FCC RADIO TEST REPORT

FCC ID	:	**2AOAI-5432**
Equipment	:	**DIGITAL MEDIA RECEIVER**
Model name	:	**L9D29R**
Applicant	:	**Reny7 LLC** **6701 Democracy Blvd. Suite 300** **Bethesda, Maryland, 20817**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was completed on Jul. 16, 2018. 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Jones Tsai

Approved by: Jones Tsai

SPORTON INTERTIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issued Date
FR830922-01F	01	Initial issue of report	Jul. 17, 2018

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)
3.1	15.403 (i)	6dB & 26dB Bandwidth	Pass
3.1	2.1049	99% Occupied Bandwidth	Reporting only
3.2	15.407 (a)	Maximum Conducted Output Power	Pass
3.3	15.407 (a)	Power Spectral Density	Pass
3.4	15.407(b)	Unwanted Emissions	Pass
3.5	15.207	AC Conducted Emission	Pass
3.6	15.407 (c)	Automatically Discontinue Transmission	Pass
3.7	15.203 & 15.407 (a)	Antenna Requirement	Pass

Reviewed by: Joseph Lin

Report Producer: Natasha Hsieh

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Digital Media Receiver
Model Name	L9D29R
FCC ID	2AOAI-5432
EUT supports Radios application	WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE Zigbee

1.2 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Channel Frequency Range	5745 MHz ~ 5825 MHz
Maximum Output Power <CDD Modes>	**<Ant. 1>** 802.11a : 17.72 dBm / 0.0592 W 802.11n HT20 : 17.37 dBm / 0.0546 W 802.11n HT40 : 17.28 dBm / 0.0535 W 802.11ac VHT20: 17.07 dBm / 0.0509 W 802.11ac VHT40: 17.23 dBm / 0.0528 W 802.11ac VHT80: 16.48 dBm / 0.0445 W **<Ant. 2>** 802.11a : 17.82 dBm / 0.0605 W 802.11n HT20 : 17.25 dBm / 0.0531 W 802.11n HT40 : 17.16 dBm / 0.0520 W 802.11ac VHT20: 17.25 dBm / 0.0531 W 802.11ac VHT40: 17.15 dBm / 0.0519 W 802.11ac VHT80: 16.21 dBm / 0.0418 W **MIMO<Ant. 1+2>** 802.11a : 20.85 dBm / 0.1216 W 802.11n HT20 : 20.64 dBm / 0.1159 W 802.11n HT40 : 20.43 dBm / 0.1104 W 802.11ac VHT20: 20.56 dBm / 0.1138 W 802.11ac VHT40: 20.37 dBm / 0.1089 W 802.11ac VHT80: 19.47 dBm / 0.0885 W
Maximum Output Power to Antenna <TXBF Modes>	**MIMO<Ant. 1+2>** 802.11ac VHT20 : 20.64 dBm / 0.1159 W 802.11ac VHT40 : 20.10 dBm / 0.1023 W 802.11ac VHT80 : 19.80 dBm / 0.0955 W

Standards-related Product Specification	
99% Occupied Bandwidth <CDD Modes>	**<Ant. 1>** 802.11a : 17.10 MHz 802.11n HT20 : 18.00 MHz 802.11n HT40 : 37.10 MHz 802.11ac VHT80 : 77.52 MHz **<Ant. 2>** 802.11a : 17.50 MHz 802.11n HT20 : 18.30 MHz 802.11n HT40 : 36.90 MHz 802.11ac VHT80 : 77.52 MHz **MIMO <Ant. 1>** 802.11a : 17.05 MHz 802.11n HT20 : 18.20 MHz 802.11n HT40 : 37.10 MHz 802.11ac VHT80 : 77.40 MHz **MIMO <Ant. 2>** 802.11a : 17.50 MHz 802.11n HT20 : 18.70 MHz 802.11n HT40 : 37.20 MHz 802.11ac VHT80 : 77.64 MHz
99% Occupied Bandwidth <TXBF Modes>	**MIMO<Ant. 1>** 802.11ac VHT20 : 18.00 MHz 802.11ac VHT40 : 36.90 MHz 802.11ac VHT80 : 77.52 MHz **MIMO<Ant. 2>** 802.11ac VHT20 : 18.15 MHz 802.11ac VHT40 : 37.00 MHz 802.11ac VHT80 : 77.52 MHz
Antenna Type / Gain	**Ant. 1 :** Fixed Internal Antenna type with gain 4.03 dBi **Ant. 2 :** Fixed Internal Antenna type with gain 3.81 dBi
Antenna Function Description	

	Ant. 1	Ant. 2
802.11 a/n/ac	V	V
802.11 a/n/ac MIMO	V	V

Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)

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

1.3 Modification of EUT

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

1.4 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1190 and TW0007 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	**Sporton 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.	**Sporton Site No.**
	03CH12-HY

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

1.5 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 v02r01.
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ANSI C63.10-2013

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

2 Test Configuration of Equipment Under Test

a. 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: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

b. AC power line Conducted Emission was tested under maximum output power.

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 modes are considering the modulation and worse data rates as below table.

Single Mode

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20 (Covered by HT20)	MCS0
802.11ac VHT40 (Covered by HT40)	MCS0
802.11ac VHT80	MCS0

MIMO Mode

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20 (Covered by HT20)	MCS0
802.11ac VHT40 (Covered by HT40)	MCS0
802.11ac VHT80	MCS0

TXBF Mode

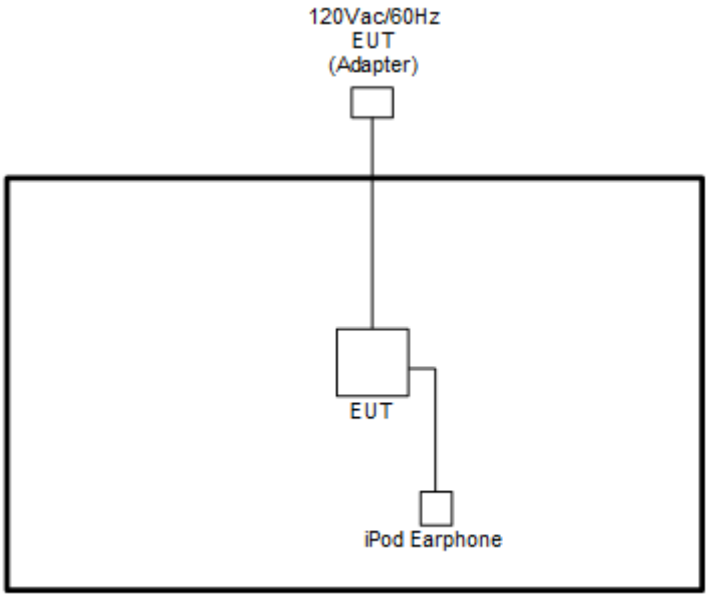
Modulation	Data Rate
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : WLAN (5GHz) Link + Play News + Adapter + Speaker Out

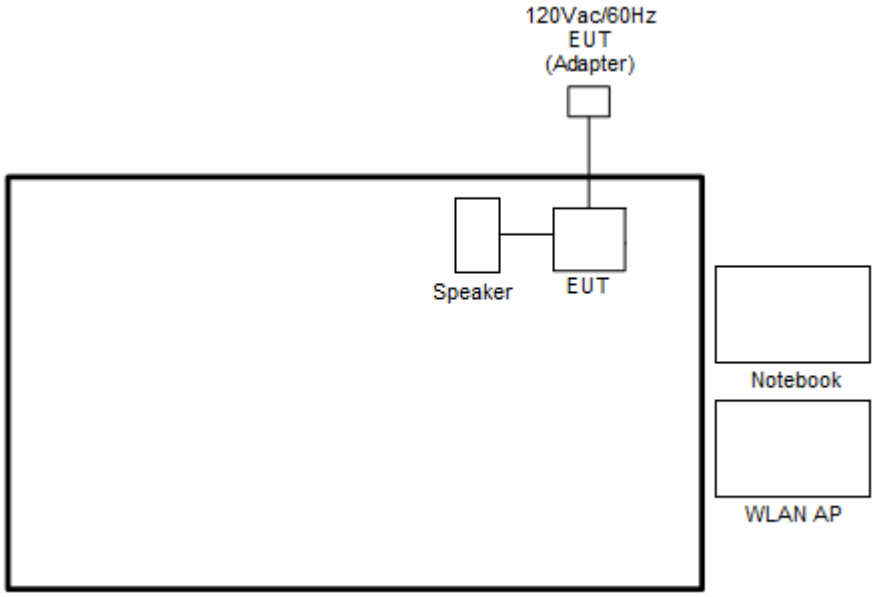
Ch. #		Band IV：5725-5850 MHz			
		802.11a	802.11n HT20	802.11n HT40	802.11ac VHT80
L	Low	149	149	151	-
M	Middle	157	157	-	155
H	High	165	165	159	-

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.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
2.	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
3.	Notebook	DELL	Latitude E3340	FCC DoC/ Contains FCC ID: PD97260NGU	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	Speaker	JAWBONE	JAMBOX	V3J-JBE	Shielded, 0.5 m	N/A
5.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A

2.5 EUT Operation Test Setup

The RF test items, utility “QATool.exe” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

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.

Offset = RF cable loss + attenuator factor.

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

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

= 4.2 + 10 = 14.2 (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.

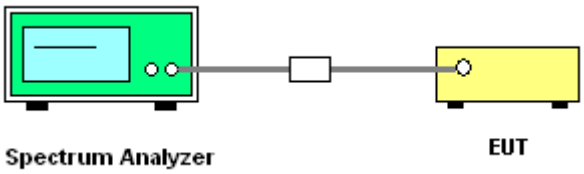
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth for the band 5.725-5.85GHz
2. Set RBW = 100kHz.
3. Set the VBW ≥ 3 x 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

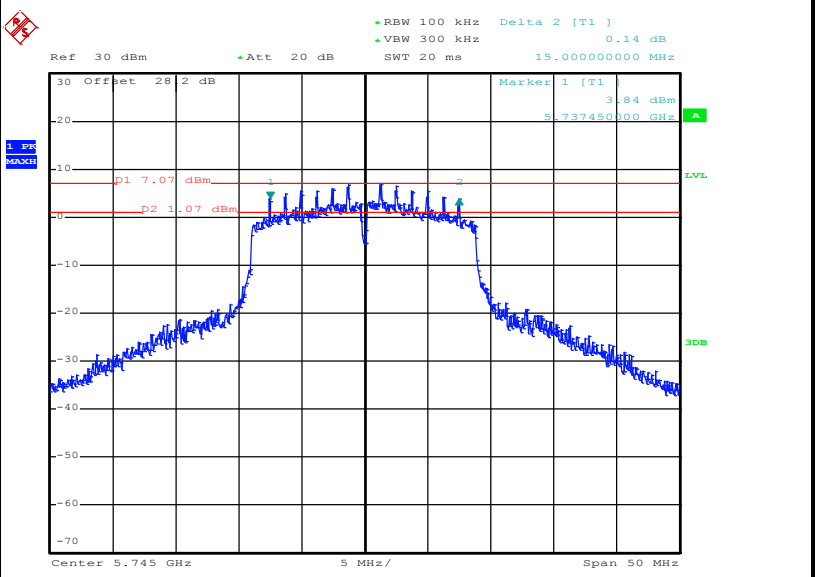


3.1.5 Test Result of 6dB Bandwidth

Please refer to Appendix A.

<CDD Mode>

Minimum 6dB Bandwidth



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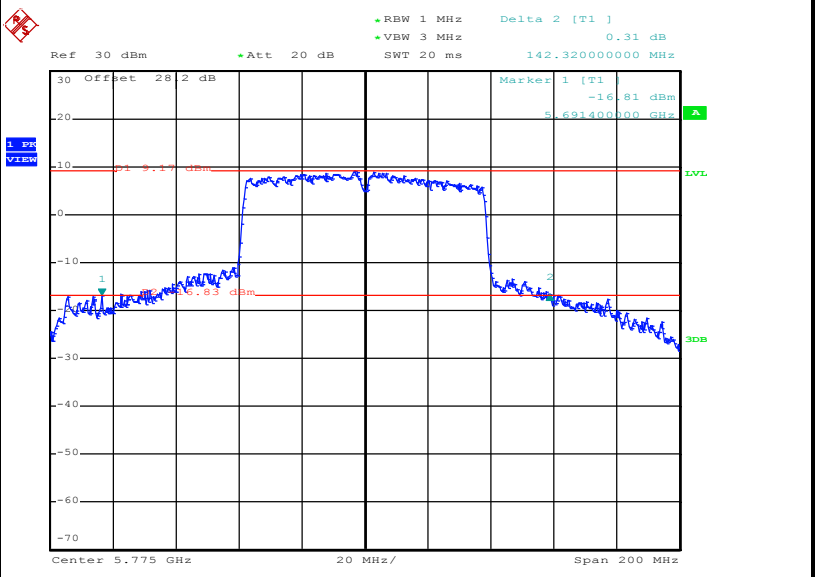
Maximum 26dB Bandwidth



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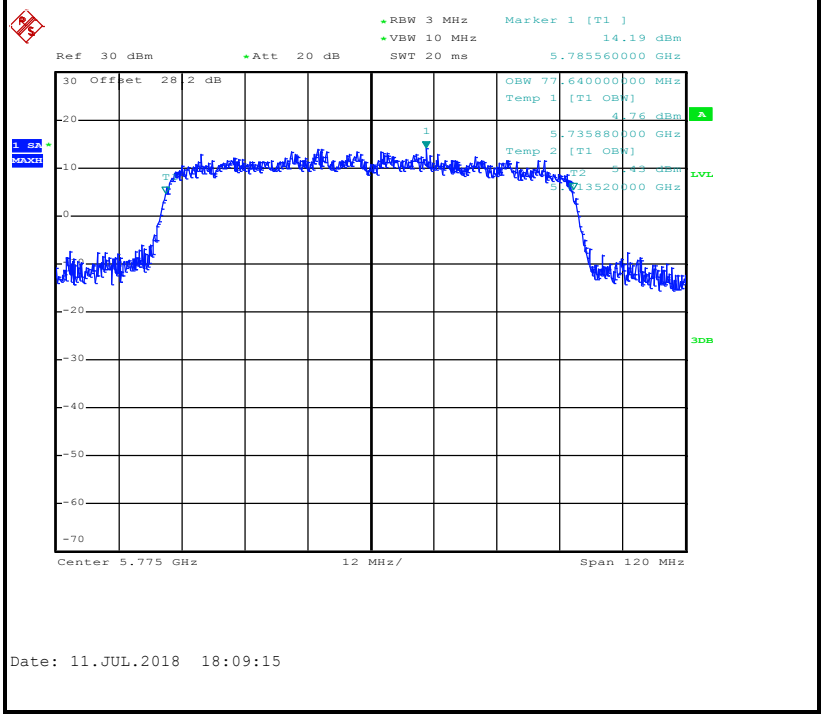
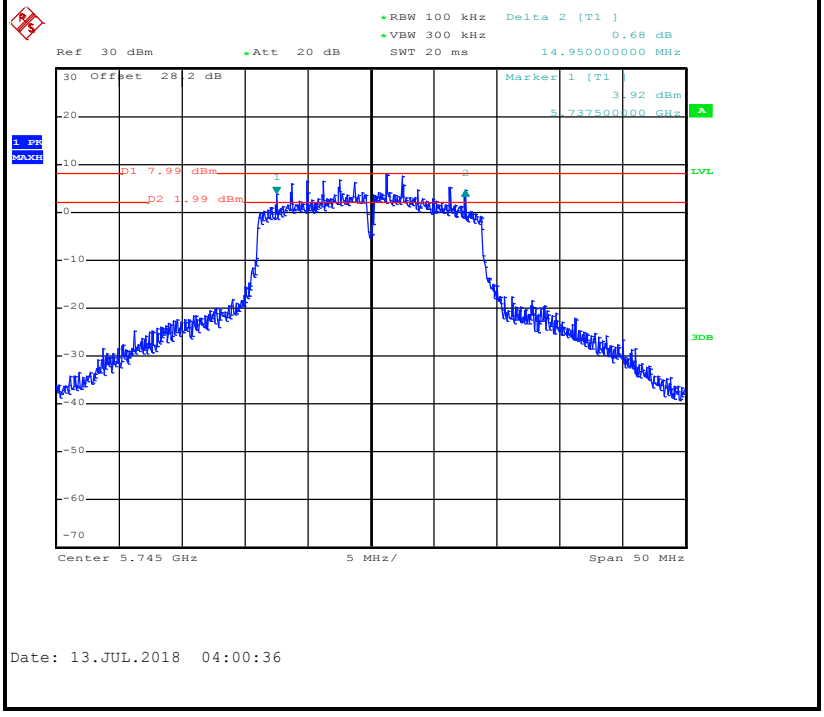
Maximum 99% Occupied Bandwidth



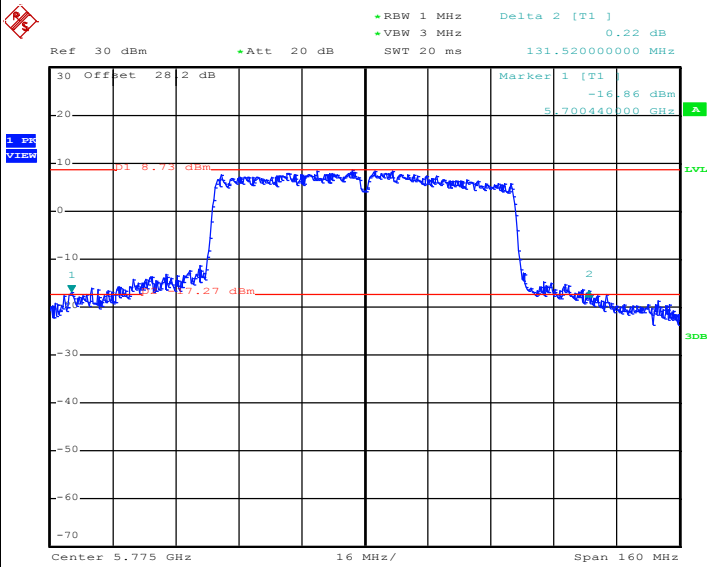
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<TXBF Modes>

Minimum 6dB Bandwidth



Maximum 26dB Bandwidth



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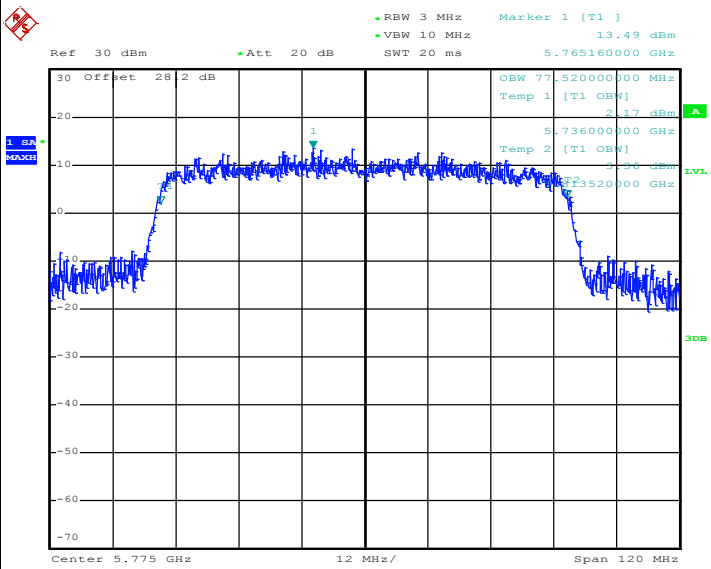
Maximum 99% Occupied Bandwidth



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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

See list of measuring equipment of this test report.

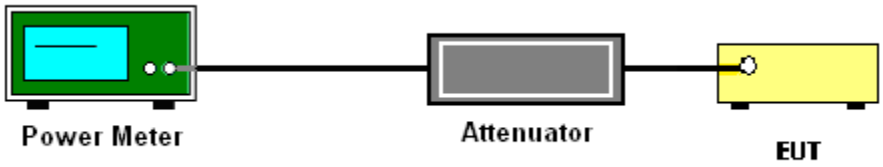
3.2.3 Test Procedures

The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

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

See list of measuring equipment of this test report.

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
Section F) Maximum power spectral density.

<CDD Modes>

 # 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 ≥ 1 MHz.
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Add 10 log(500kHz/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.

<TXBF Modes>

 # Method SA-3 #

(power averaging (rms) detection with max hold):

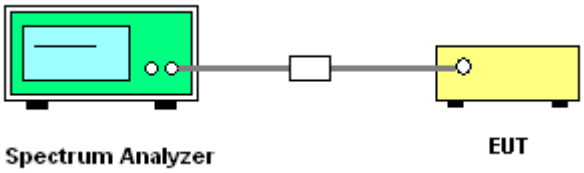
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 300 kHz.
- Set VBW ≥ 1 MHz.
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time ≤ (number of points in sweep) × T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
- Detector = power averaging (rms).
- Trace mode = max hold.
- Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.

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 $1/N_{ANT}$ th of the PSD limit.

