390	234	P	H
		5941	52.04	-16.16	68.2	37.05	33.63	12.45	31.09	390	234	P	H
													H
	HT20												H
	CH 157												
5785MHz		5629.2	54.15	-14.05	68.2	40.6	32.76	11.79	31	303	61	P	V
		5680	54.62	-35.82	90.44	40.91	32.9	11.82	31.01	303	61	P	V
		5718	58.34	-51.9	110.24	44.51	33.01	11.84	31.02	303	61	P	V
		5722.2	60.02	-55.8	115.82	46.18	33.02	11.84	31.02	303	61	P	V
	*	5785	114.32	-	-	100.29	33.2	11.88	31.05	303	61	P	V
	*	5785	105.13	-	-	91.1	33.2	11.88	31.05	303	61	A	V
		5850.8	57.34	-63.04	120.38	42.99	33.38	12.03	31.06	303	61	P	V
		5857.8	56.61	-53.4	110.01	42.25	33.4	12.03	31.07	303	61	P	V
		5877	53.75	-49.96	103.71	39.19	33.46	12.17	31.07	303	61	P	V
		5940.4	52.58	-15.62	68.2	37.59	33.63	12.45	31.09	303	61	P	V
													V
													V



WIFI Ant. 0b+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.
802.11n	*	5825	114.09	-	-	99.8	33.31	12.03	31.05	365	231	P	H
	*	5825	105.11	-	-	90.82	33.31	12.03	31.05	365	231	A	H
		5850.2	71.83	-49.91	121.74	57.48	33.38	12.03	31.06	365	231	P	H
		5856.4	67.39	-43.02	110.41	53.02	33.4	12.03	31.06	365	231	P	H
		5876.2	56.82	-47.49	104.31	42.27	33.45	12.17	31.07	365	231	P	H
		5942.8	53.03	-15.17	68.2	38.03	33.64	12.45	31.09	365	231	P	H
													H
													H
HT20													
CH 165	*	5825	114.15	-	-	99.86	33.31	12.03	31.05	297	60	P	V
5825MHz	*	5825	104.97	-	-	90.68	33.31	12.03	31.05	297	60	A	V
		5850	72.94	-49.26	122.2	58.59	33.38	12.03	31.06	297	60	P	V
		5855	69.09	-41.71	110.8	54.73	33.39	12.03	31.06	297	60	P	V
		5876.6	62.67	-41.34	104.01	48.12	33.45	12.17	31.07	297	60	P	V
		5939.4	52.4	-15.8	68.2	37.55	33.63	12.31	31.09	297	60	P	V
													V
													V
Remark	<p>1. No other spurious found.</p> <p>2. All results are PASS against Peak and Average limit line.</p>												



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 0b+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 149 5745MHz		11490	57.38	-16.62	74	56.56	40.2	18.4	57.78	345	0	P	H
		11490	47.31	-6.69	54	46.49	40.2	18.4	57.78	345	0	A	H
		17235	49.52	-18.68	68.2	41.6	41.92	23.14	57.14	100	0	P	H
													H
		11490	58.21	-15.79	74	57.39	40.2	18.4	57.78	377	332	P	V
		11490	48.34	-5.66	54	47.52	40.2	18.4	57.78	377	332	A	V
		17235	49.32	-18.88	68.2	41.4	41.92	23.14	57.14	100	0	P	V
													V
802.11n HT20 CH 157 5785MHz		11570	57.67	-16.33	74	56.92	40.06	18.49	57.8	357	0	P	H
		11570	46.95	-7.05	54	46.2	40.06	18.49	57.8	357	0	A	H
		17355	49.97	-18.23	68.2	42.1	42.18	23.25	57.56	100	0	P	H
													H
		11570	57.71	-16.29	74	56.96	40.06	18.49	57.8	364	336	P	V
		11570	47.9	-6.1	54	47.15	40.06	18.49	57.8	364	336	A	V
		17355	49.79	-18.41	68.2	41.92	42.18	23.25	57.56	100	0	P	V
													V
802.11n HT20 CH 165 5825MHz		11650	57.35	-16.65	74	56.67	39.9	18.58	57.8	396	0	P	H
		11650	46.54	-7.46	54	45.86	39.9	18.58	57.8	396	0	A	H
		17475	49.77	-18.43	68.2	41.95	42.44	23.36	57.98	100	0	P	H
													H
		11650	57.38	-16.62	74	56.7	39.9	18.58	57.8	400	23	P	V
		11650	46.8	-7.2	54	46.12	39.9	18.58	57.8	400	23	A	V
		17475	49.89	-18.31	68.2	42.07	42.44	23.36	57.98	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 0b+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5636	59.11	-9.09	68.2	45.54	32.78	11.79	31	376	229	P	H
		5700	71.94	-33.26	105.2	58.17	32.96	11.82	31.01	376	229	P	H
		5719	84.95	-25.57	110.52	71.12	33.01	11.84	31.02	376	229	P	H
		5723	86.93	-30.71	117.64	73.09	33.02	11.84	31.02	376	229	P	H
802.11n HT40	*	5755	112.68	-	-	98.74	33.11	11.86	31.03	376	229	P	H
	*	5755	104.24	-	-	90.3	33.11	11.86	31.03	376	229	A	H
		5853	60.45	-54.91	115.36	46.09	33.39	12.03	31.06	376	229	P	H
		5859	59.38	-50.3	109.68	45.01	33.41	12.03	31.07	376	229	P	H
		5876.4	56.38	-47.78	104.16	41.83	33.45	12.17	31.07	376	229	P	H
		5926.2	53.15	-15.05	68.2	38.34	33.59	12.31	31.09	376	229	P	H
													H
													H
CH 151 5755MHz		5647.6	60.6	-7.6	68.2	47	32.81	11.79	31	298	61	P	V
		5698.6	75.18	-28.99	104.17	61.41	32.96	11.82	31.01	298	61	P	V
		5719	88.09	-22.43	110.52	74.26	33.01	11.84	31.02	298	61	P	V
		5722.6	87.88	-28.85	116.73	74.04	33.02	11.84	31.02	298	61	P	V
	*	5755	111.09	-	-	97.15	33.11	11.86	31.03	298	61	P	V
	*	5755	102.66	-	-	88.72	33.11	11.86	31.03	298	61	A	V
		5852.6	61.13	-55.14	116.27	46.77	33.39	12.03	31.06	298	61	P	V
		5858.6	60.31	-49.48	109.79	45.95	33.4	12.03	31.07	298	61	P	V
		5878.8	55.58	-46.8	102.38	41.02	33.46	12.17	31.07	298	61	P	V
		5926	52.65	-15.55	68.2	37.84	33.59	12.31	31.09	298	61	P	V
													V
													V



WIFI Ant. 0b+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak (P/A)	Avg. (H/V)
		5643.4	55.1	-13.1	68.2	41.51	32.8	11.79	31	370	230	P	H
		5696.2	61.49	-40.91	102.4	47.73	32.95	11.82	31.01	370	230	P	H
		5717	65.35	-44.61	109.96	51.52	33.01	11.84	31.02	370	230	P	H
		5724.6	66.89	-54.4	121.29	53.04	33.03	11.84	31.02	370	230	P	H
	*	5795	111.92	-	-	97.86	33.23	11.88	31.05	370	230	P	H
	*	5795	103.67	-	-	89.61	33.23	11.88	31.05	370	230	A	H
		5851.6	68.94	-49.61	118.55	54.59	33.38	12.03	31.06	370	230	P	H
		5856.4	66.91	-43.5	110.41	52.54	33.4	12.03	31.06	370	230	P	H
		5880	61.45	-40.04	101.49	46.89	33.46	12.17	31.07	370	230	P	H
		5927.4	54.18	-14.02	68.2	39.36	33.6	12.31	31.09	370	230	P	H
802.11n													H
HT40													H
CH 159		5638.4	55.84	-12.36	68.2	42.26	32.79	11.79	31	302	62	P	V
5795MHz		5697.4	63.79	-39.49	103.28	50.03	32.95	11.82	31.01	302	62	P	V
		5716	66.84	-42.84	109.68	53.02	33	11.84	31.02	302	62	P	V
		5722.8	67.67	-49.51	117.18	53.83	33.02	11.84	31.02	302	62	P	V
	*	5795	112.24	-	-	98.18	33.23	11.88	31.05	302	62	P	V
	*	5795	103.73	-	-	89.67	33.23	11.88	31.05	302	62	A	V
		5853	72.07	-43.29	115.36	57.71	33.39	12.03	31.06	302	62	P	V
		5855.4	71.26	-39.43	110.69	56.89	33.4	12.03	31.06	302	62	P	V
		5876.2	64.84	-39.47	104.31	50.29	33.45	12.17	31.07	302	62	P	V
		5927.6	57.69	-10.51	68.2	42.87	33.6	12.31	31.09	302	62	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 0b+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 151 5755MHz		11510	54.54	-19.46	74	53.71	40.18	18.45	57.8	322	256	P	H
		11510	45.96	-8.04	54	45.13	40.18	18.45	57.8	322	356	A	H
		17265	49.34	-18.86	68.2	41.45	41.98	23.17	57.26	100	0	P	H
													H
		11510	54.37	-19.63	74	53.54	40.18	18.45	57.8	364	18	P	V
		11510	45.54	-8.46	54	44.71	40.18	18.45	57.8	364	18	A	V
		17265	49.1	-19.1	68.2	41.21	41.98	23.17	57.26	100	0	P	V
													V
802.11n HT40 CH 159 5795MHz		11590	53.86	-20.14	74	53.1	40.02	18.54	57.8	400	0	P	H
		11590	44.77	-9.23	54	44.01	40.02	18.54	57.8	400	0	A	H
		17385	49.95	-18.25	68.2	42.09	42.25	23.29	57.68	100	0	P	H
													H
		11590	49.89	-24.11	74	49.13	40.02	18.54	57.8	100	0	P	V
		17385	49.61	-18.59	68.2	41.75	42.25	23.29	57.68	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 0b+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 155 5775MHz		5647.8	67.52	-0.68	68.2	53.92	32.81	11.79	31	371	228	P	H
		5698	78.2	-25.53	103.73	64.44	32.95	11.82	31.01	371	228	P	H
		5719.8	80.34	-30.4	110.74	66.5	33.02	11.84	31.02	371	228	P	H
		5720	79.6	-31.2	110.8	65.76	33.02	11.84	31.02	371	228	P	H
	*	5775	108.22	-	-	94.23	33.17	11.86	31.04	371	228	P	H
	*	5775	101.14	-	-	87.15	33.17	11.86	31.04	371	228	A	H
		5853.4	77.91	-36.54	114.45	63.55	33.39	12.03	31.06	371	228	P	H
		5861	76.2	-32.92	109.12	61.69	33.41	12.17	31.07	371	228	P	H
		5878.4	70.03	-32.64	102.67	55.47	33.46	12.17	31.07	371	228	P	H
		5928.4	59.68	-8.52	68.2	44.86	33.6	12.31	31.09	371	228	P	H
													H
													H
Remark	1.	No other spurious found.											
	2.	All results are PASS against Peak and Average limit line.											



Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 0b+1a	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.
802.11ac		11550	49.23	-24.77	74	48.44	40.1	18.49	57.8	100	0	P	H
		17325	48.75	-19.45	68.2	40.86	42.12	23.21	57.44	100	0	P	H
													H
VHT80													H
CH 155 5775MHz		11550	49.11	-24.89	74	48.32	40.1	18.49	57.8	100	0	P	V
		17325	50.07	-18.13	68.2	42.18	42.12	23.21	57.44	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

5GHz WIFI 802.11ac VHT80 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
0b+1a		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
5GHz 802.11ac VHT80 LF		43.77	21.68	-18.32	40	35.1	18.26	0.78	32.46	-	-	P	H
		108.03	28.82	-14.68	43.5	42.7	17.12	1.43	32.43	100	0	P	H
		220.62	24.8	-21.2	46	39.06	16.28	1.83	32.37	-	-	P	H
		322.4	22.87	-23.13	46	32.43	20.36	2.34	32.26	-	-	P	H
		519.1	25.43	-20.57	46	30.33	24.31	3.19	32.4	-	-	P	H
		796.3	29.93	-16.07	46	30.13	27.87	4.14	32.21	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
Remark	1.	No other spurious found.											
	2.	All results are PASS against limit line.											

**Note symbol**

*	Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is over limit line.
P/A	Peak or Average
H/V	Horizontal or Vertical



A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
0b+1a		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Level(dB μ V/m) =

$$= \text{Antenna Factor(dB/m)} + \text{Cable Loss(dB)} + \text{Read Level(dB μ V)} - \text{Preamp Factor(dB)}$$

2. Over Limit(dB) = Level(dB μ V/m) – Limit Line(dB μ V/m)

For Peak Limit @ 2390MHz:

1. Level(dB μ V/m)

$$= \text{Antenna Factor(dB/m)} + \text{Cable Loss(dB)} + \text{Read Level(dB μ V)} - \text{Preamp Factor(dB)}$$

$$= 32.22(\text{dB/m}) + 4.58(\text{dB}) + 54.51(\text{dB μ V}) - 35.86 (\text{dB})$$

$$= 55.45 (\text{dB μ V/m})$$

2. Over Limit(dB)

$$= \text{Level(dB μ V/m)} - \text{Limit Line(dB μ V/m)}$$

$$= 55.45(\text{dB μ V/m}) - 74(\text{dB μ V/m})$$

$$= -18.55(\text{dB})$$

For Average Limit @ 2390MHz:

1. Level(dB μ V/m)

$$= \text{Antenna Factor(dB/m)} + \text{Cable Loss(dB)} + \text{Read Level(dB μ V)} - \text{Preamp Factor(dB)}$$

$$= 32.22(\text{dB/m}) + 4.58(\text{dB}) + 42.6(\text{dB μ V}) - 35.86 (\text{dB})$$

$$= 43.54 (\text{dB μ V/m})$$

2. Over Limit(dB)

$$= \text{Level(dB μ V/m)} - \text{Limit Line(dB μ V/m)}$$

$$= 43.54(\text{dB μ V/m}) - 54(\text{dB μ V/m})$$

$$= -10.46(\text{dB})$$

Both peak and average measured complies with the limit line, so test result is “PASS”.



Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
0b+1b		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		5640.2	52.94	-15.26	68.2	39.36	32.79	11.79	31	355	317	P	H
		5696	63.29	-38.96	102.25	49.53	32.95	11.82	31.01	355	317	P	H
		5720	73.37	-37.43	110.8	59.53	33.02	11.84	31.02	355	317	P	H
		5723.6	80.66	-38.35	119.01	66.81	33.03	11.84	31.02	355	317	P	H
	*	5745	113.43	-	-	99.51	33.09	11.86	31.03	355	317	P	H
	*	5745	105.58	-	-	91.66	33.09	11.86	31.03	355	317	A	H
													H
													H
		5644.4	54.06	-14.14	68.2	40.47	32.8	11.79	31	330	308	P	V
		5697.2	67.86	-35.28	103.14	54.1	32.95	11.82	31.01	330	308	P	V
		5720	76.67	-34.13	110.8	62.83	33.02	11.84	31.02	330	308	P	V
		5724.8	85.19	-36.55	121.74	71.34	33.03	11.84	31.02	330	308	P	V
	*	5745	114.94	-	-	101.02	33.09	11.86	31.03	330	308	P	V
	*	5745	107.39	-	-	93.47	33.09	11.86	31.03	330	308	A	V
													V
													V



WIFI Ant. 0b+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak (P/A)	Avg. (H/V)
802.11a CH 157 5785MHz		5617.2	52.58	-15.62	68.2	39.07	32.73	11.77	30.99	369	312	P	H
		5699.4	54.49	-50.27	104.76	40.72	32.96	11.82	31.01	369	312	P	H
		5709	55.77	-51.95	107.72	41.96	32.99	11.84	31.02	369	312	P	H
		5723.6	54.8	-64.21	119.01	40.95	33.03	11.84	31.02	369	312	P	H
	*	5785	112.31	-	-	98.28	33.2	11.88	31.05	369	312	P	H
	*	5785	105.26	-	-	91.23	33.2	11.88	31.05	369	312	A	H
		5854	54.12	-58.96	113.08	39.76	33.39	12.03	31.06	369	312	P	H
		5869.6	53.61	-53.1	106.71	39.08	33.43	12.17	31.07	369	312	P	H
		5875.4	53.36	-51.54	104.9	38.81	33.45	12.17	31.07	369	312	P	H
		5943.2	51.87	-16.33	68.2	36.87	33.64	12.45	31.09	369	312	P	H
													H
													H
		5627.2	53.87	-14.33	68.2	40.31	32.76	11.79	30.99	308	311	P	V
		5665.6	55.86	-23.92	79.78	42.19	32.86	11.82	31.01	308	311	P	V
		5719	55.94	-54.58	110.52	42.11	33.01	11.84	31.02	308	311	P	V
		5725	57.85	-64.35	122.2	44	33.03	11.84	31.02	308	311	P	V
	*	5785	114.17	-	-	100.14	33.2	11.88	31.05	308	311	P	V
	*	5785	106.68	-	-	92.65	33.2	11.88	31.05	308	311	A	V
		5850.2	54.38	-67.36	121.74	40.03	33.38	12.03	31.06	308	311	P	V
		5860.4	54.9	-54.39	109.29	40.39	33.41	12.17	31.07	308	311	P	V
		5890.2	53.3	-40.62	93.92	38.72	33.49	12.17	31.08	308	311	P	V
		5932.8	52.55	-15.65	68.2	37.72	33.61	12.31	31.09	308	311	P	V
													V
													V



WIFI Ant. 0b+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 165 5825MHz	*	5825	113.67	-	-	99.38	33.31	12.03	31.05	282	318	P	H
	*	5825	106.05	-	-	91.76	33.31	12.03	31.05	282	318	A	H
		5853.6	71.7	-42.29	113.99	57.34	33.39	12.03	31.06	282	318	P	H
		5857.8	68.82	-41.19	110.01	54.46	33.4	12.03	31.07	282	318	P	H
		5876.4	56.08	-48.08	104.16	41.53	33.45	12.17	31.07	282	318	P	H
		5946	52.35	-15.85	68.2	37.34	33.65	12.45	31.09	282	318	P	H
													H
													H
	*	5825	114.82	-	-	100.53	33.31	12.03	31.05	319	292	P	V
	*	5825	107.45	-	-	93.16	33.31	12.03	31.05	319	292	A	V
		5851.4	71.55	-47.46	119.01	57.2	33.38	12.03	31.06	319	292	P	V
		5855.6	69.55	-41.08	110.63	55.18	33.4	12.03	31.06	319	292	P	V
		5875.8	60.5	-44.11	104.61	45.95	33.45	12.17	31.07	319	292	P	V
		5928.8	53.04	-15.16	68.2	38.22	33.6	12.31	31.09	319	292	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 0b+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		11490	58.89	-15.11	74	58.07	40.2	18.4	57.78	355	358	P	H
		11490	47.52	-6.48	54	46.7	40.2	18.4	57.78	355	358	A	H
		17235	49.53	-18.67	68.2	41.61	41.92	23.14	57.14	100	0	P	H
													H
		11490	58.27	-15.73	74	57.45	40.2	18.4	57.78	325	25	P	V
		11490	47.24	-6.76	54	46.42	40.2	18.4	57.78	325	25	A	V
		17235	49.54	-18.66	68.2	41.62	41.92	23.14	57.14	100	0	P	V
													V
802.11a CH 157 5785MHz		11570	57.82	-16.18	74	57.07	40.06	18.49	57.8	326	356	P	H
		11570	46.24	-7.76	54	45.49	40.06	18.49	57.8	326	356	A	H
		17355	50.22	-17.98	68.2	42.35	42.18	23.25	57.56	100	0	P	H
													H
		11570	57.14	-16.86	74	56.39	40.06	18.49	57.8	321	20	P	V
		11570	46.15	-7.85	54	45.4	40.06	18.49	57.8	321	20	A	V
		17355	50.05	-18.15	68.2	42.18	42.18	23.25	57.56	100	0	P	V
													V
802.11a CH 165 5825MHz		11650	56.39	-17.61	74	55.71	39.9	18.58	57.8	324	356	P	H
		11650	45.89	-8.11	54	45.21	39.9	18.58	57.8	324	356	A	H
		17475	50.93	-17.27	68.2	43.11	42.44	23.36	57.98	100	0	P	H
													H
		11650	55.53	-18.47	74	54.85	39.9	18.58	57.8	400	24	P	V
		11650	44.82	-9.18	54	44.14	39.9	18.58	57.8	400	24	A	V
		17475	49.92	-18.28	68.2	42.1	42.44	23.36	57.98	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 0b+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 149 5745MHz		5641.2	53.8	-14.4	68.2	40.21	32.8	11.79	31	281	311	P	H
		5697.4	63.38	-39.9	103.28	49.62	32.95	11.82	31.01	281	311	P	H
		5718	75.93	-34.31	110.24	62.1	33.01	11.84	31.02	281	311	P	H
		5723.2	81.59	-36.51	118.1	67.75	33.02	11.84	31.02	281	311	P	H
	*	5745	113.21	-	-	99.29	33.09	11.86	31.03	281	311	P	H
	*	5745	105.15	-	-	91.23	33.09	11.86	31.03	281	311	A	H
													H
													H
		5647	53.49	-14.71	68.2	39.89	32.81	11.79	31	284	289	P	V
		5698.8	70.01	-34.31	104.32	56.24	32.96	11.82	31.01	284	289	P	V
		5720	80.97	-29.83	110.8	67.13	33.02	11.84	31.02	284	289	P	V
		5722.8	88.06	-29.12	117.18	74.22	33.02	11.84	31.02	284	289	P	V
	*	5745	115.2	-	-	101.28	33.09	11.86	31.03	284	289	P	V
	*	5745	107.03	-	-	93.11	33.09	11.86	31.03	284	289	A	V
													V
													V



WIFI Ant. 0b+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak (P/A)	Avg. (H/V)
		5620.2	52.91	-15.29	68.2	39.37	32.74	11.79	30.99	282	315	P	H
		5697.6	53.8	-49.63	103.43	40.04	32.95	11.82	31.01	282	315	P	H
		5704.4	55.87	-50.56	106.43	42.07	32.97	11.84	31.01	282	315	P	H
		5722.6	55.43	-61.3	116.73	41.59	33.02	11.84	31.02	282	315	P	H
802.11n	*	5785	112.46	-	-	98.43	33.2	11.88	31.05	282	315	P	H
	*	5785	104.69	-	-	90.66	33.2	11.88	31.05	282	315	A	H
		5853.8	55.8	-57.74	113.54	41.44	33.39	12.03	31.06	282	315	P	H
		5861.2	55.47	-53.59	109.06	40.96	33.41	12.17	31.07	282	315	P	H
		5910.4	53.53	-25.44	78.97	38.76	33.55	12.31	31.09	282	315	P	H
		5935.2	53.04	-15.16	68.2	38.2	33.62	12.31	31.09	282	315	P	H
													H
	HT20												H
	CH 157												
5785MHz		5627	53.74	-14.46	68.2	40.18	32.76	11.79	30.99	267	329	P	V
		5691.8	55.32	-43.83	99.15	41.57	32.94	11.82	31.01	267	329	P	V
		5717.4	65.22	-44.85	110.07	51.39	33.01	11.84	31.02	267	329	P	V
		5724.8	64.06	-57.68	121.74	50.21	33.03	11.84	31.02	267	329	P	V
	*	5785	114.32	-	-	100.29	33.2	11.88	31.05	267	329	P	V
	*	5785	106.22	-	-	92.19	33.2	11.88	31.05	267	329	A	V
		5854.6	59.41	-52.3	111.71	45.05	33.39	12.03	31.06	267	329	P	V
		5861.6	58.5	-50.45	108.95	43.99	33.41	12.17	31.07	267	329	P	V
		5882.4	54.27	-45.43	99.7	39.7	33.47	12.17	31.07	267	329	P	V
		5934.4	52.35	-15.85	68.2	37.51	33.62	12.31	31.09	267	329	P	V
													V
													V



WIFI Ant. 0b+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n	*	5825	113.2	-	-	98.91	33.31	12.03	31.05	269	322	P	H
	*	5825	105.3	-	-	91.01	33.31	12.03	31.05	269	322	A	H
		5850	72.74	-49.46	122.2	58.39	33.38	12.03	31.06	269	322	P	H
		5858.4	71.19	-38.66	109.85	56.83	33.4	12.03	31.07	269	322	P	H
		5877	59.39	-44.32	103.71	44.83	33.46	12.17	31.07	269	322	P	H
		5932	52.57	-15.63	68.2	37.74	33.61	12.31	31.09	269	322	P	H
													H
													H
HT20													
CH 165	*	5825	113.85	-	-	99.56	33.31	12.03	31.05	275	329	P	V
5825MHz	*	5825	105.78	-	-	91.49	33.31	12.03	31.05	275	329	A	V
		5850	77.31	-44.89	122.2	62.96	33.38	12.03	31.06	275	329	P	V
		5855.2	71.89	-38.85	110.74	57.53	33.39	12.03	31.06	275	329	P	V
		5875.2	63.79	-41.26	105.05	49.24	33.45	12.17	31.07	275	329	P	V
		5941.4	52.92	-15.28	68.2	37.92	33.64	12.45	31.09	275	329	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 0b+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 149 5745MHz		11490	58.58	-15.42	74	57.76	40.2	18.4	57.78	347	0	P	H
		11490	47.37	-6.63	54	46.55	40.2	18.4	57.78	347	0	A	H
		17235	49.63	-18.57	68.2	41.71	41.92	23.14	57.14	100	0	P	H
													H
		11490	58.75	-15.25	74	57.93	40.2	18.4	57.78	396	327	P	V
		11490	47.05	-6.95	54	46.23	40.2	18.4	57.78	396	327	A	V
		17235	50.64	-17.56	68.2	42.72	41.92	23.14	57.14	100	0	P	V
													V
802.11n HT20 CH 157 5785MHz		11570	57.27	-16.73	74	56.52	40.06	18.49	57.8	330	0	P	H
		11570	45.96	-8.04	54	45.21	40.06	18.49	57.8	330	0	A	H
		17355	51.24	-16.96	68.2	43.37	42.18	23.25	57.56	100	0	P	H
													H
		11570	57.31	-16.69	74	56.56	40.06	18.49	57.8	381	327	P	V
		11570	45.33	-8.67	54	44.58	40.06	18.49	57.8	381	327	A	V
		17355	50.1	-18.1	68.2	42.23	42.18	23.25	57.56	100	0	P	V
													V
802.11n HT20 CH 165 5825MHz		11650	56.67	-17.33	74	55.99	39.9	18.58	57.8	327	0	P	H
		11650	45.56	-8.44	54	44.88	39.9	18.58	57.8	327	0	A	H
		17475	49.79	-18.41	68.2	41.97	42.44	23.36	57.98	100	0	P	H
													H
		11650	56.22	-17.78	74	55.54	39.9	18.58	57.8	400	25	P	V
		11650	45.15	-8.85	54	44.47	39.9	18.58	57.8	400	25	A	V
		17475	50	-18.2	68.2	42.18	42.44	23.36	57.98	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 0b+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5649.6	56.16	-12.04	68.2	42.55	32.82	11.79	31	349	317	P	H
		5696.6	69.74	-32.95	102.69	55.98	32.95	11.82	31.01	349	317	P	H
		5718.8	81.85	-28.61	110.46	68.02	33.01	11.84	31.02	349	317	P	H
		5724	83.53	-36.39	119.92	69.68	33.03	11.84	31.02	349	317	P	H
802.11n HT40 CH 151 5755MHz	*	5755	108.86	-	-	94.92	33.11	11.86	31.03	349	317	P	H
	*	5755	101.75	-	-	87.81	33.11	11.86	31.03	349	317	A	H
		5850.6	58.4	-62.43	120.83	44.05	33.38	12.03	31.06	349	317	P	H
		5859.8	58.38	-51.07	109.45	44.01	33.41	12.03	31.07	349	317	P	H
		5876	55.79	-48.67	104.46	41.24	33.45	12.17	31.07	349	317	P	H
		5928.4	52.68	-15.52	68.2	37.86	33.6	12.31	31.09	349	317	P	H
													H
													H
		5633.4	60.07	-8.13	68.2	46.51	32.77	11.79	31	329	299	P	V
		5697.2	73.67	-29.47	103.14	59.91	32.95	11.82	31.01	329	299	P	V
		5717.2	87.58	-22.44	110.02	73.75	33.01	11.84	31.02	329	299	P	V
		5724.4	86.96	-33.87	120.83	73.11	33.03	11.84	31.02	329	299	P	V
	*	5755	111.25	-	-	97.31	33.11	11.86	31.03	329	299	P	V
	*	5755	103.58	-	-	89.64	33.11	11.86	31.03	329	299	A	V
		5851	61.36	-58.56	119.92	47.01	33.38	12.03	31.06	329	299	P	V
		5859.2	59.5	-50.12	109.62	45.13	33.41	12.03	31.07	329	299	P	V
		5881.2	57.21	-43.38	100.59	42.64	33.47	12.17	31.07	329	299	P	V
		5932.2	52.92	-15.28	68.2	38.09	33.61	12.31	31.09	329	299	P	V
													V
													V



WIFI Ant. 0b+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak (P/A)	Avg. (H/V)
802.11n		5624.8	53.98	-14.22	68.2	40.43	32.75	11.79	30.99	329	310	P	H
		5694.2	59.28	-41.64	100.92	45.53	32.94	11.82	31.01	329	310	P	H
		5716.6	63.94	-45.91	109.85	50.11	33.01	11.84	31.02	329	310	P	H
		5724.6	65	-56.29	121.29	51.15	33.03	11.84	31.02	329	310	P	H
	*	5795	110.43	-	-	96.37	33.23	11.88	31.05	329	310	P	H
	*	5795	102.08	-	-	88.02	33.23	11.88	31.05	329	310	A	H
		5850.6	67.26	-53.57	120.83	52.91	33.38	12.03	31.06	329	310	P	H
		5857.4	68.15	-41.98	110.13	53.78	33.4	12.03	31.06	329	310	P	H
		5881.6	61.06	-39.24	100.3	46.49	33.47	12.17	31.07	329	310	P	H
		5927.2	54.23	-13.97	68.2	39.41	33.6	12.31	31.09	329	310	P	H
													H
	HT40												H
	CH 159												
5795MHz		5644.6	54.34	-13.86	68.2	40.75	32.8	11.79	31	329	320	P	V
		5696	60.15	-42.1	102.25	46.39	32.95	11.82	31.01	329	320	P	V
		5720	66.65	-44.15	110.8	52.81	33.02	11.84	31.02	329	320	P	V
		5723.8	67.68	-51.78	119.46	53.83	33.03	11.84	31.02	329	320	P	V
	*	5795	110.68	-	-	96.62	33.23	11.88	31.05	329	320	P	V
	*	5795	102.08	-	-	88.02	33.23	11.88	31.05	329	320	A	V
		5852.2	70.2	-46.98	117.18	55.84	33.39	12.03	31.06	329	320	P	V
		5855.4	68.87	-41.82	110.69	54.5	33.4	12.03	31.06	329	320	P	V
		5875.4	62.61	-42.29	104.9	48.06	33.45	12.17	31.07	329	320	P	V
		5931.4	54.94	-13.26	68.2	40.11	33.61	12.31	31.09	329	320	P	V
													V
													V
	Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.											



Band 4 5725~5850MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 0b+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 151 5755MHz		11510	56.38	-17.62	74	55.55	40.18	18.45	57.8	332	357	P	H
		11510	45.22	-8.78	54	44.39	40.18	18.45	57.8	332	357	A	H
		17265	48.47	-19.73	68.2	40.58	41.98	23.17	57.26	100	0	P	H
													H
		11510	55.35	-18.65	74	54.52	40.18	18.45	57.8	367	22	P	V
		11510	44.38	-9.62	54	43.55	40.18	18.45	57.8	367	22	A	V
		17265	48.12	-20.08	68.2	40.23	41.98	23.17	57.26	100	0	P	V
													V
802.11n HT40 CH 159 5795MHz		11590	54.22	-19.78	74	53.46	40.02	18.54	57.8	349	0	P	H
		11590	44.92	-9.08	54	44.16	40.02	18.54	57.8	349	0	A	H
		17385	51.14	-17.06	68.2	43.28	42.25	23.29	57.68	100	0	P	H
													H
		11590	50.76	-23.24	74	50	40.02	18.54	57.8	100	0	P	V
		17385	50.4	-17.8	68.2	42.54	42.25	23.29	57.68	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 0b+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 155 5775MHz		5649.4	64.64	-3.56	68.2	51.03	32.82	11.79	31	302	319	P	H
		5699	74.92	-29.54	104.46	61.15	32.96	11.82	31.01	302	319	P	H
		5715.8	78.73	-30.9	109.63	64.91	33	11.84	31.02	302	319	P	H
		5723.2	77.05	-41.05	118.1	63.21	33.02	11.84	31.02	302	319	P	H
	*	5775	106.5	-	-	92.51	33.17	11.86	31.04	302	319	P	H
	*	5775	99.45	-	-	85.46	33.17	11.86	31.04	302	319	A	H
		5851	76.1	-43.82	119.92	61.75	33.38	12.03	31.06	302	319	P	H
		5859.4	74.88	-34.69	109.57	60.51	33.41	12.03	31.07	302	319	P	H
		5876.8	70.33	-33.53	103.86	55.77	33.46	12.17	31.07	302	319	P	H
		5927.6	61.16	-7.04	68.2	46.34	33.6	12.31	31.09	302	319	P	H
													H
													H
Remark	1.	No other spurious found.											
	2.	All results are PASS against Peak and Average limit line.											



Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 0b+1b	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.
802.11ac		11550	47.27	-26.73	74	46.48	40.1	18.49	57.8	100	0	P	H
		17325	49.77	-18.43	68.2	41.88	42.12	23.21	57.44	100	0	P	H
													H
VHT80													H
CH 155		11550	49.91	-24.09	74	49.12	40.1	18.49	57.8	100	0	P	V
5775MHz		17325	49.41	-18.79	68.2	41.52	42.12	23.21	57.44	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

5GHz WIFI 802.11ac VHT80 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
0b+1b		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
5GHz 802.11ac VHT80 LF		107.76	29.25	-14.25	43.5	43.13	17.12	1.43	32.43	100	0	P	H
		184.71	21.57	-21.93	43.5	36.74	15.54	1.7	32.41	-	-	P	H
		224.67	24.54	-21.46	46	38.47	16.6	1.83	32.36	-	-	P	H
		416.2	24.44	-21.56	46	31.47	22.66	2.68	32.37	-	-	P	H
		568.8	30.72	-15.28	46	34.95	24.87	3.3	32.4	-	-	P	H
		757.8	29.55	-16.45	46	30.31	27.56	3.97	32.29	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
Remark	1.	No other spurious found.											
	2.	All results are PASS against limit line.											

**Note symbol**

*	Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is over limit line.
P/A	Peak or Average
H/V	Horizontal or Vertical



A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
0b+1b		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Level(dB μ V/m) =

$$\text{Antenna Factor(dB/m)} + \text{Cable Loss(dB)} + \text{Read Level(dB μ V)} - \text{Preamp Factor(dB)}$$

2. Over Limit(dB) = Level(dB μ V/m) – Limit Line(dB μ V/m)

For Peak Limit @ 2390MHz:

1. Level(dB μ V/m)

$$= \text{Antenna Factor(dB/m)} + \text{Cable Loss(dB)} + \text{Read Level(dB μ V)} - \text{Preamp Factor(dB)}$$

$$= 32.22(\text{dB/m}) + 4.58(\text{dB}) + 54.51(\text{dB μ V}) - 35.86 (\text{dB})$$

$$= 55.45 (\text{dB μ V/m})$$

2. Over Limit(dB)

$$= \text{Level(dB μ V/m)} - \text{Limit Line(dB μ V/m)}$$

$$= 55.45(\text{dB μ V/m}) - 74(\text{dB μ V/m})$$

$$= -18.55(\text{dB})$$

For Average Limit @ 2390MHz:

1. Level(dB μ V/m)

$$= \text{Antenna Factor(dB/m)} + \text{Cable Loss(dB)} + \text{Read Level(dB μ V)} - \text{Preamp Factor(dB)}$$

$$= 32.22(\text{dB/m}) + 4.58(\text{dB}) + 42.6(\text{dB μ V}) - 35.86 (\text{dB})$$

$$= 43.54 (\text{dB μ V/m})$$

2. Over Limit(dB)

$$= \text{Level(dB μ V/m)} - \text{Limit Line(dB μ V/m)}$$

$$= 43.54(\text{dB μ V/m}) - 54(\text{dB μ V/m})$$

$$= -10.46(\text{dB})$$

Both peak and average measured complies with the limit line, so test result is “PASS”.

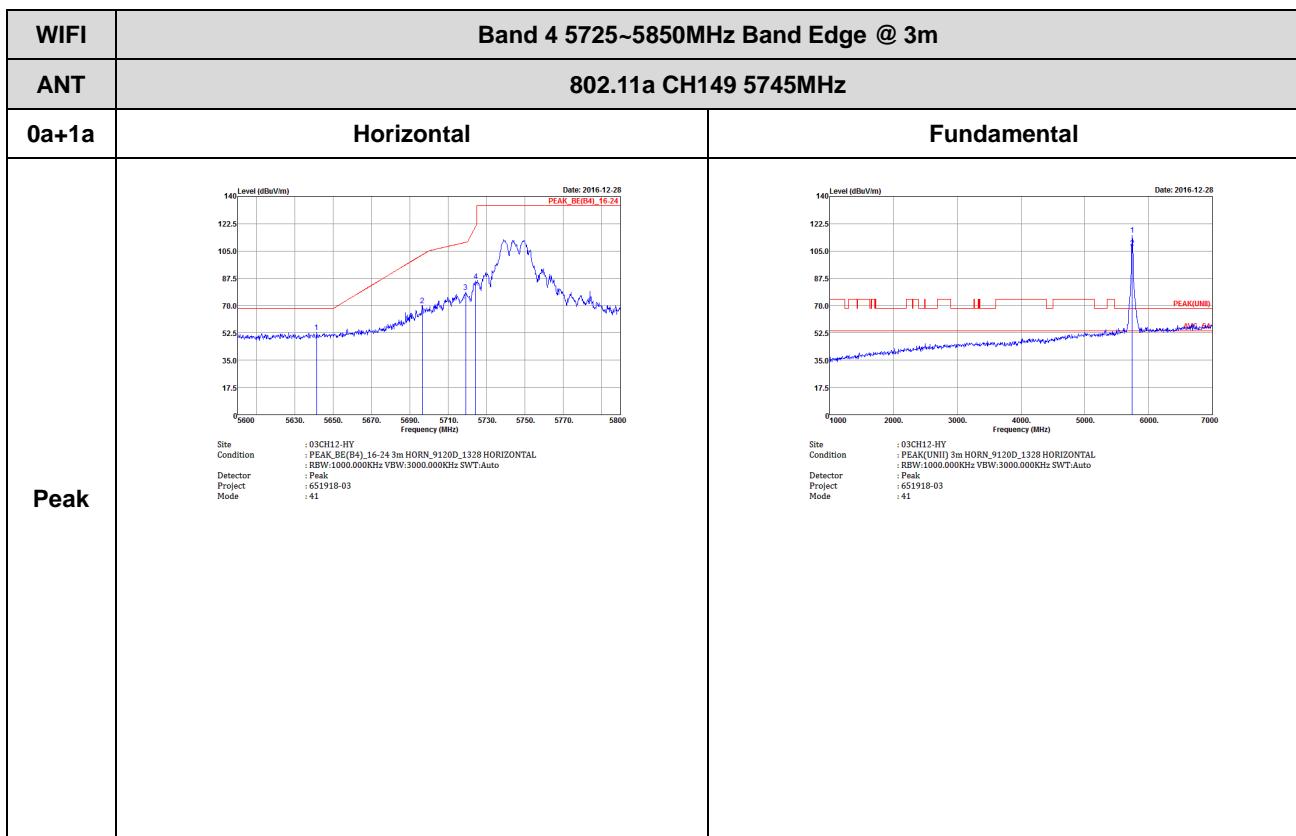


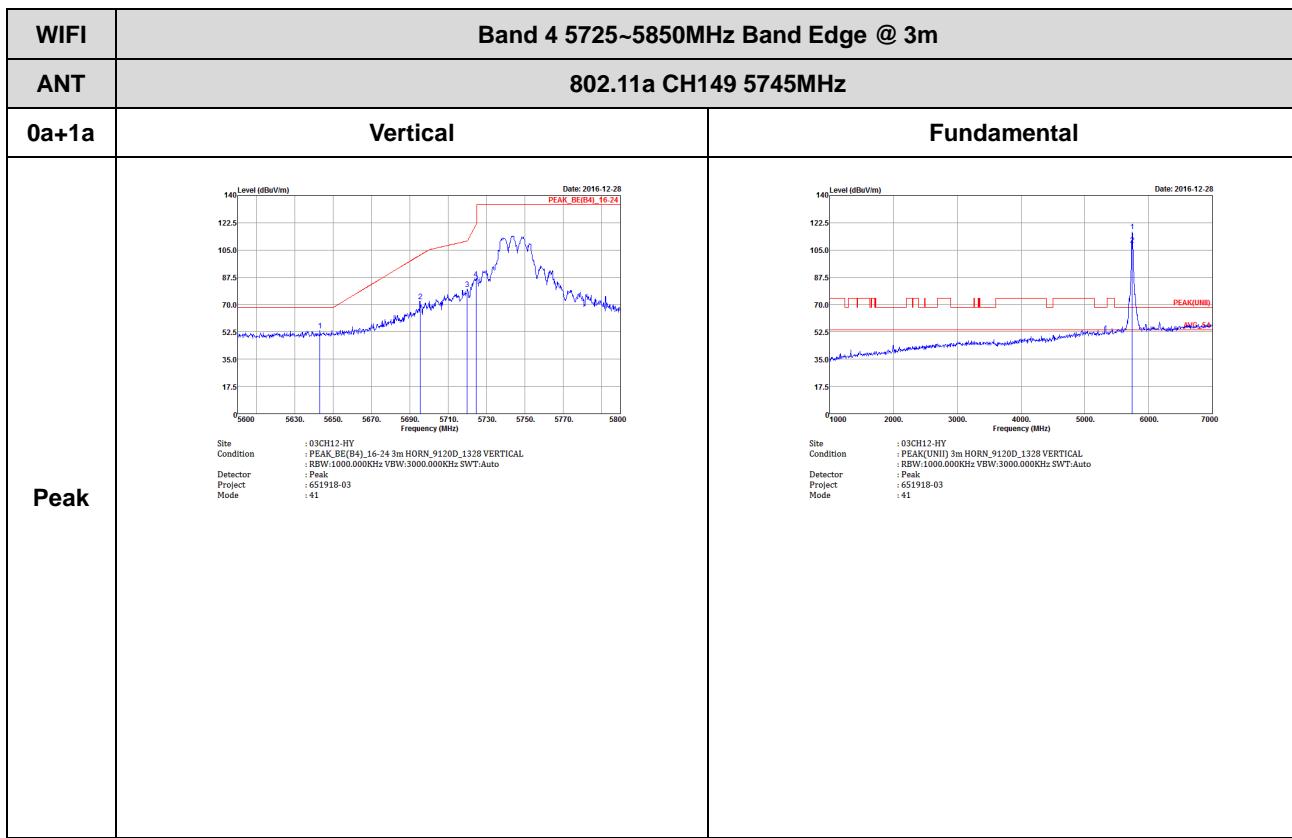
Appendix C. Radiated Spurious Emission Plots

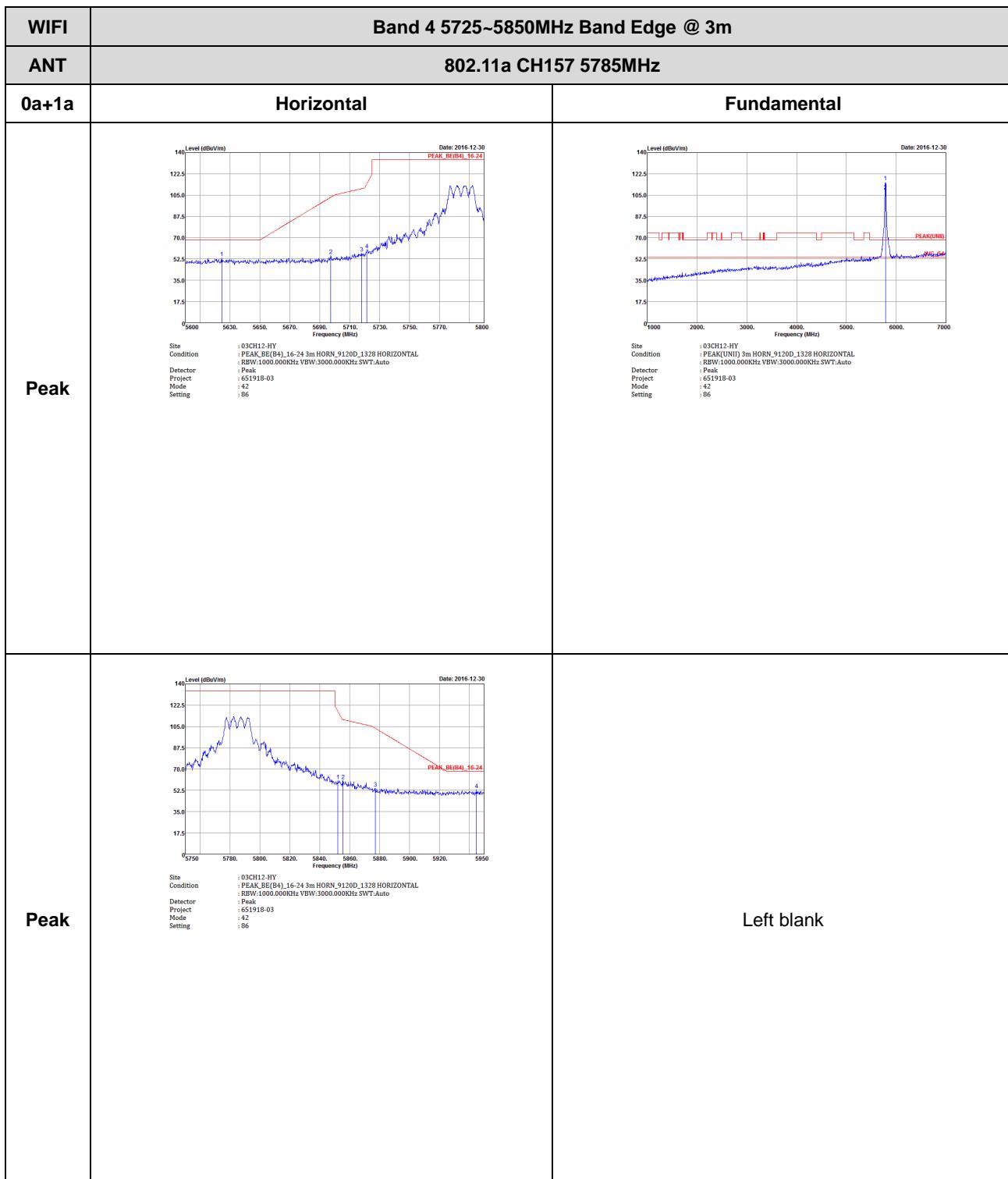
Test Engineer :	Karl Hou, Nick Yu, Peter Chiu, and Rover Lee	Temperature :	22~25°C
		Relative Humidity :	53~56%

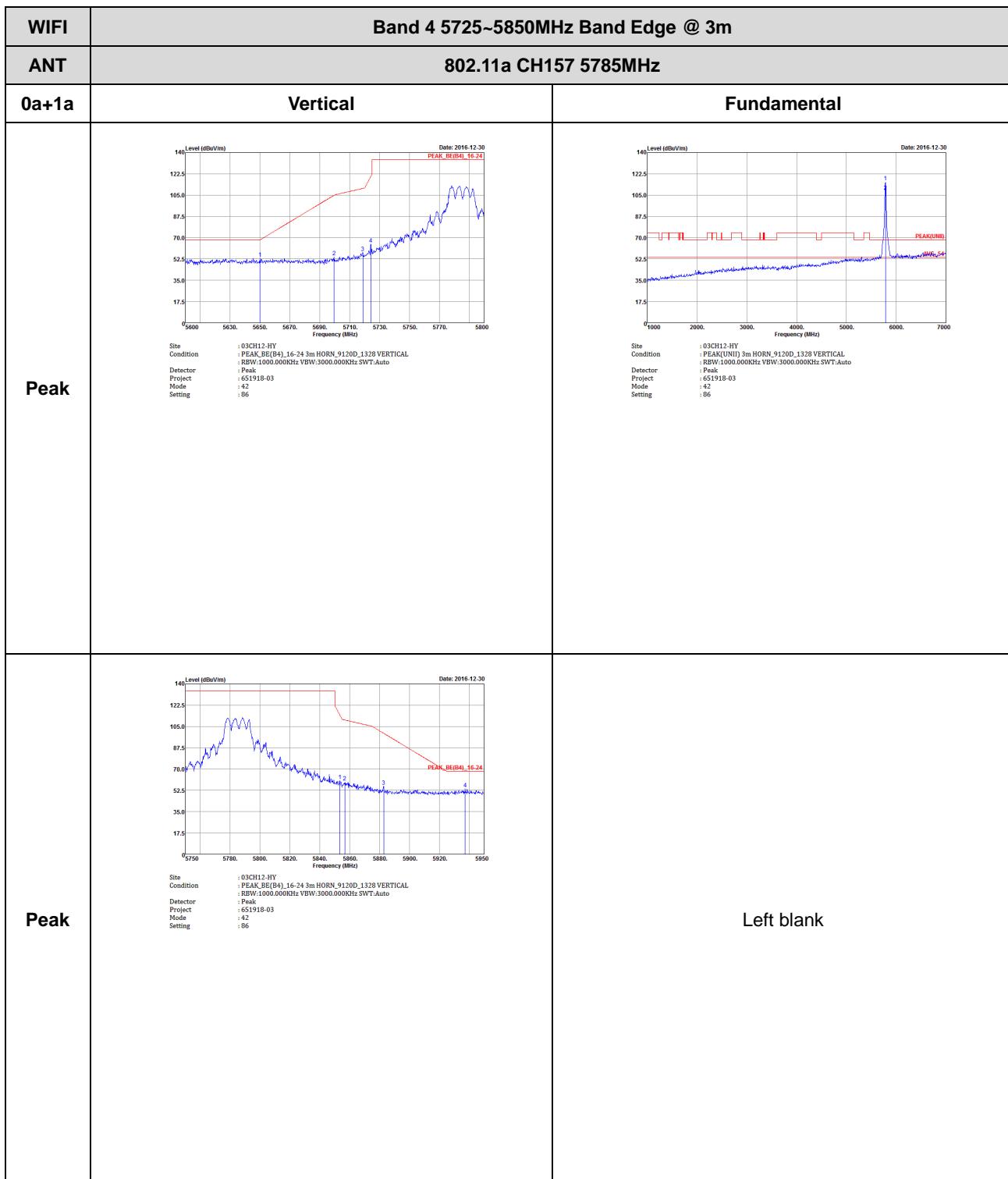
Band 4 - 5725~5850MHz

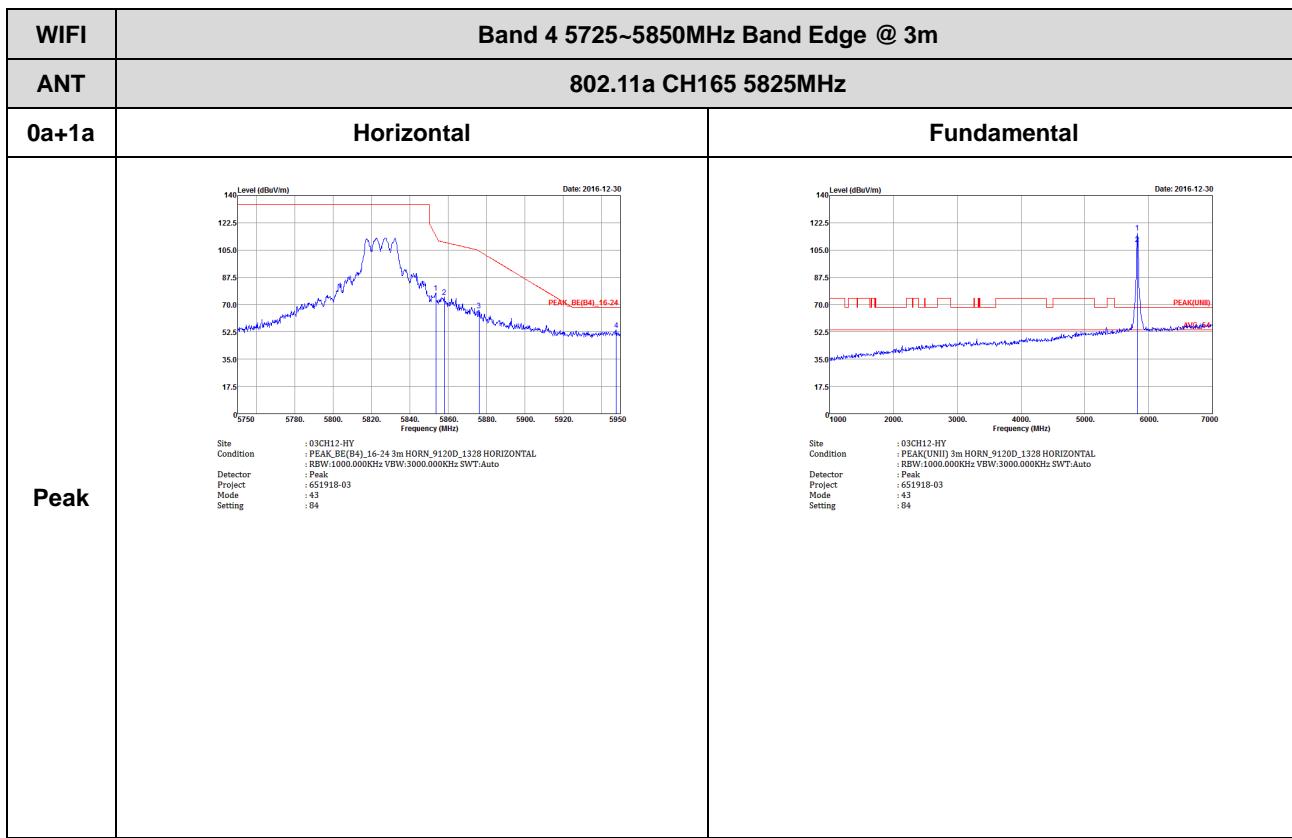
WIFI 802.11a (Band Edge @ 3m)