3.3.4 Test Setup

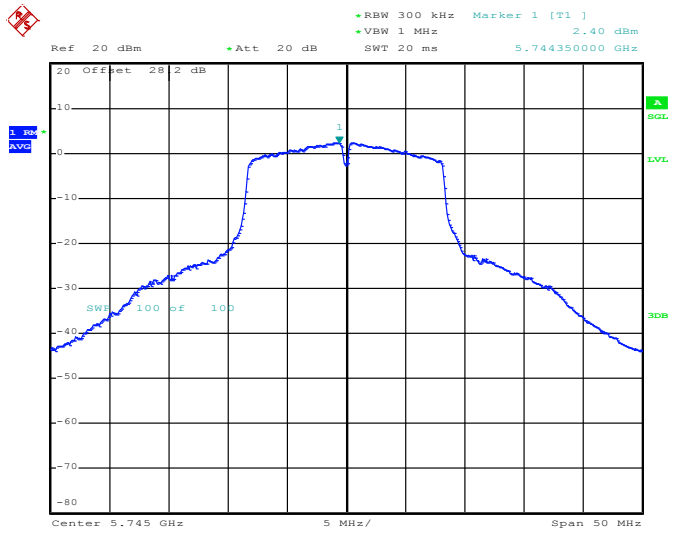


3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

<CDD Modes>

Worst Case Power Density (dBm/MHz) for MIMO Ant. 1



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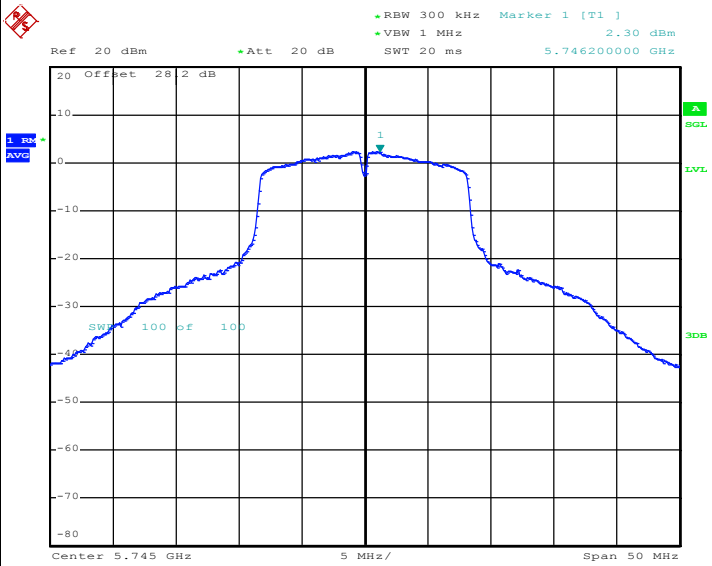
Worst Case Power Density (dBm/MHz) for MIMO Ant. 2



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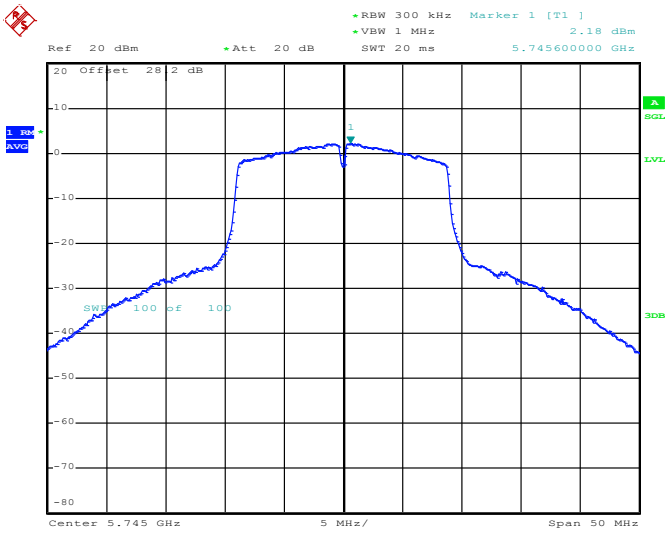
<TXBF Modes>

Worst Case Power Density (dBm/MHz) for MIMO Ant. 1



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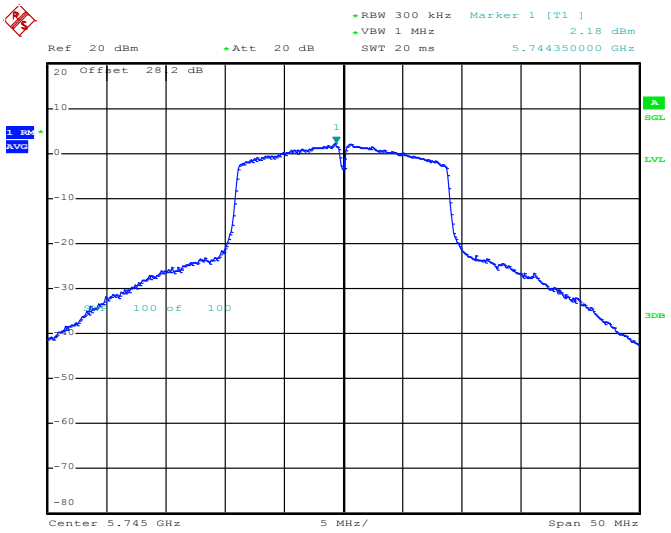
Worst Case Power Density (dBm/MHz) for MIMO Ant. 2



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3.4 Unwanted Emissions Measurement

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

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 shall comply with the general field strength limits 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.

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

EIRP (dBm)	Field Strength at 3m (dBµV/m)
- 27	68.3

(3) KDB789033 D02 v02r01 G)2)c)

(i) Section 15.407(b)(1) to (b)(3) specify the unwanted emission limits for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz.[3]

(ii) Section 15.407(b)(4) specifies the unwanted emission limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are in terms of a Peak detector. An alternative to the band emissions mask is specified in Section 15.407(b)(4)(ii). The alternative limits are based on the highest antenna gain specified in the filing. There are also marketing and importation restrictions for the devices using the alternative limit.[4]

Note 3: An out-of-band emission that complies with both the average and peak limits of Section 15.209 is not required to satisfy the -27 dBm/MHz peak emission limit.

Note 4: Only devices with antenna gains of 10 dBi or less may be approved using the emission limits specified in Section 15.247(d) till March 2, 2018; all other devices operating in this band must use the mask specified in Section 15.407(b)(4)(i).

3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. 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 ≥ 3 MHz
   - Detector = Peak
   - Sweep time = auto
   - Trace mode = max hold

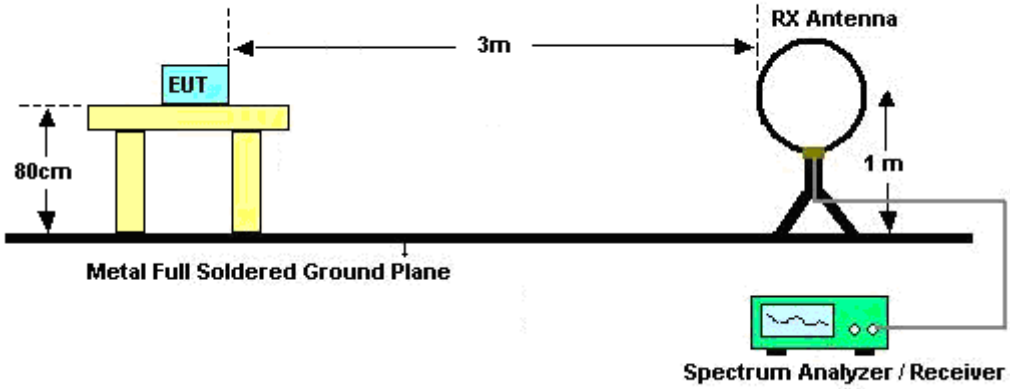
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

   - RBW = 1 MHz
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 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.

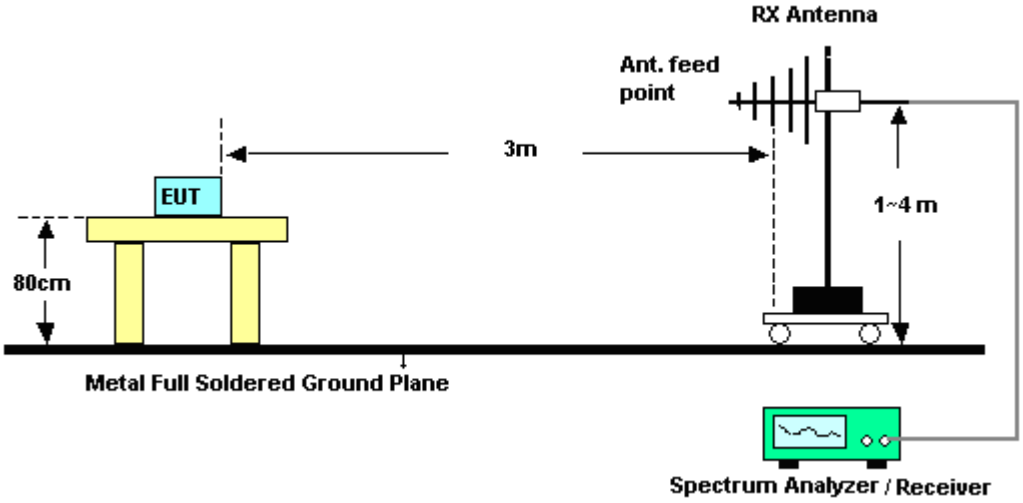
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband 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

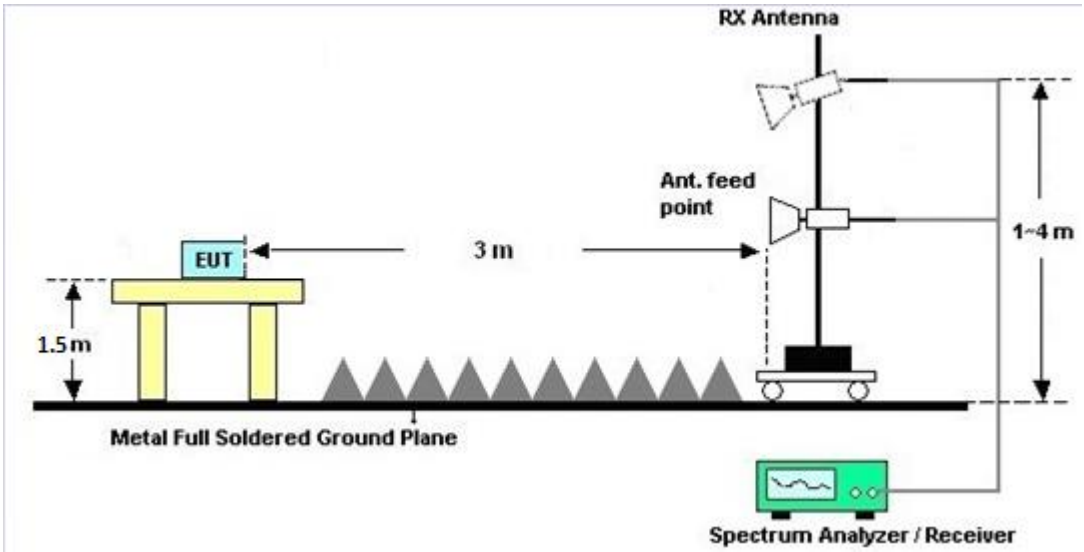
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.4.5 Test Results of Radiated 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 was not reported.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

3.4.6 Test Result of Radiated Band Edges

Please refer to Appendix C and D.

3.4.7 Duty Cycle

Please refer to Appendix E.

3.4.8 Test Result of Unwanted Radiated Emission (30MHz ~ 10th Harmonic)

Please refer to Appendix C and D.

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 (dBμV)	
	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.

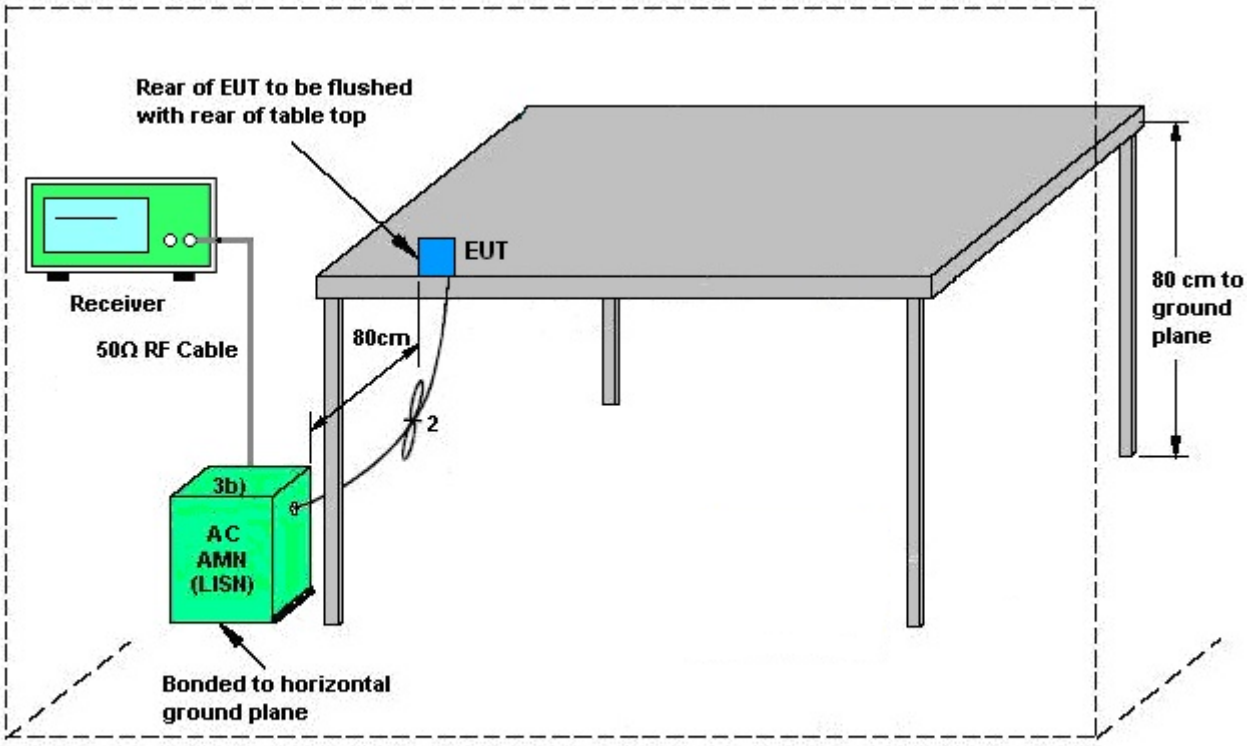
3.5.2 Measuring Instruments

See list of measuring equipment 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 (LISN)
AE = Associated equipment
EUT = Equipment under test
ISN = Impedance stabilization network

3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.6 Automatically Discontinue Transmission

3.6.1 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.

3.6.2 Measuring Instruments

See list of measuring equipment of this test report.

3.6.3 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.

3.7 Antenna Requirements

3.7.1 Standard Applicable

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.

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = GANT + Array Gain, where Array Gain is as follows.

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

Array Gain = 10 log(NANT/NSS=1) dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4.

Directional gain may be calculated by using the formulas applicable to equal gain antennas with GANT 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.

<CDD Modes>

	Ant. 1 (dBi)	Ant. 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band IV	4.03	3.81	4.03	6.93	0.00	0.93

Power Limit Reduction = DG(Power) – 6dBi, (min = 0)

PSD Limit Reduction = DG(PSD) – 6dBi, (min = 0)

TXBF modes

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

N_{SS} = the number of independent spatial streams of data;

N_{ANT} = the total number of antennas

$g_{j,k} = 10^{G_k/20}$ if the kth antenna is being fed by spatial stream j, or zero if it is not;

G_k is the gain in dBi of the kth antenna.

The EUT supports beamforming for 802.11ac modes.

The directional gain calculation is following F)2)e)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.

	Ant 1 (dBi)	Ant 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band IV	4.03	3.81	6.93	6.93	0.93	0.93

Power Limit Reduction = DG(Power) – 6dBi, (min = 0)

PSD Limit Reduction = DG(PSD) – 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	1240001	N/A	Sep. 07, 2017	Jun. 16, 2018~ Jul. 15, 2018	Sep. 06, 2018	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1207349	300MHz~40GHz	Sep. 07, 2017	Jun. 16, 2018~ Jul. 15, 2018	Sep. 06, 2018	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Nov. 21, 2017	Jun. 16, 2018~ Jul. 15, 2018	Nov. 20, 2018	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP30	101067	9kHz ~ 30GHz	Nov. 13, 2017	Jun. 16, 2018~ Jul. 15, 2018	Nov. 12, 2018	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC1300484	N/A	Mar. 01, 2018	Jun. 16, 2018~ Jul. 15, 2018	Feb. 28, 2019	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jun. 24, 2018	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	3.6GHz	Dec. 08, 2017	Jun. 24, 2018	Dec. 07, 2018	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 30, 2017	Jun. 24, 2018	Nov. 29, 2018	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Jun. 24, 2018	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 03, 2018	Jun. 24, 2018	Jan. 02, 2019	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 03, 2018	Jun. 24, 2018	Jan. 02, 2019	Conduction (CO05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Nov. 23, 2017	Jun. 18, 2018~ Jul. 16, 2018	Nov. 22, 2018	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800N1D01N-06	37059&01	30MHz~1GHz	Oct. 14, 2017	Jun. 18, 2018~ Jul. 16, 2018	Oct. 13, 2018	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1328	1GHz ~ 18GHz	Oct. 20, 2017	Jun. 18, 2018~ Jul. 16, 2018	Oct. 19, 2018	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz ~ 40GHz	Nov. 27, 2017	Jun. 18, 2018~ Jul. 16, 2018	Nov. 26, 2018	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103	161075	10MHz~1GHz	Mar. 26, 2018	Jun. 18, 2018~ Jul. 16, 2018	Mar. 25, 2019	Radiation (03CH12-HY)
Preamplifier	Keysight	83017A	MY53270148	1GHz~26.5GHz	Jan. 15, 2018	Jun. 18, 2018~ Jul. 16, 2018	Jan. 14, 2019	Radiation (03CH12-HY)
Preamplifier	MITEQ	AMF-7D-00101800-30-10P	1590074	1GHz~18GHz	May 21, 2018	Jun. 18, 2018~ Jul. 16, 2018	May 20, 2019	Radiation (03CH12-HY)
Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 18, 2017	Jun. 18, 2018~ Jul. 16, 2018	Jul. 17, 2018	Radiation (03CH12-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100390	20Hz~26.5GHz	Dec. 25, 2017	Jun. 18, 2018~ Jul. 16, 2018	Dec. 24, 2018	Radiation (03CH12-HY)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	Keysight	N9010A	MY54200485	10Hz ~ 44GHz	Oct. 31, 2017	Jun. 18, 2018~ Jul. 16, 2018	Oct. 30, 2018	Radiation (03CH12-HY)
Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN11	1G Low Pass	Sep. 18, 2017	Jun. 18, 2018~ Jul. 16, 2018	Sep. 17, 2019	Radiation (03CH12-HY)
Filter	Wainwright	WHKX12-2700-3000-18000-60ST	SN4	3 GHz Highpass	Sep. 19, 2017	Jun. 18, 2018~ Jul. 16, 2018	Sep. 18, 2018	Radiation (03CH12-HY)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN4	6.75 GHz Highpass	May 22, 2018	Jun. 18, 2018~ Jul. 16, 2018	May 21, 2019	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0058/126E	30M-18G	Mar. 14, 2018	Jun. 18, 2018~ Jul. 16, 2018	Mar. 13, 2019	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30M~40GHz	Oct. 17, 2017	Jun. 18, 2018~ Jul. 16, 2018	Oct. 16, 2018	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30M~40GHz	Oct. 17, 2017	Jun. 18, 2018~ Jul. 16, 2018	Oct. 16, 2018	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Jun. 18, 2018~ Jul. 16, 2018	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jun. 18, 2018~ Jul. 16, 2018	N/A	Radiation (03CH12-HY)
Software	Audix	E3 6.2009-8-24	RK-000989	N/A	N/A	Jun. 18, 2018~ Jul. 16, 2018	N/A	Radiation (03CH12-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.7

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.1

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.2

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.7

Appendix A. Test Result of Conducted Test Items

<CDD Mode>

Test Engineer:	Kai Liao / Rebecca Li	Temperature:	21~25	°C
Test Date:	2018/6/16 ~ 2018/7/11	Relative Humidity:	51~54	%

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

Band IV												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	149	5745	17.10	17.15	32.25	35.95	15.15	15.15	0.5	Pass
11a	6Mbps	1	157	5785	16.75	17.40	29.70	34.60	15.10	15.15	0.5	Pass
11a	6Mbps	1	165	5825	16.70	17.50	25.75	36.85	15.05	15.10	0.5	Pass
HT20	MCS0	1	149	5745	18.00	18.00	33.00	38.60	15.05	15.00	0.5	Pass
HT20	MCS0	1	157	5785	17.90	18.00	32.95	34.50	15.10	15.10	0.5	Pass
HT20	MCS0	1	165	5825	17.80	18.30	29.90	36.60	15.15	15.15	0.5	Pass
HT40	MCS0	1	151	5755	36.60	36.80	68.22	70.02	35.10	35.20	0.5	Pass
HT40	MCS0	1	159	5795	37.10	36.90	70.11	70.56	35.00	35.10	0.5	Pass
VHT80	MCS0	1	155	5775	77.52	77.52	119.04	131.68	76.08	74.88	0.5	Pass
11a	6Mbps	2	149	5745	17.05	17.50	33.60	35.90	15.00	15.05	0.5	Pass
11a	6Mbps	2	157	5785	16.85	16.75	30.40	35.10	15.10	15.10	0.5	Pass
11a	6Mbps	2	165	5825	16.80	16.70	26.70	30.10	15.10	15.10	0.5	Pass
HT20	MCS0	2	149	5745	17.95	18.05	36.10	39.20	15.00	15.65	0.5	Pass
HT20	MCS0	2	157	5785	18.10	18.05	37.45	37.50	15.15	15.65	0.5	Pass
HT20	MCS0	2	165	5825	18.20	18.70	36.10	38.10	15.10	15.15	0.5	Pass
HT40	MCS0	2	151	5755	36.70	37.10	68.76	68.76	35.10	35.10	0.5	Pass
HT40	MCS0	2	159	5795	37.10	37.20	70.11	69.66	35.10	35.20	0.5	Pass
VHT80	MCS0	2	155	5775	77.40	77.64	120.96	142.32	75.84	75.48	0.5	Pass

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TEST RESULTS DATA
Average Power Table

Band IV														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	149	5745	0.30	0.30	17.72	17.53		30.00	30.00	4.03	3.81	Pass
11a	6Mbps	1	157	5785	0.30	0.30	16.18	17.44		30.00	30.00	4.03	3.81	Pass
11a	6Mbps	1	165	5825	0.30	0.30	15.55	17.82		30.00	30.00	4.03	3.81	Pass
HT20	MCS0	1	149	5745	0.32	0.35	17.37	16.99		30.00	30.00	4.03	3.81	Pass
HT20	MCS0	1	157	5785	0.32	0.35	16.91	16.89		30.00	30.00	4.03	3.81	Pass
HT20	MCS0	1	165	5825	0.32	0.35	16.33	17.25		30.00	30.00	4.03	3.81	Pass
HT40	MCS0	1	151	5755	0.69	0.69	17.20	17.16		30.00	30.00	4.03	3.81	Pass
HT40	MCS0	1	159	5795	0.69	0.69	17.28	17.08		30.00	30.00	4.03	3.81	Pass
VHT20	MCS0	1	149	5745	0.35	0.32	17.07	16.99		30.00	30.00	4.03	3.81	Pass
VHT20	MCS0	1	157	5785	0.35	0.32	16.88	16.86		30.00	30.00	4.03	3.81	Pass
VHT20	MCS0	1	165	5825	0.35	0.32	16.08	17.25		30.00	30.00	4.03	3.81	Pass
VHT40	MCS0	1	151	5755	0.65	0.68	17.18	17.15		30.00	30.00	4.03	3.81	Pass
VHT40	MCS0	1	159	5795	0.65	0.68	17.23	16.99		30.00	30.00	4.03	3.81	Pass
VHT80	MCS0	1	155	5775	1.17	1.18	16.48	16.21		30.00	30.00	4.03	3.81	Pass
11a	6Mbps	2	149	5745	0.30	0.30	17.93	17.74	20.85	30.00		4.03		Pass
11a	6Mbps	2	157	5785	0.30	0.30	17.28	16.76	20.04	30.00		4.03		Pass
11a	6Mbps	2	165	5825	0.30	0.30	15.91	15.67	18.80	30.00		4.03		Pass
HT20	MCS0	2	149	5745	0.32	0.32	17.53	17.38	20.47	30.00		4.03		Pass
HT20	MCS0	2	157	5785	0.32	0.32	17.67	17.32	20.51	30.00		4.03		Pass
HT20	MCS0	2	165	5825	0.32	0.32	17.63	17.63	20.64	30.00		4.03		Pass
HT40	MCS0	2	151	5755	0.63	0.68	17.47	17.36	20.43	30.00		4.03		Pass
HT40	MCS0	2	159	5795	0.63	0.68	16.86	16.83	19.86	30.00		4.03		Pass
VHT20	MCS0	2	149	5745	0.32	0.35	17.38	17.30	20.35	30.00		4.03		Pass
VHT20	MCS0	2	157	5785	0.32	0.35	17.43	17.30	20.37	30.00		4.03		Pass
VHT20	MCS0	2	165	5825	0.32	0.35	17.49	17.62	20.56	30.00		4.03		Pass
VHT40	MCS0	2	151	5755	0.68	0.68	17.45	17.28	20.37	30.00		4.03		Pass
VHT40	MCS0	2	159	5795	0.68	0.68	16.86	16.61	19.75	30.00		4.03		Pass
VHT80	MCS0	2	155	5775	1.17	1.17	16.54	16.37	19.47	30.00		4.03		Pass

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TEST RESULTS DATA
Power Spectral Density

Band IV																
Mod.	Data Rate	NTX	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
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	149	5745	0.30	0.30	2.22	2.22	2.40	2.17		30.00	30.00	4.03	3.81	Pass
11a	6Mbps	1	157	5785	0.30	0.30	2.22	2.22	1.11	2.12		30.00	30.00	4.03	3.81	Pass
11a	6Mbps	1	165	5825	0.30	0.30	2.22	2.22	0.38	2.34		30.00	30.00	4.03	3.81	Pass
HT20	MCS0	1	149	5745	0.32	0.35	2.22	2.22	1.90	1.51		30.00	30.00	4.03	3.81	Pass
HT20	MCS0	1	157	5785	0.32	0.35	2.22	2.22	1.28	1.20		30.00	30.00	4.03	3.81	Pass
HT20	MCS0	1	165	5825	0.32	0.35	2.22	2.22	0.82	1.58		30.00	30.00	4.03	3.81	Pass
HT40	MCS0	1	151	5755	0.69	0.69	2.22	2.22	-1.35	-1.94		30.00	30.00	4.03	3.81	Pass
HT40	MCS0	1	159	5795	0.69	0.69	2.22	2.22	-1.64	-2.03		30.00	30.00	4.03	3.81	Pass
VHT80	MCS0	1	155	5775	1.17	1.18	2.22	2.22	-4.66	-5.00		30.00	30.00	4.03	3.81	Pass
11a	6Mbps	2	149	5745	0.30	0.30	2.22		2.70	2.60	7.93	29.07		6.93		Pass
11a	6Mbps	2	157	5785	0.30	0.30	2.22		1.82	1.65	7.05	29.07		6.93		Pass
11a	6Mbps	2	165	5825	0.30	0.30	2.22		1.02	0.55	6.25	29.07		6.93		Pass
HT20	MCS0	2	149	5745	0.32	0.32	2.22		2.22	2.04	7.45	29.07		6.93		Pass
HT20	MCS0	2	157	5785	0.32	0.32	2.22		2.06	1.98	7.29	29.07		6.93		Pass
HT20	MCS0	2	165	5825	0.32	0.32	2.22		2.34	2.13	7.57	29.07		6.93		Pass
HT40	MCS0	2	151	5755	0.63	0.68	2.22		-0.95	-1.46	4.28	29.07		6.93		Pass
HT40	MCS0	2	159	5795	0.63	0.68	2.22		-1.79	-2.40	3.44	29.07		6.93		Pass
VHT80	MCS0	2	155	5775	1.17	1.17	2.22		-4.74	-4.63	0.60	29.07		6.93		Pass

Note: PSD Sum = Max PSD(Ant. 1, Ant. 2) + 10 log (n)

<TXBF Mode>

Test Engineer:	Rebecca Li/Shiming Liu	Temperature:	21~25	°C
Test Date:	2018/7/10~2018/7/15	Relative Humidity:	51~54	%

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

Band IV												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
VHT20	MCS0	2	149	5745	17.95	18.10	36.55	37.30	14.95	15.60	0.5	Pass
VHT20	MCS0	2	157	5785	18.00	18.00	37.50	37.90	15.01	15.00	0.5	Pass
VHT20	MCS0	2	165	5825	17.95	18.15	36.60	37.55	15.00	15.10	0.5	Pass
VHT40	MCS0	2	151	5755	36.70	36.90	66.71	62.31	34.97	35.03	0.5	Pass
VHT40	MCS0	2	159	5795	36.90	37.00	68.27	70.78	35.07	35.04	0.5	Pass
VHT80	MCS0	2	155	5775	77.52	77.52	120.86	131.52	75.82	75.44	0.5	Pass

TEST RESULTS DATA
Average Power Table

Band IV														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
VHT20	MCS0	2	149	5745	0.13	0.13	17.82	17.42	20.64	29.07		6.93		Pass
VHT20	MCS0	2	157	5785	0.13	0.13	14.95	14.95	17.96	29.07		6.93		Pass
VHT20	MCS0	2	165	5825	0.13	0.13	13.72	13.88	16.81	29.07		6.93		Pass
VHT40	MCS0	2	151	5755	0.23	0.23	17.26	16.91	20.10	29.07		6.93		Pass
VHT40	MCS0	2	159	5795	0.23	0.23	15.14	14.68	17.93	29.07		6.93		Pass
VHT80	MCS0	2	155	5775	0.51	0.46	17.06	16.50	19.80	29.07		6.93		Pass

TEST RESULTS DATA
Power Spectral Density

Band IV																	
Mod.	Data Rate	NTX	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
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
VHT20	MCS0	2	149	5745	0.13	0.13	2.22		2.31	2.31	7.54	29.07		6.93		Pass
VHT20	MCS0	2	157	5785	0.13	0.13	2.22		-0.99	-0.80	4.43	29.07		6.93		Pass
VHT20	MCS0	2	165	5825	0.13	0.13	2.22		-2.06	-1.66	3.57	29.07		6.93		Pass
VHT40	MCS0	2	151	5755	0.23	0.23	2.22		-1.62	-1.91	3.61	29.07		6.93		Pass
VHT40	MCS0	2	159	5795	0.23	0.23	2.22		-4.86	-4.88	0.37	29.07		6.93		Pass
VHT80	MCS0	2	155	5775	0.51	0.46	2.22		-5.08	-5.29	0.15	29.07		6.93		Pass

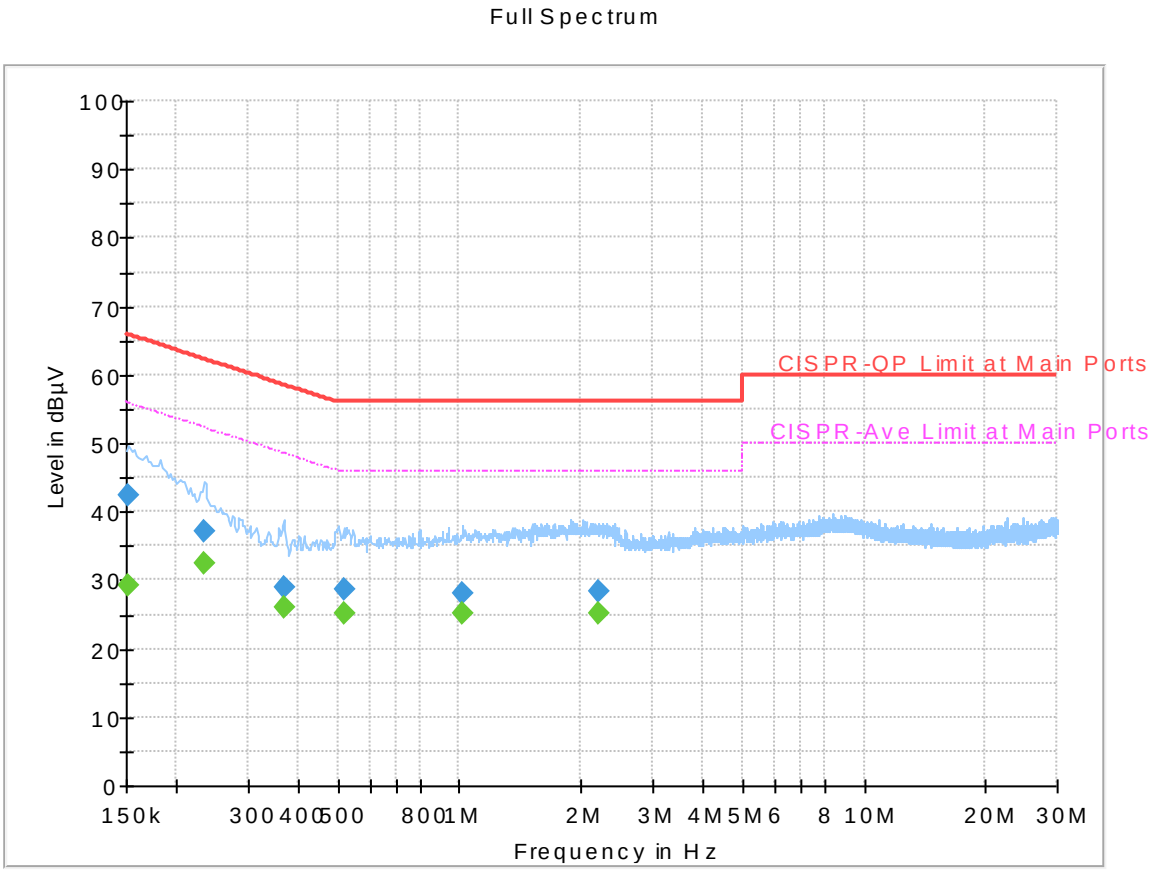
Note: PSD Sum = Max PSD(Ant. 1, Ant. 2) + 10 log (n)

Appendix B. AC Conducted Emission Test Results

Test Engineer :	Kai-Chun Chu	**Temperature :**	25~27℃
		Relative Humidity :	50~52%

EUT Information

Report NO :	830922-01
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

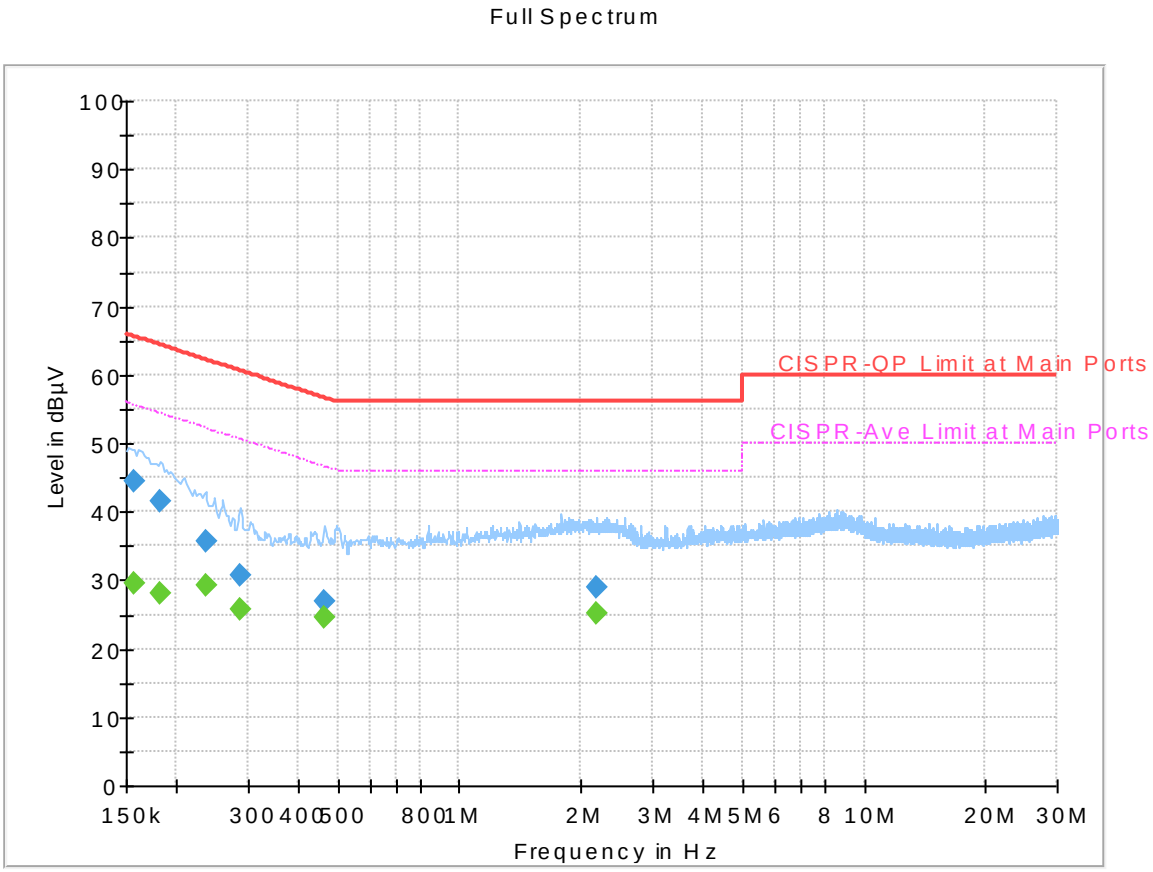


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	29.28	55.88	26.60	L1	OFF	19.5
0.152250	42.45	---	65.88	23.43	L1	OFF	19.5
0.233250	---	32.53	52.33	19.80	L1	OFF	19.5
0.233250	37.13	---	62.33	25.20	L1	OFF	19.5
0.368250	---	26.06	48.54	22.48	L1	OFF	19.5
0.368250	28.98	---	58.54	29.56	L1	OFF	19.5
0.516750	---	25.19	46.00	20.81	L1	OFF	19.5
0.516750	28.53	---	56.00	27.47	L1	OFF	19.5
1.016250	---	25.09	46.00	20.91	L1	OFF	19.6
1.016250	27.98	---	56.00	28.02	L1	OFF	19.6
2.206500	---	25.12	46.00	20.88	L1	OFF	19.5
2.206500	28.44	---	56.00	27.56	L1	OFF	19.5

EUT Information

Report NO :	830922-01
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.156750	---	29.49	55.63	26.14	N	OFF	19.5
0.156750	44.32	---	65.63	21.31	N	OFF	19.5
0.181500	---	28.07	54.42	26.35	N	OFF	19.5
0.181500	41.58	---	64.42	22.84	N	OFF	19.5
0.235500	---	29.24	52.25	23.01	N	OFF	19.5
0.235500	35.59	---	62.25	26.66	N	OFF	19.5
0.287250	---	25.69	50.60	24.91	N	OFF	19.5
0.287250	30.59	---	60.60	30.01	N	OFF	19.5
0.465000	---	24.54	46.60	22.06	N	OFF	19.5
0.465000	26.86	---	56.60	29.74	N	OFF	19.5
2.175000	---	25.23	46.00	20.77	N	OFF	19.5
2.175000	29.07	---	56.00	26.93	N	OFF	19.5

Appendix C. Radiated Spurious Emission

Test Engineer :	Jacky Hung, Peter Chiu, and Master Huang	Temperature :	22~25°C
		Relative Humidity :	56~62%

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		5638.8	55.96	-12.24	68.2	44.54	32.19	10.45	31.22	189	3	P	H
		5677.8	56.81	-32	88.81	45.32	32.24	10.48	31.23	189	3	P	H
		5719	66.74	-43.78	110.52	55.17	32.31	10.52	31.26	189	3	P	H
		5725	73.47	-48.73	122.2	61.9	32.31	10.52	31.26	189	3	P	H
	*	5745	113.33	-	-	101.72	32.34	10.54	31.27	189	3	P	H
	*	5745	102.78	-	-	91.17	32.34	10.54	31.27	189	3	A	H
		5636	53.89	-14.31	68.2	42.47	32.19	10.45	31.22	396	342	P	V
		5664.8	53.83	-25.36	79.19	42.37	32.22	10.47	31.23	396	342	P	V
		5719	63.27	-47.25	110.52	51.7	32.31	10.52	31.26	396	342	P	V
		5724.8	71.07	-50.67	121.74	59.5	32.31	10.52	31.26	396	342	P	V
	*	5745	110.25	-	-	98.64	32.34	10.54	31.27	396	342	P	V
	*	5745	99.63	-	-	88.02	32.34	10.54	31.27	396	342	A	V

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 157 5785MHz		5644.8	55.57	-12.63	68.2	44.14	32.19	10.46	31.22	199	359	P	H
		5680.2	57.1	-33.49	90.59	45.63	32.24	10.48	31.25	199	359	P	H
		5707.6	56	-51.33	107.33	44.46	32.29	10.51	31.26	199	359	P	H
		5723.6	55.49	-63.52	119.01	43.92	32.31	10.52	31.26	199	359	P	H
	*	5785	111.65	-	-	99.98	32.39	10.57	31.29	199	359	P	H
	*	5785	101.3	-	-	89.63	32.39	10.57	31.29	199	359	A	H
		5851.4	54.49	-64.52	119.01	42.71	32.48	10.62	31.32	199	359	P	H
		5866.2	55.64	-52.02	107.66	43.83	32.51	10.63	31.33	199	359	P	H
		5892	55.21	-37.37	92.58	43.34	32.56	10.65	31.34	199	359	P	H
		5927.4	54.08	-14.12	68.2	42.15	32.6	10.68	31.35	199	359	P	H
		5642.4	53.94	-14.26	68.2	42.52	32.19	10.45	31.22	399	353	P	V
		5681	54.62	-36.56	91.18	43.15	32.24	10.48	31.25	399	353	P	V
		5710	54.36	-53.64	108	42.82	32.29	10.51	31.26	399	353	P	V
		5721	52.61	-60.47	113.08	41.04	32.31	10.52	31.26	399	353	P	V
	*	5785	108.92	-	-	97.25	32.39	10.57	31.29	399	353	P	V
	*	5785	98.35	-	-	86.68	32.39	10.57	31.29	399	353	A	V
		5853	52.89	-62.47	115.36	41.11	32.48	10.62	31.32	399	353	P	V
		5867.2	53.35	-54.03	107.38	41.54	32.51	10.63	31.33	399	353	P	V
		5898.6	53.63	-34.07	87.7	41.76	32.56	10.65	31.34	399	353	P	V
		5937	53.34	-14.86	68.2	41.43	32.6	10.68	31.37	399	353	P	V

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a CH 165 5825MHz	*	5825	110.6	-	-	98.85	32.46	10.6	31.31	198	359	P	H
	*	5825	100.02	-	-	88.27	32.46	10.6	31.31	198	359	A	H
		5850.2	59.02	-62.72	121.74	47.24	32.48	10.62	31.32	198	359	P	H
		5855	55.78	-55.02	110.8	43.97	32.51	10.62	31.32	198	359	P	H
		5881	55.45	-45.29	100.74	43.61	32.53	10.64	31.33	198	359	P	H
		5938.2	54.24	-13.96	68.2	42.33	32.6	10.68	31.37	198	359	P	H
	*	5825	107.61	-	-	95.86	32.46	10.6	31.31	106	275	P	V
	*	5825	96.96	-	-	85.21	32.46	10.6	31.31	106	275	A	V
		5850	57.24	-64.96	122.2	45.46	32.48	10.62	31.32	106	275	P	V
		5856.2	54.53	-55.93	110.46	42.72	32.51	10.62	31.32	106	275	P	V
		5922.4	54.11	-16.01	70.12	42.19	32.6	10.67	31.35	106	275	P	V
		5936.2	53.13	-15.07	68.2	41.22	32.6	10.68	31.37	106	275	P	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. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		11490	65.28	-8.72	74	64.98	40.11	16.49	56.3	163	350	P	H
		11490	51.71	-2.29	54	51.41	40.11	16.49	56.3	163	350	A	H
		17235	53.62	-14.58	68.2	47.87	41.54	20.78	56.57	100	0	P	H
		11490	62.39	-11.61	74	62.09	40.11	16.49	56.3	145	0	P	V
		11490	48.63	-5.37	54	48.33	40.11	16.49	56.3	145	0	A	V
		17235	51.93	-16.27	68.2	46.18	41.54	20.78	56.57	100	0	P	V
802.11a CH 157 5785MHz		11570	67.03	-6.97	74	66.85	39.93	16.55	56.3	152	5	P	H
		11570	53.24	-0.76	54	53.06	39.93	16.55	56.3	152	5	A	H
		17355	50.77	-17.43	68.2	44.74	41.96	20.88	56.81	100	0	P	H
		11570	61.71	-12.29	74	61.53	39.93	16.55	56.3	150	0	P	V
		11570	48.22	-5.78	54	48.04	39.93	16.55	56.3	150	0	A	V
		17355	51.58	-16.62	68.2	45.55	41.96	20.88	56.81	100	0	P	V
802.11a CH 165 5825MHz		11650	66.97	-7.03	74	66.88	39.77	16.62	56.3	149	2	P	H
		11650	53.48	-0.52	54	53.39	39.77	16.62	56.3	149	2	A	H
		17475	49.88	-18.32	68.2	43.58	42.38	20.97	57.05	100	0	P	H
		11650	61.45	-12.55	74	61.36	39.77	16.62	56.3	211	110	P	V
		11650	47.88	-6.12	54	47.79	39.77	16.62	56.3	211	110	A	V
		17475	49.94	-18.26	68.2	43.64	42.38	20.97	57.05	100	0	P	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 149 5745MHz		5615.8	56.37	-11.83	68.2	44.98	32.17	10.43	31.21	190	8	P	H
		5698	57.05	-46.68	103.73	45.53	32.27	10.5	31.25	190	8	P	H
		5719.8	70.83	-39.91	110.74	59.26	32.31	10.52	31.26	190	8	P	H
		5724.6	75.75	-45.54	121.29	64.18	32.31	10.52	31.26	190	8	P	H
	*	5745	112.38	-	-	100.77	32.34	10.54	31.27	190	8	P	H
	*	5745	101.36	-	-	89.75	32.34	10.54	31.27	190	8	A	H
		5617.2	54.61	-13.59	68.2	43.22	32.17	10.43	31.21	100	118	P	V
		5658.4	55.47	-18.97	74.44	44.01	32.22	10.47	31.23	100	118	P	V
		5720	68.01	-42.79	110.8	56.44	32.31	10.52	31.26	100	118	P	V
		5723.6	72.78	-46.23	119.01	61.21	32.31	10.52	31.26	100	118	P	V
	*	5745	110.07	-	-	98.46	32.34	10.54	31.27	100	118	P	V
	*	5745	98.76	-	-	87.15	32.34	10.54	31.27	100	118	A	V