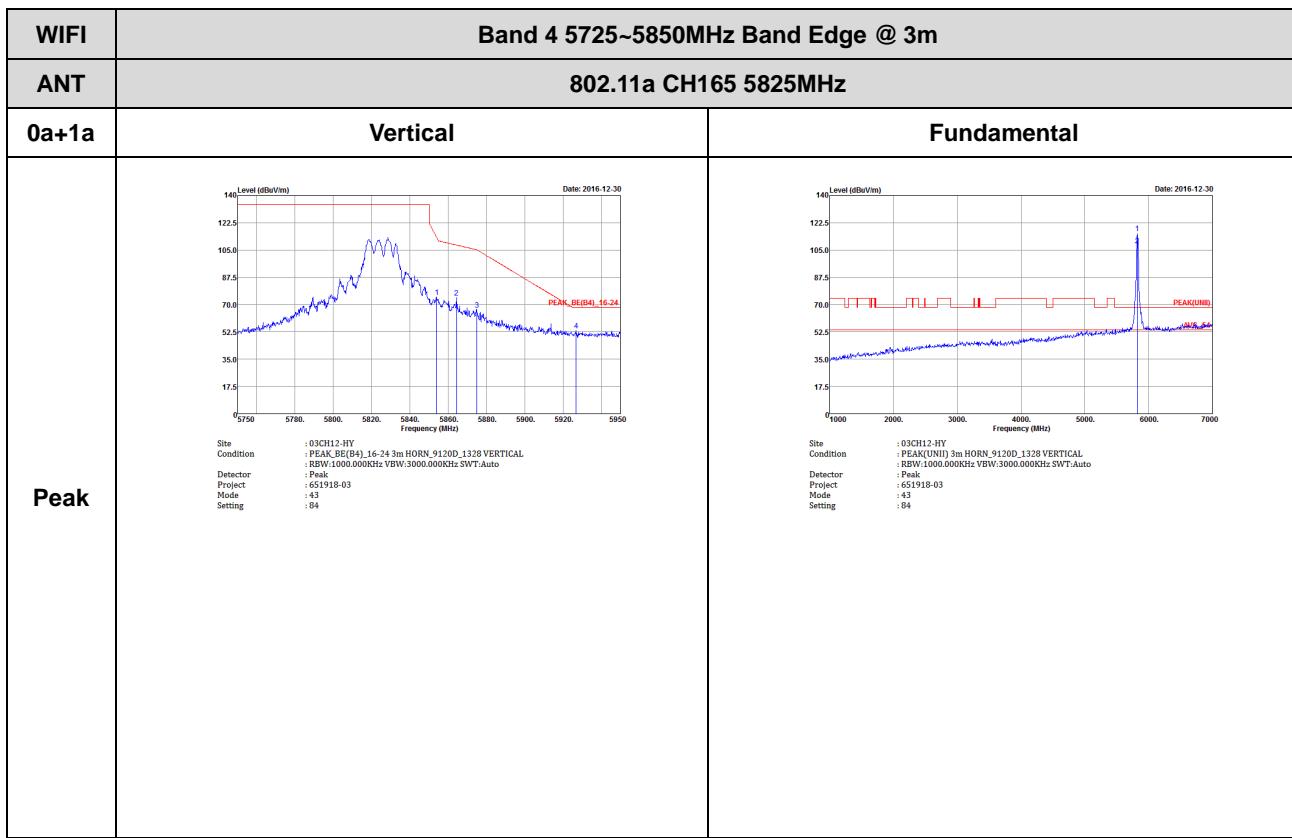








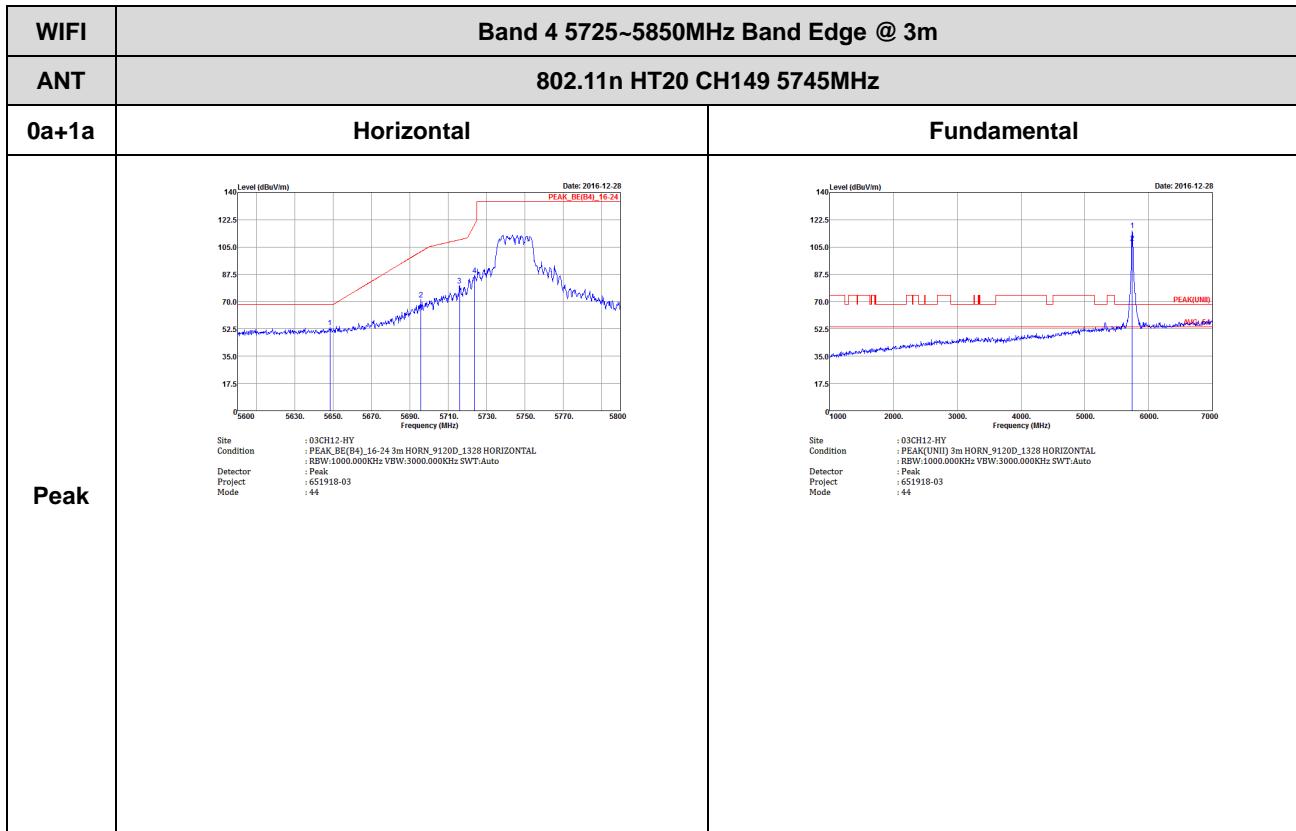


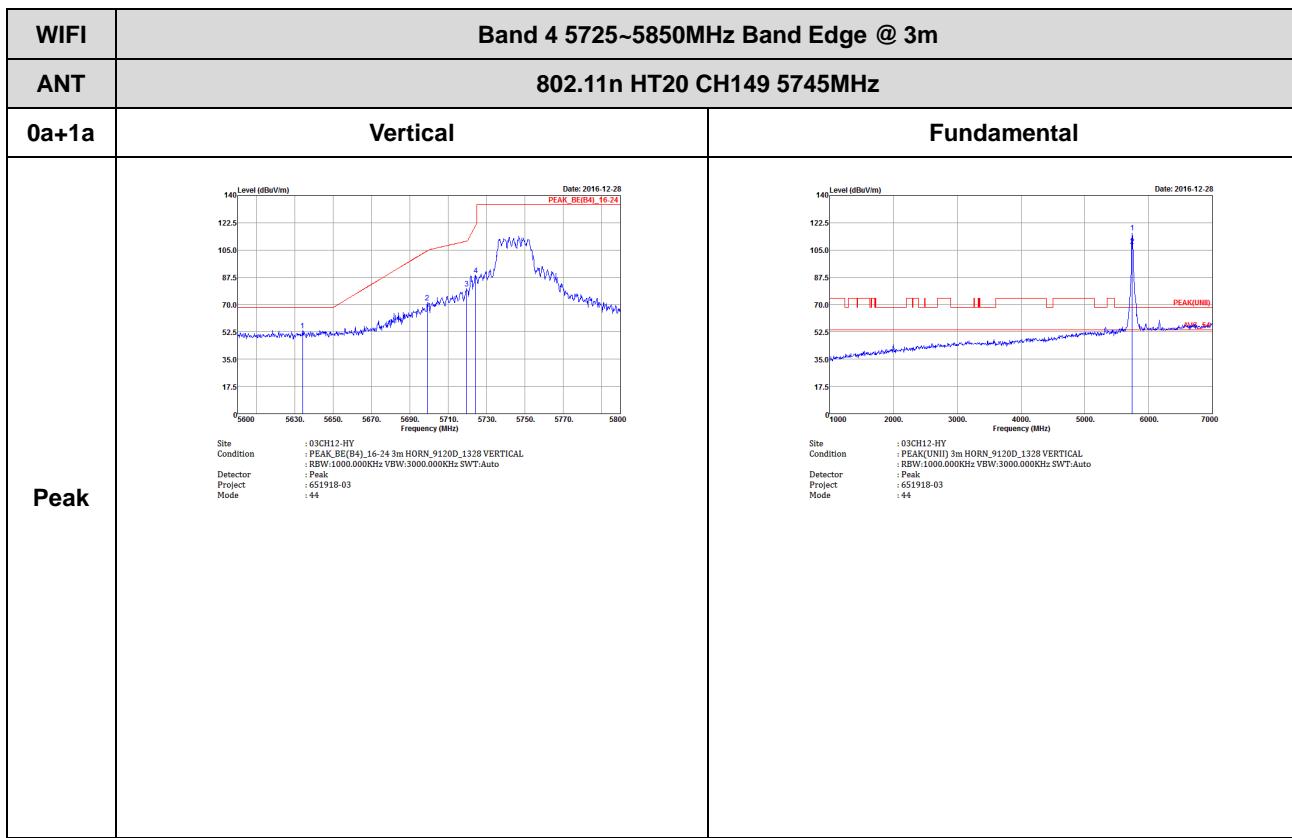


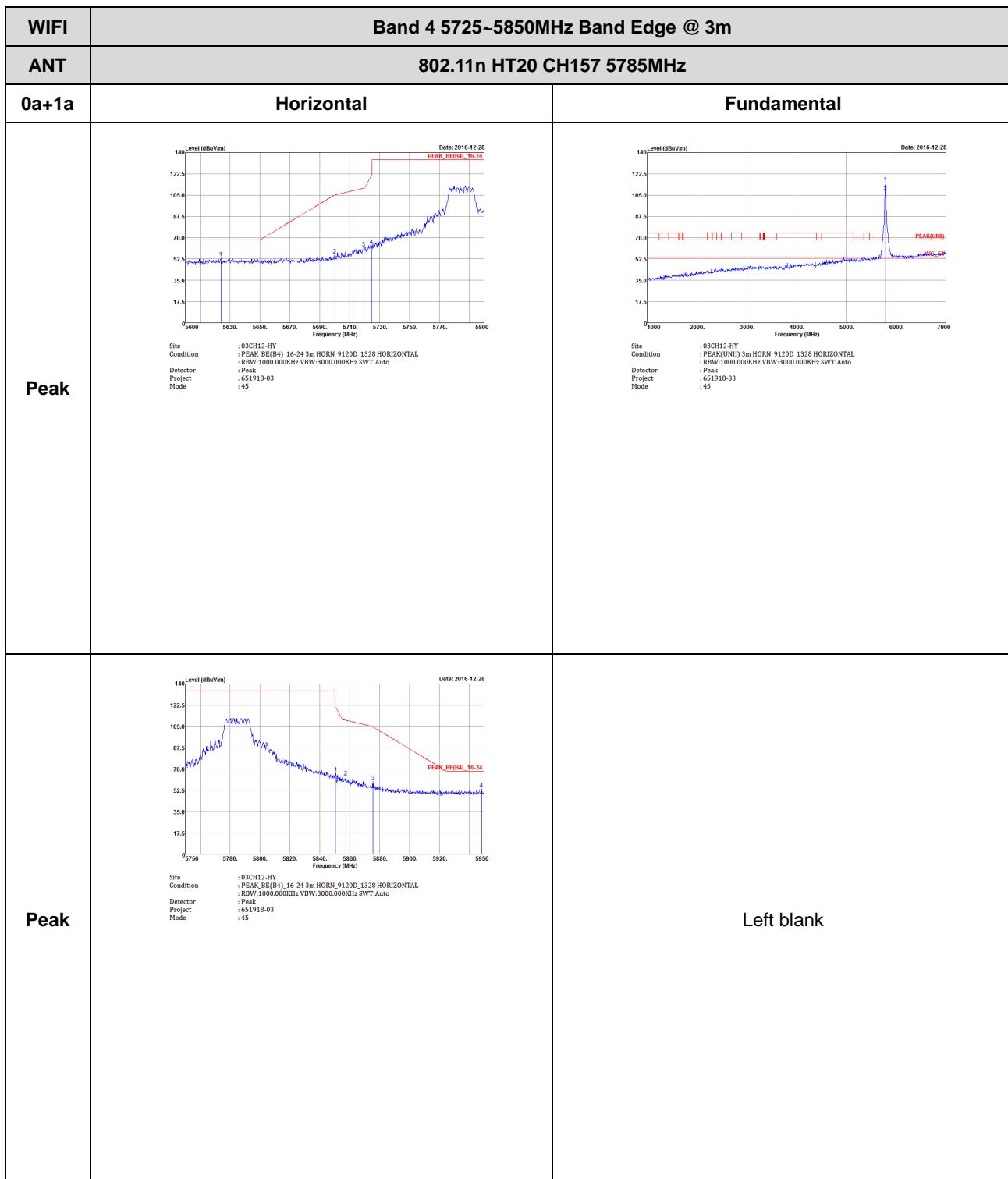


Band 4 5725~5850MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

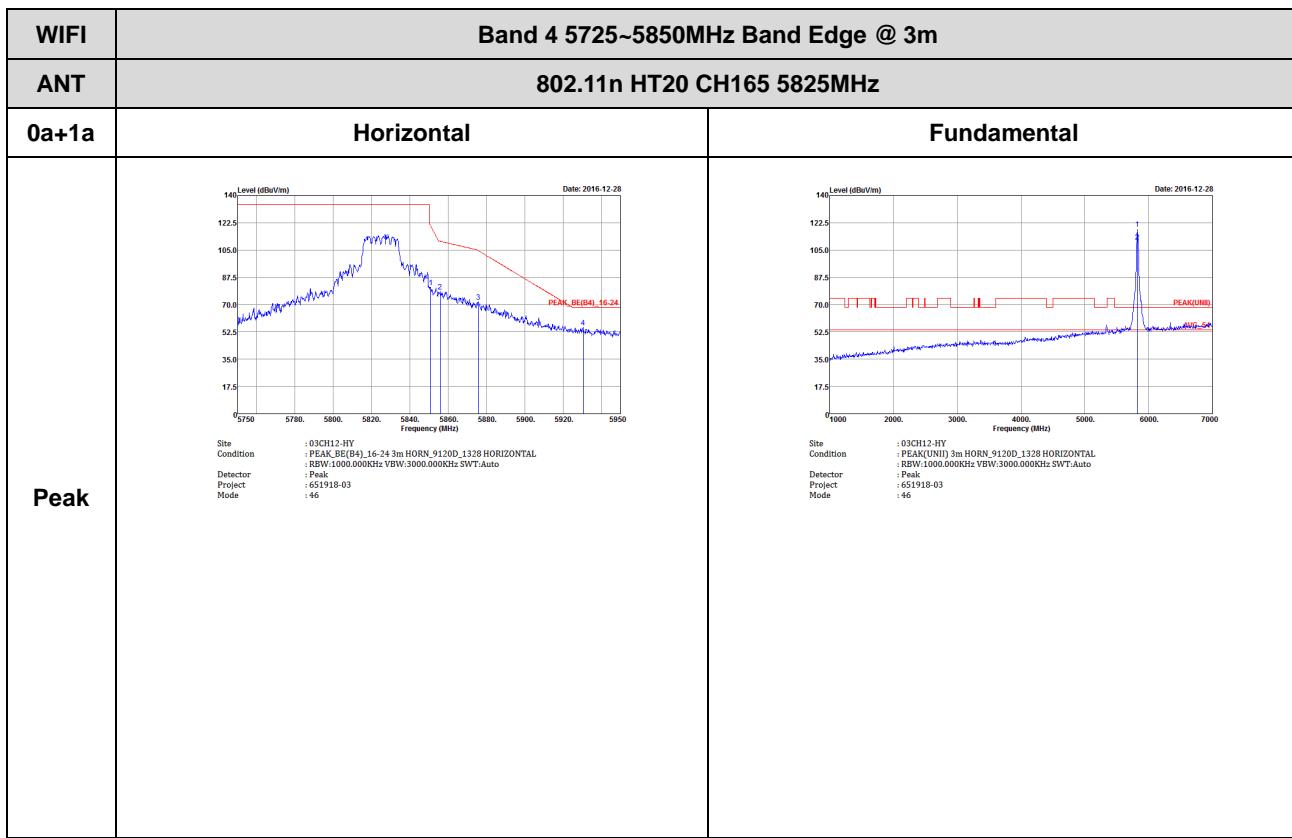


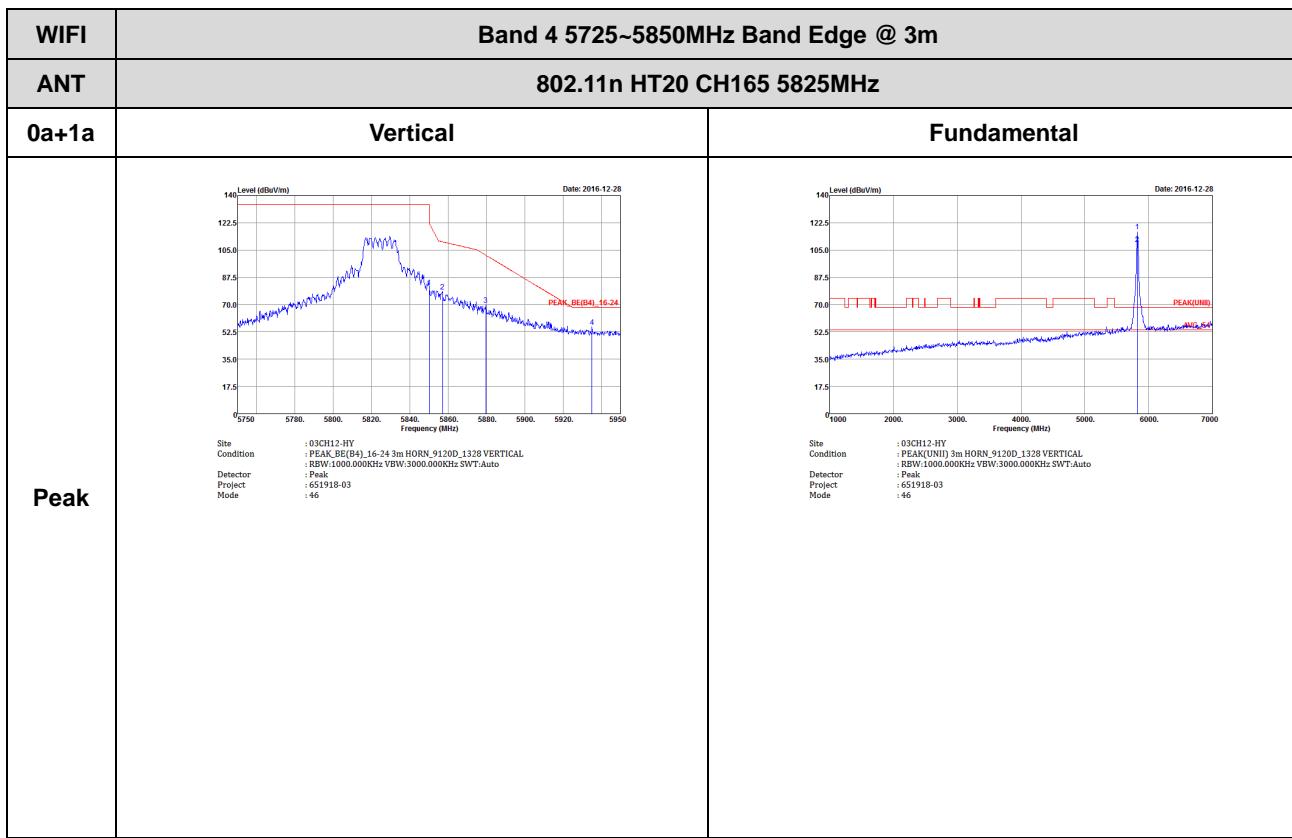






WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
0a+1a	Vertical	Fundamental
Peak	<p>Site Condition : 03CH12-HY Detector : PEAK(BE) Project : 651918-03 Mode : 45</p>	<p>Site Condition : 03CH12-HY Detector : PEAK(UNI) Project : 651918-03 Mode : 45</p>
Peak	<p>Site Condition : 03CH12-HY Detector : PEAK(BE) Project : 651918-03 Mode : 45</p>	Left blank







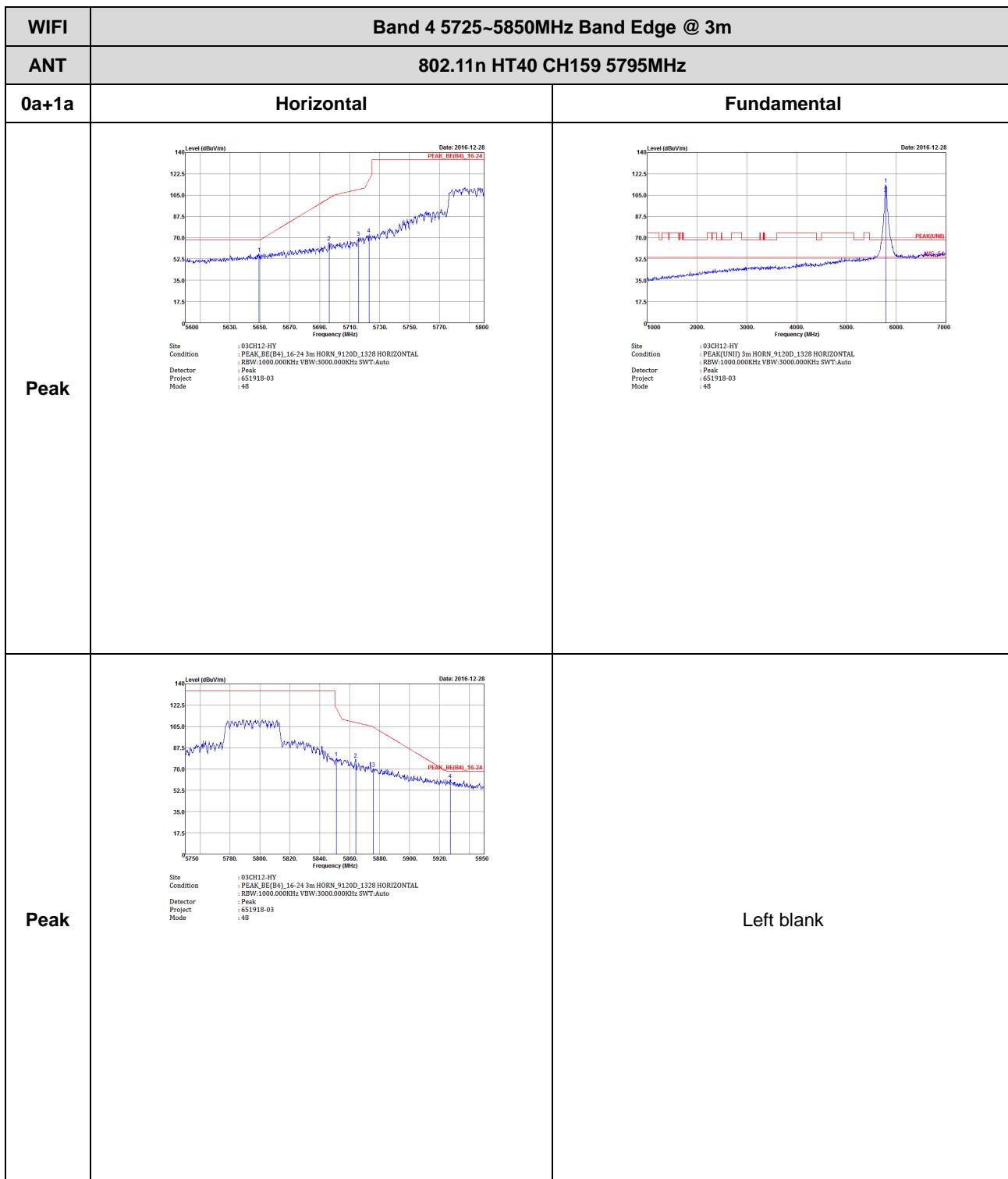
Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

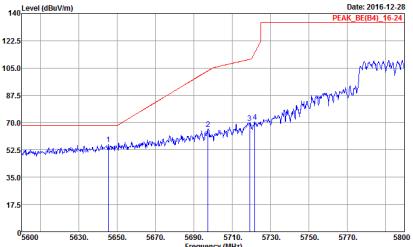
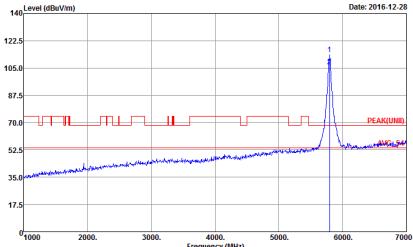
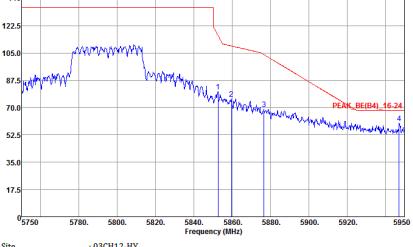
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
0a+1a	Horizontal	Fundamental
Peak	 Site Condition : 03CH12-HY : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL : BW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 651918-03 Mode : 47 Date: 2016-12-28 PEAK_BE(B4)_16-24	 Site Condition : 03CH12-HY : PEAK(UNI) 3m HORN_9120D_1328 HORIZONTAL : BW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 651918-03 Mode : 47 Date: 2016-12-28 PEAK(UNI) AVG
Peak	 Site Condition : 03CH12-HY : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL : BW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 651918-03 Mode : 47 Date: 2016-12-28 PEAK_BE(B4)_16-24	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
0a+1a	Vertical	Fundamental
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 651918-03 Mode : 47</p>	<p>Site : 03CH12-HY Condition : PEAK(UNI) 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 651918-03 Mode : 47</p>
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 651918-03 Mode : 47</p>	Left blank





WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
0a+1a	Vertical	Fundamental
Peak	 <p>Site Condition : 03CH12-HY : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 651918-03 Mode : 48</p>	 <p>Site Condition : 03CH12-HY : PEAK(UNI) 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 651918-03 Mode : 48</p>
Peak	 <p>Site Condition : 03CH12-HY : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 651918-03 Mode : 48</p>	Left blank



Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0a+1a	Horizontal	Fundamental
Peak	 Site Condition : 03CH12-HY : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL : BW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 651918-03 Mode : 49 Setting : 78 Date: 2016-12-28 PEAK_BE(B4)_16-24	 Site Condition : 03CH12-HY : PEAK(UNII) 3m HORN_9120D_1328 HORIZONTAL : BW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 651918-03 Mode : 49 Setting : 78 Date: 2016-12-28 PEAK(UNII) AVG
Peak	 Site Condition : 03CH12-HY : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL : BW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 651918-03 Mode : 49 Setting : 78 Date: 2016-12-28 PEAK_BE(B4)_16-24	Left blank

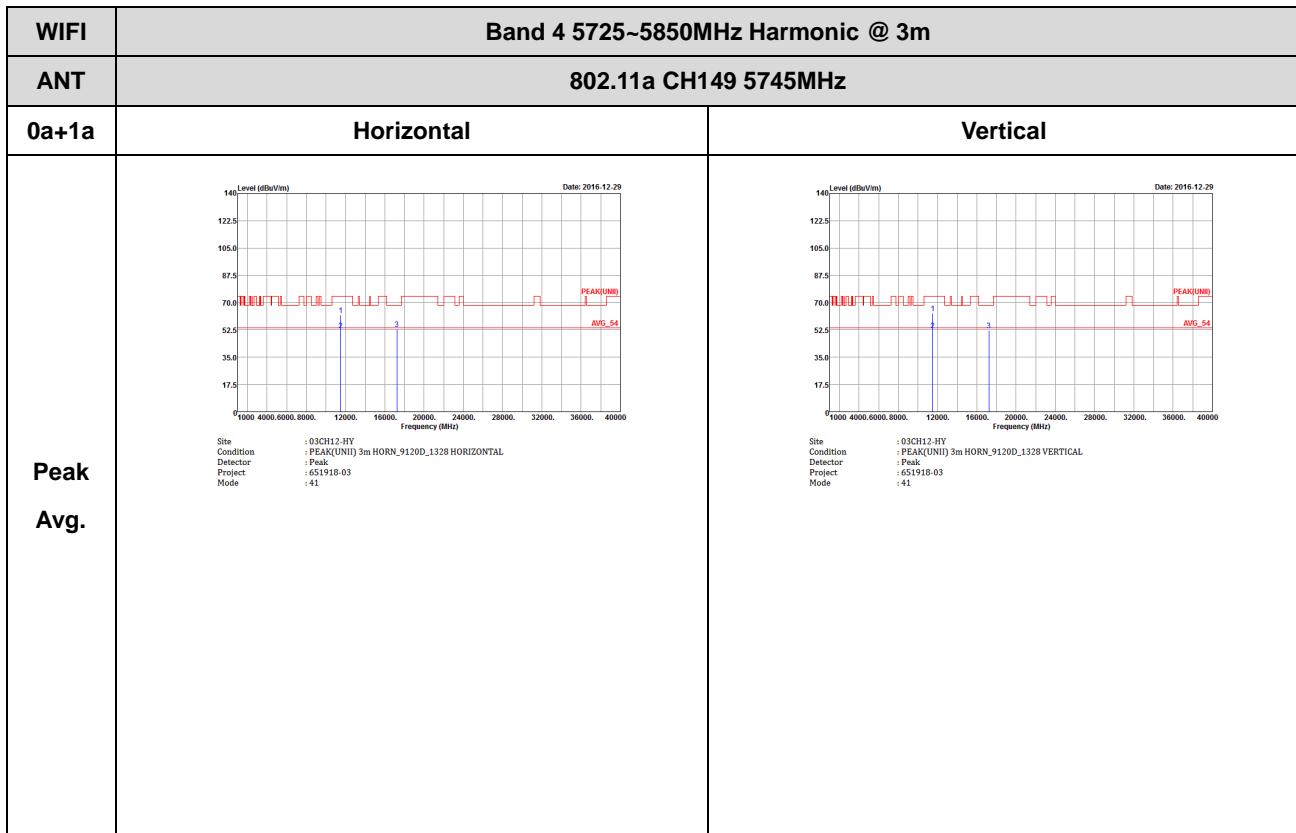


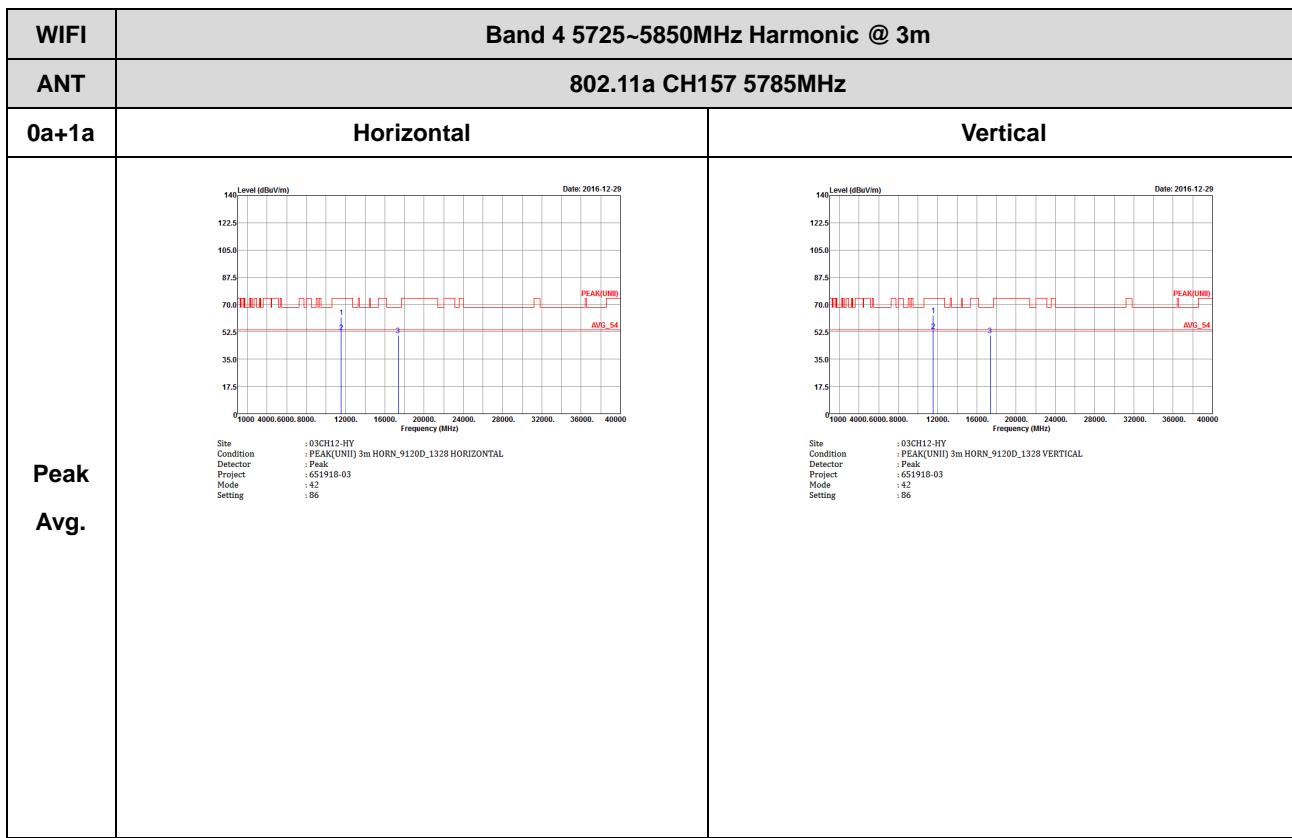
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0a+1a	Vertical	Fundamental
Peak	<p>Site Condition : 03CH12-HY : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector Project : Peak : 651918-03 Mode Setting : 49 : 78</p>	<p>Site Condition : 03CH12-HY : PEAK(UNI) 3m HORN_9120D_1328 VERTICAL Detector Project : Peak : 651918-03 Mode Setting : 49 : 78</p>
Peak	<p>Site Condition : 03CH12-HY : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector Project : Peak : 651918-03 Mode Setting : 49 : 78</p>	Left blank

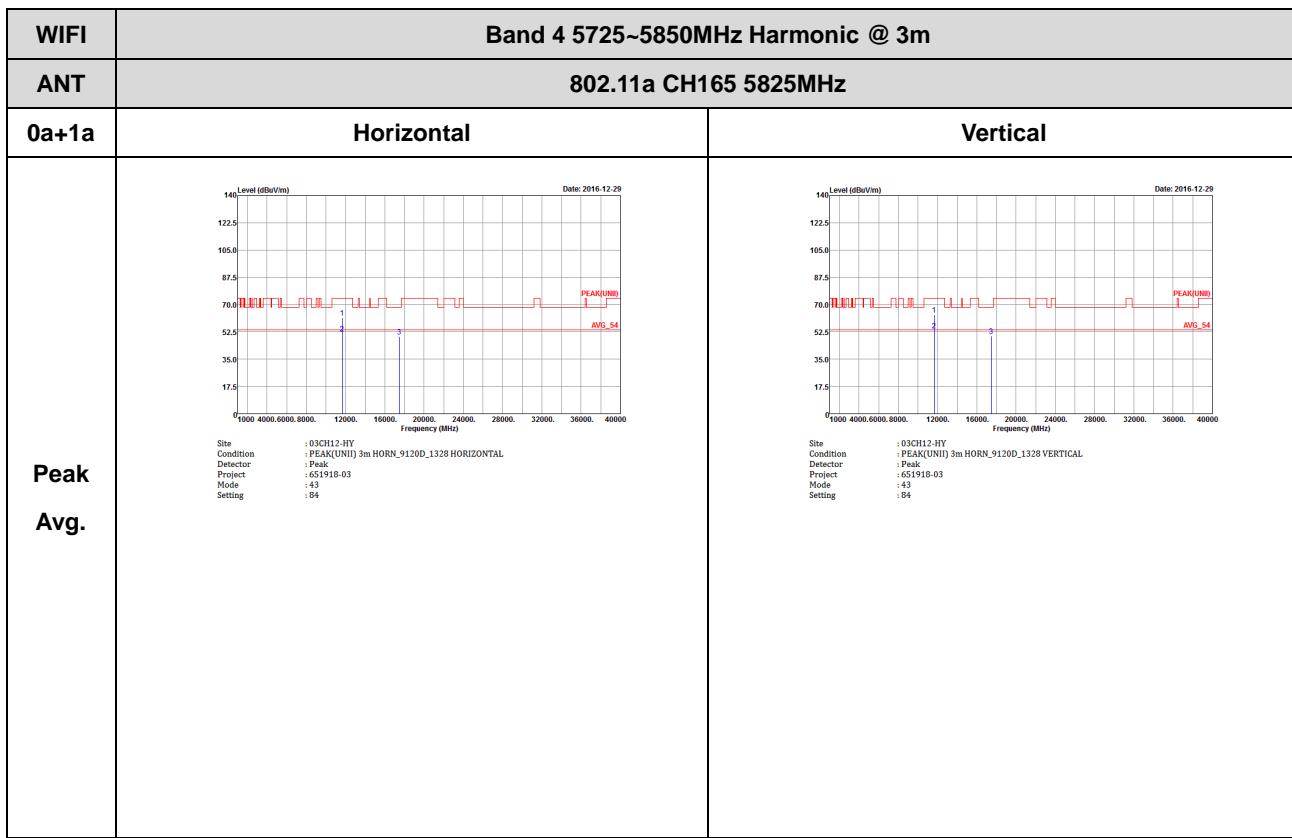


Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)



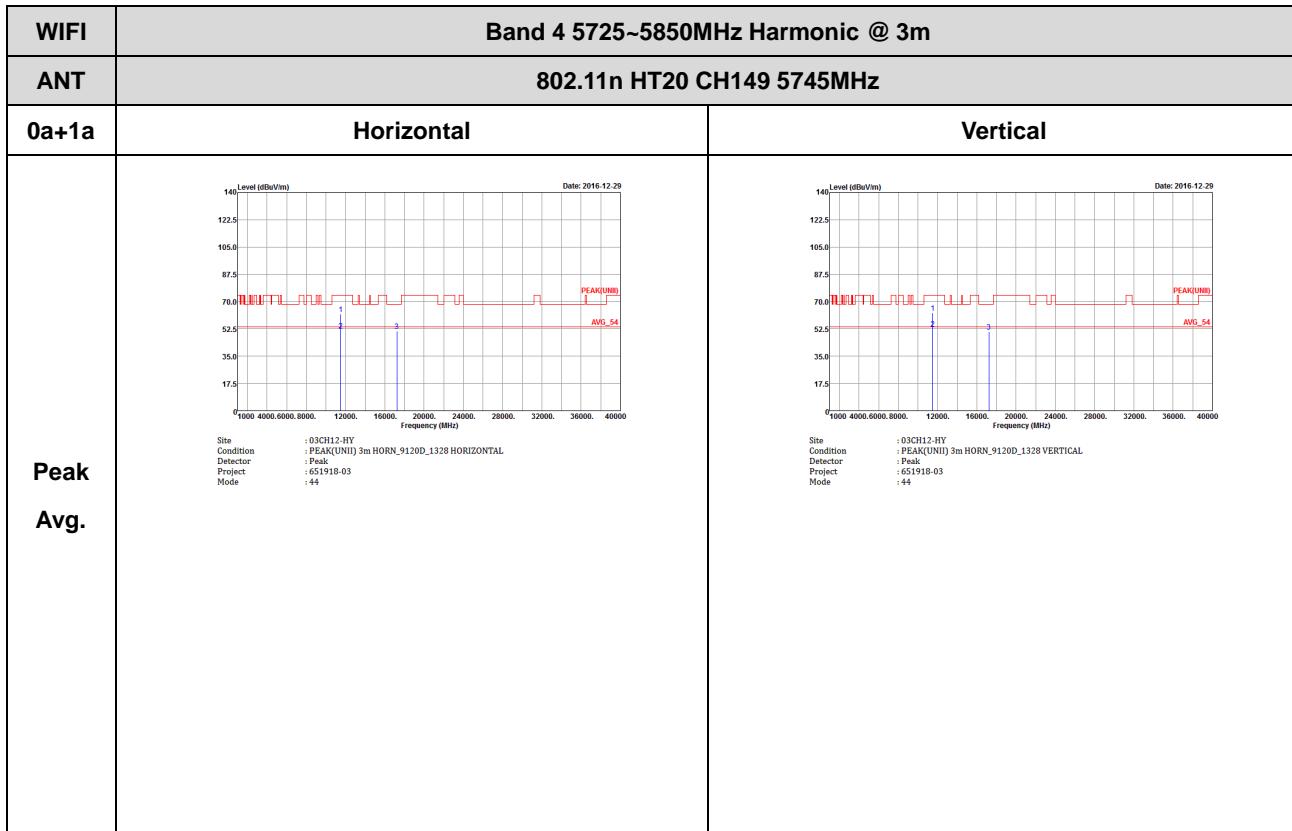


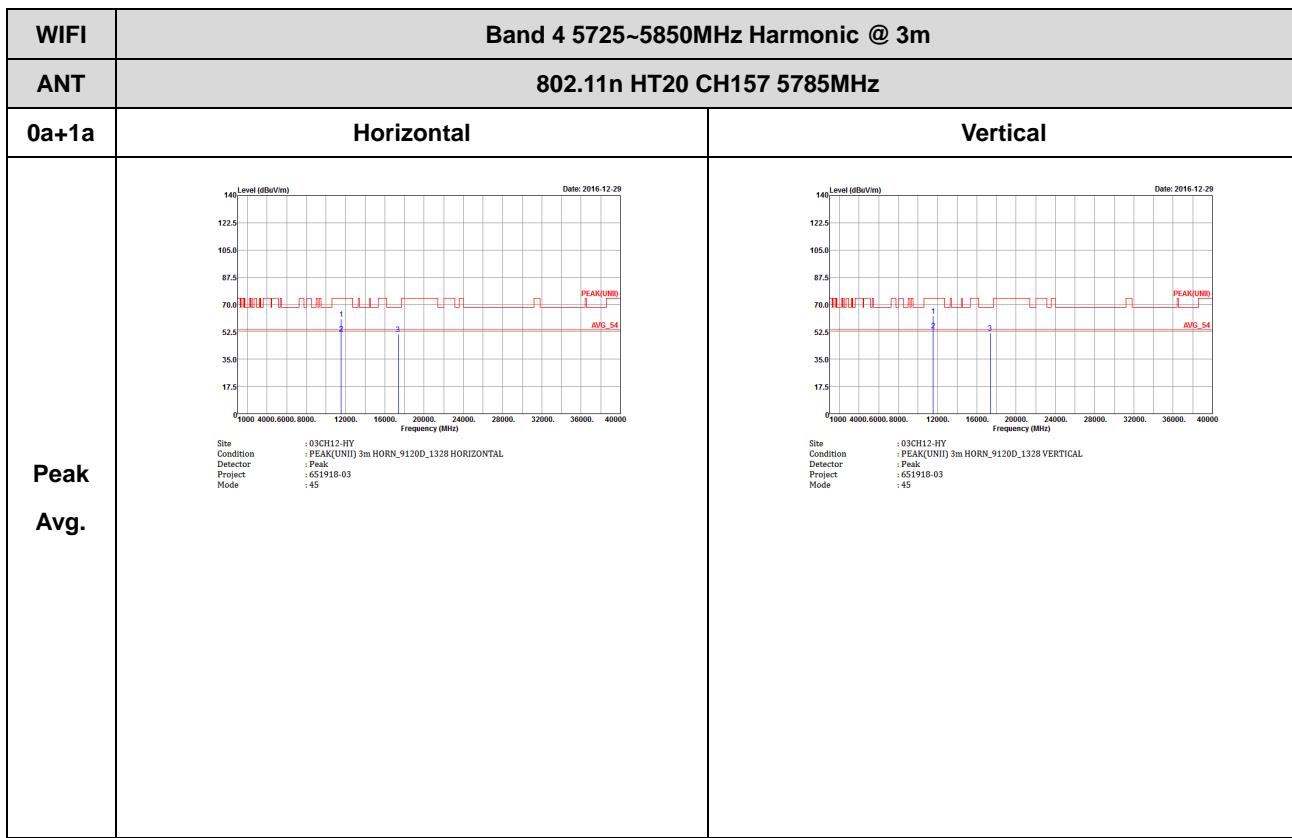


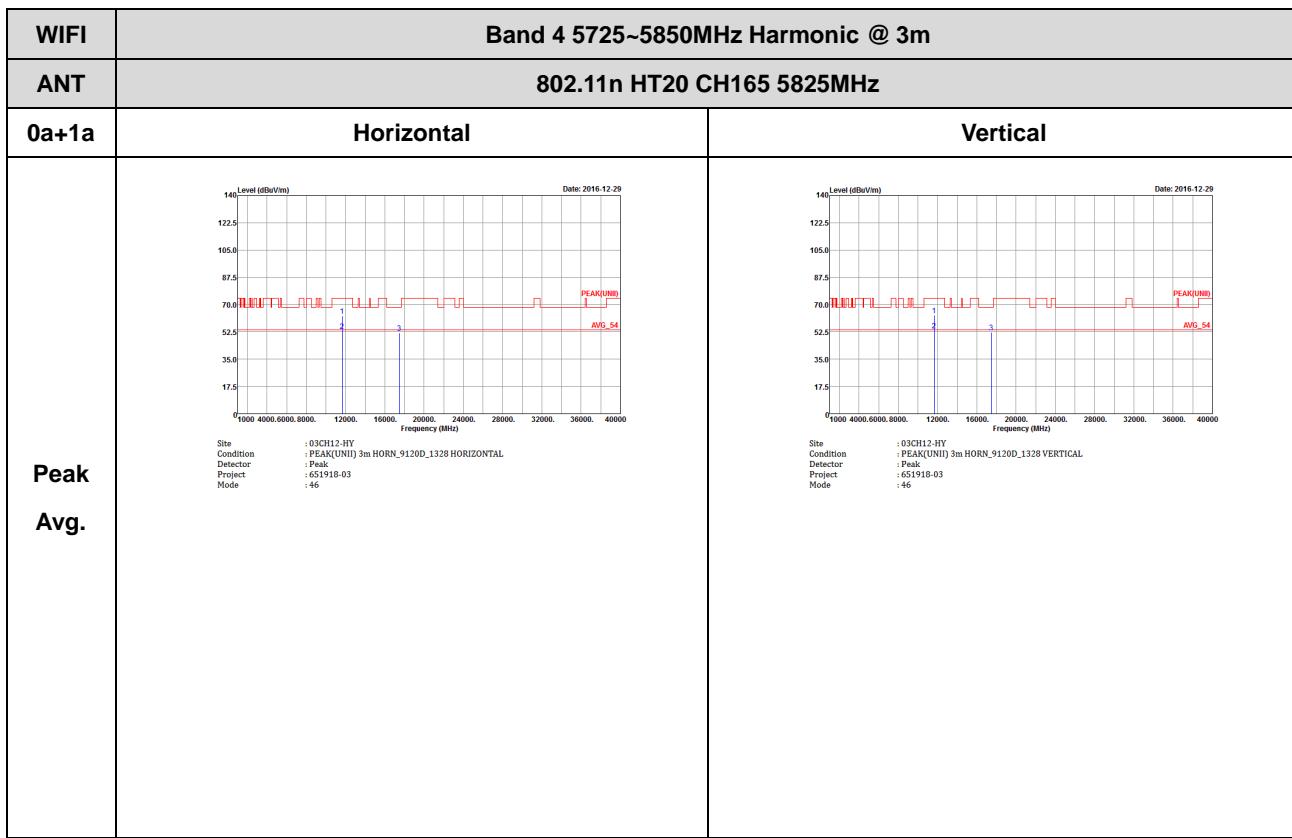


Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)