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 157 5785MHz		5623.2	55.13	-13.07	68.2	43.73	32.17	10.44	31.21	201	359	P	H
		5690	55.54	-42.29	97.83	44.03	32.27	10.49	31.25	201	359	P	H
		5701	56.29	-49.19	105.48	44.75	32.29	10.5	31.25	201	359	P	H
		5724	55.51	-64.41	119.92	43.94	32.31	10.52	31.26	201	359	P	H
	*	5785	112.65	-	-	100.98	32.39	10.57	31.29	201	359	P	H
	*	5785	101.01	-	-	89.34	32.39	10.57	31.29	201	359	A	H
		5854	54.37	-58.71	113.08	42.56	32.51	10.62	31.32	201	359	P	H
		5857	54.61	-55.63	110.24	42.8	32.51	10.62	31.32	201	359	P	H
		5892.2	54.77	-37.67	92.44	42.9	32.56	10.65	31.34	201	359	P	H
		5947.4	54.33	-13.87	68.2	42.38	32.63	10.69	31.37	201	359	P	H
		5622.2	55.13	-13.07	68.2	43.73	32.17	10.44	31.21	142	173	P	V
		5692.4	54.88	-44.72	99.6	43.37	32.27	10.49	31.25	142	173	P	V
		5701	55.68	-49.8	105.48	44.14	32.29	10.5	31.25	142	173	P	V
		5720.4	54.64	-57.07	111.71	43.07	32.31	10.52	31.26	142	173	P	V
	*	5785	109.7	-	-	98.03	32.39	10.57	31.29	142	173	P	V
	*	5785	99.18	-	-	87.51	32.39	10.57	31.29	142	173	A	V
		5851	54.02	-65.9	119.92	42.24	32.48	10.62	31.32	142	173	P	V
		5860.8	55.17	-54	109.17	43.36	32.51	10.63	31.33	142	173	P	V
		5878.8	54.72	-47.66	102.38	42.88	32.53	10.64	31.33	142	173	P	V
		5941.4	53.79	-14.41	68.2	41.84	32.63	10.69	31.37	142	173	P	V

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11n HT20 CH 165 5825MHz	*	5825	110.43	-	-	98.68	32.46	10.6	31.31	198	359	P	H
	*	5825	99.89	-	-	88.14	32.46	10.6	31.31	198	359	A	H
		5850.2	64.57	-57.17	121.74	52.79	32.48	10.62	31.32	198	359	P	H
		5855.6	58.69	-51.94	110.63	46.88	32.51	10.62	31.32	198	359	P	H
		5882.2	55.89	-43.96	99.85	44.05	32.53	10.64	31.33	198	359	P	H
		5930	54.47	-13.73	68.2	42.54	32.6	10.68	31.35	198	359	P	H
	*	5825	107.36	-	-	95.61	32.46	10.6	31.31	100	274	P	V
	*	5825	96.78	-	-	85.03	32.46	10.6	31.31	100	274	A	V
		5850.4	61.99	-59.3	121.29	50.21	32.48	10.62	31.32	100	274	P	V
		5855.2	56.61	-54.13	110.74	44.8	32.51	10.62	31.32	100	274	P	V
		5889.6	55.58	-38.78	94.36	43.71	32.56	10.65	31.34	100	274	P	V
		5944.6	54.17	-14.03	68.2	42.22	32.63	10.69	31.37	100	274	P	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. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path 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	65.9	-8.1	74	65.6	40.11	16.49	56.3	160	6	P	H
		11490	50.86	-3.14	54	50.56	40.11	16.49	56.3	160	6	A	H
		17235	51.08	-17.12	68.2	45.33	41.54	20.78	56.57	100	0	P	H
		11490	62.25	-11.75	74	61.95	40.11	16.49	56.3	122	0	P	V
		11490	47.19	-6.81	54	46.89	40.11	16.49	56.3	122	0	A	V
		17235	50.71	-17.49	68.2	44.96	41.54	20.78	56.57	100	0	P	V
802.11n HT20 CH 157 5785MHz		11570	68.03	-5.97	74	67.85	39.93	16.55	56.3	158	3	P	H
		11570	53.11	-0.89	54	52.93	39.93	16.55	56.3	158	3	A	H
		17355	50.03	-18.17	68.2	44	41.96	20.88	56.81	100	0	P	H
		11570	62.26	-11.74	74	62.08	39.93	16.55	56.3	216	0	P	V
		11570	47.16	-6.84	54	46.98	39.93	16.55	56.3	216	0	A	V
		17355	50.95	-17.25	68.2	44.92	41.96	20.88	56.81	100	0	P	V
802.11n HT20 CH 165 5825MHz		11650	68.57	-5.43	74	68.48	39.77	16.62	56.3	148	2	P	H
		11650	53.43	-0.57	54	53.34	39.77	16.62	56.3	148	2	A	H
		17475	50.13	-18.07	68.2	43.83	42.38	20.97	57.05	100	0	P	H
		11650	62.61	-11.39	74	62.52	39.77	16.62	56.3	216	228	P	V
		11650	47.16	-6.84	54	47.07	39.77	16.62	56.3	216	228	A	V
		17475	50.79	-17.41	68.2	44.49	42.38	20.97	57.05	100	0	P	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 151 5755MHz		5646	55.38	-12.82	68.2	43.95	32.19	10.46	31.22	191	9	P	H
		5699.2	66.75	-37.86	104.61	55.23	32.27	10.5	31.25	191	9	P	H
		5719.6	79.16	-31.53	110.69	67.59	32.31	10.52	31.26	191	9	P	H
		5722.8	80.87	-36.31	117.18	69.3	32.31	10.52	31.26	191	9	P	H
	*	5755	108.39	-	-	96.76	32.36	10.54	31.27	191	9	P	H
	*	5755	98.61	-	-	86.98	32.36	10.54	31.27	191	9	A	H
		5853	54.14	-61.22	115.36	42.36	32.48	10.62	31.32	191	9	P	H
		5856.8	55.11	-55.19	110.3	43.3	32.51	10.62	31.32	191	9	P	H
		5899.2	55.09	-32.16	87.25	43.22	32.56	10.65	31.34	191	9	P	H
		5931.4	54.04	-14.16	68.2	42.11	32.6	10.68	31.35	191	9	P	H
		5621.2	55.79	-12.41	68.2	44.39	32.17	10.44	31.21	385	1	P	V
		5696.8	62.57	-40.27	102.84	51.05	32.27	10.5	31.25	385	1	P	V
		5719.6	76.03	-34.66	110.69	64.46	32.31	10.52	31.26	385	1	P	V
		5722.8	78.13	-39.05	117.18	66.56	32.31	10.52	31.26	385	1	P	V
	*	5755	105.59	-	-	93.96	32.36	10.54	31.27	385	1	P	V
	*	5755	95.7	-	-	84.07	32.36	10.54	31.27	385	1	A	V
		5853.4	53.85	-60.6	114.45	42.07	32.48	10.62	31.32	385	1	P	V
		5858	54.79	-55.17	109.96	42.99	32.51	10.62	31.33	385	1	P	V
		5900	54.25	-32.41	86.66	42.38	32.56	10.65	31.34	385	1	P	V
		5930.4	53.35	-14.85	68.2	41.42	32.6	10.68	31.35	385	1	P	V

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 159 5795MHz		5641.6	57.15	-11.05	68.2	45.73	32.19	10.45	31.22	199	0	P	H
		5695.8	56.57	-45.53	102.1	45.05	32.27	10.5	31.25	199	0	P	H
		5719.2	58.78	-51.8	110.58	47.21	32.31	10.52	31.26	199	0	P	H
		5720.2	58.44	-52.82	111.26	46.87	32.31	10.52	31.26	199	0	P	H
	*	5795	109.81	-	-	98.11	32.41	10.58	31.29	199	0	P	H
	*	5795	99.89	-	-	88.19	32.41	10.58	31.29	199	0	A	H
		5850.4	66.12	-55.17	121.29	54.34	32.48	10.62	31.32	199	0	P	H
		5855.8	60.23	-50.35	110.58	48.42	32.51	10.62	31.32	199	0	P	H
		5889.4	55.78	-38.73	94.51	43.91	32.56	10.65	31.34	199	0	P	H
		5940.6	54.3	-13.9	68.2	42.35	32.63	10.69	31.37	199	0	P	H
		5610.4	54.19	-14.01	68.2	42.83	32.14	10.43	31.21	118	171	P	V
		5682.8	55.49	-37.02	92.51	44.01	32.24	10.49	31.25	118	171	P	V
		5710.4	56.34	-51.77	108.11	44.8	32.29	10.51	31.26	118	171	P	V
		5722.4	56.27	-60	116.27	44.7	32.31	10.52	31.26	118	171	P	V
	*	5795	106.97	-	-	95.27	32.41	10.58	31.29	118	171	P	V
	*	5795	96.96	-	-	85.26	32.41	10.58	31.29	118	171	A	V
		5851.4	61.98	-57.03	119.01	50.2	32.48	10.62	31.32	118	171	P	V
		5855.4	58.42	-52.27	110.69	46.61	32.51	10.62	31.32	118	171	P	V
		5875.4	55.41	-49.49	104.9	43.57	32.53	10.64	31.33	118	171	P	V
		5945.8	54.49	-13.71	68.2	42.54	32.63	10.69	31.37	118	171	P	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 151 5755MHz		11510	62.63	-11.37	74	62.33	40.1	16.5	56.3	156	5	P	H
		11510	49.55	-4.45	54	49.25	40.1	16.5	56.3	156	5	A	H
		17265	50.12	-18.08	68.2	44.28	41.66	20.81	56.63	100	0	P	H
		11510	59.26	-14.74	74	58.96	40.1	16.5	56.3	134	0	P	V
		11510	46.16	-7.84	54	45.86	40.1	16.5	56.3	134	0	A	V
		17265	50.62	-17.58	68.2	44.78	41.66	20.81	56.63	100	0	P	V
802.11n HT40 CH 159 5795MHz		11590	65.95	-8.05	74	65.79	39.89	16.57	56.3	158	6	P	H
		11590	53.18	-0.82	54	53.02	39.89	16.57	56.3	158	6	A	H
		17385	51.25	-16.95	68.2	45.14	42.08	20.9	56.87	100	0	P	H
		11590	61.35	-12.65	74	61.19	39.89	16.57	56.3	149	0	P	V
		11590	48.74	-5.26	54	48.58	39.89	16.57	56.3	149	0	A	V
		17385	49.86	-18.34	68.2	43.75	42.08	20.9	56.87	100	0	P	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 155 5775MHz		5644.4	58.81	-9.39	68.2	47.38	32.19	10.46	31.22	187	0	P	H
		5689.2	71.51	-25.73	97.24	60	32.27	10.49	31.25	187	0	P	H
		5719.8	77.83	-32.91	110.74	66.26	32.31	10.52	31.26	187	0	P	H
		5724.6	77.19	-44.1	121.29	65.62	32.31	10.52	31.26	187	0	P	H
	*	5775	106.23	-	-	94.56	32.39	10.56	31.28	187	0	P	H
	*	5775	96.25	-	-	84.58	32.39	10.56	31.28	187	0	A	H
		5852.2	71.77	-45.41	117.18	59.99	32.48	10.62	31.32	187	0	P	H
		5855.6	68.01	-42.62	110.63	56.2	32.51	10.62	31.32	187	0	P	H
		5876.4	61.23	-42.93	104.16	49.39	32.53	10.64	31.33	187	0	P	H
		5928.2	54.05	-14.15	68.2	42.12	32.6	10.68	31.35	187	0	P	H
		5643.2	55.92	-12.28	68.2	44.5	32.19	10.45	31.22	120	173	P	V
		5700	69.61	-35.59	105.2	58.09	32.27	10.5	31.25	120	173	P	V
		5719.6	75.39	-35.3	110.69	63.82	32.31	10.52	31.26	120	173	P	V
		5722	74.42	-40.94	115.36	62.85	32.31	10.52	31.26	120	173	P	V
	*	5775	103.45	-	-	91.78	32.39	10.56	31.28	120	173	P	V
	*	5775	93.34	-	-	81.67	32.39	10.56	31.28	120	173	A	V
		5852.2	68	-49.18	117.18	56.22	32.48	10.62	31.32	120	173	P	V
		5856.2	65.34	-45.12	110.46	53.53	32.51	10.62	31.32	120	173	P	V
		5876.4	60.3	-43.86	104.16	48.46	32.53	10.64	31.33	120	173	P	V
		5942	53.48	-14.72	68.2	41.53	32.63	10.69	31.37	120	173	P	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 155 5775MHz		11550	61.74	-12.26	74	61.52	39.98	16.54	56.3	150	6	P	H
		11550	49.81	-4.19	54	49.59	39.98	16.54	56.3	150	6	A	H
		17325	50.5	-17.7	68.2	44.56	41.84	20.85	56.75	100	0	P	H
		11550	56.76	-17.24	74	56.54	39.98	16.54	56.3	145	0	P	V
		11550	45.17	-8.83	54	44.95	39.98	16.54	56.3	145	0	A	V
		17325	50.17	-18.03	68.2	44.23	41.84	20.85	56.75	100	0	P	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 (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		5633	54.78	-13.42	68.2	43.36	32.19	10.45	31.22	184	193	P	H
		5671	56.2	-27.58	83.78	44.71	32.24	10.48	31.23	184	193	P	H
		5718.4	63.76	-46.59	110.35	52.2	32.31	10.51	31.26	184	193	P	H
		5724.8	71.44	-50.3	121.74	59.87	32.31	10.52	31.26	184	193	P	H
	*	5745	110.31	-	-	98.7	32.34	10.54	31.27	184	193	P	H
	*	5745	100.65	-	-	89.04	32.34	10.54	31.27	184	193	A	H
		5618.6	54.05	-14.15	68.2	42.66	32.17	10.43	31.21	400	134	P	V
		5658	53.67	-20.47	74.14	42.21	32.22	10.47	31.23	400	134	P	V
		5718	59.68	-50.56	110.24	48.12	32.31	10.51	31.26	400	134	P	V
		5724.4	66.84	-53.99	120.83	55.27	32.31	10.52	31.26	400	134	P	V
	*	5745	108.52	-	-	96.91	32.34	10.54	31.27	400	134	P	V
	*	5745	97.75	-	-	86.14	32.34	10.54	31.27	400	134	A	V

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 157 5785MHz		5618	54.69	-13.51	68.2	43.3	32.17	10.43	31.21	183	185	P	H
		5697.4	55.22	-48.06	103.28	43.7	32.27	10.5	31.25	183	185	P	H
		5703.8	54.52	-51.75	106.27	42.98	32.29	10.5	31.25	183	185	P	H
		5723.2	54.91	-63.19	118.1	43.34	32.31	10.52	31.26	183	185	P	H
	*	5785	110.78	-	-	99.11	32.39	10.57	31.29	183	185	P	H
	*	5785	100.2	-	-	88.53	32.39	10.57	31.29	183	185	A	H
		5852.6	53.27	-63	116.27	41.49	32.48	10.62	31.32	183	185	P	H
		5861.2	53.65	-55.41	109.06	41.84	32.51	10.63	31.33	183	185	P	H
		5879.4	54.45	-47.48	101.93	42.61	32.53	10.64	31.33	183	185	P	H
		5943	54.24	-13.96	68.2	42.29	32.63	10.69	31.37	183	185	P	H
		5604.2	53.65	-14.55	68.2	42.3	32.14	10.42	31.21	400	128	P	V
		5690	53.95	-43.88	97.83	42.44	32.27	10.49	31.25	400	128	P	V
		5710.4	53.57	-54.54	108.11	42.03	32.29	10.51	31.26	400	128	P	V
		5723.6	53.26	-65.75	119.01	41.69	32.31	10.52	31.26	400	128	P	V
	*	5785	107.45	-	-	95.78	32.39	10.57	31.29	400	128	P	V
	*	5785	96.87	-	-	85.2	32.39	10.57	31.29	400	128	A	V
		5853.4	52.24	-62.21	114.45	40.46	32.48	10.62	31.32	400	128	P	V
		5870.4	54.26	-52.23	106.49	42.45	32.51	10.63	31.33	400	128	P	V
		5885.2	53.42	-44.21	97.63	41.59	32.53	10.64	31.34	400	128	P	V
		5945.4	52.75	-15.45	68.2	40.8	32.63	10.69	31.37	400	128	P	V

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a CH 165 5825MHz	*	5825	111.06	-	-	99.31	32.46	10.6	31.31	165	193	P	H
	*	5825	100.55	-	-	88.8	32.46	10.6	31.31	165	193	A	H
		5850.8	61.89	-58.49	120.38	50.11	32.48	10.62	31.32	165	193	P	H
		5857.4	58.42	-51.71	110.13	46.61	32.51	10.62	31.32	165	193	P	H
		5879.2	55.7	-46.38	102.08	43.86	32.53	10.64	31.33	165	193	P	H
		5926.6	54.09	-14.11	68.2	42.17	32.6	10.67	31.35	165	193	P	H
	*	5825	108.07	-	-	96.32	32.46	10.6	31.31	374	167	P	V
	*	5825	97.22	-	-	85.47	32.46	10.6	31.31	374	167	A	V
		5852.6	58.04	-58.23	116.27	46.26	32.48	10.62	31.32	374	167	P	V
		5856.6	56.73	-53.62	110.35	44.92	32.51	10.62	31.32	374	167	P	V
		5879.6	54.86	-46.92	101.78	43.02	32.53	10.64	31.33	374	167	P	V
		5925.4	53.58	-14.62	68.2	41.66	32.6	10.67	31.35	374	167	P	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		11490	58.53	-15.47	74	58.23	40.11	16.49	56.3	101	226	P	H
		11490	44.36	-9.64	54	44.06	40.11	16.49	56.3	101	226	A	H
		17235	51.93	-16.27	68.2	46.18	41.54	20.78	56.57	100	0	P	H
		11490	56.82	-17.18	74	56.52	40.11	16.49	56.3	400	271	P	V
		11490	42.94	-11.06	54	42.64	40.11	16.49	56.3	400	271	A	V
		17235	51.3	-16.9	68.2	45.55	41.54	20.78	56.57	100	0	P	V
802.11a CH 157 5785MHz		11570	58.15	-15.85	74	57.97	39.93	16.55	56.3	302	83	P	H
		11570	44.26	-9.74	54	44.08	39.93	16.55	56.3	302	83	A	H
		17355	53.45	-14.75	68.2	47.42	41.96	20.88	56.81	100	0	P	H
		11570	56.9	-17.1	74	56.72	39.93	16.55	56.3	106	338	P	V
		11570	42.75	-11.25	54	42.57	39.93	16.55	56.3	106	338	A	V
		17355	52.73	-15.47	68.2	46.7	41.96	20.88	56.81	100	0	P	V
802.11a CH 165 5825MHz		11650	59.05	-14.95	74	58.96	39.77	16.62	56.3	146	176	P	H
		11650	45.16	-8.84	54	45.07	39.77	16.62	56.3	146	176	A	H
		17475	53.02	-15.18	68.2	46.72	42.38	20.97	57.05	100	0	P	H
		11650	55.68	-18.32	74	55.59	39.77	16.62	56.3	391	268	P	V
		11650	41.8	-12.2	54	41.71	39.77	16.62	56.3	391	268	A	V
		17475	50.6	-17.6	68.2	44.3	42.38	20.97	57.05	100	0	P	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 149 5745MHz		5649.8	55.71	-12.49	68.2	44.25	32.22	10.46	31.22	186	188	P	H
		5676.2	56.34	-31.29	87.63	44.85	32.24	10.48	31.23	186	188	P	H
		5720	68.36	-42.44	110.8	56.79	32.31	10.52	31.26	186	188	P	H
		5724.4	73.85	-46.98	120.83	62.28	32.31	10.52	31.26	186	188	P	H
	*	5745	110.39	-	-	98.78	32.34	10.54	31.27	186	188	P	H
	*	5745	99.72	-	-	88.11	32.34	10.54	31.27	186	188	A	H
		5630	54.37	-13.83	68.2	42.98	32.17	10.44	31.22	397	183	P	V
		5663.4	54.11	-24.04	78.15	42.65	32.22	10.47	31.23	397	183	P	V
		5719.4	63.93	-46.7	110.63	52.36	32.31	10.52	31.26	397	183	P	V
		5724.6	69.11	-52.18	121.29	57.54	32.31	10.52	31.26	397	183	P	V
	*	5745	107.58	-	-	95.97	32.34	10.54	31.27	397	183	P	V
	*	5745	95.99	-	-	84.38	32.34	10.54	31.27	397	183	A	V

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 157 5785MHz		5621.2	55.53	-12.67	68.2	44.13	32.17	10.44	31.21	185	203	P	H
		5698.8	55.88	-48.44	104.32	44.36	32.27	10.5	31.25	185	203	P	H
		5701	55.93	-49.55	105.48	44.39	32.29	10.5	31.25	185	203	P	H
		5724	55.67	-64.25	119.92	44.1	32.31	10.52	31.26	185	203	P	H
	*	5785	110.34	-	-	98.67	32.39	10.57	31.29	185	203	P	H
	*	5785	99.52	-	-	87.85	32.39	10.57	31.29	185	203	A	H
		5853.4	54.12	-60.33	114.45	42.34	32.48	10.62	31.32	185	203	P	H
		5874.4	54.86	-50.51	105.37	43.02	32.53	10.64	31.33	185	203	P	H
		5901.2	54.8	-30.97	85.77	42.92	32.56	10.66	31.34	185	203	P	H
		5937.2	55.05	-13.15	68.2	43.14	32.6	10.68	31.37	185	203	P	H
		5627.2	53.93	-14.27	68.2	42.53	32.17	10.44	31.21	400	131	P	V
		5675	55	-31.74	86.74	43.51	32.24	10.48	31.23	400	131	P	V
		5700.4	54.16	-51.15	105.31	42.64	32.27	10.5	31.25	400	131	P	V
		5721.2	53.37	-60.17	113.54	41.8	32.31	10.52	31.26	400	131	P	V
	*	5785	106.36	-	-	94.69	32.39	10.57	31.29	400	131	P	V
	*	5785	95.76	-	-	84.09	32.39	10.57	31.29	400	131	A	V
		5852.4	53.18	-63.55	116.73	41.4	32.48	10.62	31.32	400	131	P	V
		5861.2	53.51	-55.55	109.06	41.7	32.51	10.63	31.33	400	131	P	V
		5879.6	54.42	-47.36	101.78	42.58	32.53	10.64	31.33	400	131	P	V
		5949.8	53.98	-14.22	68.2	42.03	32.63	10.69	31.37	400	131	P	V

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11n HT20 CH 165 5825MHz	*	5825	110.14	-	-	98.39	32.46	10.6	31.31	169	198	P	H
	*	5825	99.32	-	-	87.57	32.46	10.6	31.31	169	198	A	H
		5850	66.21	-55.99	122.2	54.43	32.48	10.62	31.32	169	198	P	H
		5856.6	59.77	-50.58	110.35	47.96	32.51	10.62	31.32	169	198	P	H
		5878.4	55.03	-47.64	102.67	43.19	32.53	10.64	31.33	169	198	P	H
		5944	55.21	-12.99	68.2	43.26	32.63	10.69	31.37	169	198	P	H
	*	5825	107.73	-	-	95.98	32.46	10.6	31.31	341	160	P	V
	*	5825	96.29	-	-	84.54	32.46	10.6	31.31	341	160	A	V
		5850.2	63.41	-58.33	121.74	51.63	32.48	10.62	31.32	341	160	P	V
		5857.2	56.42	-53.76	110.18	44.61	32.51	10.62	31.32	341	160	P	V
		5882	54.08	-45.92	100	42.24	32.53	10.64	31.33	341	160	P	V
		5947.4	54.26	-13.94	68.2	42.31	32.63	10.69	31.37	341	160	P	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 149 5745MHz		11490	58.47	-15.53	74	58.17	40.11	16.49	56.3	100	226	P	H
		11490	43.32	-10.68	54	43.02	40.11	16.49	56.3	100	226	A	H
		17235	51.13	-17.07	68.2	45.38	41.54	20.78	56.57	100	0	P	H
		11490	56.33	-17.67	74	56.03	40.11	16.49	56.3	117	338	P	V
		11490	41.76	-12.24	54	41.46	40.11	16.49	56.3	117	338	A	V
		17235	50.89	-17.31	68.2	45.14	41.54	20.78	56.57	100	0	P	V
802.11n HT20 CH 157 5785MHz		11570	59.73	-14.27	74	59.55	39.93	16.55	56.3	141	176	P	H
		11570	44.66	-9.34	54	44.48	39.93	16.55	56.3	141	176	A	H
		17355	53.14	-15.06	68.2	47.11	41.96	20.88	56.81	100	0	P	H
		11570	56	-18	74	55.82	39.93	16.55	56.3	107	338	P	V
		11570	41.85	-12.15	54	41.67	39.93	16.55	56.3	107	338	A	V
		17355	52.12	-16.08	68.2	46.09	41.96	20.88	56.81	100	0	P	V
802.11n HT20 CH 165 5825MHz		11650	59.46	-14.54	74	59.37	39.77	16.62	56.3	145	179	P	H
		11650	43.85	-10.15	54	43.76	39.77	16.62	56.3	145	179	A	H
		17475	51.19	-17.01	68.2	44.89	42.38	20.97	57.05	100	0	P	H
		11650	55.4	-18.6	74	55.31	39.77	16.62	56.3	392	270	P	V
		11650	40.82	-13.18	54	40.73	39.77	16.62	56.3	392	270	A	V
		17475	50.78	-17.42	68.2	44.48	42.38	20.97	57.05	100	0	P	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 151 5755MHz		5625.8	55.02	-13.18	68.2	43.62	32.17	10.44	31.21	184	186	P	H
		5699	64.38	-40.08	104.46	52.86	32.27	10.5	31.25	184	186	P	H
		5720	77.12	-33.68	110.8	65.55	32.31	10.52	31.26	184	186	P	H
		5722.8	79.2	-37.98	117.18	67.63	32.31	10.52	31.26	184	186	P	H
	*	5755	107.59	-	-	95.96	32.36	10.54	31.27	184	186	P	H
	*	5755	96.73	-	-	85.1	32.36	10.54	31.27	184	186	A	H
		5854.8	54.46	-56.8	111.26	42.65	32.51	10.62	31.32	184	186	P	H
		5858.4	54.64	-55.21	109.85	42.84	32.51	10.62	31.33	184	186	P	H
		5883.6	54.01	-44.8	98.81	42.18	32.53	10.64	31.34	184	186	P	H
		5941	53.68	-14.52	68.2	41.73	32.63	10.69	31.37	184	186	P	H
		5638.2	54.02	-14.18	68.2	42.6	32.19	10.45	31.22	400	175	P	V
		5698	59.99	-43.74	103.73	48.47	32.27	10.5	31.25	400	175	P	V
		5719.8	72.52	-38.22	110.74	60.95	32.31	10.52	31.26	400	175	P	V
		5722.6	74.71	-42.02	116.73	63.14	32.31	10.52	31.26	400	175	P	V
	*	5755	103.85	-	-	92.22	32.36	10.54	31.27	400	175	P	V
	*	5755	93.36	-	-	81.73	32.36	10.54	31.27	400	175	A	V
		5852.4	53.15	-63.58	116.73	41.37	32.48	10.62	31.32	400	175	P	V
		5857.8	53.19	-56.82	110.01	41.39	32.51	10.62	31.33	400	175	P	V
		5884.4	53.65	-44.57	98.22	41.82	32.53	10.64	31.34	400	175	P	V
		5927.6	53.32	-14.88	68.2	41.39	32.6	10.68	31.35	400	175	P	V

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 159 5795MHz		5640.4	55.58	-12.62	68.2	44.16	32.19	10.45	31.22	181	195	P	H
		5698.6	55.86	-48.31	104.17	44.34	32.27	10.5	31.25	181	195	P	H
		5714	56.1	-53.02	109.12	44.56	32.29	10.51	31.26	181	195	P	H
		5723	56.27	-61.37	117.64	44.7	32.31	10.52	31.26	181	195	P	H
	*	5795	107.08	-	-	95.38	32.41	10.58	31.29	181	195	P	H
	*	5795	96.79	-	-	85.09	32.41	10.58	31.29	181	195	A	H
		5850.4	61.41	-59.88	121.29	49.63	32.48	10.62	31.32	181	195	P	H
		5855.4	57.45	-53.24	110.69	45.64	32.51	10.62	31.32	181	195	P	H
		5879.8	54.74	-46.89	101.63	42.9	32.53	10.64	31.33	181	195	P	H
		5947.6	53.94	-14.26	68.2	41.99	32.63	10.69	31.37	181	195	P	H
		5622	53.94	-14.26	68.2	42.54	32.17	10.44	31.21	122	105	P	V
		5691.6	54.11	-44.9	99.01	42.6	32.27	10.49	31.25	122	105	P	V
		5715.8	55.06	-54.57	109.63	43.52	32.29	10.51	31.26	122	105	P	V
		5722.2	55.65	-60.17	115.82	44.08	32.31	10.52	31.26	122	105	P	V
	*	5795	103.94	-	-	92.24	32.41	10.58	31.29	122	105	P	V
	*	5795	93.93	-	-	82.23	32.41	10.58	31.29	122	105	A	V
		5850.6	58.98	-61.85	120.83	47.2	32.48	10.62	31.32	122	105	P	V
		5855.6	56.64	-53.99	110.63	44.83	32.51	10.62	31.32	122	105	P	V
		5904.2	54.44	-29.11	83.55	42.56	32.56	10.66	31.34	122	105	P	V
		5929.8	54.02	-14.18	68.2	42.09	32.6	10.68	31.35	122	105	P	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 151 5755MHz		11510	55.49	-18.51	74	55.19	40.1	16.5	56.3	100	227	P	H
		11510	42.4	-11.6	54	42.1	40.1	16.5	56.3	100	227	A	H
		17265	49.99	-18.21	68.2	44.15	41.66	20.81	56.63	100	0	P	H
		11510	54.1	-19.9	74	53.8	40.1	16.5	56.3	400	268	P	V
		11510	41.04	-12.96	54	40.74	40.1	16.5	56.3	400	268	A	V
		17265	50.12	-18.08	68.2	44.28	41.66	20.81	56.63	100	0	P	V
802.11n HT40 CH 159 5795MHz		11590	55.43	-18.57	74	55.27	39.89	16.57	56.3	295	81	P	H
		11590	42.61	-11.39	54	42.45	39.89	16.57	56.3	295	81	A	H
		17385	50.84	-17.36	68.2	44.73	42.08	20.9	56.87	100	0	P	H
		11590	54.28	-19.72	74	54.12	39.89	16.57	56.3	100	338	P	V
		11590	41.13	-12.87	54	40.97	39.89	16.57	56.3	100	338	A	V
		17385	51.92	-16.28	68.2	45.81	42.08	20.9	56.87	100	0	P	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 155 5775MHz		5641.6	56.18	-12.02	68.2	44.76	32.19	10.45	31.22	187	186	P	H
		5689.4	70.48	-26.9	97.38	58.97	32.27	10.49	31.25	187	186	P	H
		5719.6	77.13	-33.56	110.69	65.56	32.31	10.52	31.26	187	186	P	H
		5722.4	75.67	-40.6	116.27	64.1	32.31	10.52	31.26	187	186	P	H
	*	5775	104.05	-	-	92.38	32.39	10.56	31.28	187	186	P	H
	*	5775	94.3	-	-	82.63	32.39	10.56	31.28	187	186	A	H
		5852.2	67.66	-49.52	117.18	55.88	32.48	10.62	31.32	187	186	P	H
		5855.2	65.7	-45.04	110.74	53.89	32.51	10.62	31.32	187	186	P	H
		5876.6	59.6	-44.41	104.01	47.76	32.53	10.64	31.33	187	186	P	H
		5937.4	53.89	-14.31	68.2	41.98	32.6	10.68	31.37	187	186	P	H
		5644.4	53.42	-14.78	68.2	41.99	32.19	10.46	31.22	400	172	P	V
		5689	64.8	-32.29	97.09	53.29	32.27	10.49	31.25	400	172	P	V
		5719.4	69.71	-40.92	110.63	58.14	32.31	10.52	31.26	400	172	P	V
		5724.8	71.08	-50.66	121.74	59.51	32.31	10.52	31.26	400	172	P	V
	*	5775	100.98	-	-	89.31	32.39	10.56	31.28	400	172	P	V
	*	5775	90.87	-	-	79.2	32.39	10.56	31.28	400	172	A	V
		5854.8	62.17	-49.09	111.26	50.36	32.51	10.62	31.32	400	172	P	V
		5869	61.35	-45.53	106.88	49.54	32.51	10.63	31.33	400	172	P	V
		5876.4	58.21	-45.95	104.16	46.37	32.53	10.64	31.33	400	172	P	V
		5948.2	53.67	-14.53	68.2	41.72	32.63	10.69	31.37	400	172	P	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 155 5775MHz		11550	53.07	-20.93	74	52.85	39.98	16.54	56.3	100	228	P	H
		11550	41.6	-12.4	54	41.38	39.98	16.54	56.3	100	228	A	H
		17325	50.81	-17.39	68.2	44.87	41.84	20.85	56.75	100	0	P	H
		11550	48.91	-25.09	74	48.69	39.98	16.54	56.3	100	0	P	V
		17325	50.82	-17.38	68.2	44.88	41.84	20.85	56.75	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

<For CDD Mode>

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		5618.4	55.66	-12.54	68.2	44.27	32.17	10.43	31.21	198	12	P	H
		5689.2	56.52	-40.72	97.24	45.01	32.27	10.49	31.25	198	12	P	H
		5719.6	69.26	-41.43	110.69	57.69	32.31	10.52	31.26	198	12	P	H
		5725	76.41	-45.79	122.2	64.84	32.31	10.52	31.26	198	12	P	H
	*	5745	115.5	-	-	103.89	32.34	10.54	31.27	198	12	P	H
	*	5745	105.16	-	-	93.55	32.34	10.54	31.27	198	12	A	H
		5624	55.08	-13.12	68.2	43.68	32.17	10.44	31.21	100	114	P	V
		5691.6	55.83	-43.18	99.01	44.32	32.27	10.49	31.25	100	114	P	V
		5716.8	64.72	-45.19	109.91	53.18	32.29	10.51	31.26	100	114	P	V
		5724.8	71.97	-49.77	121.74	60.4	32.31	10.52	31.26	100	114	P	V
	*	5745	113.62	-	-	102.01	32.34	10.54	31.27	100	114	P	V
	*	5745	103.25	-	-	91.64	32.34	10.54	31.27	100	114	A	V

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 157 5785MHz		5610.4	53.94	-14.26	68.2	42.58	32.14	10.43	31.21	184	19	P	H
		5662.8	55.98	-21.72	77.7	44.52	32.22	10.47	31.23	184	19	P	H
		5715.8	55.74	-53.89	109.63	44.2	32.29	10.51	31.26	184	19	P	H
		5722	55.3	-60.06	115.36	43.73	32.31	10.52	31.26	184	19	P	H
	*	5785	114.87	-	-	103.2	32.39	10.57	31.29	184	19	P	H
	*	5785	104.42	-	-	92.75	32.39	10.57	31.29	184	19	A	H
		5852.8	54.54	-61.28	115.82	42.76	32.48	10.62	31.32	184	19	P	H
		5864.6	54.62	-53.49	108.11	42.81	32.51	10.63	31.33	184	19	P	H
		5904.6	54.81	-28.45	83.26	42.91	32.58	10.66	31.34	184	19	P	H
		5941.6	53.45	-14.75	68.2	41.5	32.63	10.69	31.37	184	19	P	H
		5638.2	54.78	-13.42	68.2	43.36	32.19	10.45	31.22	104	113	P	V
		5683.6	55.82	-37.28	93.1	44.31	32.27	10.49	31.25	104	113	P	V
		5716.8	56.32	-53.59	109.91	44.78	32.29	10.51	31.26	104	113	P	V
		5722.4	55.17	-61.1	116.27	43.6	32.31	10.52	31.26	104	113	P	V
	*	5785	113.4	-	-	101.73	32.39	10.57	31.29	104	113	P	V
	*	5785	103.01	-	-	91.34	32.39	10.57	31.29	104	113	A	V
		5852.2	53.95	-63.23	117.18	42.17	32.48	10.62	31.32	104	113	P	V
		5856.6	54.38	-55.97	110.35	42.57	32.51	10.62	31.32	104	113	P	V
		5897.8	54.3	-33.99	88.29	42.43	32.56	10.65	31.34	104	113	P	V
		5929.8	53.7	-14.5	68.2	41.77	32.6	10.68	31.35	104	113	P	V

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1+2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a CH 165 5825MHz	*	5825	112.5	-	-	100.75	32.46	10.6	31.31	128	4	P	H
	*	5825	102.23	-	-	90.48	32.46	10.6	31.31	128	4	A	H
		5850	58.42	-63.78	122.2	46.64	32.48	10.62	31.32	128	4	P	H
		5855.2	58.35	-52.39	110.74	46.54	32.51	10.62	31.32	128	4	P	H
		5890.8	54.85	-38.62	93.47	42.98	32.56	10.65	31.34	128	4	P	H
		5936.8	54.54	-13.66	68.2	42.63	32.6	10.68	31.37	128	4	P	H
	*	5825	111.2	-	-	99.45	32.46	10.6	31.31	117	112	P	V
	*	5825	100.73	-	-	88.98	32.46	10.6	31.31	117	112	A	V
		5851.2	58.67	-60.79	119.46	46.89	32.48	10.62	31.32	117	112	P	V
		5855.6	55.65	-54.98	110.63	43.84	32.51	10.62	31.32	117	112	P	V
		5886.4	54.32	-42.42	96.74	42.49	32.53	10.64	31.34	117	112	P	V
		5941	53.46	-14.74	68.2	41.51	32.63	10.69	31.37	117	112	P	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		11490	64.34	-9.66	74	64.04	40.11	16.49	56.3	208	336	P	H
		11490	51.12	-2.88	54	50.82	40.11	16.49	56.3	208	336	A	H
		17235	54.37	-13.83	68.2	48.62	41.54	20.78	56.57	100	0	P	H
		11490	62.82	-11.18	74	62.52	40.11	16.49	56.3	101	149	P	V
		11490	49.57	-4.43	54	49.27	40.11	16.49	56.3	101	149	A	V
		17235	54.84	-13.36	68.2	49.09	41.54	20.78	56.57	100	0	P	V
802.11a CH 157 5785MHz		11570	66.89	-7.11	74	66.71	39.93	16.55	56.3	200	337	P	H
		11570	53.32	-0.68	54	53.14	39.93	16.55	56.3	200	337	A	H
		17355	56.04	-12.16	68.2	50.01	41.96	20.88	56.81	100	0	P	H
		11570	63.44	-10.56	74	63.26	39.93	16.55	56.3	140	360	P	V
		11570	50.4	-3.6	54	50.22	39.93	16.55	56.3	140	360	A	V
		17355	53.4	-14.8	68.2	47.37	41.96	20.88	56.81	100	0	P	V
802.11a CH 165 5825MHz		11650	66.26	-7.74	74	66.17	39.77	16.62	56.3	141	7	P	H
		11650	53.09	-0.91	54	53	39.77	16.62	56.3	141	7	A	H
		17475	52.15	-16.05	68.2	45.85	42.38	20.97	57.05	100	0	P	H
		11650	61.36	-12.64	74	61.27	39.77	16.62	56.3	210	111	P	V
		11650	47.79	-6.21	54	47.7	39.77	16.62	56.3	210	111	A	V
		17475	51.38	-16.82	68.2	45.08	42.38	20.97	57.05	100	0	P	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 149 5745MHz		5626.6	55.69	-12.51	68.2	44.29	32.17	10.44	31.21	196	13	P	H
		5686.8	57.35	-38.11	95.46	45.84	32.27	10.49	31.25	196	13	P	H
		5719.6	72.48	-38.21	110.69	60.91	32.31	10.52	31.26	196	13	P	H
		5724.2	78.63	-41.75	120.38	67.06	32.31	10.52	31.26	196	13	P	H
	*	5745	113.99	-	-	102.38	32.34	10.54	31.27	196	13	P	H
	*	5745	113.51	-	-	101.9	32.34	10.54	31.27	196	13	A	H
		5629.8	55.44	-12.76	68.2	44.05	32.17	10.44	31.22	114	113	P	V
		5675.2	55.97	-30.92	86.89	44.48	32.24	10.48	31.23	114	113	P	V
		5719.8	71.76	-38.98	110.74	60.19	32.31	10.52	31.26	114	113	P	V
		5724.6	78.26	-43.03	121.29	66.69	32.31	10.52	31.26	114	113	P	V
	*	5745	111.51	-	-	99.9	32.34	10.54	31.27	114	113	P	V
	*	5745	101.42	-	-	89.81	32.34	10.54	31.27	114	113	A	V

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 157 5785MHz		5607.6	54.95	-13.25	68.2	43.59	32.14	10.43	31.21	183	13	P	H
		5672	55.72	-28.8	84.52	44.23	32.24	10.48	31.23	183	13	P	H
		5714.6	56.1	-53.19	109.29	44.56	32.29	10.51	31.26	183	13	P	H
		5724.6	55.99	-65.3	121.29	44.42	32.31	10.52	31.26	183	13	P	H
	*	5785	114.39	-	-	102.72	32.39	10.57	31.29	183	13	P	H
	*	5785	104.36	-	-	92.69	32.39	10.57	31.29	183	13	A	H
		5851	55.12	-64.8	119.92	43.34	32.48	10.62	31.32	183	13	P	H
		5866.6	55.7	-51.85	107.55	43.89	32.51	10.63	31.33	183	13	P	H
		5897	54.62	-34.26	88.88	42.75	32.56	10.65	31.34	183	13	P	H
		5929.4	54.03	-14.17	68.2	42.1	32.6	10.68	31.35	183	13	P	H
		5630.4	54.45	-13.75	68.2	43.06	32.17	10.44	31.22	105	113	P	V
		5672.6	55.82	-29.14	84.96	44.33	32.24	10.48	31.23	105	113	P	V
		5717.8	54.98	-55.2	110.18	43.42	32.31	10.51	31.26	105	113	P	V
		5724.6	55.06	-66.23	121.29	43.49	32.31	10.52	31.26	105	113	P	V
	*	5785	111.32	-	-	99.65	32.39	10.57	31.29	105	113	P	V
	*	5785	101.57	-	-	89.9	32.39	10.57	31.29	105	113	A	V
		5852	54.46	-63.18	117.64	42.68	32.48	10.62	31.32	105	113	P	V
		5860.4	53.79	-55.5	109.29	41.98	32.51	10.63	31.33	105	113	P	V
		5884.2	54.26	-44.11	98.37	42.43	32.53	10.64	31.34	105	113	P	V
		5930.6	53.2	-15	68.2	41.27	32.6	10.68	31.35	105	113	P	V