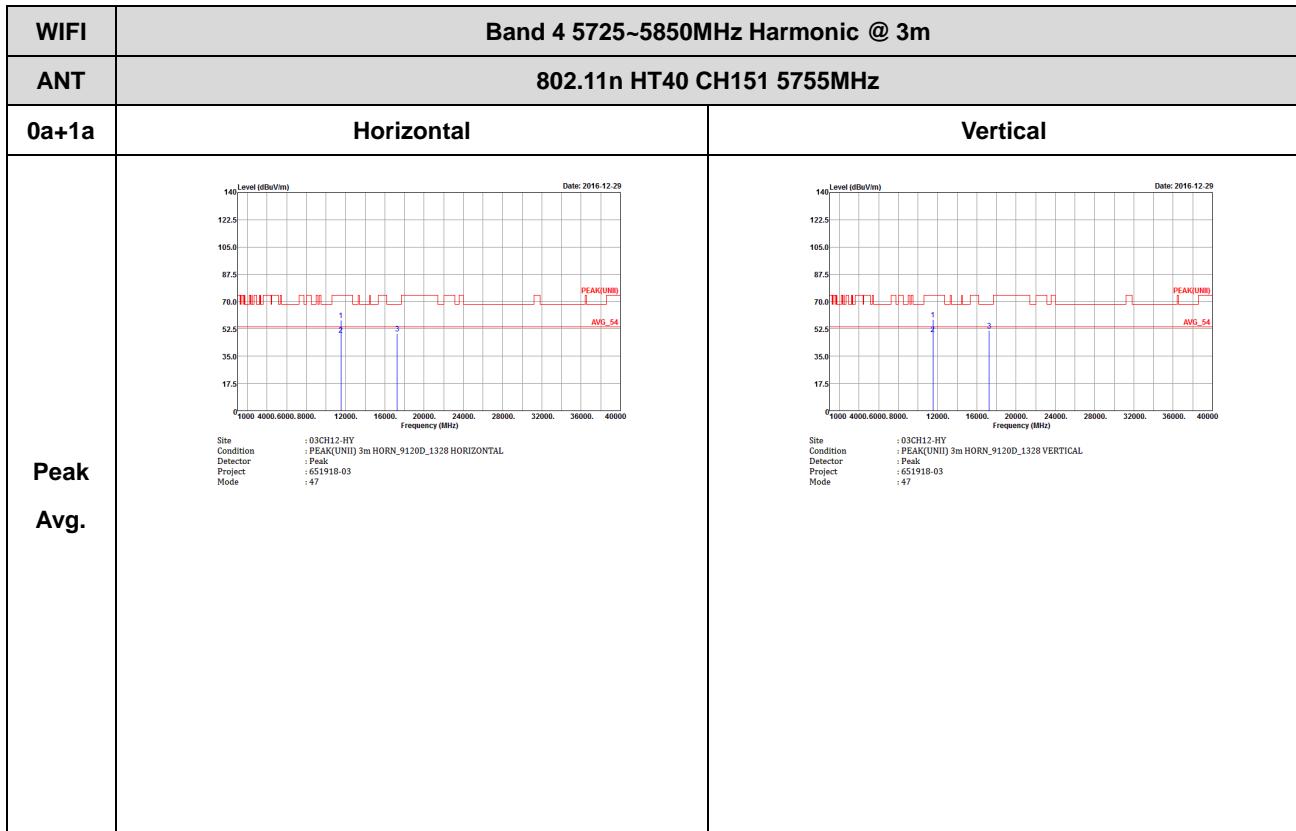


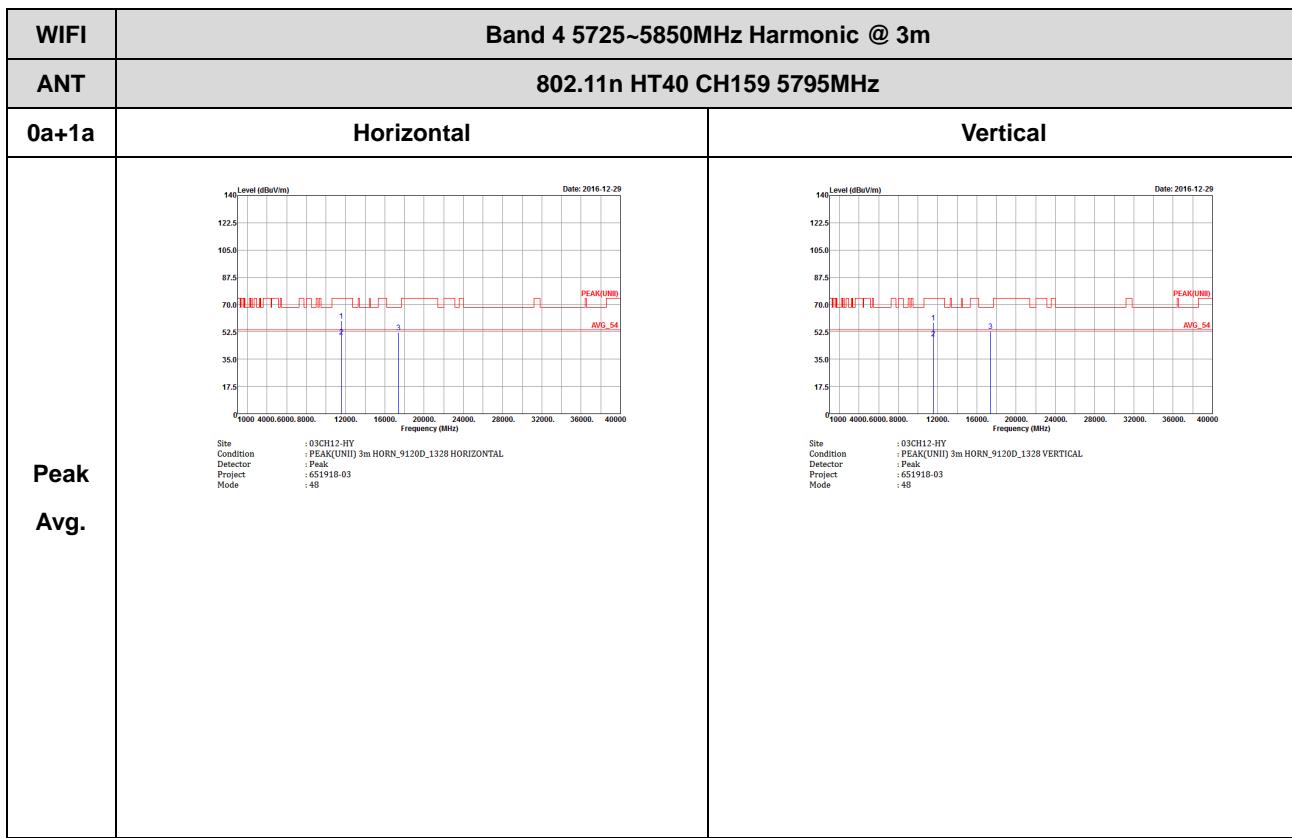




Band 4 5725~5850MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

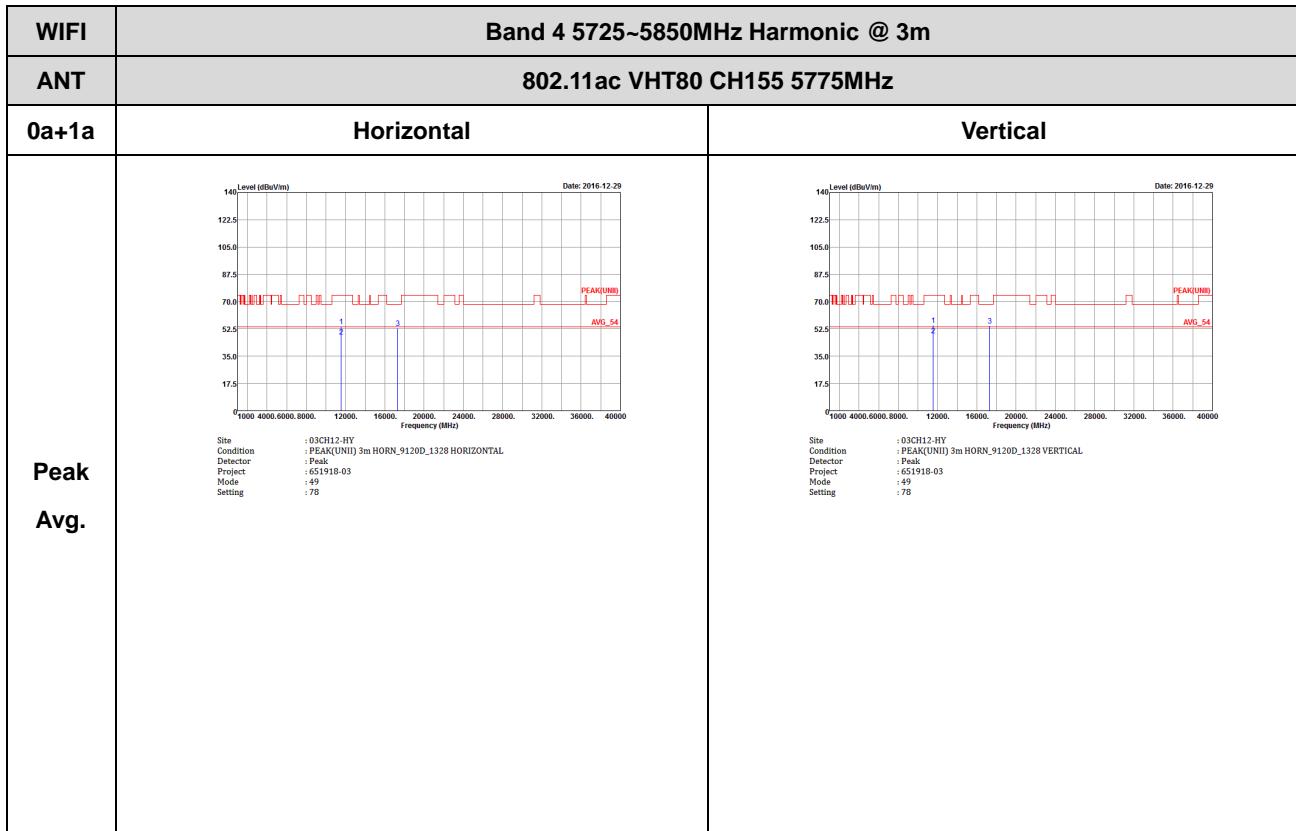






Band 4 5725~5850MHz

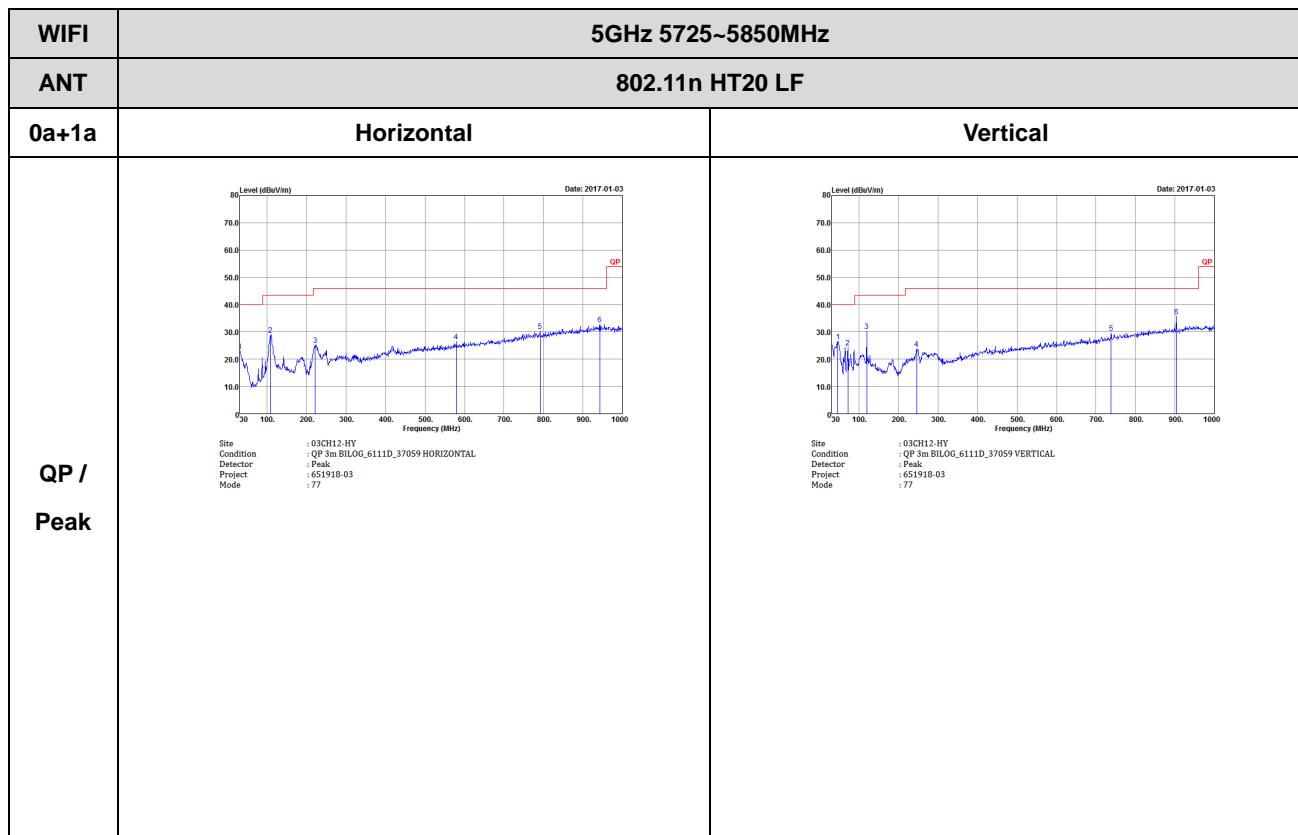
WIFI 802.11ac VHT80 (Harmonic @ 3m)





Emission below 1GHz

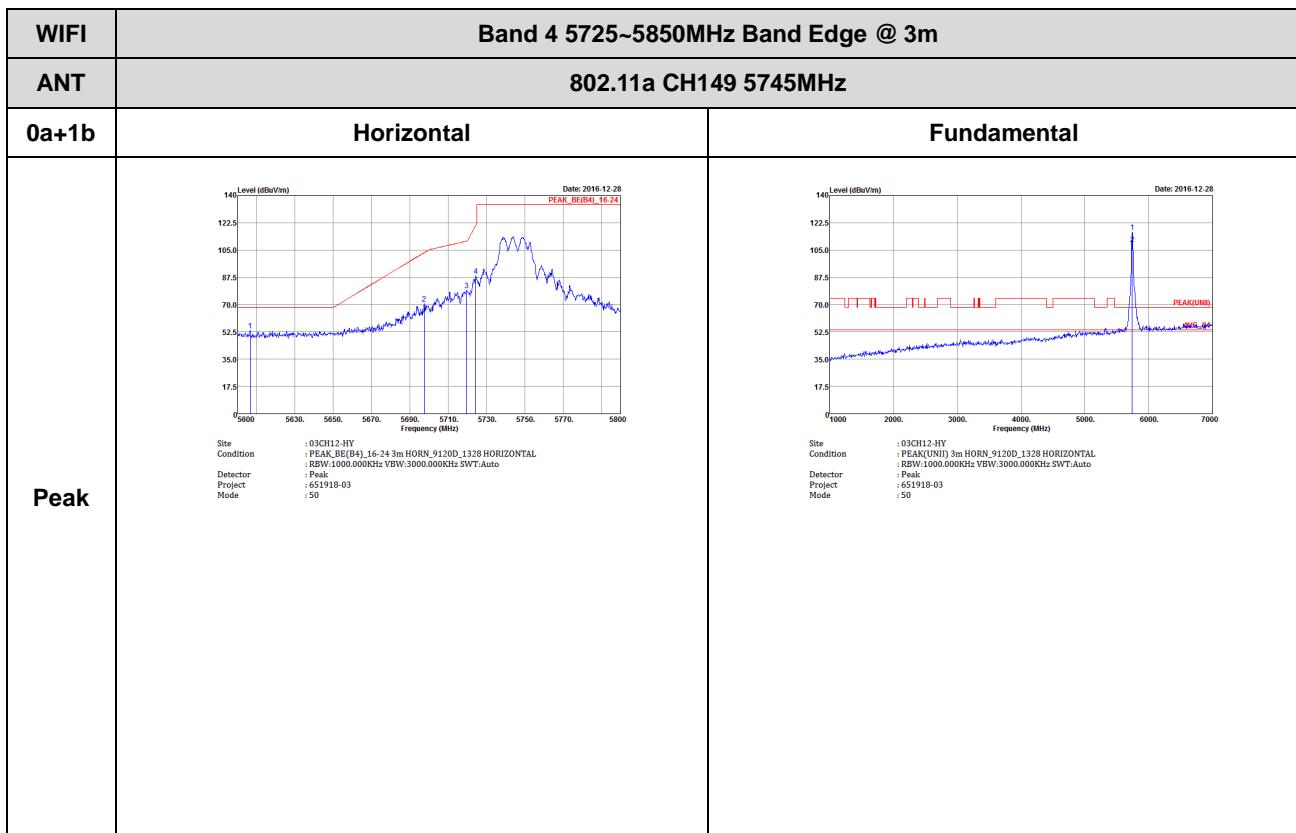
5GHz WIFI 802.11n HT20 (LF)

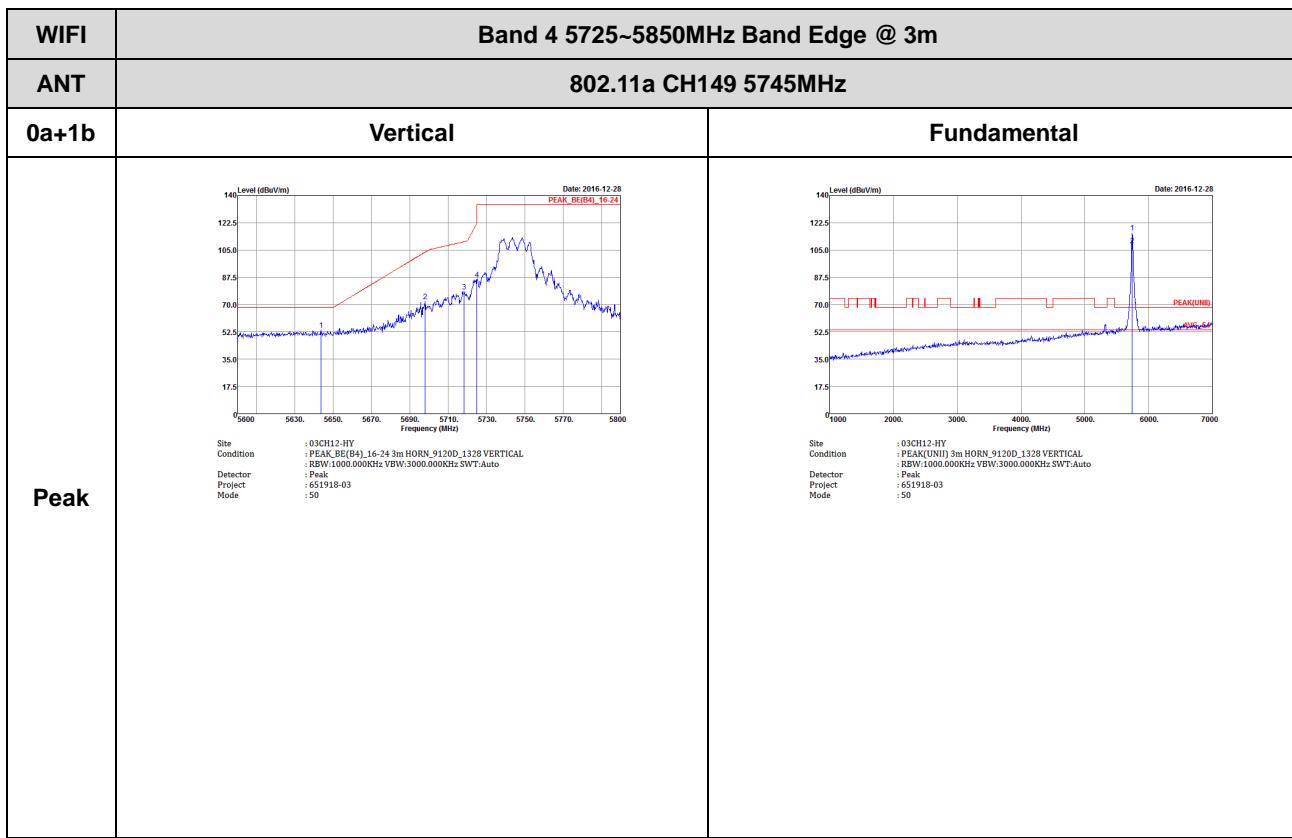




Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)



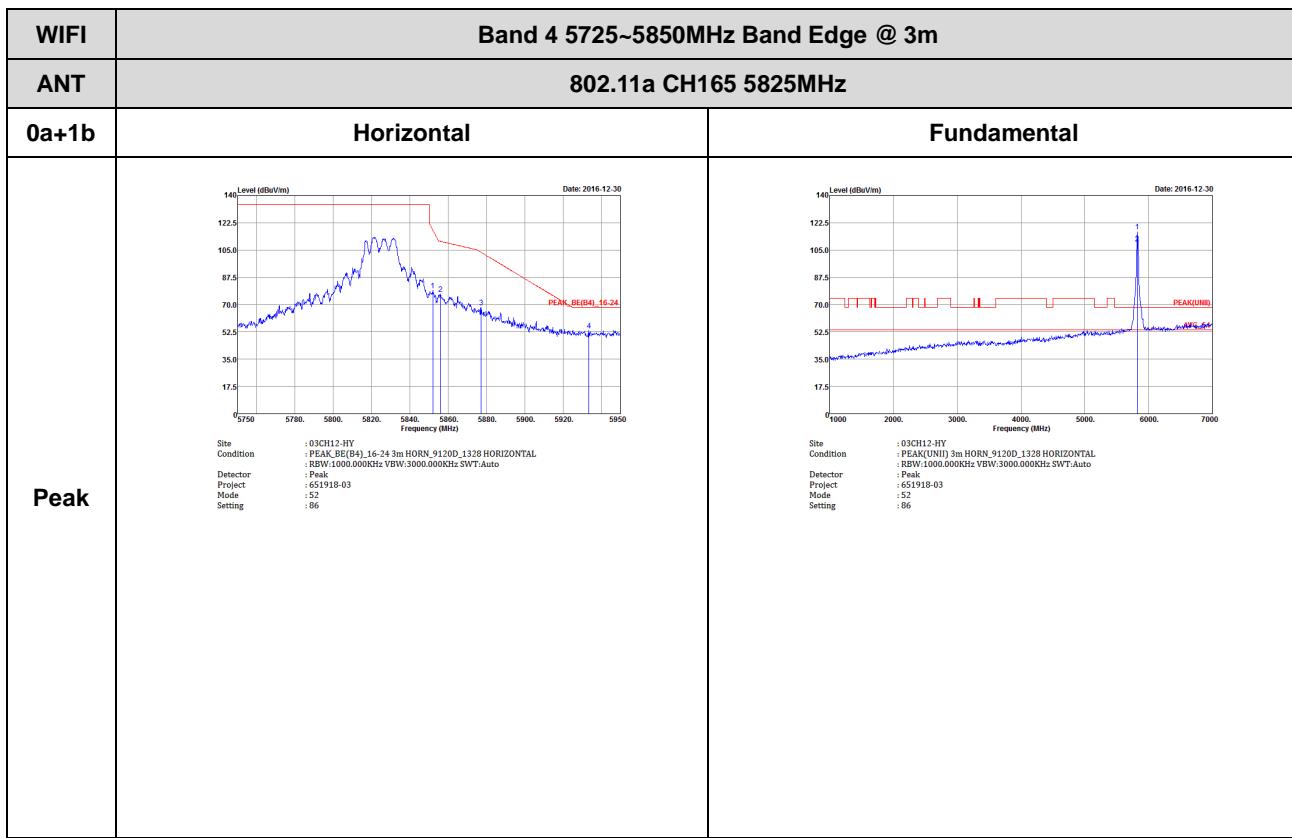


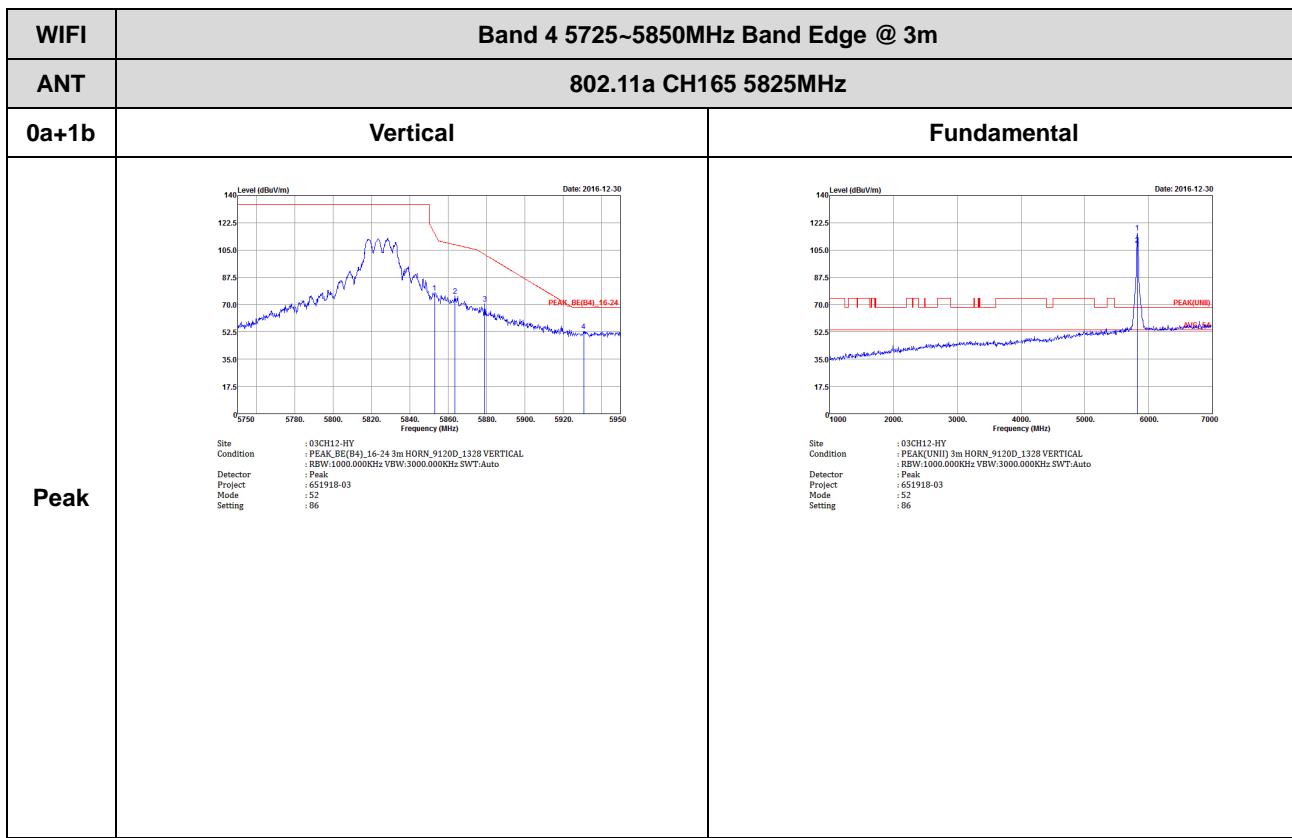


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
0a+1b	Horizontal	Fundamental
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : FR651918-03 Mode : S1</p>	<p>Site : 03CH12-HY Condition : PEAK(UNI) 3m HORN_9120D_1328 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : PEAK Mode : S1</p>
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : FR651918-03 Mode : S1</p>	Left blank