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1+2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11n HT20 CH 165 5825MHz	*	5825	113.97	-	-	102.22	32.46	10.6	31.31	199	16	P	H
	*	5825	103.86	-	-	92.11	32.46	10.6	31.31	199	16	A	H
		5851.6	65.33	-53.22	118.55	53.55	32.48	10.62	31.32	199	16	P	H
		5855.6	61.1	-49.53	110.63	49.29	32.51	10.62	31.32	199	16	P	H
		5882.2	55.98	-43.87	99.85	44.14	32.53	10.64	31.33	199	16	P	H
		5948.4	55.2	-13	68.2	43.25	32.63	10.69	31.37	199	16	P	H
	*	5825	110.81	-	-	99.06	32.46	10.6	31.31	102	112	P	V
	*	5825	100.64	-	-	88.89	32.46	10.6	31.31	102	112	A	V
		5850	68.09	-54.11	122.2	56.31	32.48	10.62	31.32	102	112	P	V
		5855.8	59.89	-50.69	110.58	48.08	32.51	10.62	31.32	102	112	P	V
		5903.4	54.64	-29.51	84.15	42.76	32.56	10.66	31.34	102	112	P	V
		5937.6	53.32	-14.88	68.2	41.41	32.6	10.68	31.37	102	112	P	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path 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	64.76	-9.24	74	64.46	40.11	16.49	56.3	210	336	P	H
		11490	49.94	-4.06	54	49.64	40.11	16.49	56.3	210	336	A	H
		17235	53.3	-14.9	68.2	47.55	41.54	20.78	56.57	100	0	P	H
		11490	62.36	-11.64	74	62.06	40.11	16.49	56.3	102	148	P	V
		11490	47.97	-6.03	54	47.67	40.11	16.49	56.3	102	148	A	V
		17235	53.87	-14.33	68.2	48.12	41.54	20.78	56.57	100	0	P	V
802.11n HT20 CH 157 5785MHz		11570	66.96	-7.04	74	66.78	39.93	16.55	56.3	200	355	P	H
		11570	52.96	-1.04	54	52.78	39.93	16.55	56.3	200	355	A	H
		17355	55.84	-12.36	68.2	49.81	41.96	20.88	56.81	100	0	P	H
		11570	63.88	-10.12	74	63.7	39.93	16.55	56.3	143	359	P	V
		11570	49.61	-4.39	54	49.43	39.93	16.55	56.3	143	359	A	V
		17355	54.81	-13.39	68.2	48.78	41.96	20.88	56.81	100	0	P	V
802.11n HT20 CH 165 5825MHz		11650	67.26	-6.74	74	67.17	39.77	16.62	56.3	197	337	P	H
		11650	52.97	-1.03	54	52.88	39.77	16.62	56.3	197	337	A	H
		17475	55.79	-12.41	68.2	49.49	42.38	20.97	57.05	100	0	P	H
		11650	64.12	-9.88	74	64.03	39.77	16.62	56.3	204	111	P	V
		11650	49.26	-4.74	54	49.17	39.77	16.62	56.3	204	111	A	V
		17475	53.15	-15.05	68.2	46.85	42.38	20.97	57.05	100	0	P	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 151 5755MHz		5638.6	56.23	-11.97	68.2	44.81	32.19	10.45	31.22	196	12	P	H
		5698.8	69.77	-34.55	104.32	58.25	32.27	10.5	31.25	196	12	P	H
		5719	81.32	-29.2	110.52	69.75	32.31	10.52	31.26	196	12	P	H
		5721.2	83.24	-30.3	113.54	71.67	32.31	10.52	31.26	196	12	P	H
	*	5755	110.88	-	-	99.25	32.36	10.54	31.27	196	12	P	H
	*	5755	101.54	-	-	89.91	32.36	10.54	31.27	196	12	A	H
		5852	56.12	-61.52	117.64	44.34	32.48	10.62	31.32	196	12	P	H
		5872.2	55.67	-50.31	105.98	43.84	32.53	10.63	31.33	196	12	P	H
		5878.8	56.72	-45.66	102.38	44.88	32.53	10.64	31.33	196	12	P	H
		5926.8	54.94	-13.26	68.2	43.01	32.6	10.68	31.35	196	12	P	H
		5626.8	55.03	-13.17	68.2	43.63	32.17	10.44	31.21	110	113	P	V
		5699.6	67.42	-37.49	104.91	55.9	32.27	10.5	31.25	110	113	P	V
		5719.8	79.75	-30.99	110.74	68.18	32.31	10.52	31.26	110	113	P	V
		5724.4	81.84	-38.99	120.83	70.27	32.31	10.52	31.26	110	113	P	V
	*	5755	108.13	-	-	96.5	32.36	10.54	31.27	110	113	P	V
	*	5755	98.8	-	-	87.17	32.36	10.54	31.27	110	113	A	V
		5851.4	53.79	-65.22	119.01	42.01	32.48	10.62	31.32	110	113	P	V
		5871.6	53.7	-52.45	106.15	41.87	32.53	10.63	31.33	110	113	P	V
		5891.8	54.74	-37.99	92.73	42.87	32.56	10.65	31.34	110	113	P	V
		5945.8	53.61	-14.59	68.2	41.66	32.63	10.69	31.37	110	113	P	V

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 159 5795MHz		5632.2	55.31	-12.89	68.2	43.91	32.17	10.45	31.22	136	14	P	H
		5692.2	56.06	-43.39	99.45	44.55	32.27	10.49	31.25	136	14	P	H
		5711.8	57.03	-51.48	108.51	45.49	32.29	10.51	31.26	136	14	P	H
		5721.4	57.67	-56.32	113.99	46.1	32.31	10.52	31.26	136	14	P	H
	*	5795	110.79	-	-	99.09	32.41	10.58	31.29	136	14	P	H
	*	5795	101.37	-	-	89.67	32.41	10.58	31.29	136	14	A	H
		5851.2	65.91	-53.55	119.46	54.13	32.48	10.62	31.32	136	14	P	H
		5856.4	60.47	-49.94	110.41	48.66	32.51	10.62	31.32	136	14	P	H
		5876.8	55.36	-48.5	103.86	43.52	32.53	10.64	31.33	136	14	P	H
		5949	53.92	-14.28	68.2	41.97	32.63	10.69	31.37	136	14	P	H
		5625.2	54.57	-13.63	68.2	43.17	32.17	10.44	31.21	102	118	P	V
		5699.4	56.21	-48.55	104.76	44.69	32.27	10.5	31.25	102	118	P	V
		5716.8	56.41	-53.5	109.91	44.87	32.29	10.51	31.26	102	118	P	V
		5724.4	57.07	-63.76	120.83	45.5	32.31	10.52	31.26	102	118	P	V
	*	5795	108.98	-	-	97.28	32.41	10.58	31.29	102	118	P	V
	*	5795	99.12	-	-	87.42	32.41	10.58	31.29	102	118	A	V
		5851.4	63.97	-55.04	119.01	52.19	32.48	10.62	31.32	102	118	P	V
		5856.8	58.56	-51.74	110.3	46.75	32.51	10.62	31.32	102	118	P	V
		5882	54.16	-45.84	100	42.32	32.53	10.64	31.33	102	118	P	V
		5930.2	53.62	-14.58	68.2	41.69	32.6	10.68	31.35	102	118	P	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 151 5755MHz		11510	62.62	-11.38	74	62.32	40.1	16.5	56.3	154	3	P	H
		11510	50.55	-3.45	54	50.25	40.1	16.5	56.3	154	3	A	H
		17265	51.33	-16.87	68.2	45.49	41.66	20.81	56.63	100	0	P	H
		11510	59.67	-14.33	74	59.37	40.1	16.5	56.3	137	0	P	V
		11510	47.34	-6.66	54	47.04	40.1	16.5	56.3	137	0	A	V
		17265	51.42	-16.78	68.2	45.58	41.66	20.81	56.63	100	0	P	V
802.11n HT40 CH 159 5795MHz		11590	64.78	-9.22	74	64.62	39.89	16.57	56.3	141	7	P	H
		11590	51.75	-2.25	54	51.59	39.89	16.57	56.3	141	7	A	H
		17385	51.6	-16.6	68.2	45.49	42.08	20.9	56.87	100	0	P	H
		11590	60.95	-13.05	74	60.79	39.89	16.57	56.3	102	147	P	V
		11590	48.5	-5.5	54	48.34	39.89	16.57	56.3	102	147	A	V
		17385	51.9	-16.3	68.2	45.79	42.08	20.9	56.87	100	0	P	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 155 5775MHz		5647.8	60.13	-8.07	68.2	48.7	32.19	10.46	31.22	209	12	P	H
		5700	75.75	-29.45	105.2	64.23	32.27	10.5	31.25	209	12	P	H
		5719.8	80.61	-30.13	110.74	69.04	32.31	10.52	31.26	209	12	P	H
		5722.4	81.14	-35.13	116.27	69.57	32.31	10.52	31.26	209	12	P	H
	*	5775	108.4	-	-	96.73	32.39	10.56	31.28	209	12	P	H
	*	5775	98.37	-	-	86.7	32.39	10.56	31.28	209	12	A	H
		5852	72.62	-45.02	117.64	60.84	32.48	10.62	31.32	209	12	P	H
		5855	71.53	-39.27	110.8	59.72	32.51	10.62	31.32	209	12	P	H
		5875.6	63.15	-41.6	104.75	51.31	32.53	10.64	31.33	209	12	P	H
		5936.6	55.27	-12.93	68.2	43.36	32.6	10.68	31.37	209	12	P	H
		5648.4	57.5	-10.7	68.2	46.07	32.19	10.46	31.22	100	119	P	V
		5680.6	72.79	-18.09	90.88	61.32	32.24	10.48	31.25	100	119	P	V
		5713.2	76.54	-32.36	108.9	65	32.29	10.51	31.26	100	119	P	V
		5720.6	78.02	-34.15	112.17	66.45	32.31	10.52	31.26	100	119	P	V
	*	5775	105.57	-	-	93.9	32.39	10.56	31.28	100	119	P	V
	*	5775	95.85	-	-	84.18	32.39	10.56	31.28	100	119	A	V
		5852.6	69.46	-46.81	116.27	57.68	32.48	10.62	31.32	100	119	P	V
		5855	68.4	-42.4	110.8	56.59	32.51	10.62	31.32	100	119	P	V
		5875.4	59.41	-45.49	104.9	47.57	32.53	10.64	31.33	100	119	P	V
		5937.6	53.66	-14.54	68.2	41.75	32.6	10.68	31.37	100	119	P	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 155 5775MHz		11550	61.26	-12.74	74	61.04	39.98	16.54	56.3	151	5	P	H
		11550	49.79	-4.21	54	49.57	39.98	16.54	56.3	151	5	A	H
		17325	52.02	-16.18	68.2	46.08	41.84	20.85	56.75	100	0	P	H
		11550	57.98	-16.02	74	57.76	39.98	16.54	56.3	143	0	P	V
		11550	46.33	-7.67	54	46.11	39.98	16.54	56.3	143	0	A	V
		17325	51.54	-16.66	68.2	45.6	41.84	20.85	56.75	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 Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
5GHz 802.11a LF		30	24.63	-15.37	40	29.54	24.57	0.7	30.18	-	-	P	H
		118.29	24.64	-18.86	43.5	36.36	17.17	1.52	30.41	-	-	P	H
		257.34	22.59	-23.41	46	30.99	19.48	2.34	30.22	-	-	P	H
		624.1	31.64	-14.36	46	31.85	25.89	3.5	29.6	-	-	P	H
		721.4	33.99	-12.01	46	32.69	27.02	3.75	29.47	100	0	P	H
		972	35.62	-18.38	54	29.29	30.8	4.46	28.93	-	-	P	H
		32.7	31.8	-8.2	40	38.28	23.01	0.74	30.23	100	0	P	V
		97.23	26.54	-16.96	43.5	40.16	15.41	1.4	30.43	-	-	P	V
		262.47	22.35	-23.65	46	30.53	19.68	2.35	30.21	-	-	P	V
		624.1	37.14	-8.86	46	37.35	25.89	3.5	29.6	-	-	P	V
		896.4	36.42	-9.58	46	32.42	28.91	4.24	29.15	-	-	P	V
		981.8	35.63	-18.37	54	29.43	30.62	4.48	28.9	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

<For TXBF Mode>

Band 4 - 5725~5850MHz

WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT20 CH 149 5745MHz		5647.6	56	-12.2	68.2	44.57	32.19	10.46	31.22	191	1	P	H
		5699	60.05	-44.41	104.46	48.53	32.27	10.5	31.25	191	1	P	H
		5718.6	72.27	-38.14	110.41	60.71	32.31	10.51	31.26	191	1	P	H
		5723.6	81.86	-37.15	119.01	70.29	32.31	10.52	31.26	191	1	P	H
	*	5745	114.85	-	-	103.24	32.34	10.54	31.27	191	1	P	H
	*	5745	104.73	-	-	93.12	32.34	10.54	31.27	191	1	A	H
		5624.8	56.11	-12.09	68.2	44.71	32.17	10.44	31.21	114	113	P	V
		5700	59.38	-45.82	105.2	47.86	32.27	10.5	31.25	114	113	P	V
		5719.8	75.8	-34.94	110.74	64.23	32.31	10.52	31.26	114	113	P	V
		5724.8	83.86	-37.88	121.74	72.29	32.31	10.52	31.26	114	113	P	V
	*	5745	113.39	-	-	101.78	32.34	10.54	31.27	114	113	P	V
	*	5745	103.03	-	-	91.42	32.34	10.54	31.27	114	113	A	V

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT20 CH 157 5785MHz		5614.8	54.04	-14.16	68.2	42.68	32.14	10.43	31.21	169	20	P	H
		5691	55.57	-42.99	98.56	44.06	32.27	10.49	31.25	169	20	P	H
		5719.2	56.68	-53.9	110.58	45.11	32.31	10.52	31.26	169	20	P	H
		5722.4	54.3	-61.97	116.27	42.73	32.31	10.52	31.26	169	20	P	H
	*	5785	112.23	-	-	100.56	32.39	10.57	31.29	169	20	P	H
	*	5785	101.65	-	-	89.98	32.39	10.57	31.29	169	20	A	H
		5851.6	54.31	-64.24	118.55	42.53	32.48	10.62	31.32	169	20	P	H
		5858.2	55.4	-54.5	109.9	43.6	32.51	10.62	31.33	169	20	P	H
		5877	55.38	-48.33	103.71	43.54	32.53	10.64	31.33	169	20	P	H
		5932.2	54.23	-13.97	68.2	42.3	32.6	10.68	31.35	169	20	P	H
		5641.2	54.81	-13.39	68.2	43.39	32.19	10.45	31.22	102	107	P	V
		5684.6	55.56	-38.28	93.84	44.05	32.27	10.49	31.25	102	107	P	V
		5704.8	55.89	-50.66	106.55	44.36	32.29	10.5	31.26	102	107	P	V
		5721.2	55.18	-58.36	113.54	43.61	32.31	10.52	31.26	102	107	P	V
	*	5785	110.55	-	-	98.88	32.39	10.57	31.29	102	107	P	V
	*	5785	100.51	-	-	88.84	32.39	10.57	31.29	102	107	A	V
		5853.2	54.18	-60.72	114.9	42.4	32.48	10.62	31.32	102	107	P	V
		5873.4	54.24	-51.41	105.65	42.4	32.53	10.64	31.33	102	107	P	V
		5900.8	54.74	-31.33	86.07	42.86	32.56	10.66	31.34	102	107	P	V
		5928.4	54.21	-13.99	68.2	42.28	32.6	10.68	31.35	102	107	P	V

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1+2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11ac VHT20 CH 165 5825MHz	*	5825	110.76	-	-	99.01	32.46	10.6	31.31	107	5	P	H
	*	5825	100.67	-	-	88.92	32.46	10.6	31.31	107	5	A	H
		5851	59.35	-60.57	119.92	47.57	32.48	10.62	31.32	107	5	P	H
		5855.8	57.13	-53.45	110.58	45.32	32.51	10.62	31.32	107	5	P	H
		5883.2	55.61	-43.5	99.11	43.77	32.53	10.64	31.33	107	5	P	H
		5947.2	54.61	-13.59	68.2	42.66	32.63	10.69	31.37	107	5	P	H
	*	5825	109.13	-	-	97.38	32.46	10.6	31.31	115	106	P	V
	*	5825	98.79	-	-	87.04	32.46	10.6	31.31	115	106	A	V
		5850	57.99	-64.21	122.2	46.21	32.48	10.62	31.32	115	106	P	V
		5870.4	55.15	-51.34	106.49	43.34	32.51	10.63	31.33	115	106	P	V
		5908.8	54.11	-26.04	80.15	42.22	32.58	10.66	31.35	115	106	P	V
		5937.4	54.26	-13.94	68.2	42.35	32.6	10.68	31.37	115	106	P	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 VHT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 149 5745MHz		11490	67.55	-6.45	74	67.25	40.11	16.49	56.3	162	5	P	H
		11490	53.02	-0.98	54	52.72	40.11	16.49	56.3	162	5	A	H
		17235	53.95	-14.25	68.2	48.2	41.54	20.78	56.57	100	0	P	H
		11490	64.19	-9.81	74	63.89	40.11	16.49	56.3	117	0	P	V
		11490	50.42	-3.58	54	50.12	40.11	16.49	56.3	117	0	A	V
		17235	52.5	-15.7	68.2	46.75	41.54	20.78	56.57	100	0	P	V
802.11ac VHT20 CH 157 5785MHz		11570	68.05	-5.95	74	67.87	39.93	16.55	56.3	150	6	P	H
		11570	52.99	-1.01	54	52.81	39.93	16.55	56.3	150	6	A	H
		17355	53.75	-14.45	68.2	47.72	41.96	20.88	56.81	100	0	P	H
		11570	62.43	-11.57	74	62.25	39.93	16.55	56.3	115	357	P	V
		11570	48.64	-5.36	54	48.46	39.93	16.55	56.3	115	357	A	V
		17355	53.1	-15.1	68.2	47.07	41.96	20.88	56.81	100	0	P	V
802.11ac VHT20 CH 165 5825MHz		11650	67.33	-6.67	74	67.24	39.77	16.62	56.3	149	4	P	H
		11650	52.82	-1.18	54	52.73	39.77	16.62	56.3	149	4	A	H
		17475	51.42	-16.78	68.2	45.12	42.38	20.97	57.05	100	0	P	H
		11650	61.66	-12.34	74	61.57	39.77	16.62	56.3	122	357	P	V
		11650	47.59	-6.41	54	47.5	39.77	16.62	56.3	122	357	A	V
		17475	50.95	-17.25	68.2	44.65	42.38	20.97	57.05	100	0	P	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 VHT40 (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 CH 151 5755MHz		5646.8	56.53	-11.67	68.2	45.1	32.19	10.46	31.22	188	4	P	H
		5696.2	67.49	-34.91	102.4	55.97	32.27	10.5	31.25	188	4	P	H
		5718.6	82.16	-28.25	110.41	70.6	32.31	10.51	31.26	188	4	P	H
		5724.2	83.75	-36.63	120.38	72.18	32.31	10.52	31.26	188	4	P	H
	*	5755	111.23	-	-	99.6	32.36	10.54	31.27	188	4	P	H
	*	5755	101.89	-	-	90.26	32.36	10.54	31.27	188	4	A	H
		5852.8	55.82	-60	115.82	44.04	32.48	10.62	31.32	188	4	P	H
		5859.2	55.24	-54.38	109.62	43.44	32.51	10.62	31.33	188	4	P	H
		5896.4	55.42	-33.91	89.33	43.55	32.56	10.65	31.34	188	4	P	H
		5933.2	54.23	-13.97	68.2	42.3	32.6	10.68	31.35	188	4	P	H
		5642.8	56.16	-12.04	68.2	44.74	32.19	10.45	31.22	111	113	P	V
		5697.2	69.41	-33.73	103.14	57.89	32.27	10.5	31.25	111	113	P	V
		5719.6	82.99	-27.7	110.69	71.42	32.31	10.52	31.26	111	113	P	V
		5724.2	85.27	-35.11	120.38	73.7	32.31	10.52	31.26	111	113	P	V
	*	5755	109.92	-	-	98.29	32.36	10.54	31.27	111	113	P	V
	*	5755	100	-	-	88.37	32.36	10.54	31.27	111	113	A	V
		5852.6	54.56	-61.71	116.27	42.78	32.48	10.62	31.32	111	113	P	V
		5873.8	55.53	-50.01	105.54	43.69	32.53	10.64	31.33	111	113	P	V
		5887.8	54.51	-41.19	95.7	42.64	32.56	10.65	31.34	111	113	P	V
		5941.6	54.21	-13.99	68.2	42.26	32.63	10.69	31.37	111	113	P	V

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 CH 159 5795MHz		5629.8	55.19	-13.01	68.2	43.8	32.17	10.44	31.22	180	2	P	H
		5676	56.29	-31.19	87.48	44.8	32.24	10.48	31.23	180	2	P	H
		5717.8	57.36	-52.82	110.18	45.8	32.31	10.51	31.26	180	2	P	H
		5722	57.61	-57.75	115.36	46.04	32.31	10.52	31.26	180	2	P	H
	*	5795	109.77	-	-	98.07	32.41	10.58	31.29	180	2	P	H
	*	5795	99.83	-	-	88.13	32.41	10.58	31.29	180	2	A	H
		5852.2	58.22	-58.96	117.18	46.44	32.48	10.62	31.32	180	2	P	H
		5865.2	56.05	-51.89	107.94	44.24	32.51	10.63	31.33	180	2	P	H
		5909.2	55.13	-24.73	79.86	43.24	32.58	10.66	31.35	180	2	P	H
		5927.8	54.53	-13.67	68.2	42.6	32.6	10.68	31.35	180	2	P	H
		5633.8	54.76	-13.44	68.2	43.34	32.19	10.45	31.22	103	113	P	V
		5697.4	56.04	-47.24	103.28	44.52	32.27	10.5	31.25	103	113	P	V
		5718.8	56.07	-54.39	110.46	44.5	32.31	10.52	31.26	103	113	P	V
		5723.8	57.17	-62.29	119.46	45.6	32.31	10.52	31.26	103	113	P	V
	*	5795	107.57	-	-	95.87	32.41	10.58	31.29	103	113	P	V
	*	5795	97.98	-	-	86.28	32.41	10.58	31.29	103	113	A	V
		5850.2	55.96	-65.78	121.74	44.18	32.48	10.62	31.32	103	113	P	V
		5860.4	55.4	-53.89	109.29	43.59	32.51	10.63	31.33	103	113	P	V
		5883.6	54.85	-43.96	98.81	43.02	32.53	10.64	31.34	103	113	P	V
		5947.8	54.16	-14.04	68.2	42.21	32.63	10.69	31.37	103	113	P	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 VHT40 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 CH 151 5755MHz		11510	64.52	-9.48	74	64.22	40.1	16.5	56.3	149	7	P	H
		11510	52.27	-1.73	54	51.97	40.1	16.5	56.3	149	7	A	H
		17265	52.92	-15.28	68.2	47.08	41.66	20.81	56.63	100	0	P	H
		11510	60.74	-13.26	74	60.44	40.1	16.5	56.3	129	0	P	V
		11510	49.21	-4.79	54	48.91	40.1	16.5	56.3	129	0	A	V
		17265	51.9	-16.3	68.2	46.06	41.66	20.81	56.63	100	0	P	V
802.11ac VHT40 CH 159 5795MHz		11590	64.91	-9.09	74	64.75	39.89	16.57	56.3	151	4	P	H
		11590	52.88	-1.12	54	52.72	39.89	16.57	56.3	151	4	A	H
		17385	52.44	-15.76	68.2	46.33	42.08	20.9	56.87	100	0	P	H
		11590	60.51	-13.49	74	60.35	39.89	16.57	56.3	113	0	P	V
		11590	48.54	-5.46	54	48.38	39.89	16.57	56.3	113	0	A	V
		17385	51.33	-16.87	68.2	45.22	42.08	20.9	56.87	100	0	P	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 155 5775MHz		5629.2	60.14	-8.06	68.2	48.75	32.17	10.44	31.22	163	21	P	H
		5697	78.6	-24.39	102.99	67.08	32.27	10.5	31.25	163	21	P	H
		5719.2	83.64	-26.94	110.58	72.07	32.31	10.52	31.26	163	21	P	H
		5722.2	83.33	-32.49	115.82	71.76	32.31	10.52	31.26	163	21	P	H
	*	5775	107.3	-	-	95.63	32.39	10.56	31.28	163	21	P	H
	*	5775	97.89	-	-	86.22	32.39	10.56	31.28	163	21	A	H
		5851.8	77.45	-40.65	118.1	65.67	32.48	10.62	31.32	163	21	P	H
		5857.2	72.55	-37.63	110.18	60.74	32.51	10.62	31.32	163	21	P	H
		5876.8	67.94	-35.92	103.86	56.1	32.53	10.64	31.33	163	21	P	H
		5929.6	56.2	-12	68.2	44.27	32.6	10.68	31.35	163	21	P	H
		5641.8	60.01	-8.19	68.2	48.59	32.19	10.45	31.22	152	171	P	V
		5699.6	75.49	-29.42	104.91	63.97	32.27	10.5	31.25	152	171	P	V
		5719.6	82.36	-28.33	110.69	70.79	32.31	10.52	31.26	152	171	P	V
		5722.2	82.91	-32.91	115.82	71.34	32.31	10.52	31.26	152	171	P	V
	*	5775	105.51	-	-	93.84	32.39	10.56	31.28	152	171	P	V
	*	5775	95.94	-	-	84.27	32.39	10.56	31.28	152	171	A	V
		5852.2	73.54	-43.64	117.18	61.76	32.48	10.62	31.32	152	171	P	V
		5855	70.63	-40.17	110.8	58.82	32.51	10.62	31.32	152	171	P	V
		5876.8	64.5	-39.36	103.86	52.66	32.53	10.64	31.33	152	171	P	V
		5927.4	54.72	-13.48	68.2	42.79	32.6	10.68	31.35	152	171	P	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 155 5775MHz		11550	63.11	-10.89	74	62.89	39.98	16.54	56.3	151	6	P	H
		11550	51.63	-2.37	54	51.41	39.98	16.54	56.3	151	6	A	H
		17325	52.04	-16.16	68.2	46.1	41.84	20.85	56.75	100	0	P	H
		11550	59.01	-14.99	74	58.79	39.98	16.54	56.3	121	357	P	V
		11550	48.2	-5.8	54	47.98	39.98	16.54	56.3	121	357	A	V
		17325	51.89	-16.31	68.2	45.95	41.84	20.85	56.75	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 802.11ac VHT20 (LF @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
5GHz 802.11ac VHT20 LF		30	24.1	-15.9	40	29.01	24.57	0.7	30.18	-	-	P	H
		183.36	24.36	-19.14	43.5	37.83	14.85	2.02	30.34	-	-	P	H
		370	26.25	-19.75	46	32.77	20.8	2.71	30.03	-	-	P	H
		624.1	32.58	-13.42	46	32.79	25.89	3.5	29.6	-	-	P	H
		857.9	34.33	-11.67	46	30.43	28.98	4.12	29.2	100	0	P	H
		972.7	35.16	-18.84	54	28.83	30.79	4.47	28.93	-	-	P	H
		39.45	28.43	-11.57	40	38.64	19.28	0.84	30.33	-	-	P	V
		201.45	25.54	-17.96	43.5	38.83	14.95	2.08	30.32	-	-	P	V
		240.33	30.66	-15.34	46	41.34	17.3	2.27	30.25	-	-	P	V
		624.1	36.54	-9.46	46	36.75	25.89	3.5	29.6	100	0	P	V
		832	34.21	-11.79	46	31.44	27.97	4.04	29.24	-	-	P	V
		968.5	36.38	-17.62	54	30.01	30.85	4.46	28.94	-	-	P	V
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	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

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

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

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

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

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

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

Appendix D. Radiated Spurious Emission Plots

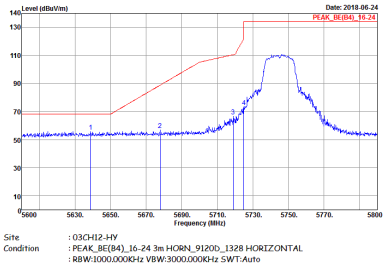
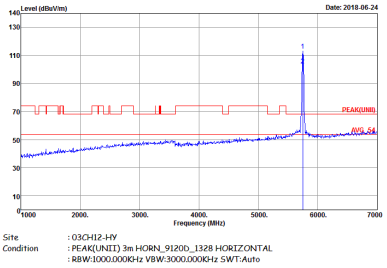
Test Engineer :	Jacky Hung, Peter Chiu, and Master Huang	**Temperature :**	22~25°C
		Relative Humidity :	56~62%

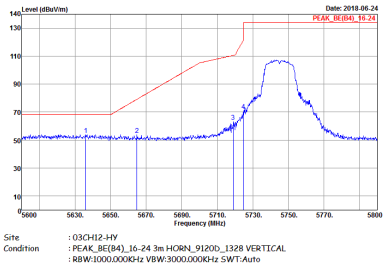
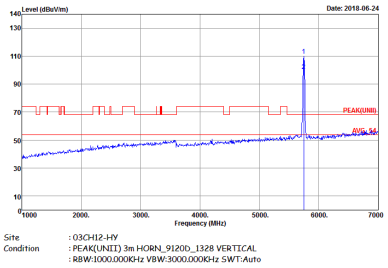
Note symbol

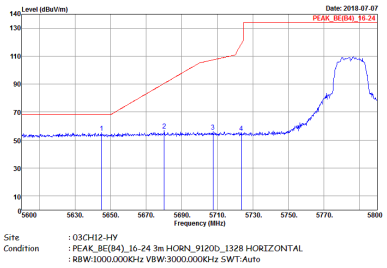
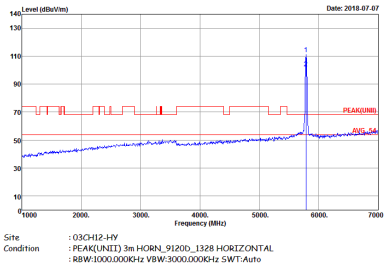
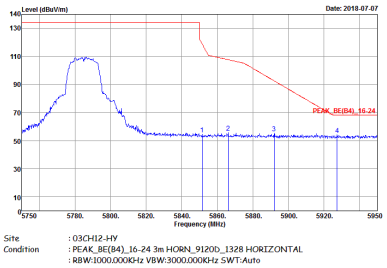
-L	**Low channel location**
-R	**High channel location**

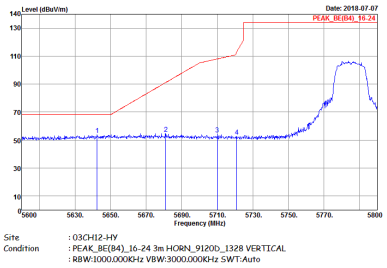
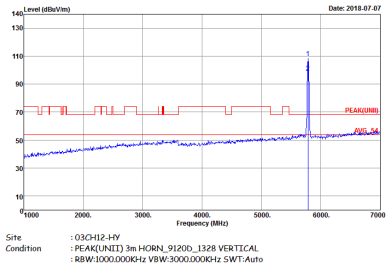
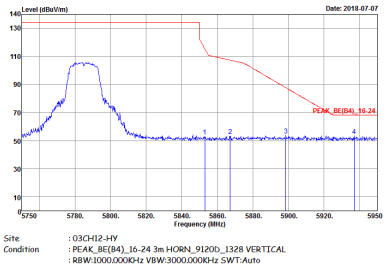
Band 4 - 5725~5850MHz

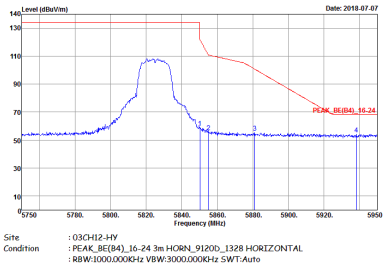
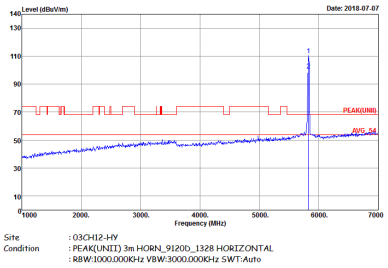
WIFI 802.11a (Band Edge @ 3m)

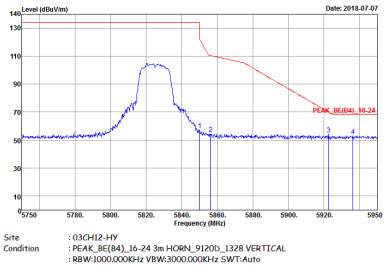
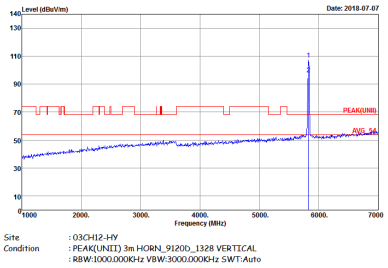
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1	Vertical	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Fundamental
Peak		
Peak		Left blank

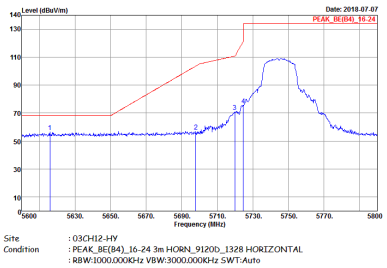
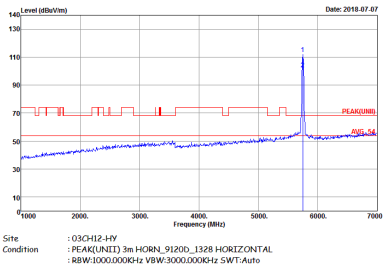
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1	Vertical	Fundamental
Peak		
Peak		Left blank

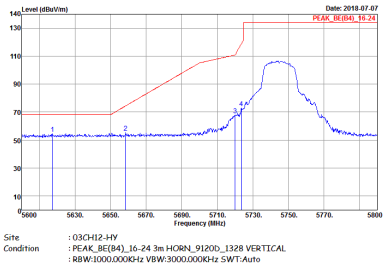
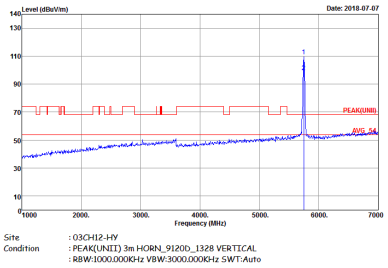
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1	Horizontal	Fundamental
Peak		

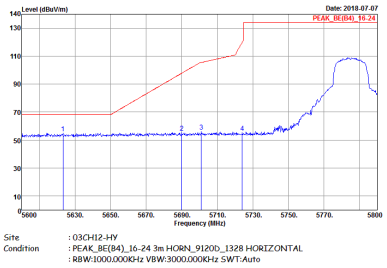
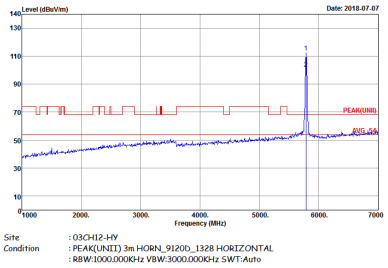
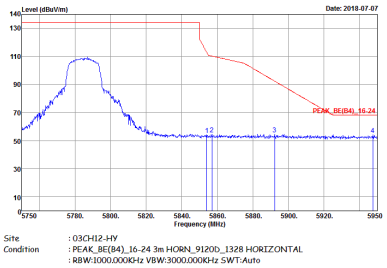
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1	Vertical	Fundamental
Peak		

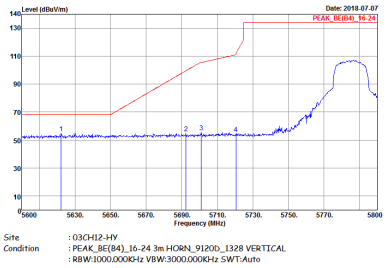
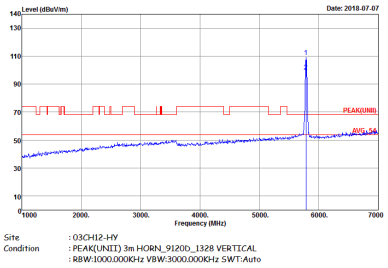
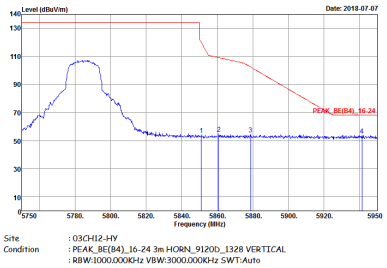
Band 4 5725~5850MHz

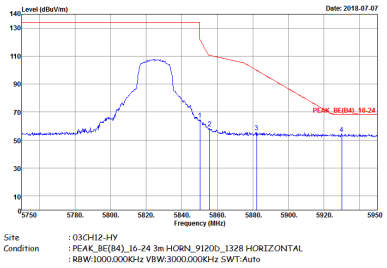
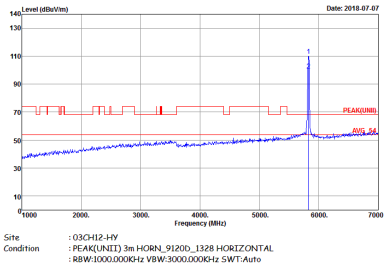
WIFI 802.11n HT20 (Band Edge @ 3m)

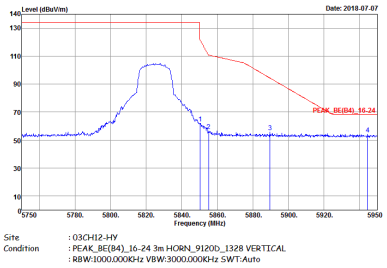
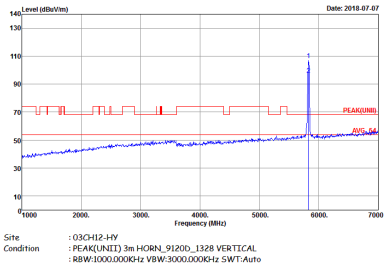
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
1	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
1	Vertical	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
1	Horizontal	Fundamental
Peak		
Peak		Left blank

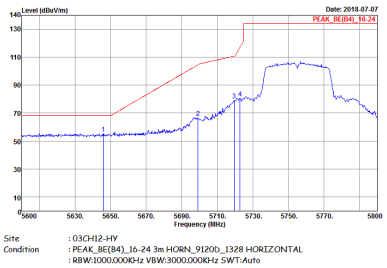
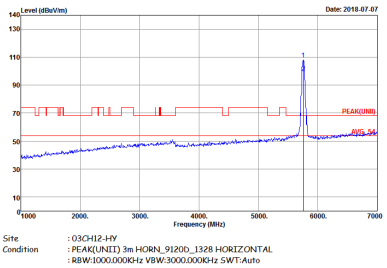
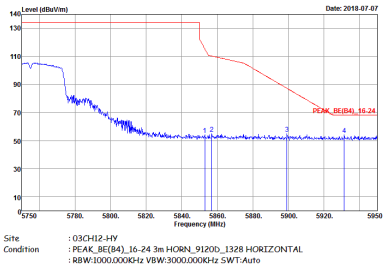
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
1	Vertical	Fundamental
Peak		
Peak		Left blank

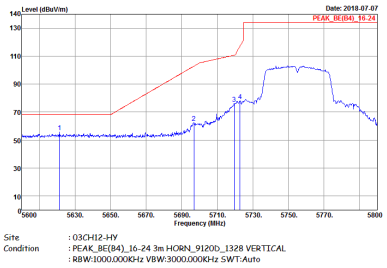
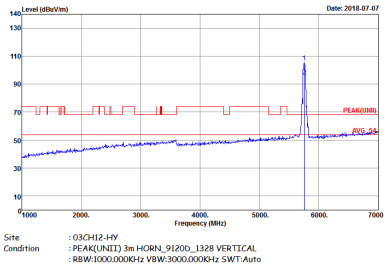
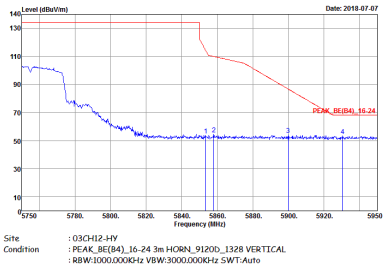
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
1	Horizontal	Fundamental
Peak		

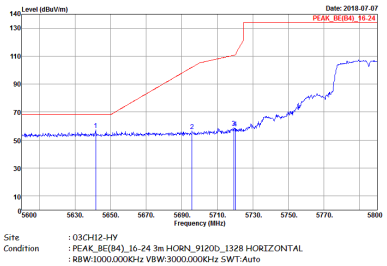
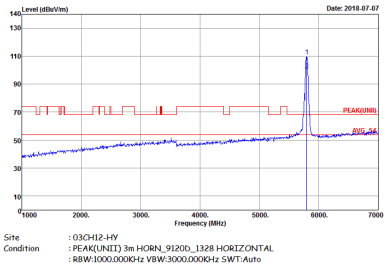
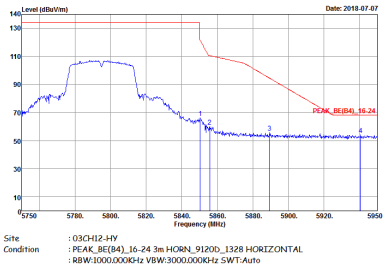
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
1	Vertical	Fundamental
Peak		

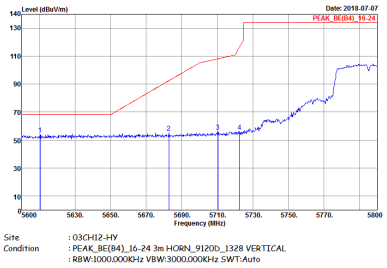
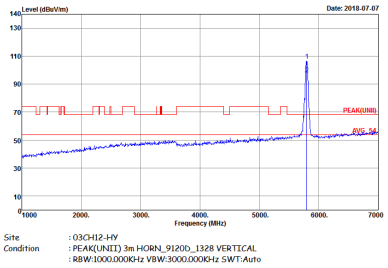
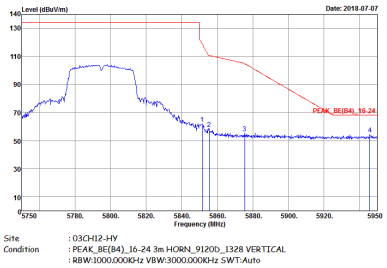
Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
1	Horizontal	Fundamental
Peak		
Peak		Left blank

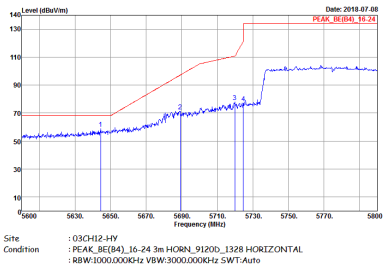
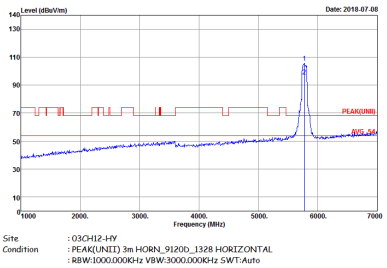
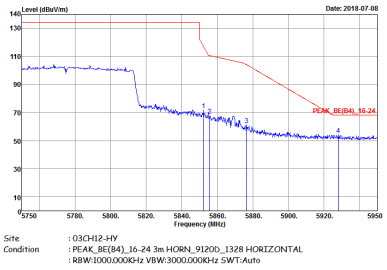
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
1	Vertical	Fundamental
Peak		
Peak		Left blank

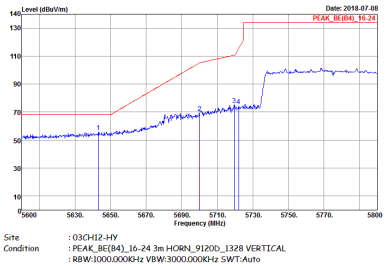
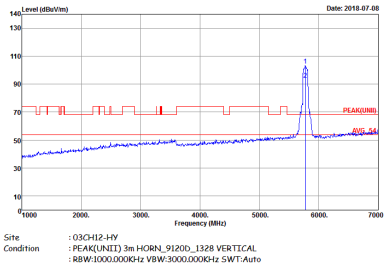
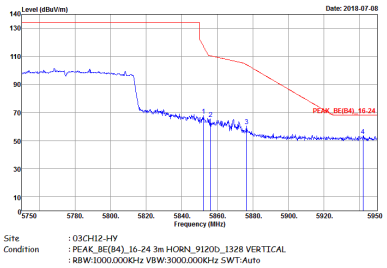
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
1	Horizontal	Fundamental
Peak		
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
1	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 5725~5850MHz

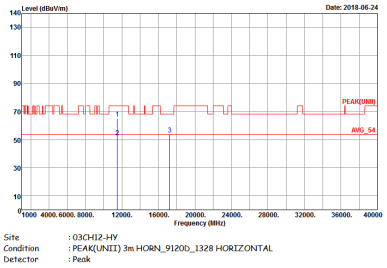
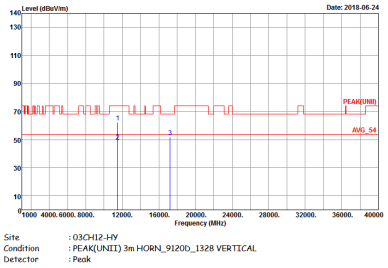
WIFI 802.11ac VHT80 (Band Edge @ 3m)

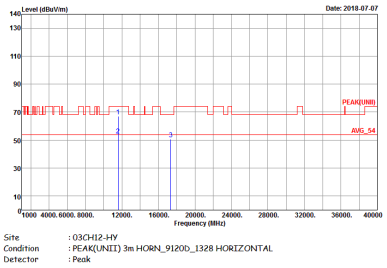
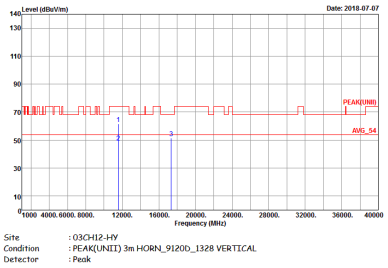
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Horizontal	Fundamental
Peak		
Peak		Left blank

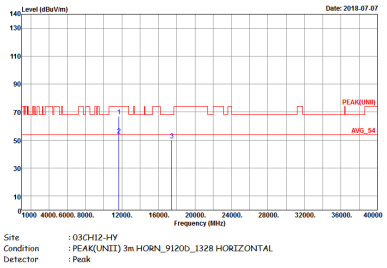
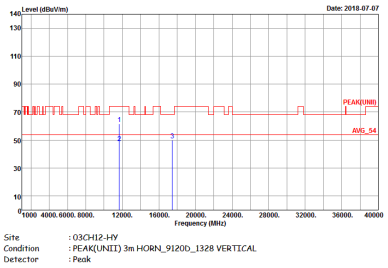
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

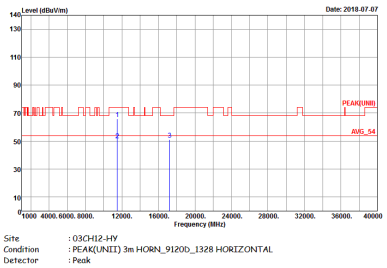
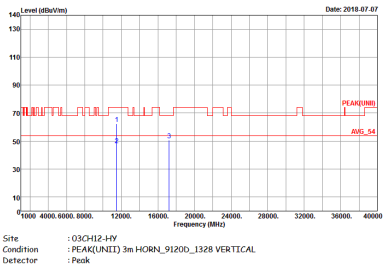
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
1	Horizontal	Vertical
Peak Avg.		