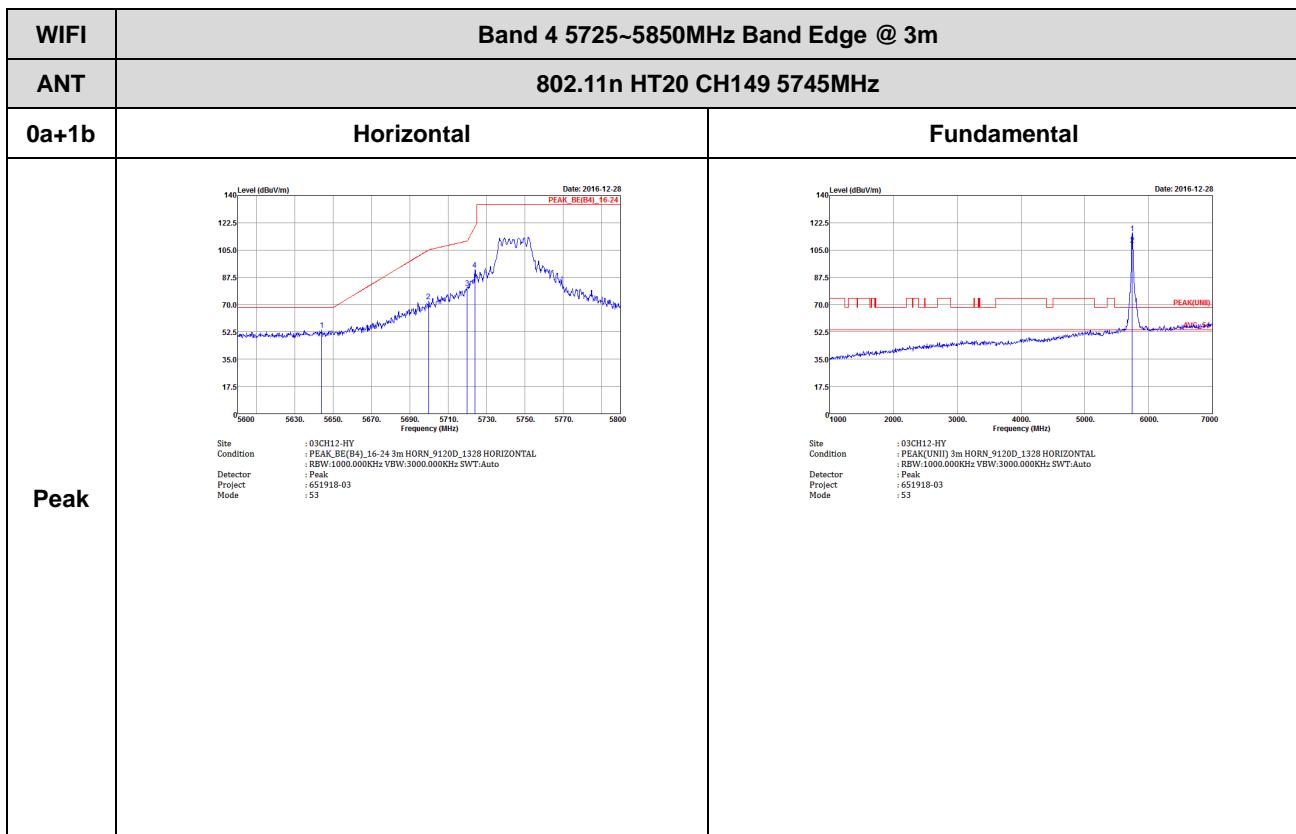
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
0a+1b	Vertical	Fundamental
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 651918-03 Mode : 51</p>	<p>Site : 03CH12-HY Condition : PEAK(UNI) 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 651918-03 Mode : 51</p>
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 651918-03 Mode : 51</p>	Left blank

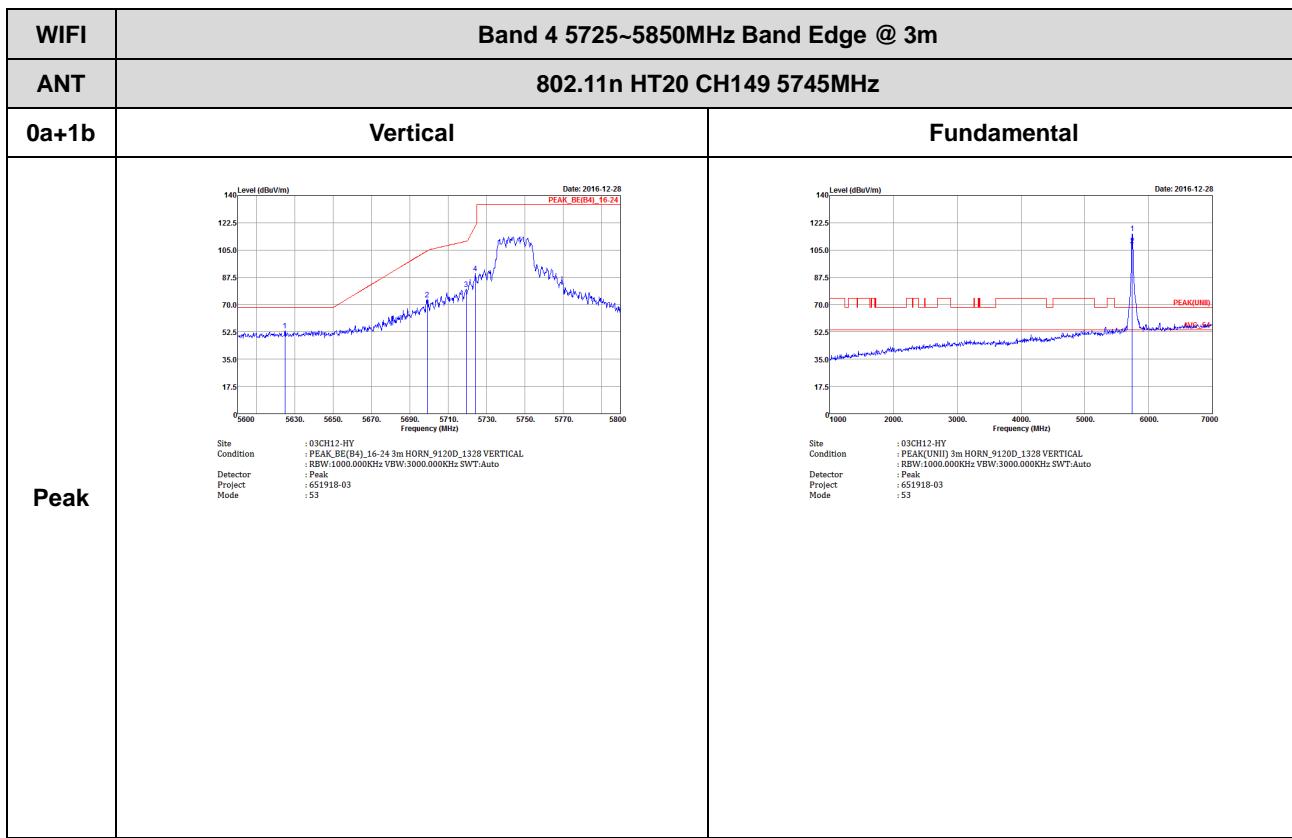






Band 4 5725~5850MHz
WIFI 802.11n HT20 (Band Edge @ 3m)



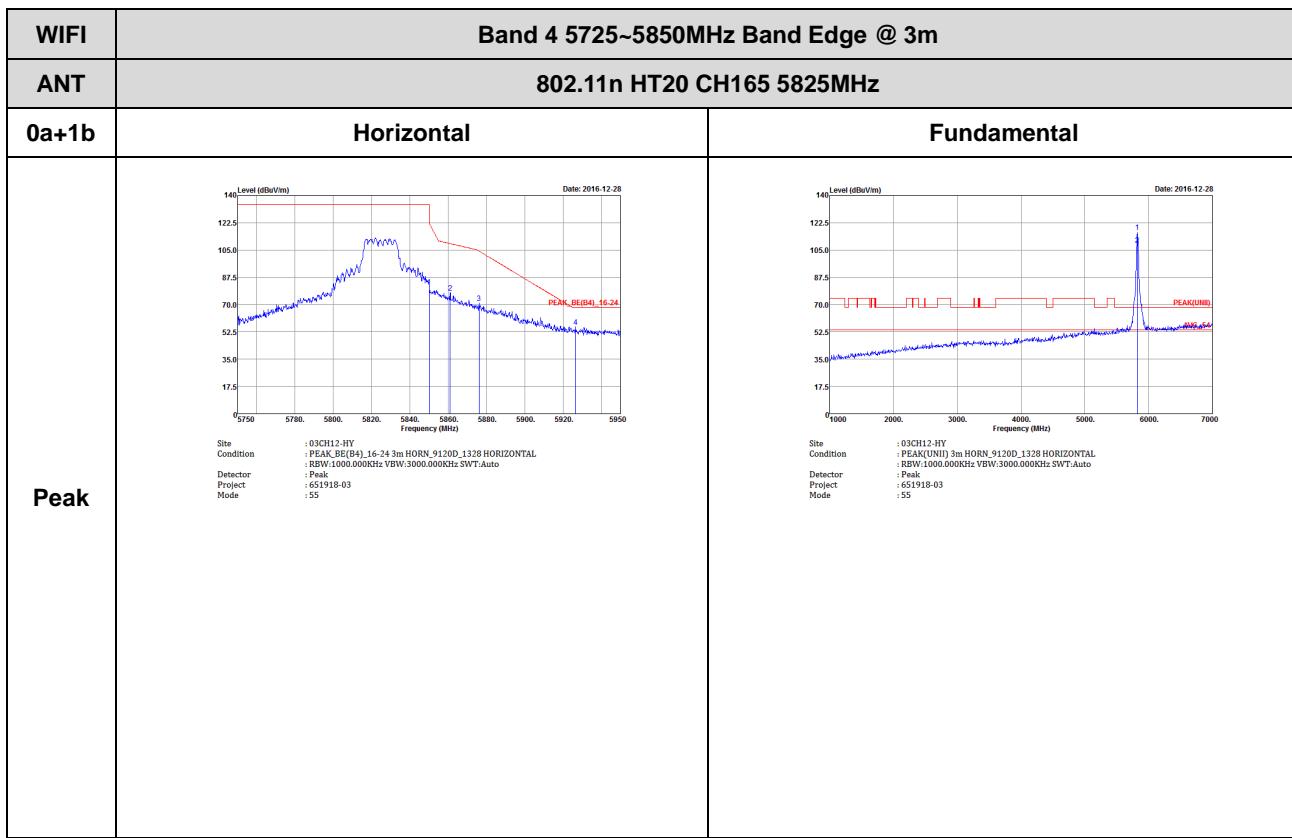


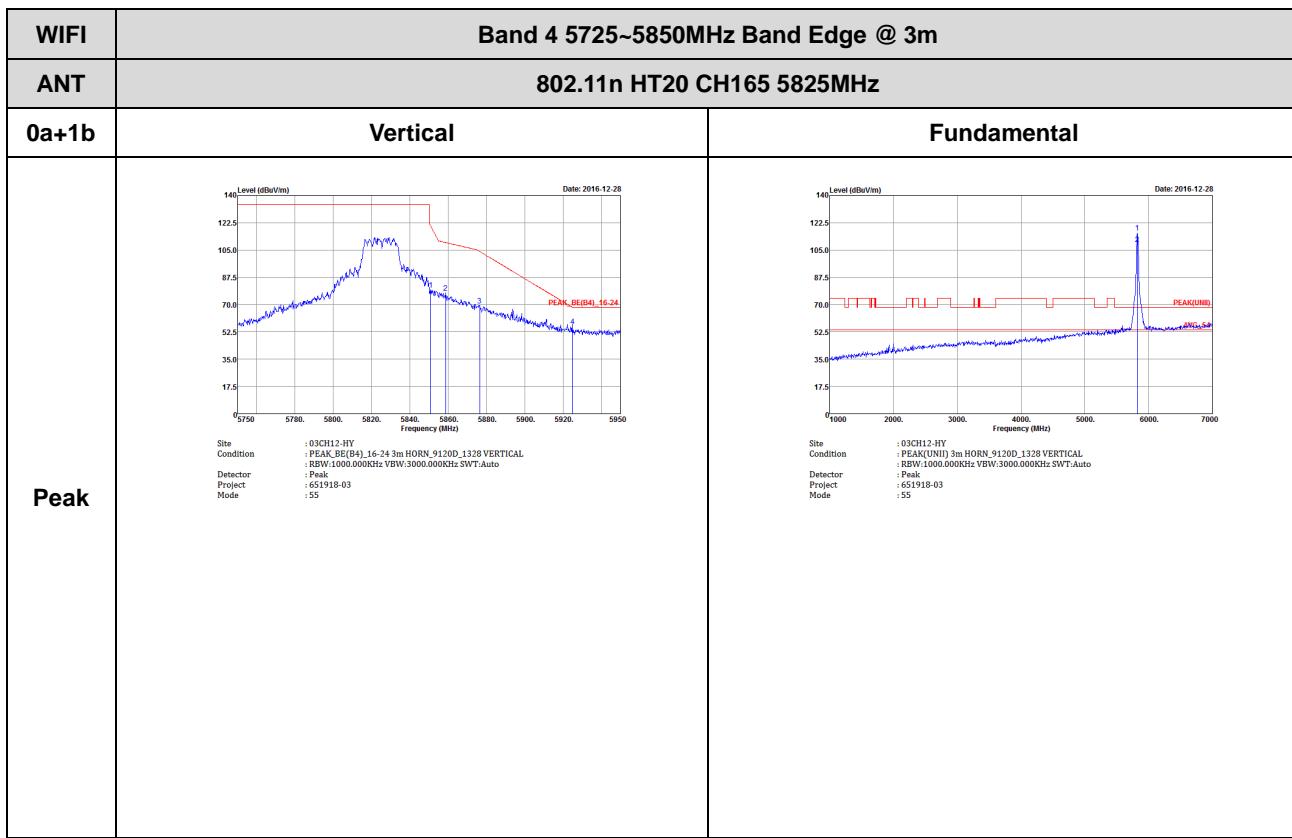


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
0a+1b	Horizontal	Fundamental
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL Detector : PkAve Project : 651918-03 Mode : 54</p>	<p>Site : 03CH12-HY Condition : PEAK(UNI) 3m HORN_9120D_1328 HORIZONTAL Detector : PkAve Project : 651918-03 Mode : 54</p>
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL Detector : PkAve Project : 651918-03 Mode : 54</p>	Left blank



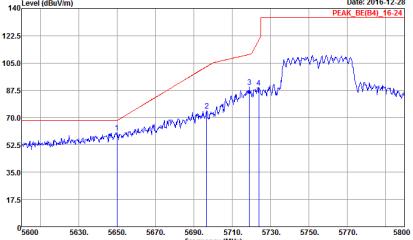
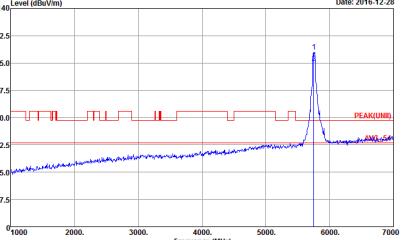
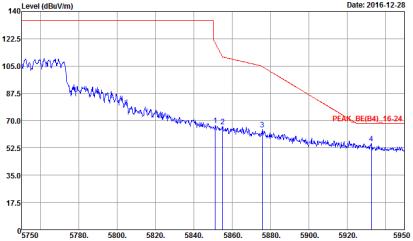
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
0a+1b	Vertical	Fundamental
Peak	<p>Site : 03CH12-HY Condition : PEAK(BE) 16-24 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 651918-03 Mode : 54</p>	<p>Site : 03CH12-HY Condition : PEAK(UNI) 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 651918-03 Mode : 54</p>
Peak	<p>Site : 03CH12-HY Condition : PEAK(BE) 16-24 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 651918-03 Mode : 54</p>	Left blank







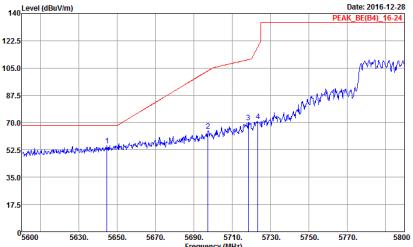
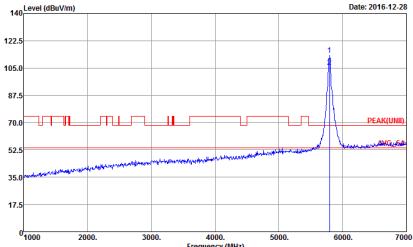
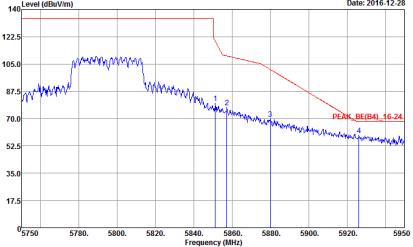
Band 4 5725~5850MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
0a+1b	Horizontal	Fundamental
Peak	 <p>Site Condition : 03CH12-HY : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 651918-03 Mode : 56</p>	 <p>Site Condition : 03CH12-HY : PEAK(UNI) 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 651918-03 Mode : 56</p>
Peak	 <p>Site Condition : 03CH12-HY : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 651918-03 Mode : 56</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
0a+1b	Vertical	Fundamental
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 651918-03 Mode : 56</p>	<p>Site : 03CH12-HY Condition : PEAK(UNI) 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 651918-03 Mode : 56</p>
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 651918-03 Mode : 56</p>	Left blank



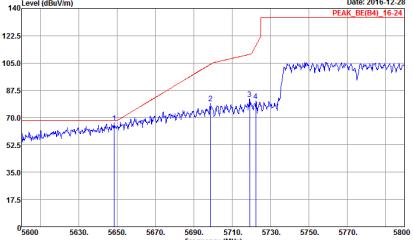
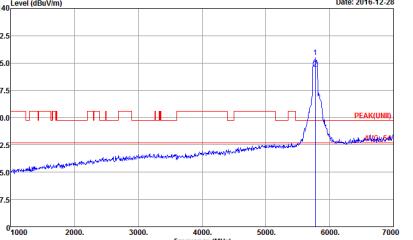
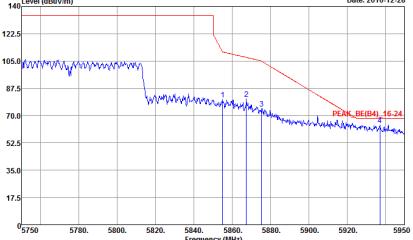
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
0a+1b	Horizontal	Fundamental
Peak	 <p>Level (dBuV/m)</p> <p>Date: 2016-12-28</p> <p>PEAK_BE(B4)_16-24</p> <p>5600 5630 5650 5670 5680 5700 5710 5730 5750 5770 5800 Frequency (MHz)</p> <p>Site Condition : 03CH12-HY Detector : PEAK(B4) Project : 651918-03 Mode : 57</p>	 <p>Level (dBuV/m)</p> <p>Date: 2016-12-28</p> <p>PEAK(UNI)</p> <p>1000 2000 3000 4000 5000 6000 7000 Frequency (MHz)</p> <p>Site Condition : 03CH12-HY Detector : PEAK(UNI) Project : 651918-03 Mode : 57</p>
Peak	 <p>Level (dBuV/m)</p> <p>Date: 2016-12-28</p> <p>PEAK_BE(B4)_16-24</p> <p>5750 5780 5800 5820 5840 5860 5880 5900 5920 5950 Frequency (MHz)</p> <p>Site Condition : 03CH12-HY Detector : PEAK(B4) Project : 651918-03 Mode : 57</p>	Left blank

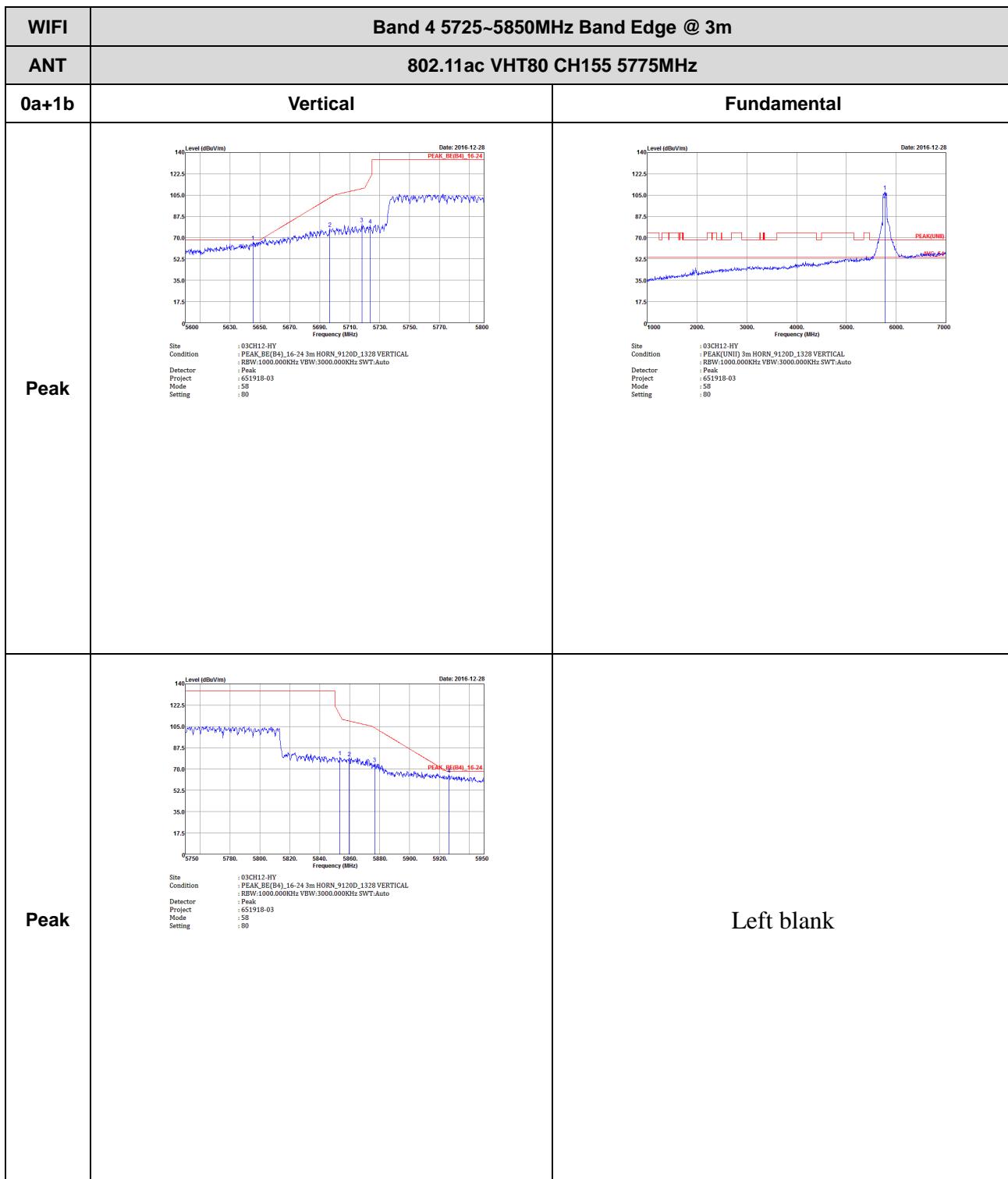


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
0a+1b	Vertical	Fundamental
Peak	 Site Condition : 03CH12-HY Detector : PEAK Project : 651918-03 Mode : 57	 Site Condition : PEAK(UNI) 3m HORN_9120D_1328 VERTICAL Detector : PEAK Project : 651918-03 Mode : 57
Peak	 Site Condition : 03CH12-HY Detector : PEAK Project : 651918-03 Mode : 57	Left blank



Band 4 5725~5850MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

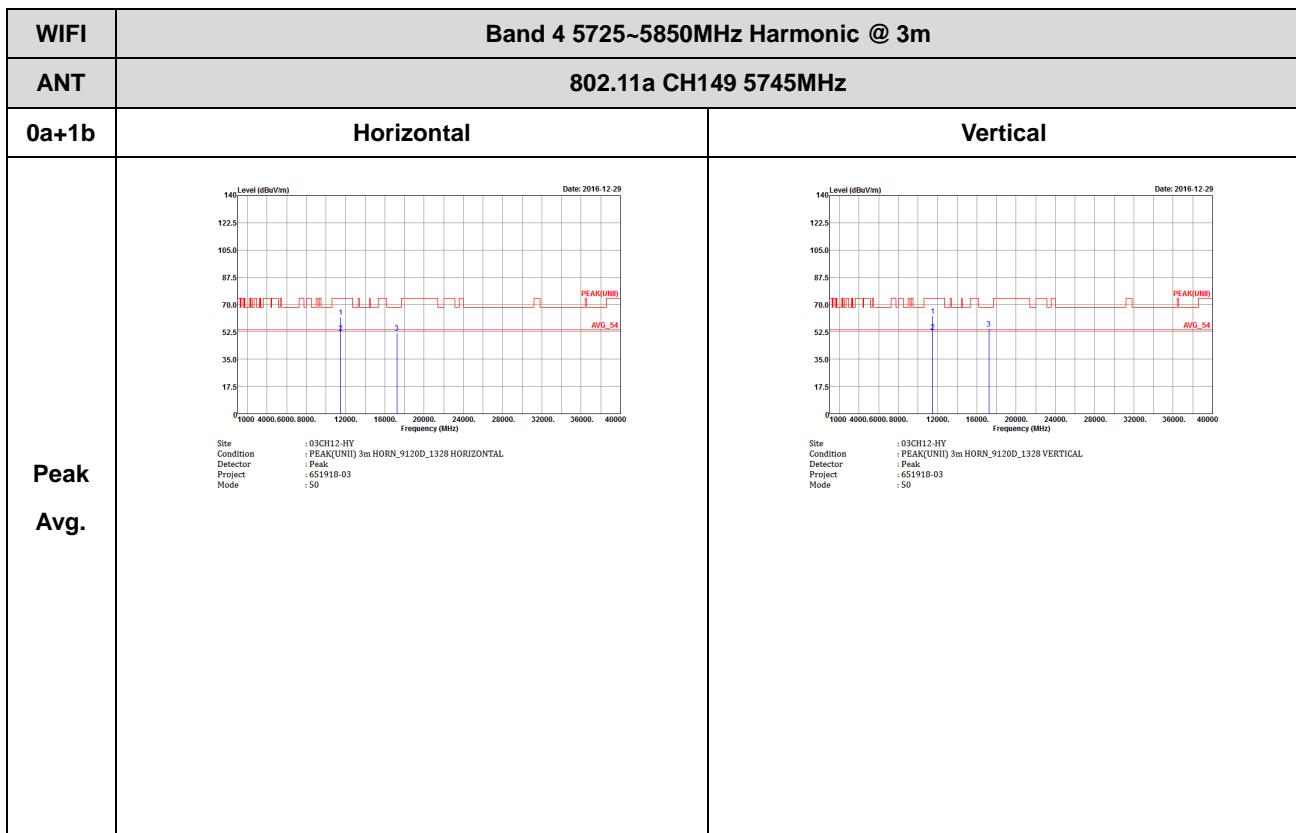
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0a+1b	Horizontal	Fundamental
Peak	 <p>Level (dBuV/m)</p> <p>Date: 2016-12-28</p> <p>PEAK_BE(B4)_16-24</p> <p>Frequency (MHz)</p> <p>Site Condition : 03CH12-HY Project : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Mode : 651918-03 Setting : 5B Setting : 80</p>	 <p>Level (dBuV/m)</p> <p>Date: 2016-12-28</p> <p>PEAK(UNI)</p> <p>Frequency (MHz)</p> <p>Site Condition : 03CH12-HY Project : PEAK(UNI) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Mode : 651918-03 Setting : 5B Setting : 80</p>
Peak	 <p>Level (dBuV/m)</p> <p>Date: 2016-12-28</p> <p>PEAK_BE(B4)_16-24</p> <p>Frequency (MHz)</p> <p>Site Condition : 03CH12-HY Project : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Mode : 651918-03 Setting : 5B Setting : 80</p>	Left blank

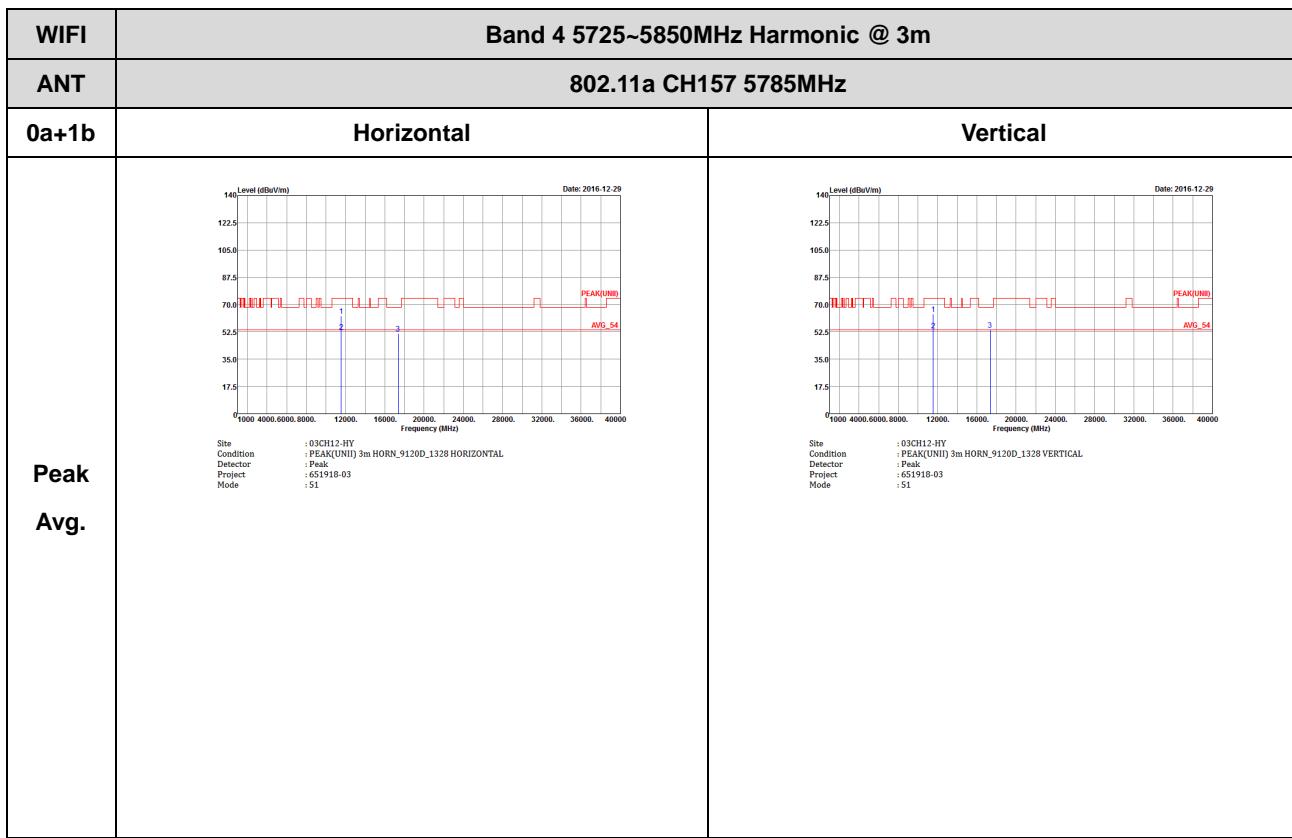


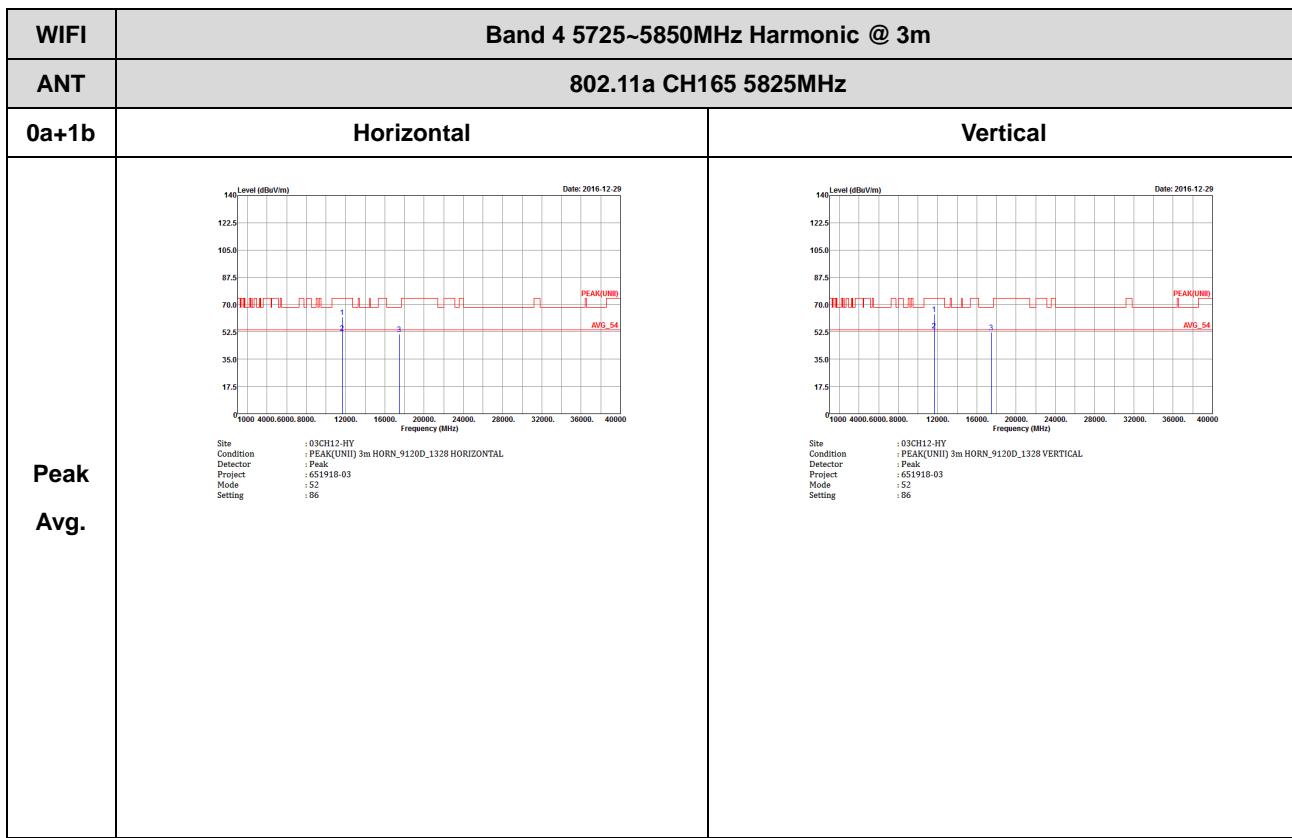


Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

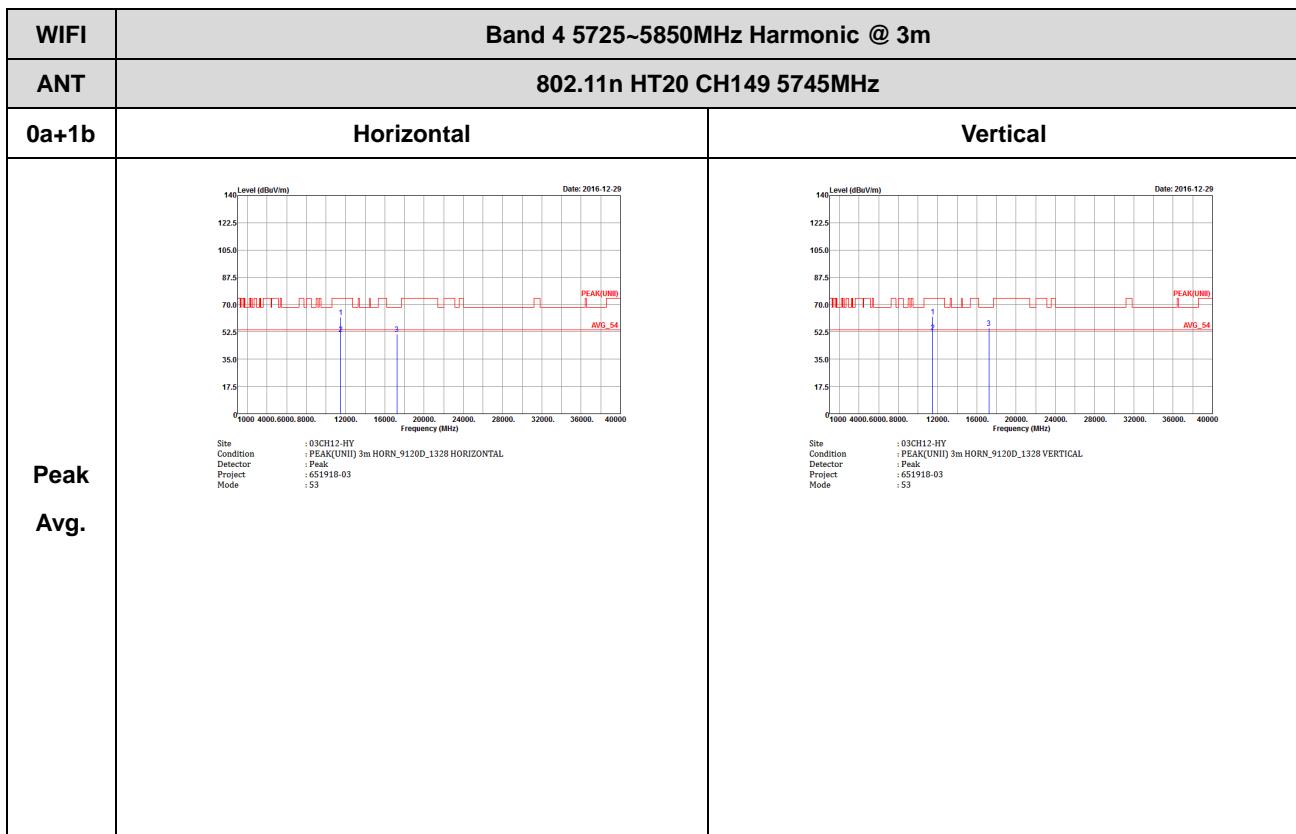


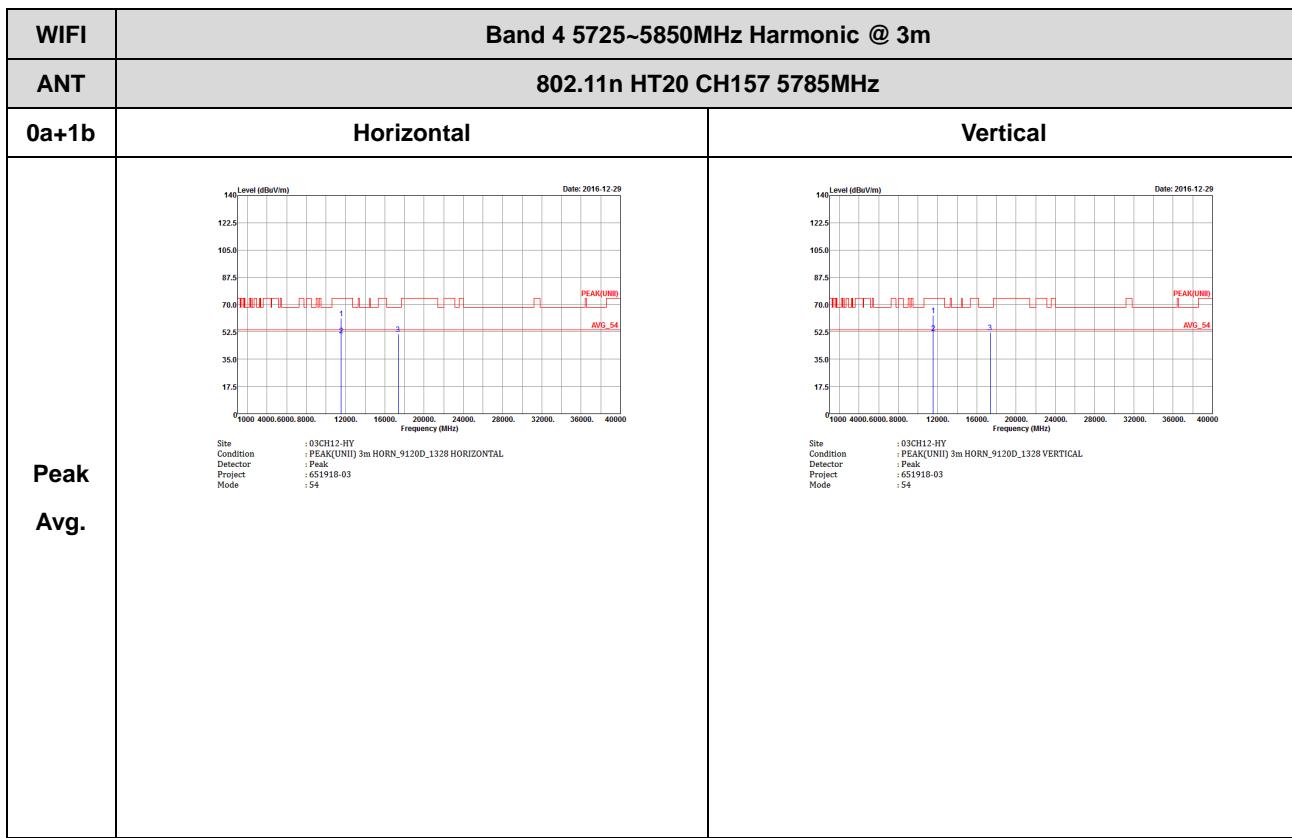


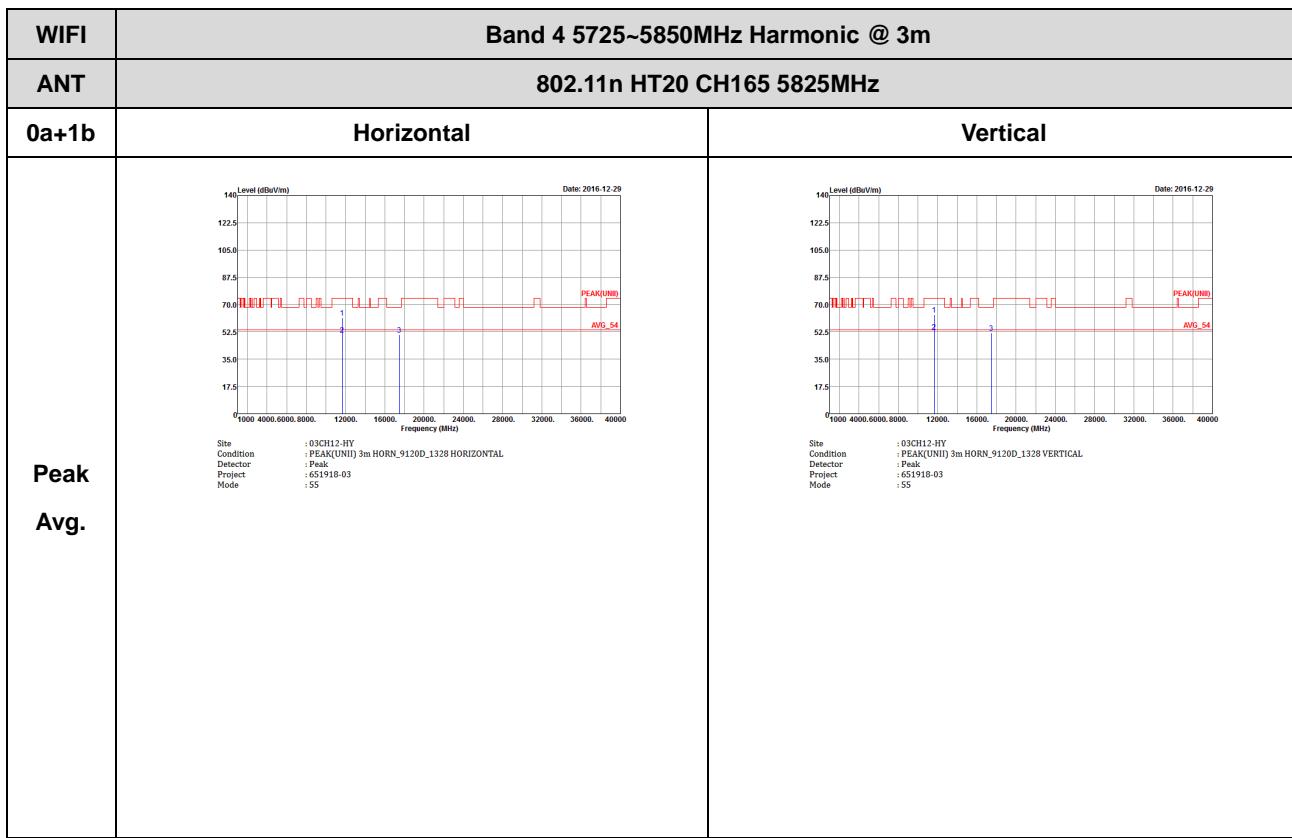




Band 4 5725~5850MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

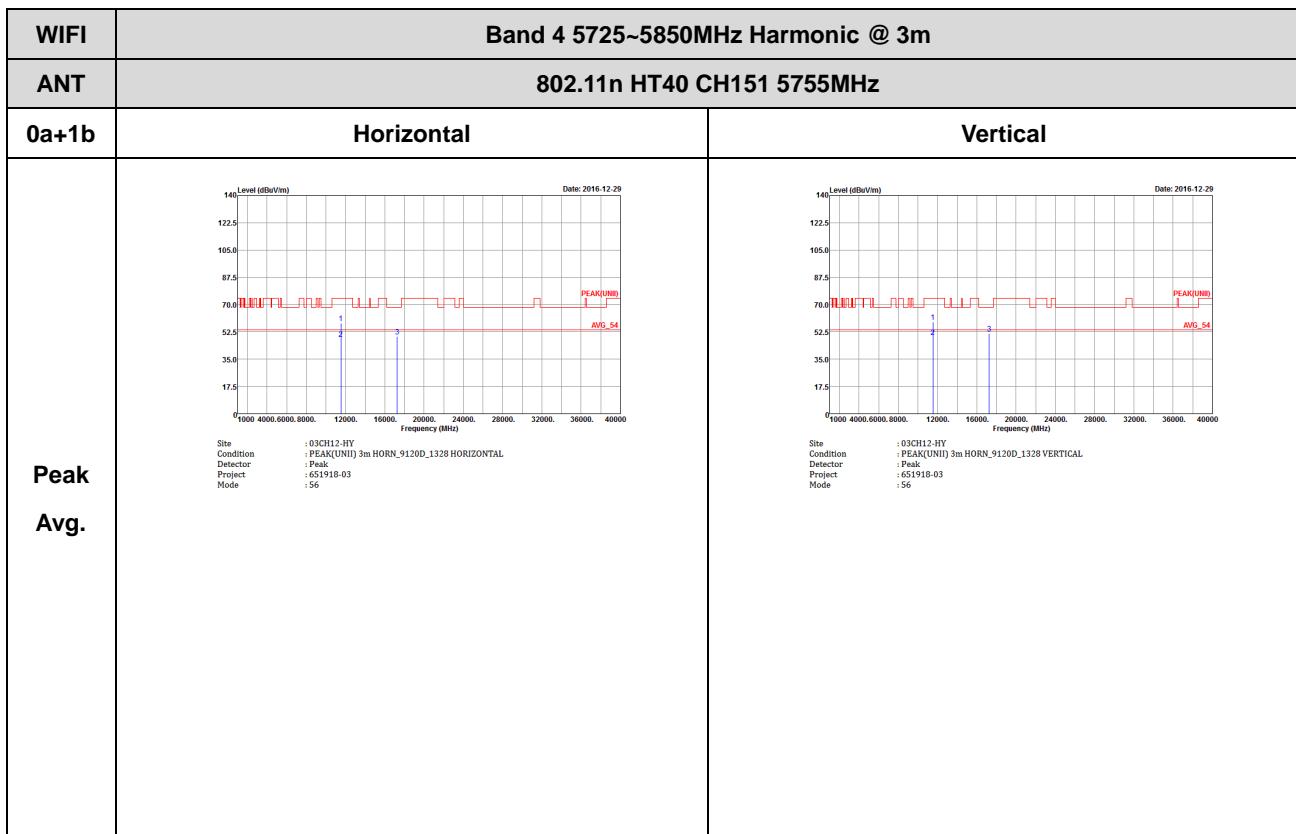


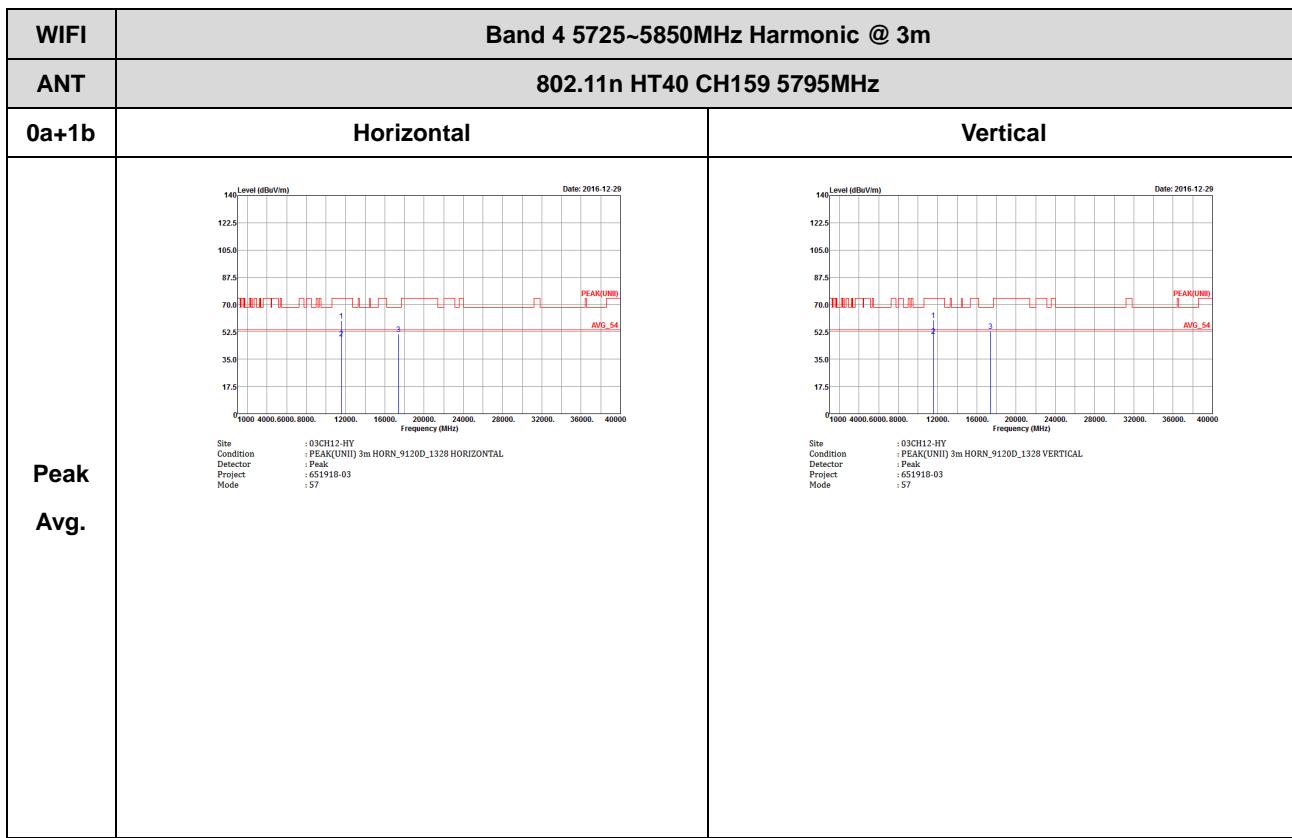






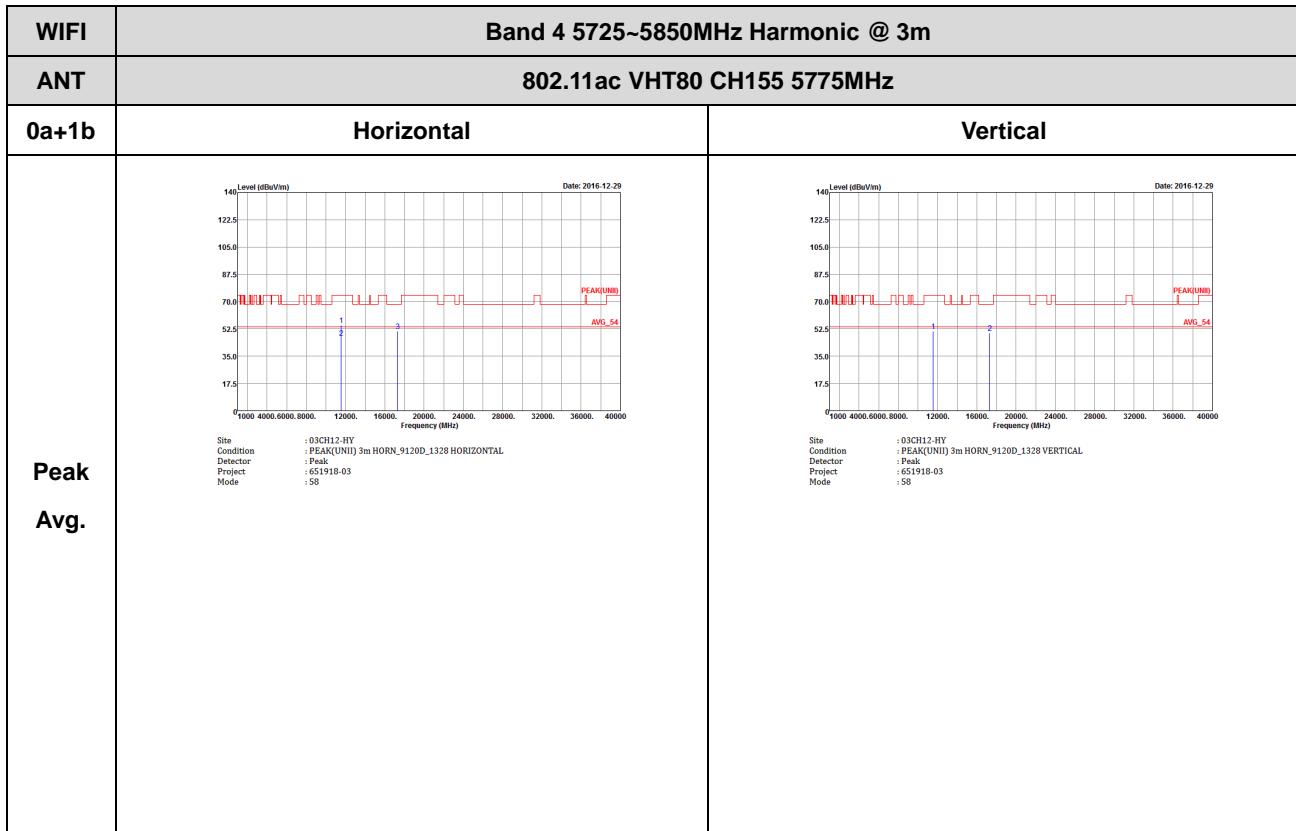
Band 4 5725~5850MHz
WIFI 802.11n HT40 (Harmonic @ 3m)







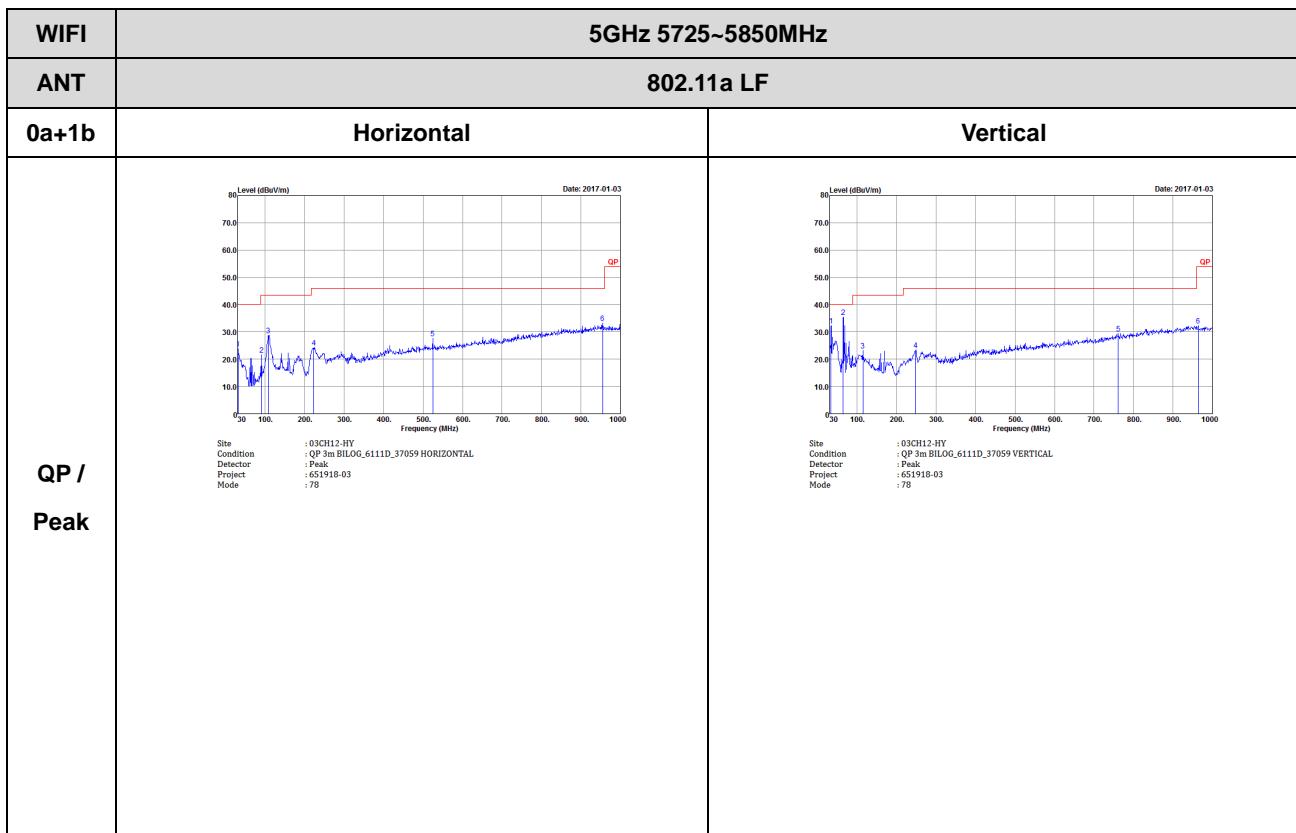
Band 4 5725~5850MHz
WIFI 802.11ac VHT80 (Harmonic @ 3m)





Emission below 1GHz

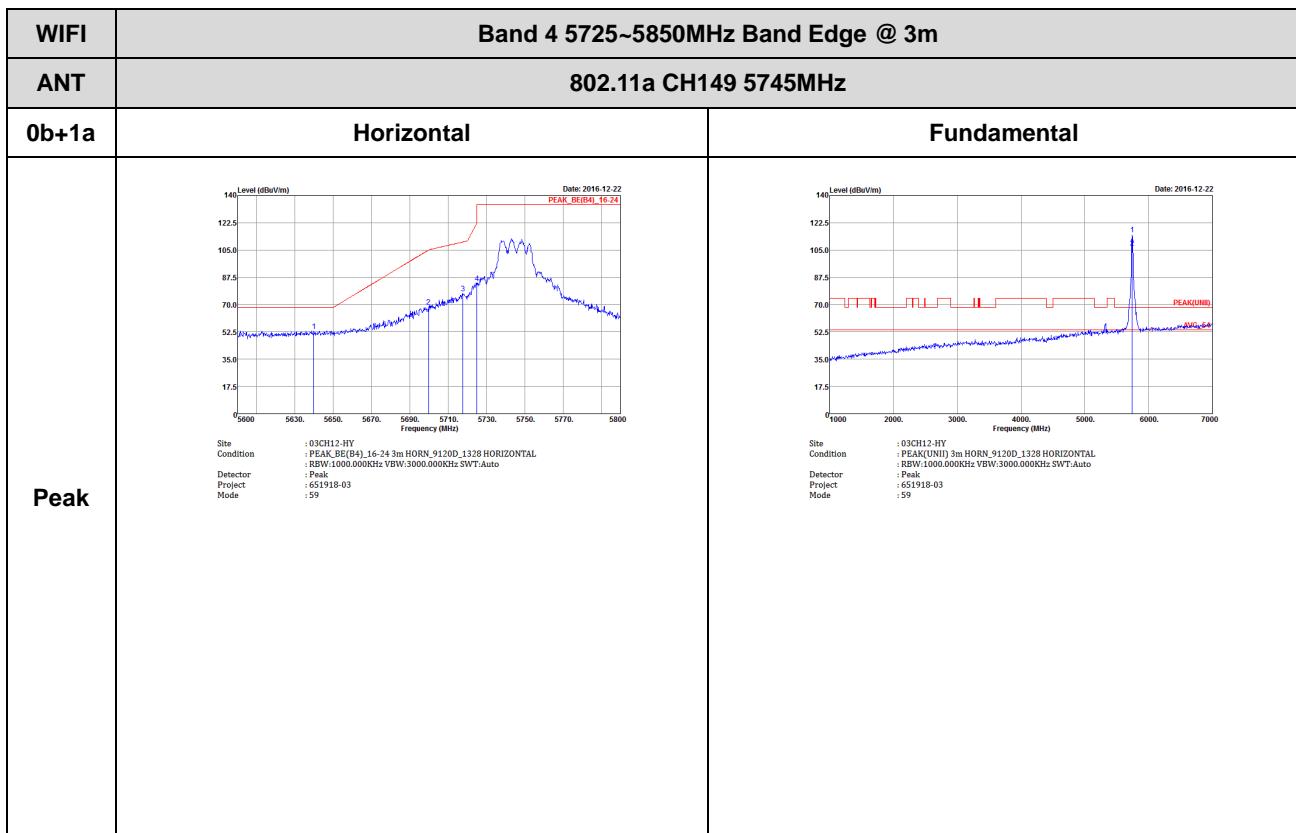
5GHz WIFI 802.11a (LF)

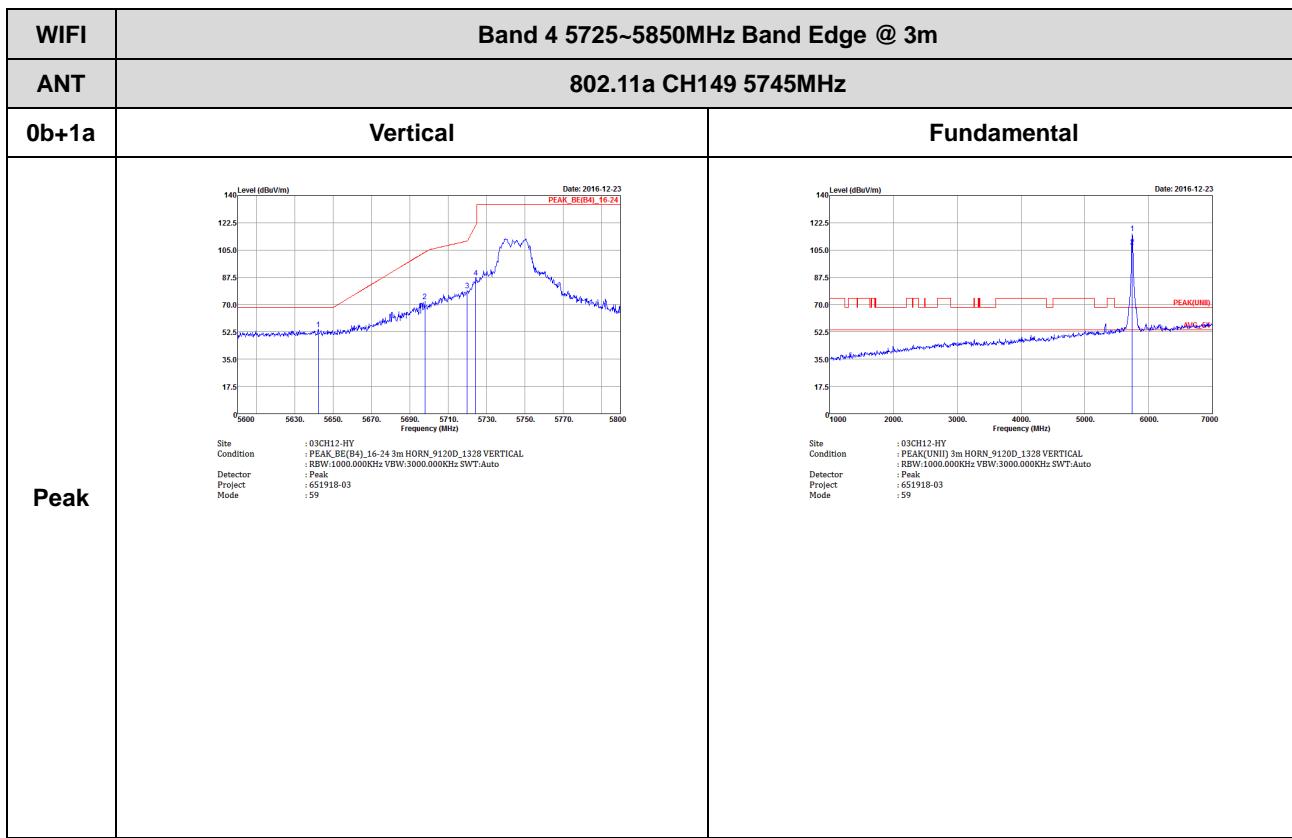


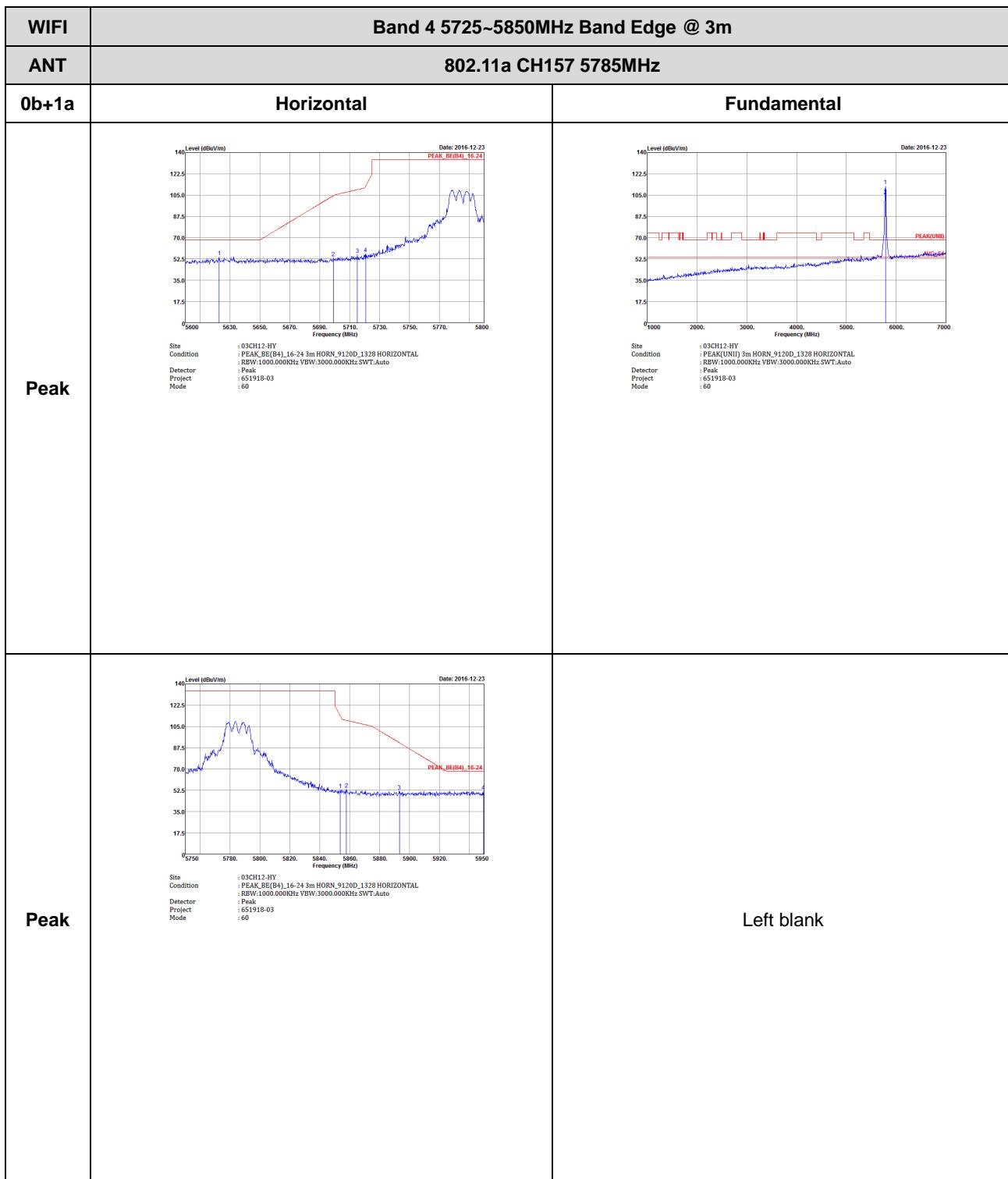


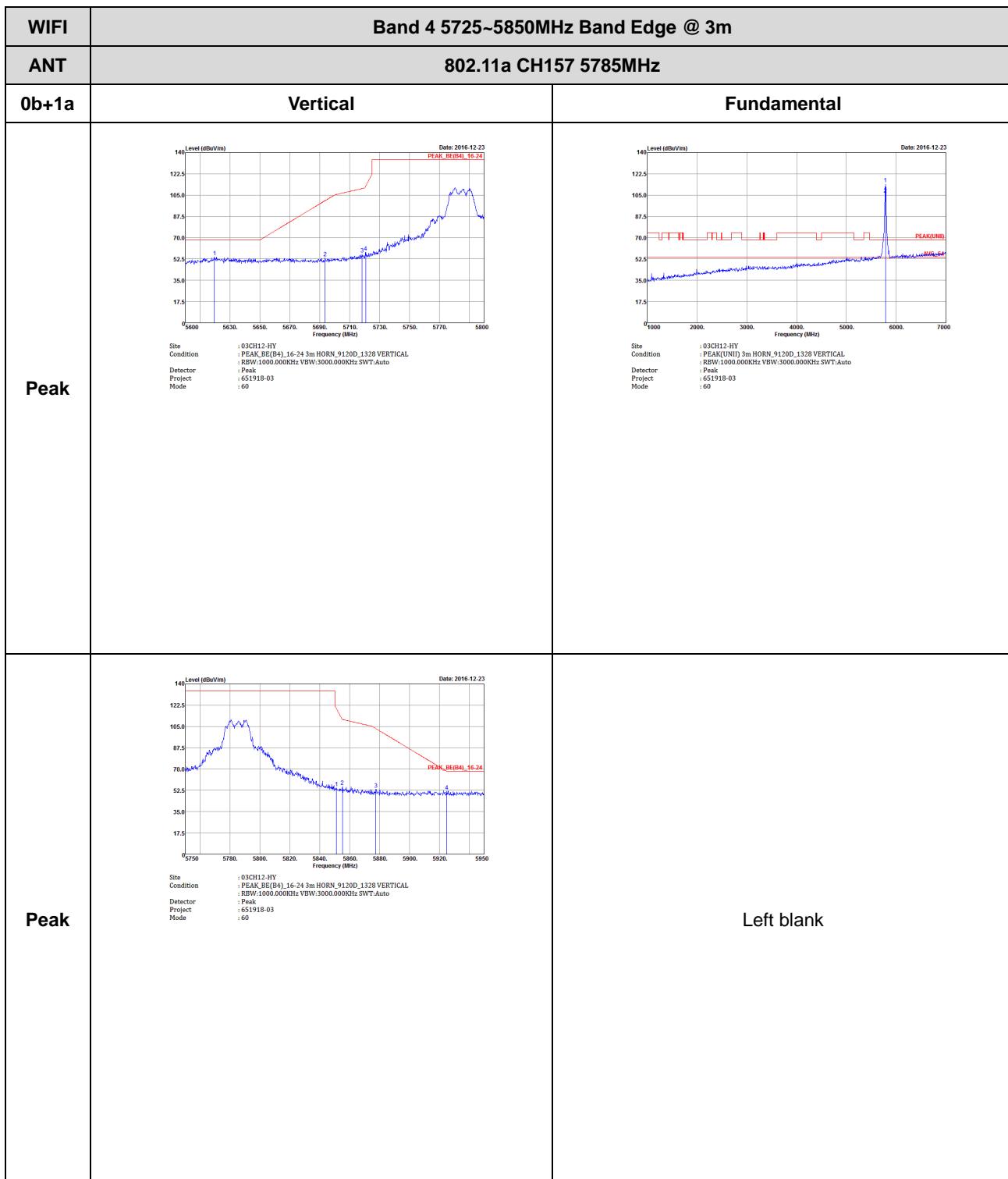
Band 4 - 5725~5850MHz

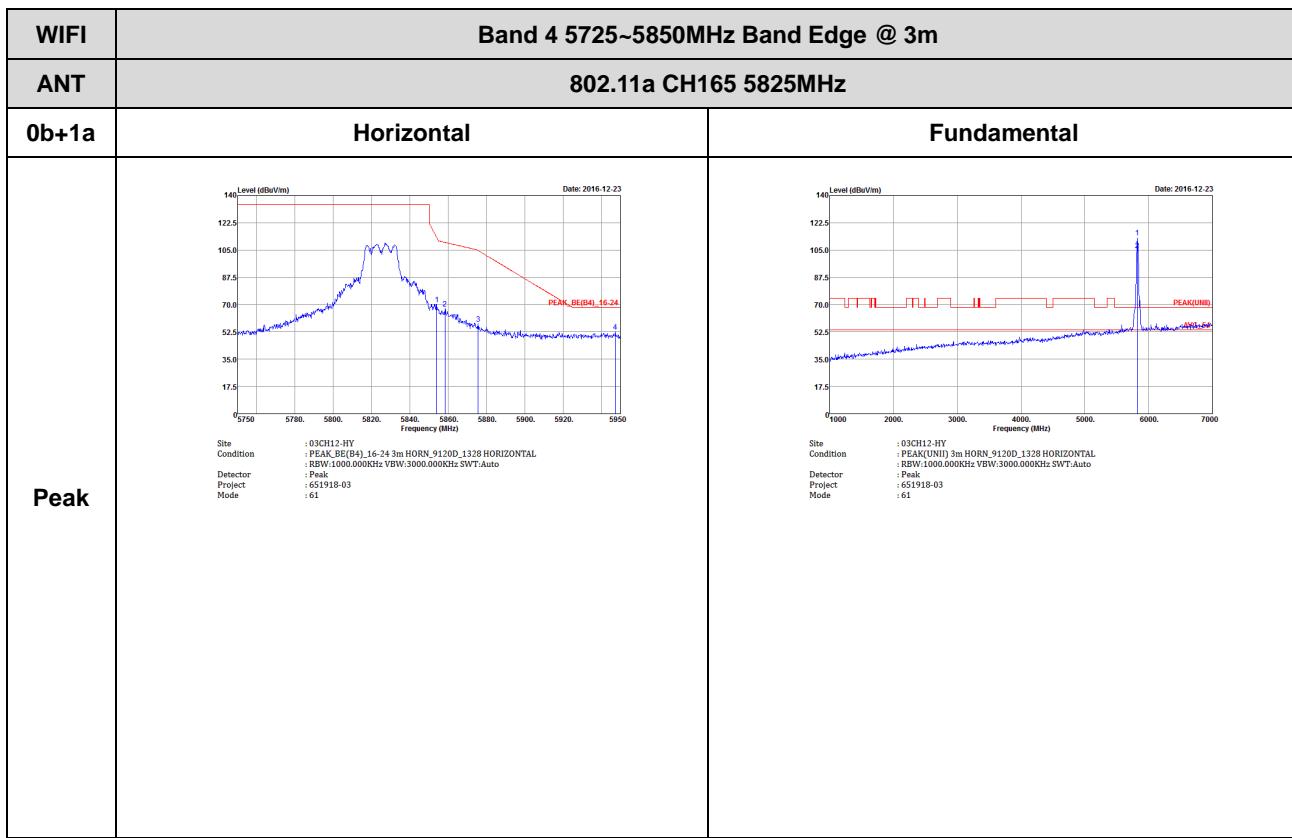
WIFI 802.11a (Band Edge @ 3m)

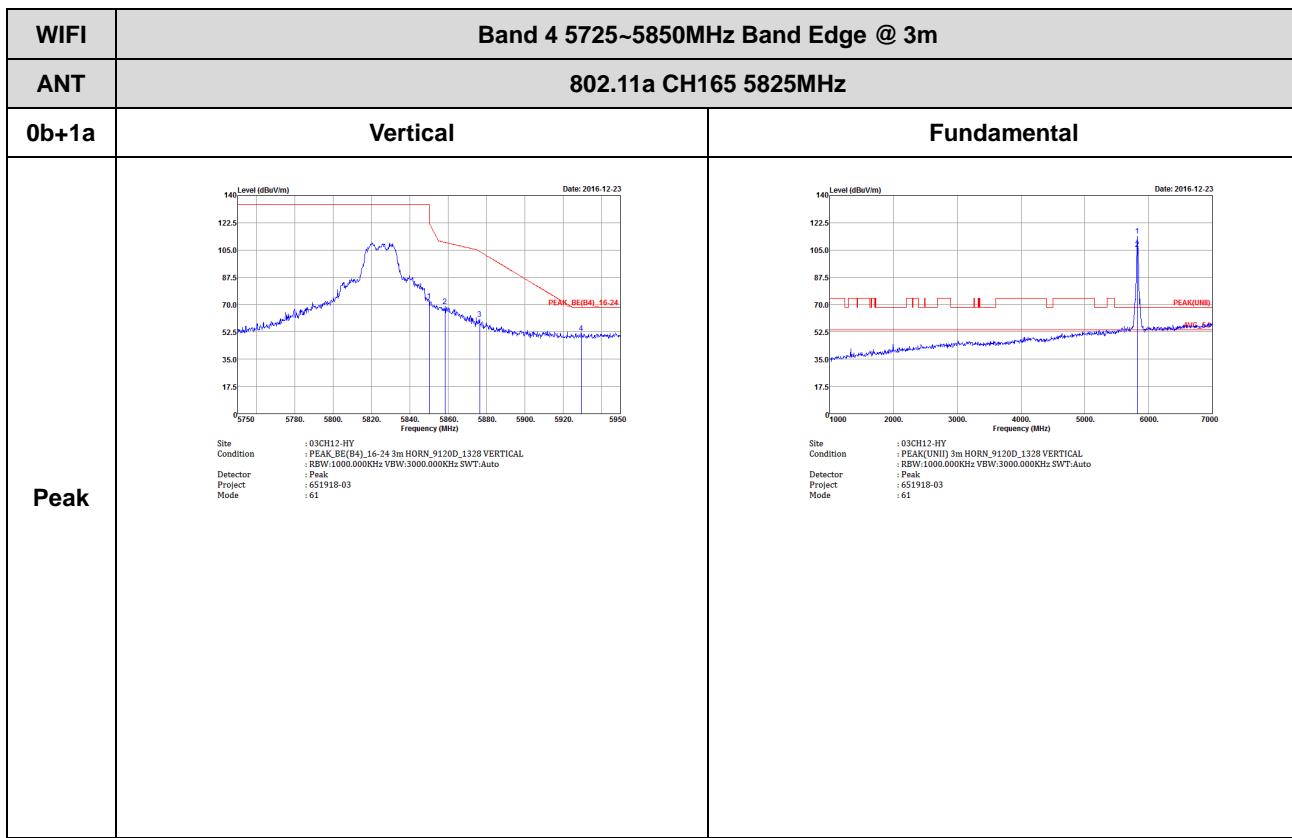








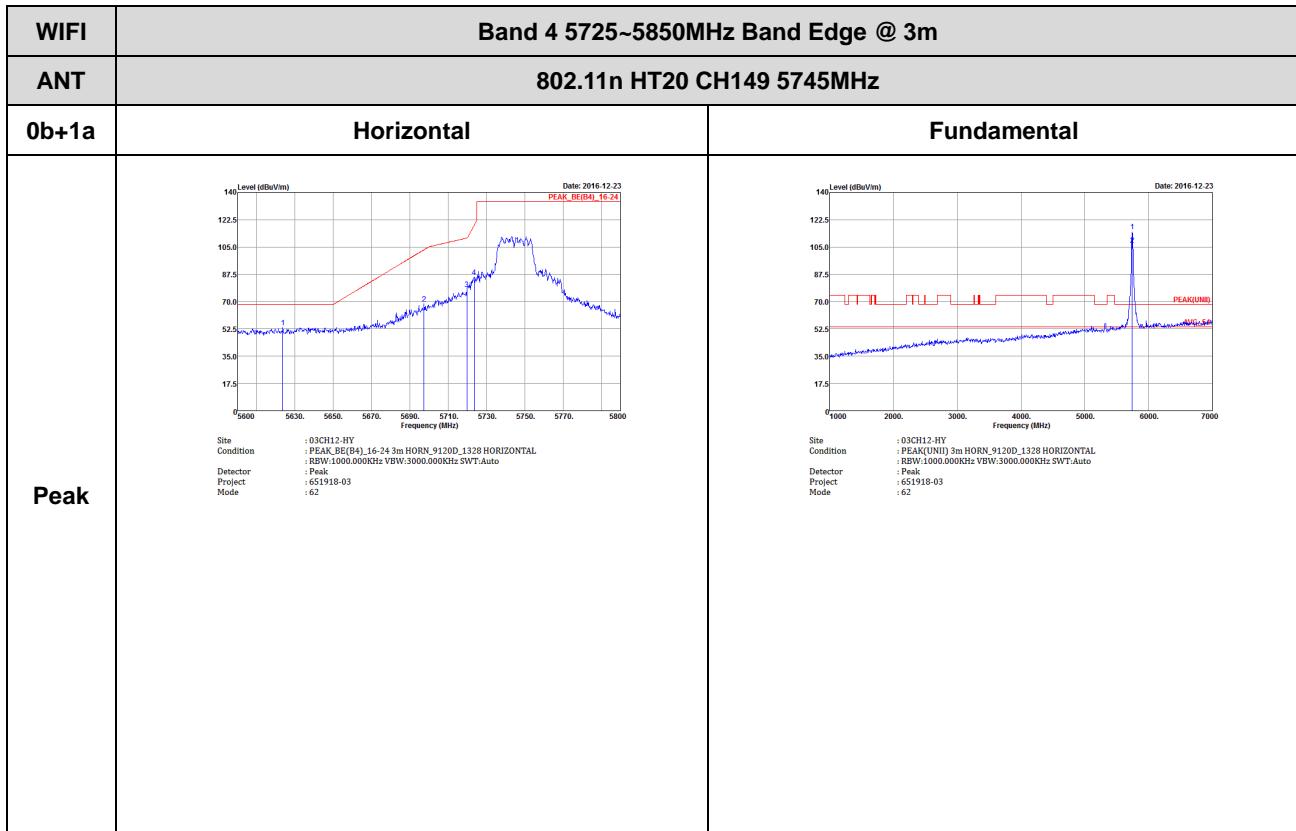


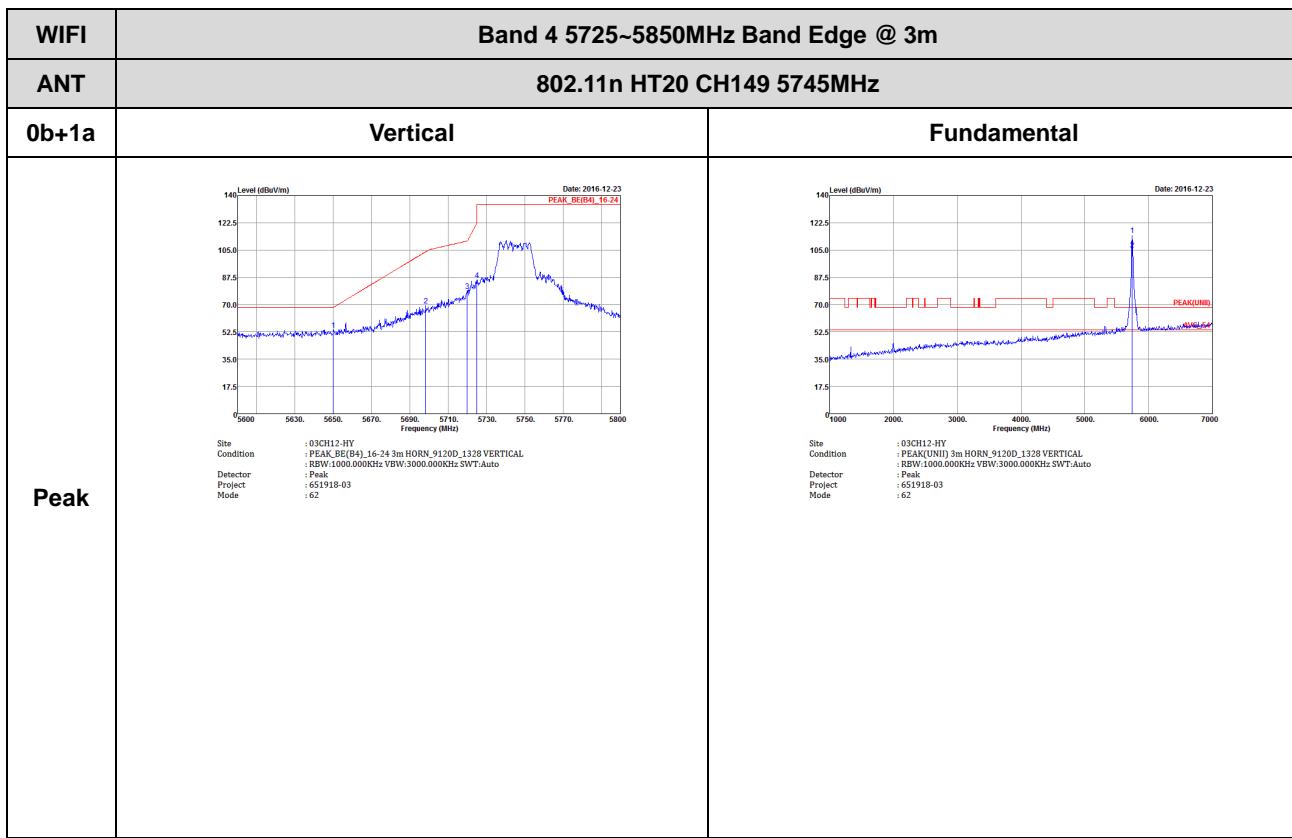


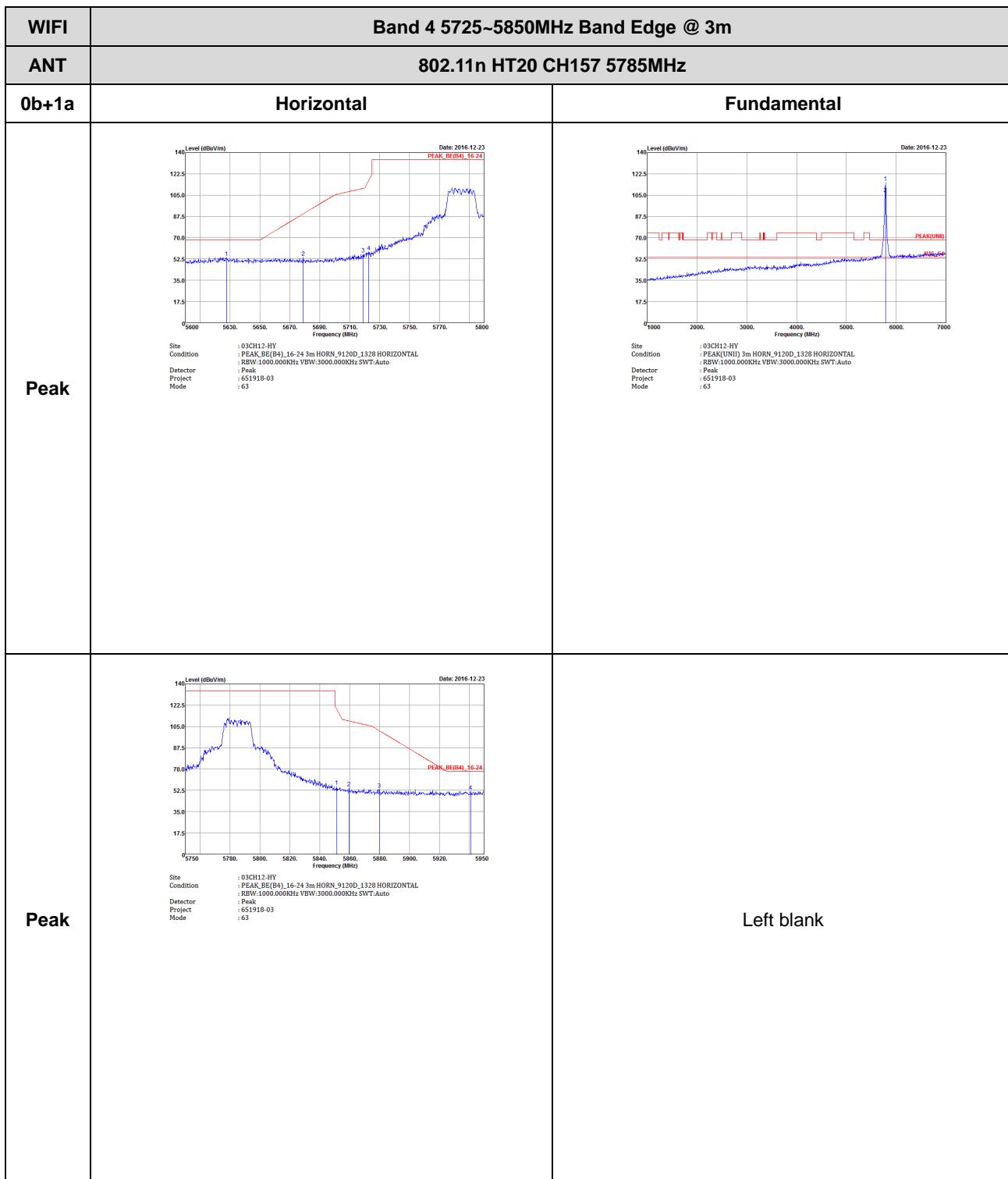


Band 4 5725~5850MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

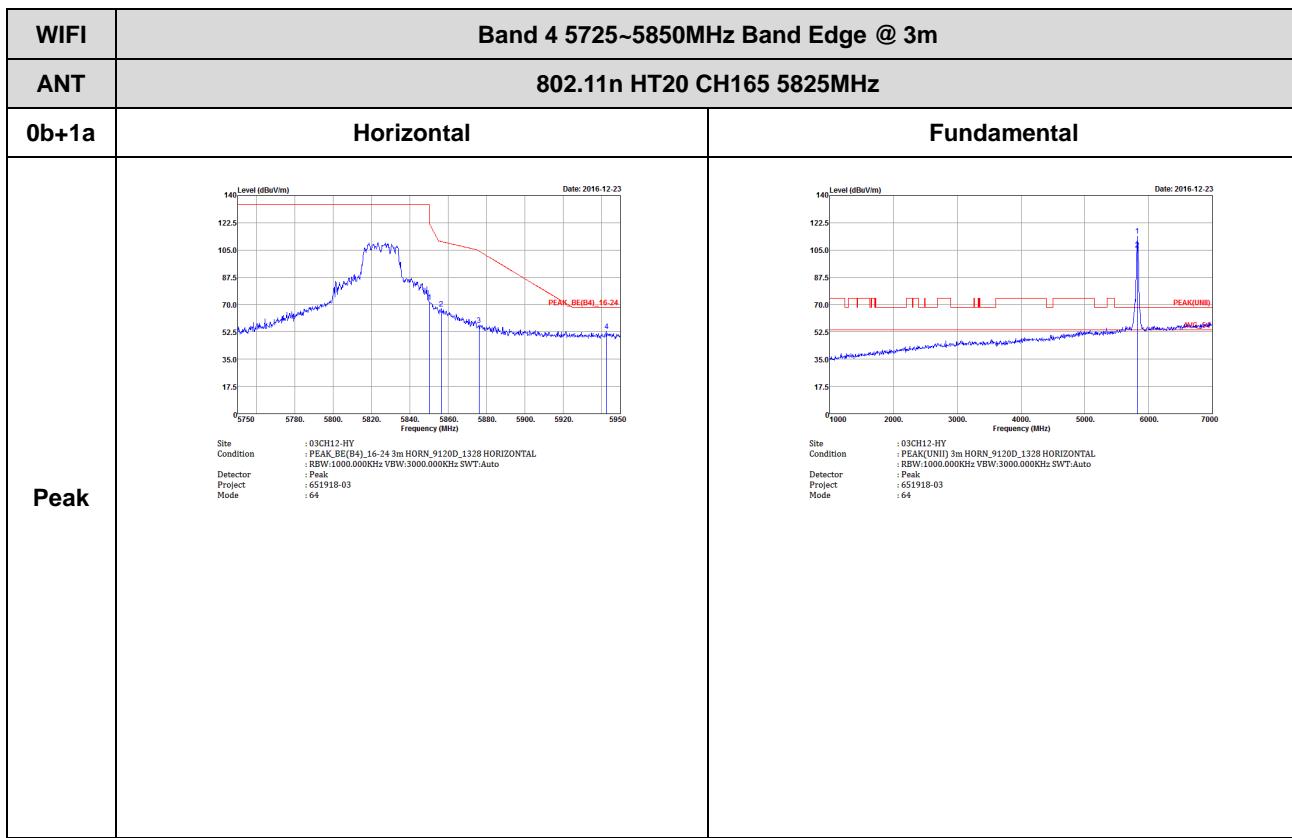


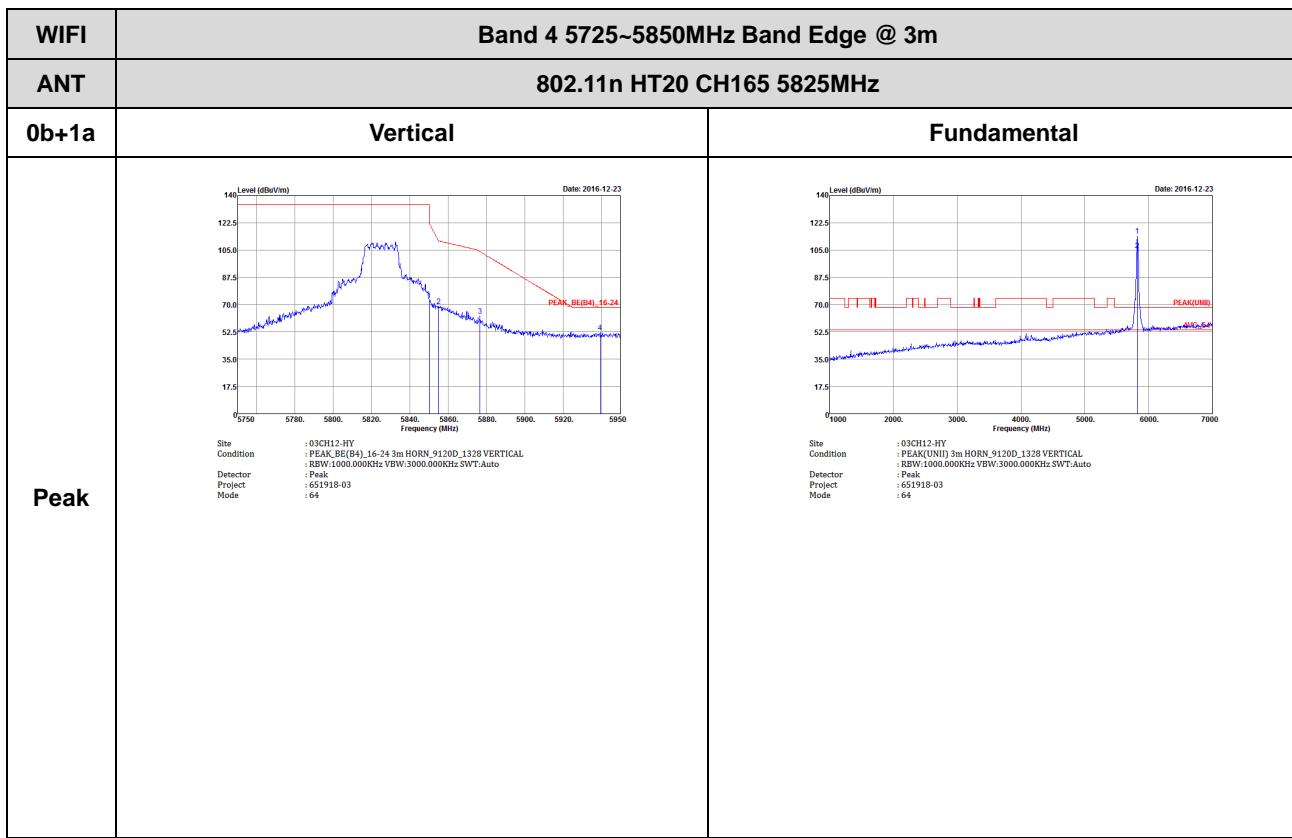






WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
0b+1a	Vertical	Fundamental
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 651918-03 Mode : 63</p>	<p>Site : 03CH12-HY Condition : PEAK(UNI) 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 651918-03 Mode : 63</p>
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 651918-03 Mode : 63</p>	Left blank







Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
0b+1a	Horizontal	Fundamental
Peak	 Site Condition : 03CH12-HY : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL : BW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 651918-03 Mode : 65	 Site Condition : 03CH12-HY : PEAK(UNI) 3m HORN_9120D_1328 HORIZONTAL : BW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 651918-03 Mode : 65
Peak	 Site Condition : 03CH12-HY : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL : BW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 651918-03 Mode : 65	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
0b+1a	Vertical	Fundamental
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 651918-03 Mode : 65</p>	<p>Site : 03CH12-HY Condition : PEAK(UNI) 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 651918-03 Mode : 65</p>
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 651918-03 Mode : 65</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
0b+1a	Horizontal	Fundamental
Peak	 Site Condition : 03CH12-HY Detector : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL Project : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Mode : Peak : 651918-03 : 66	 Site Condition : 03CH12-HY Detector : PEAK(UNI) 3m HORN_9120D_1328 HORIZONTAL Project : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Mode : Peak : 651918-03 : 66
Peak	 Site Condition : 03CH12-HY Detector : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL Project : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Mode : Peak : 651918-03 : 66	Left blank



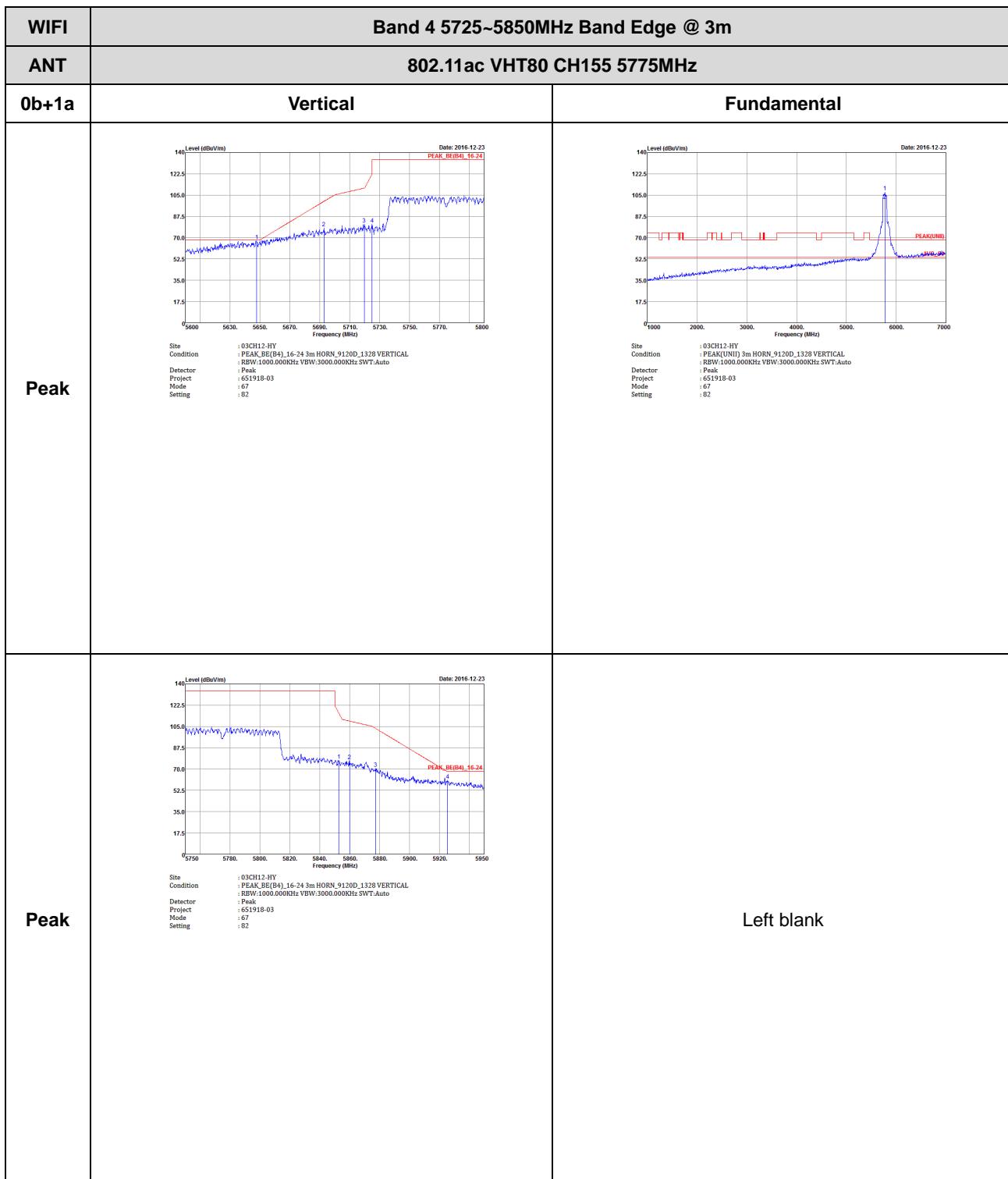
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
0b+1a	Vertical	Fundamental
Peak	<p>Site Condition : 03CH12-HY Detector Project : 651918-03 Mode : 66</p> <p>Site Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector Project : 651918-03 Mode : 66</p> <p>Date: 2016-12-23</p>	<p>Site Condition : PEAK(UNI) 3m HORN_9120D_1328 VERTICAL Detector Project : 651918-03 Mode : 66</p> <p>Date: 2016-12-23</p>
Peak	<p>Site Condition : 03CH12-HY Detector Project : 651918-03 Mode : 66</p> <p>Site Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector Project : 651918-03 Mode : 66</p> <p>Date: 2016-12-23</p>	Left blank



Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

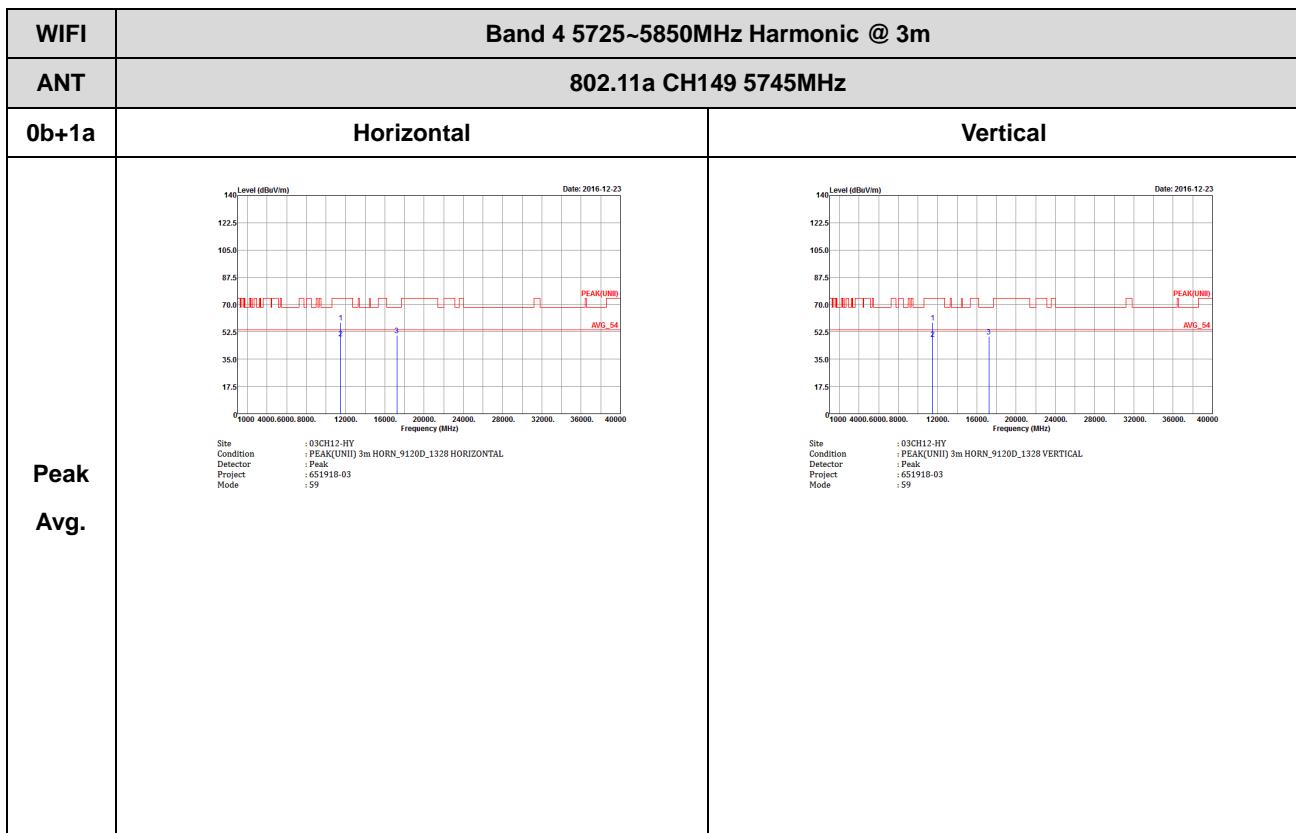
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0b+1a	Horizontal	Fundamental
Peak	 Site Condition : 03CH12-HY : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 651918-03 Mode : 67 Setting : 82 Date: 2016-12-23 PEAK_BE(B4)_16-24	 Site Condition : 03CH12-HY : PEAK(UNI) 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 651918-03 Mode : 67 Setting : 82 Date: 2016-12-23 PEAK(UNI)
Peak	 Site Condition : 03CH12-HY : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 651918-03 Mode : 67 Setting : 82 Date: 2016-12-23 PEAK_BE(B4)_16-24	Left blank

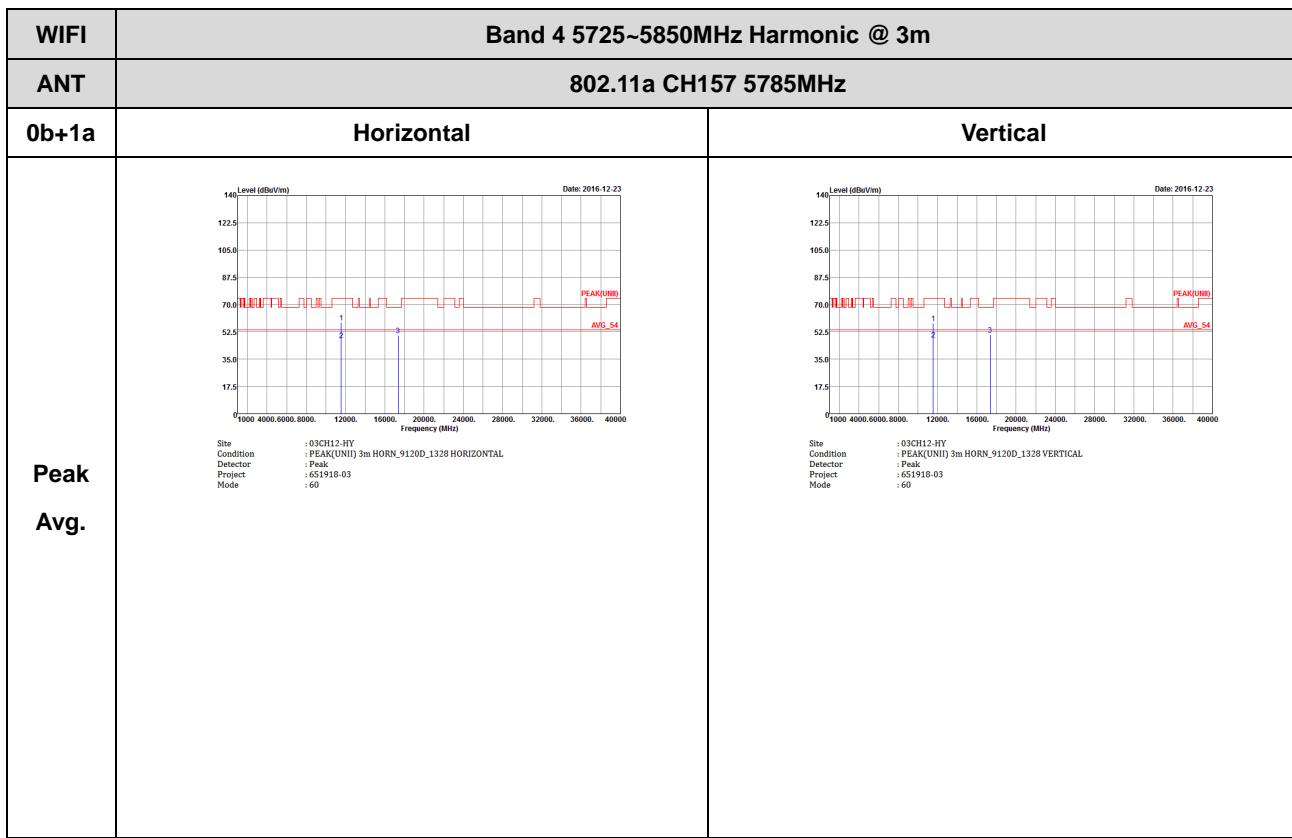


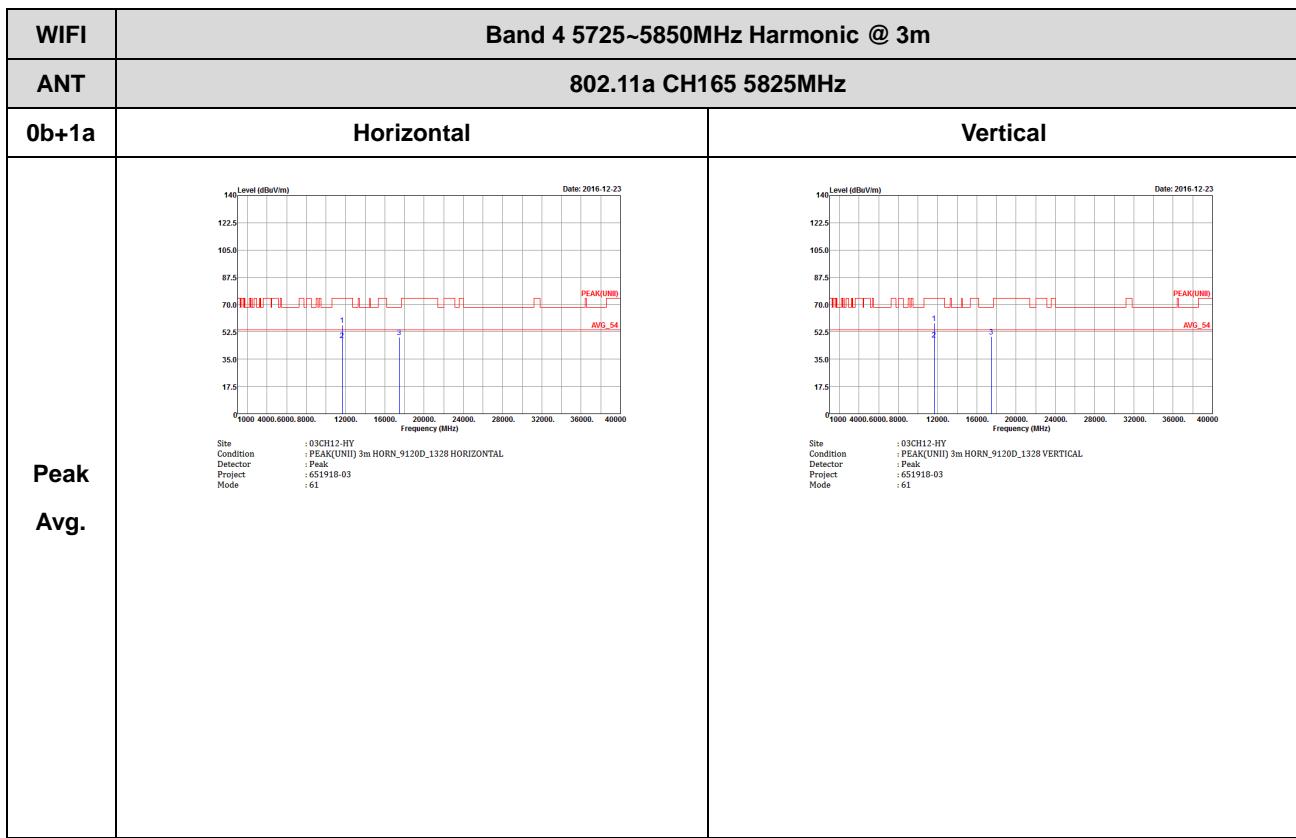


Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)





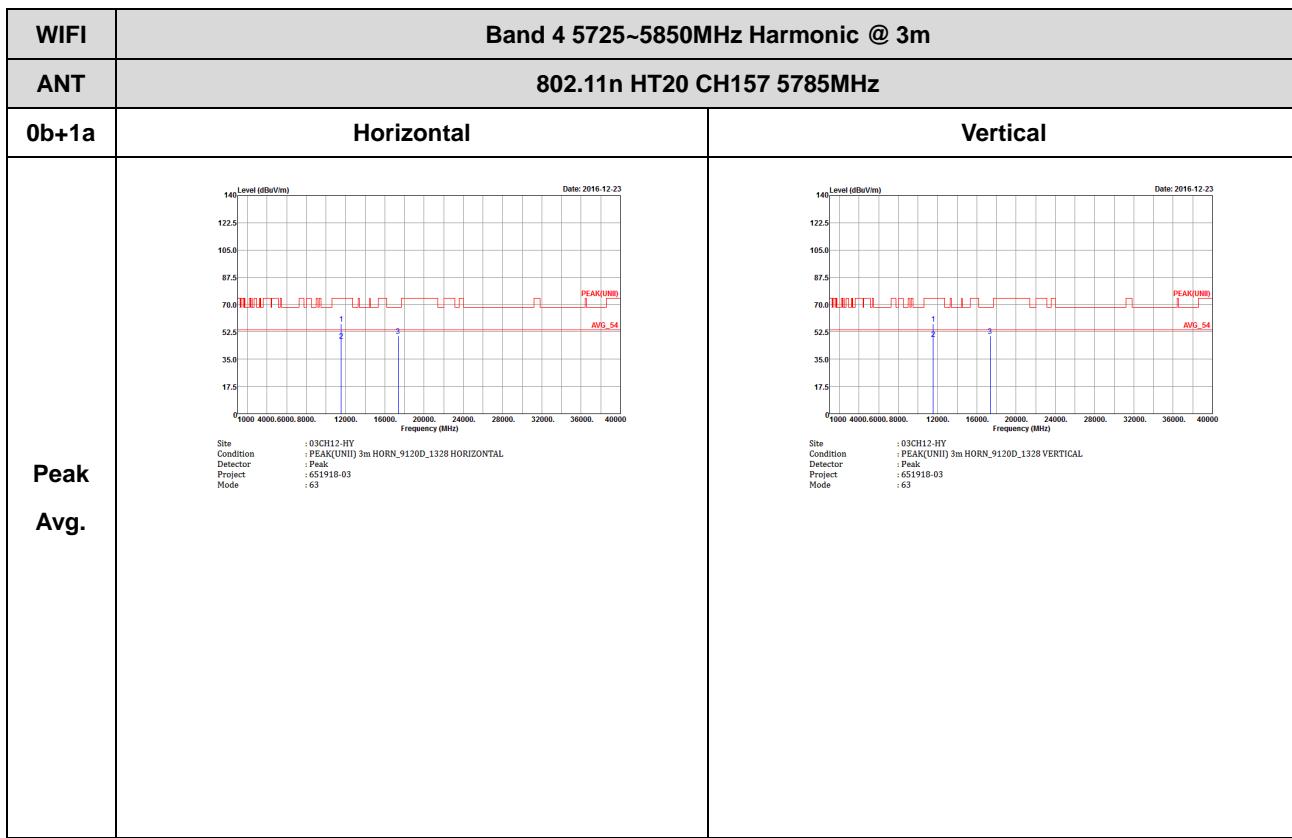


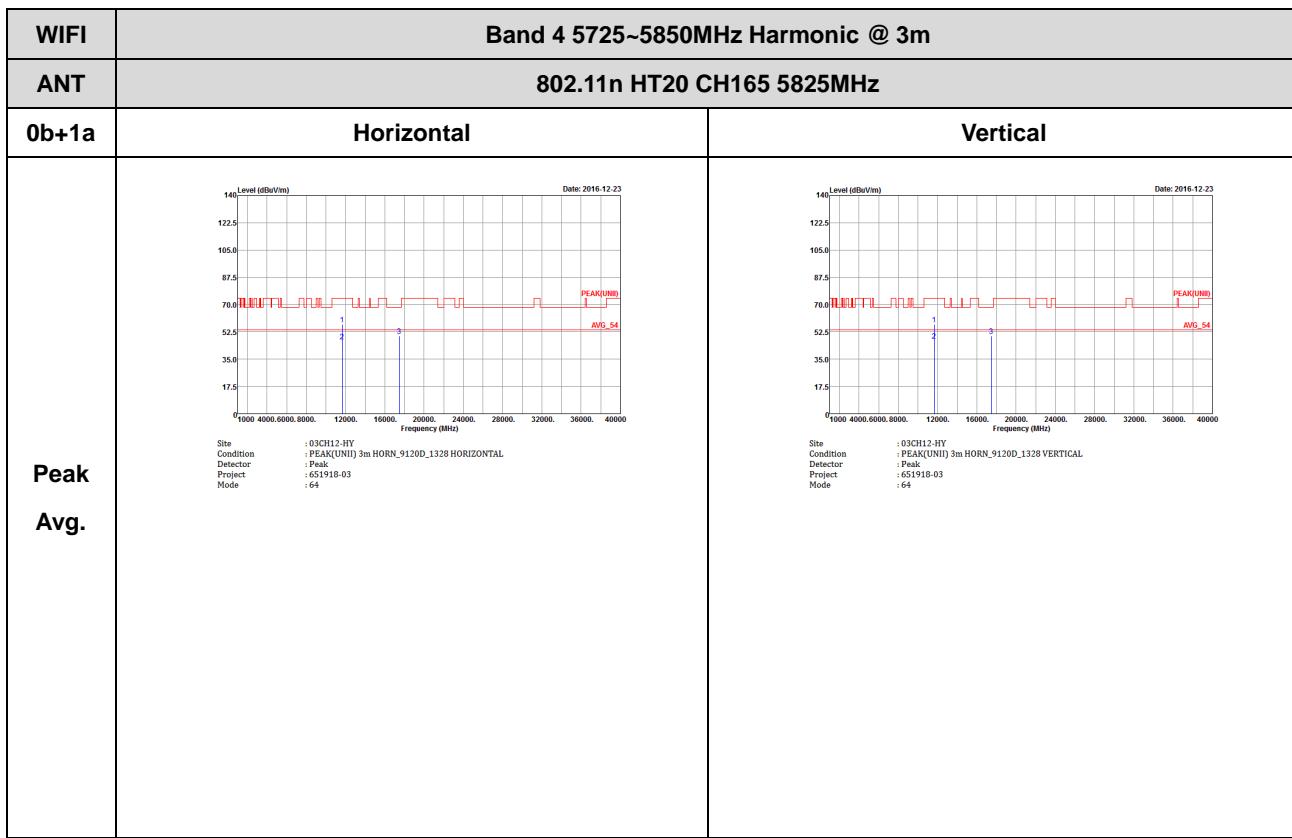


Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
0b+1a	Horizontal	Vertical
Peak Avg.	 Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 651918-03 Mode : 02 Date: 2016-12-23	 Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 651918-03 Mode : 02 Date: 2016-12-23

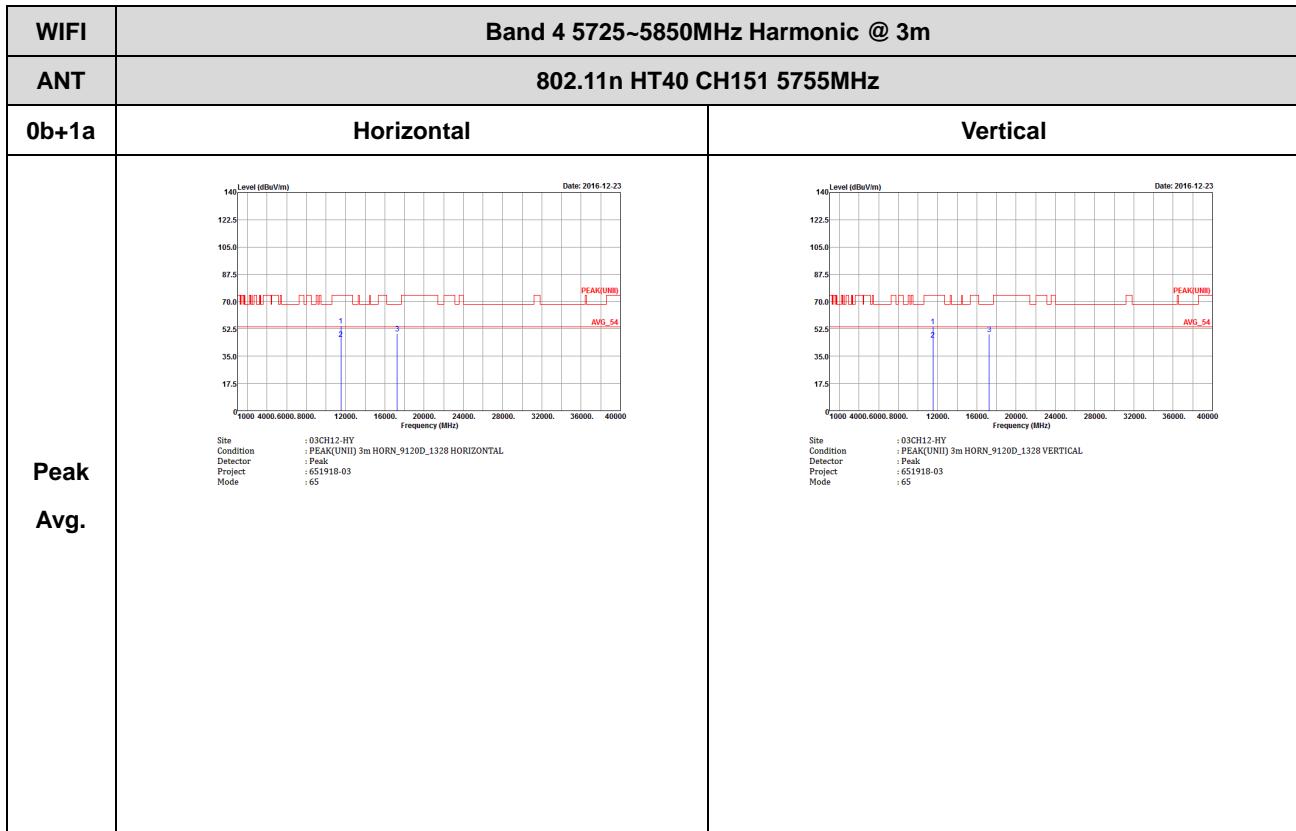


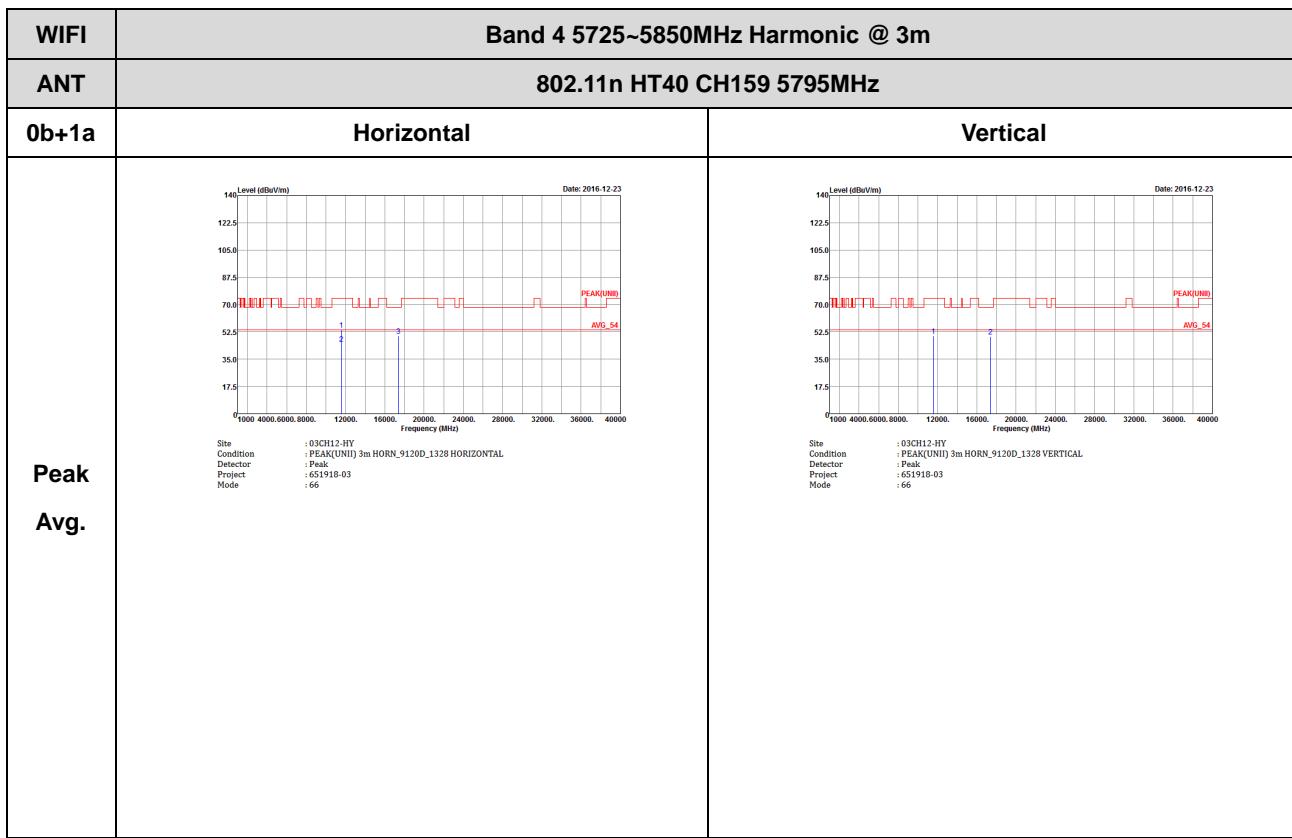




Band 4 5725~5850MHz

WIFI 802.11n HT40 (Harmonic @ 3m)







Band 4 5725~5850MHz

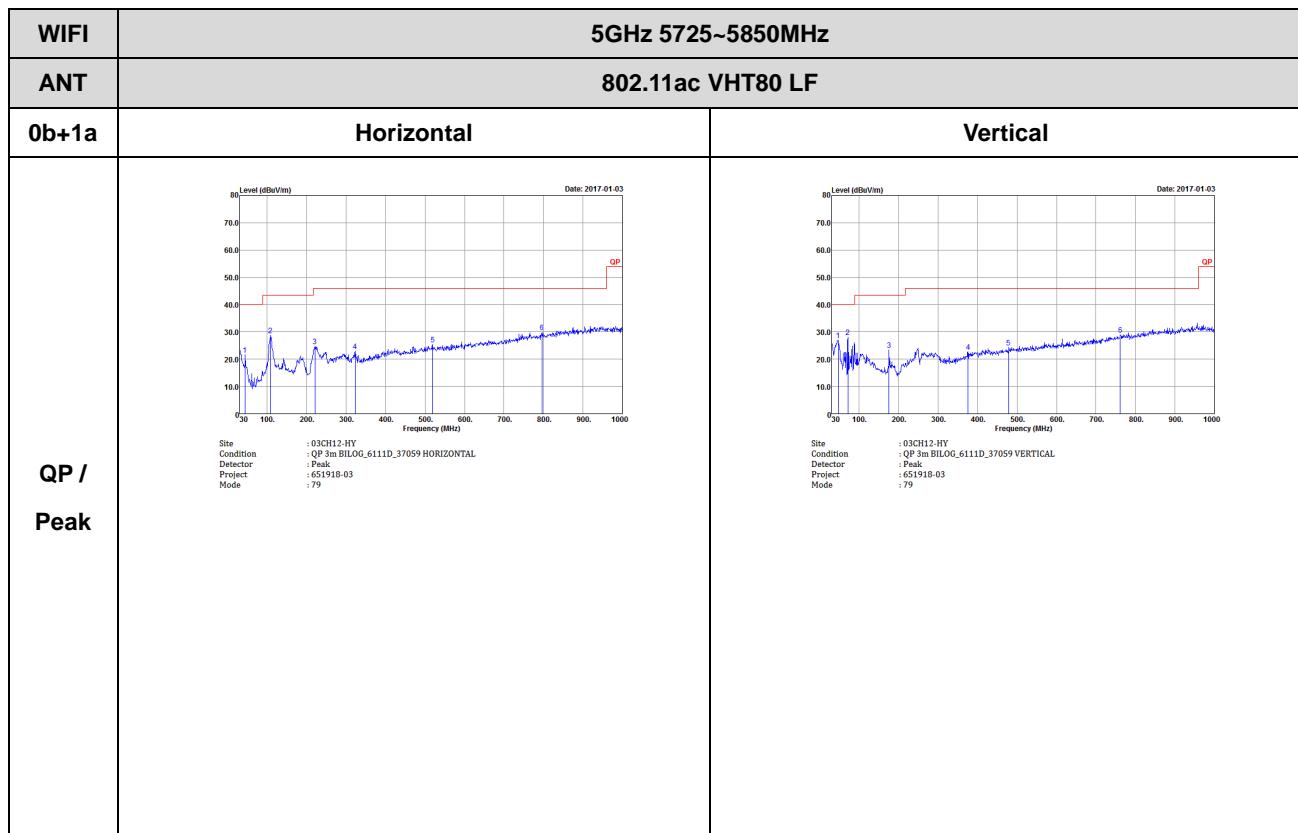
WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0b+1a	Horizontal	Vertical
Peak Avg.	<p>Level (dBuV/m) vs Frequency (MHz) from 1000 to 40000. The plot shows several discrete peaks. A red horizontal line indicates the average level. Two vertical blue lines mark specific frequency points. Labels include PEAK(UNII), AVG_54, and Date: 2016-12-23.</p> <p>Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 651918-03 Mode : 67 Setting : 82</p>	<p>Level (dBuV/m) vs Frequency (MHz) from 1000 to 40000. The plot shows several discrete peaks. A red horizontal line indicates the average level. Two vertical blue lines mark specific frequency points. Labels include PEAK(UNII), AVG_54, and Date: 2016-12-23.</p> <p>Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 651918-03 Mode : 67 Setting : 82</p>



Emission below 1GHz

5GHz WIFI 802.11ac VHT80 (LF)





Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