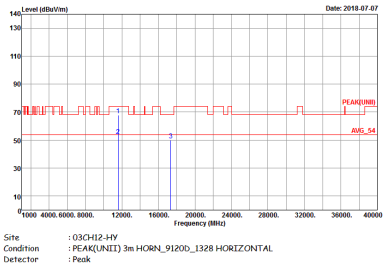
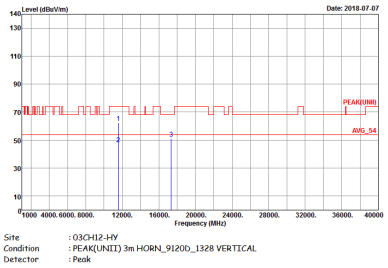
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Vertical
Peak Avg.		

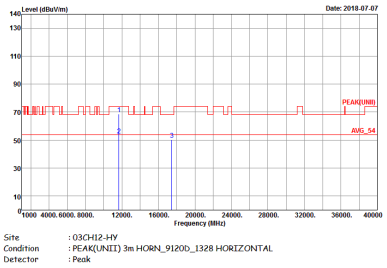
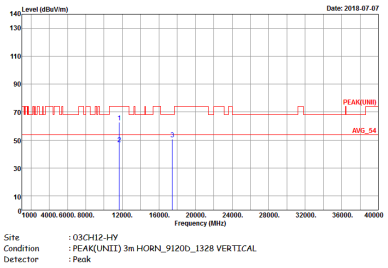
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

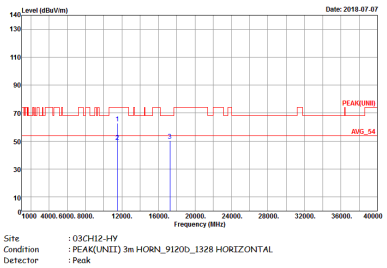
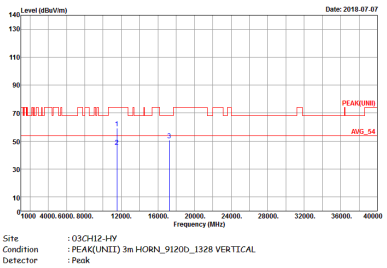
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
1	Horizontal	Vertical
Peak Avg.		

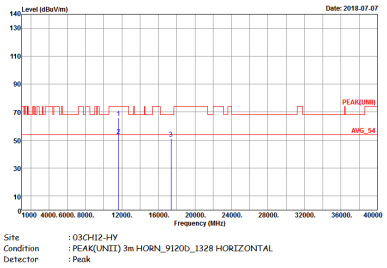
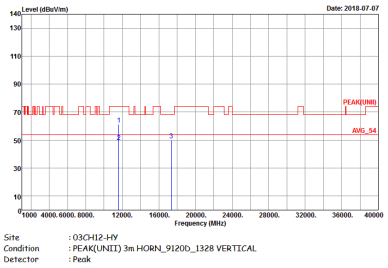
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
1	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz

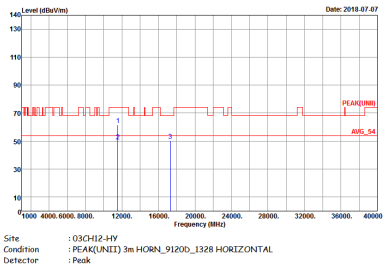
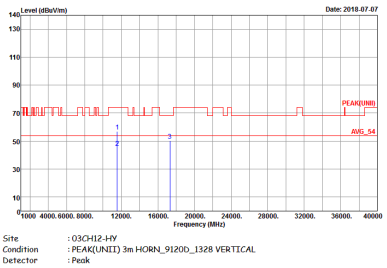
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
1	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
1	Horizontal	Vertical
Peak Avg.		

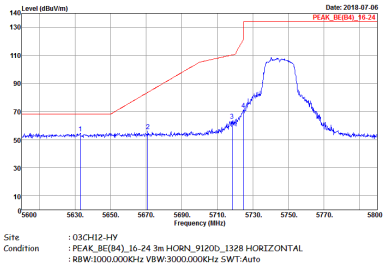
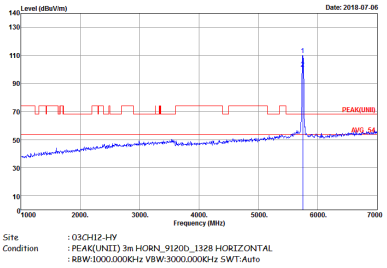
Band 4 5725~5850MHz

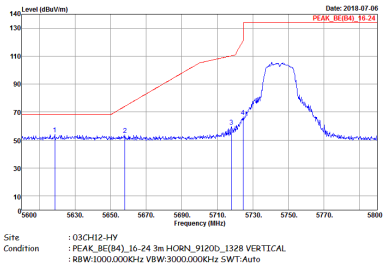
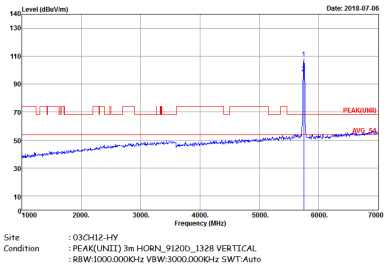
WIFI 802.11ac VHT80 (Harmonic @ 3m)

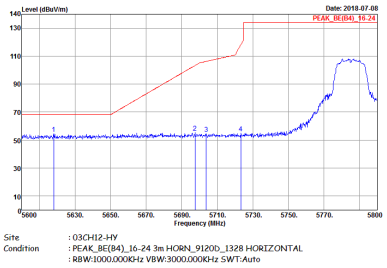
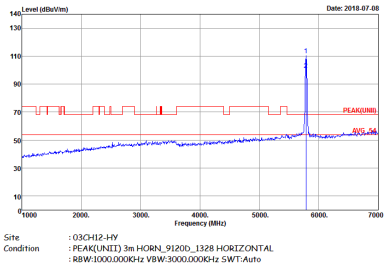
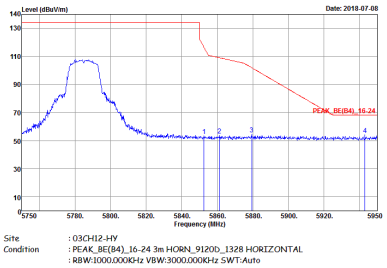
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Horizontal	Vertical
Peak Avg.		

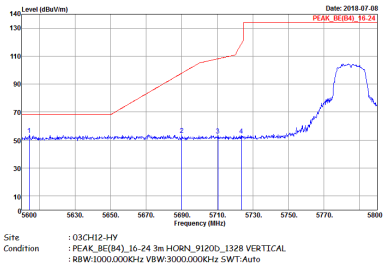
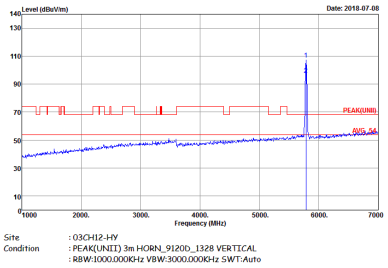
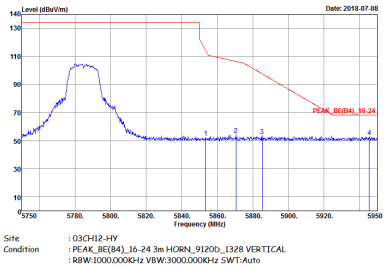
Band 4 - 5725~5850MHz

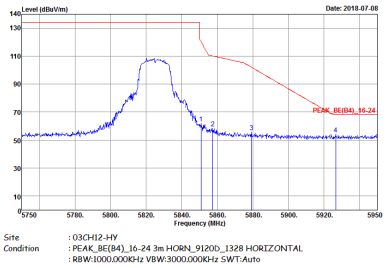
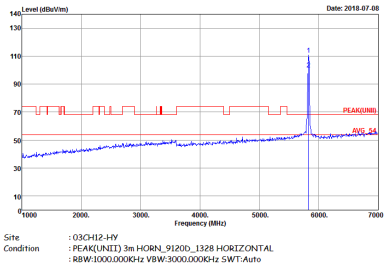
WIFI 802.11a (Band Edge @ 3m)

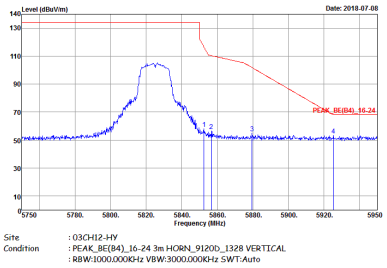
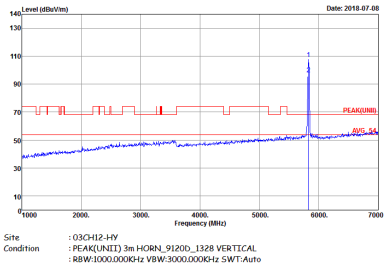
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
2	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
2	Vertical	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
2	Horizontal	Fundamental
Peak		
Peak		Left blank

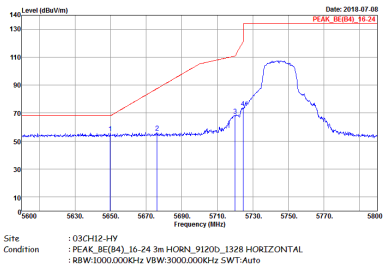
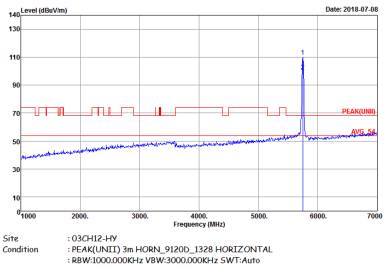
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
2	Vertical	Fundamental
Peak		
Peak		Left blank

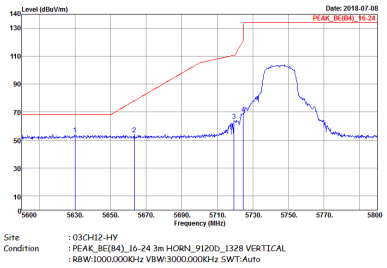
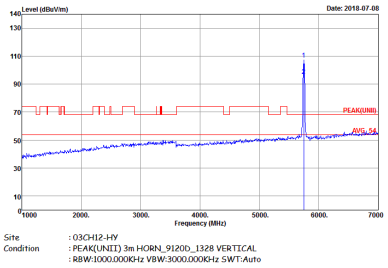
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
2	Horizontal	Fundamental
Peak		

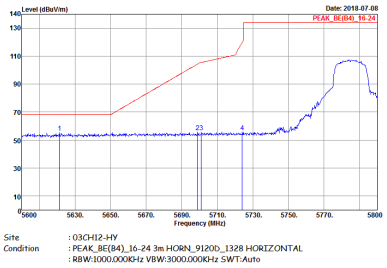
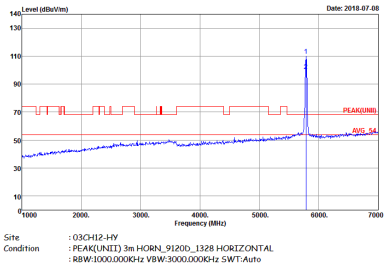
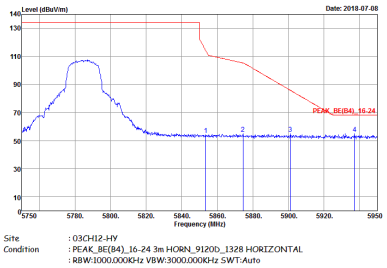
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
2	Vertical	Fundamental
Peak		

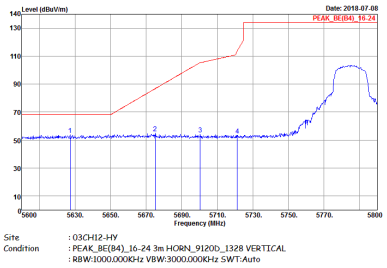
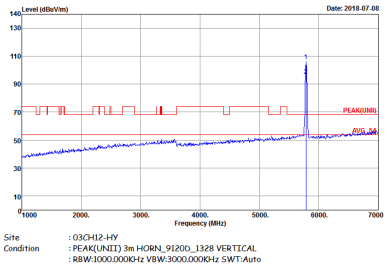
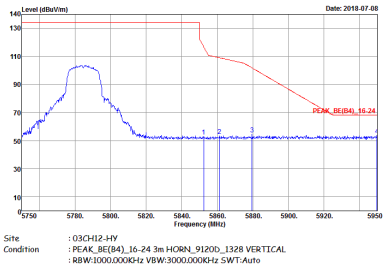
Band 4 5725~5850MHz

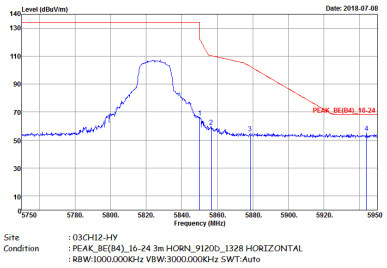
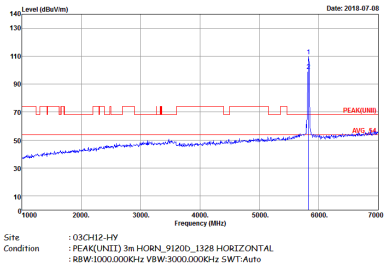
WIFI 802.11n HT20 (Band Edge @ 3m)

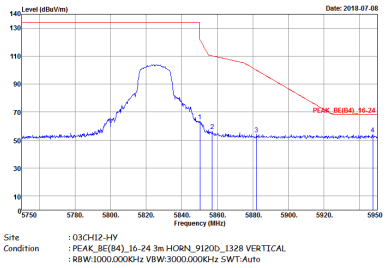
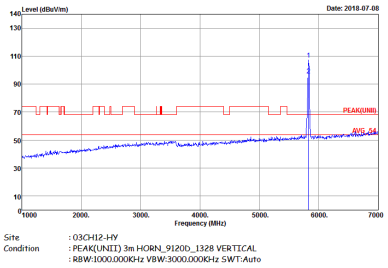
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
2	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
2	Vertical	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
2	Horizontal	Fundamental
Peak		
Peak		Left blank

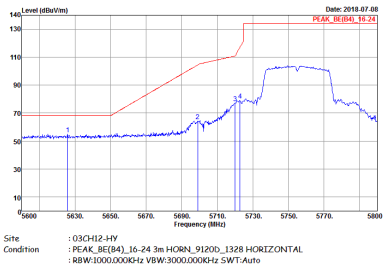
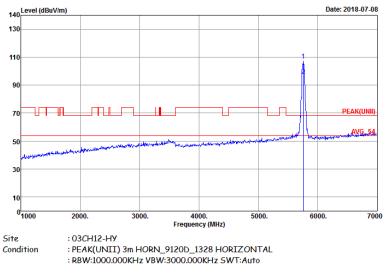
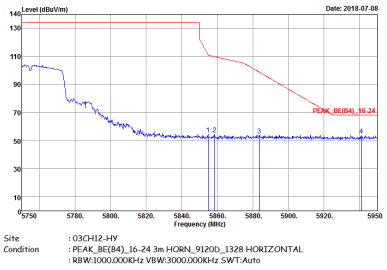
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
2	Vertical	Fundamental
Peak		
Peak		Left blank

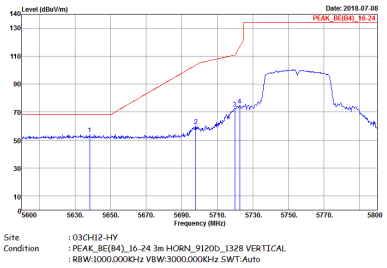
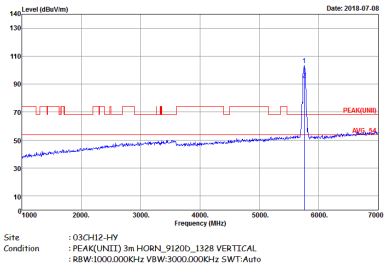
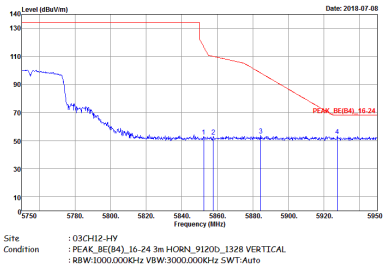
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
2	Horizontal	Fundamental
Peak		

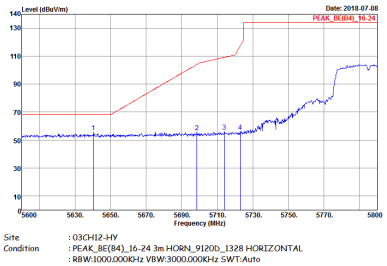
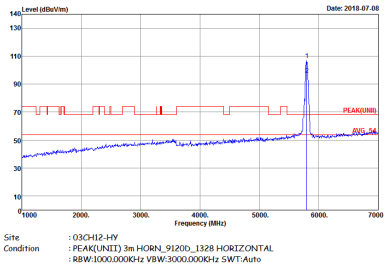
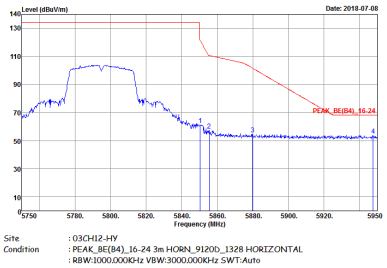
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
2	Vertical	Fundamental
Peak		

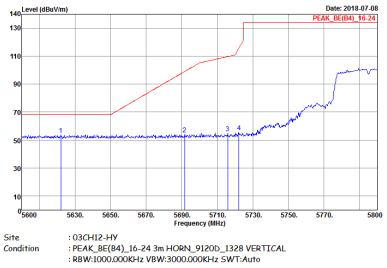
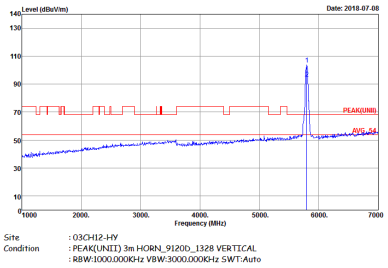
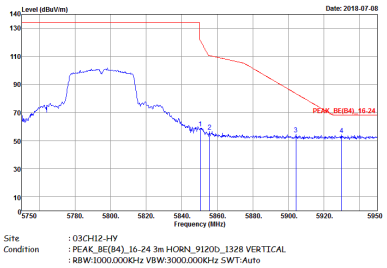
Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
2	Horizontal	Fundamental
Peak		
Peak		Left blank

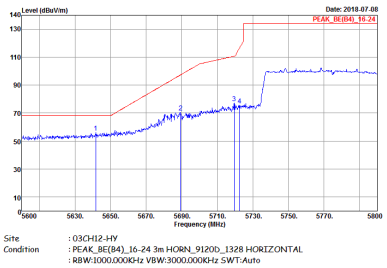
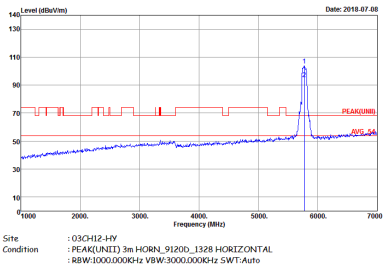
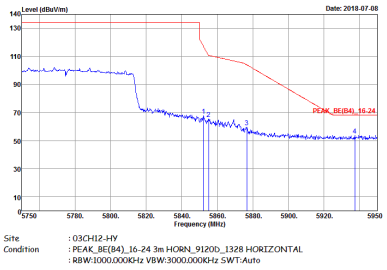
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
2	Vertical	Fundamental
Peak		
Peak		Left blank

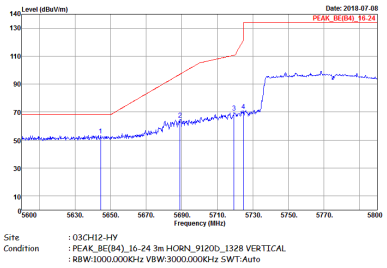
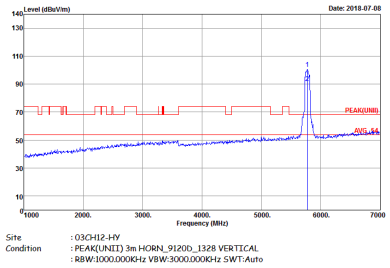
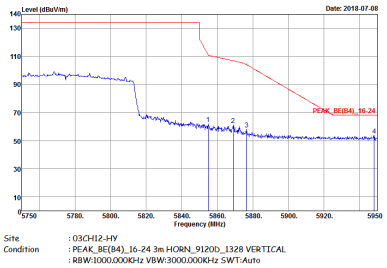
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
2	Horizontal	Fundamental
Peak		
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
2	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 5725~5850MHz

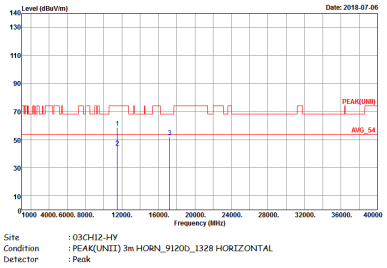
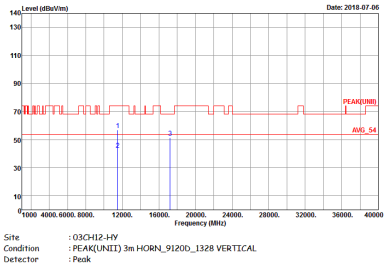
WIFI 802.11ac VHT80 (Band Edge @ 3m)

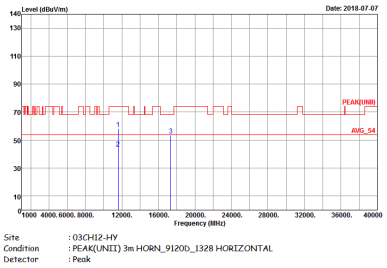
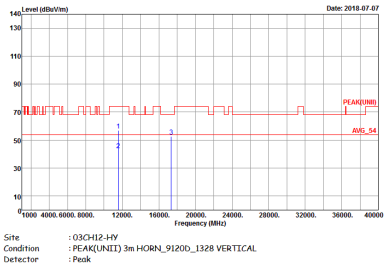
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
2	Horizontal	Fundamental
Peak		
Peak		Left blank

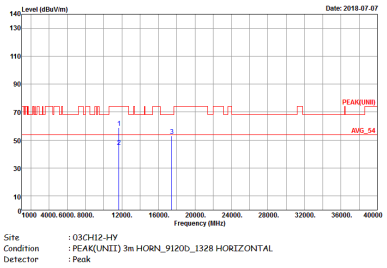
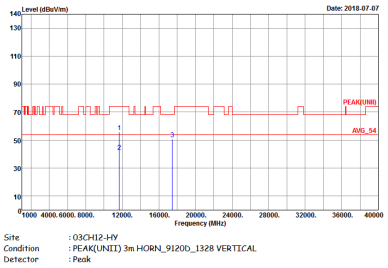
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
2	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

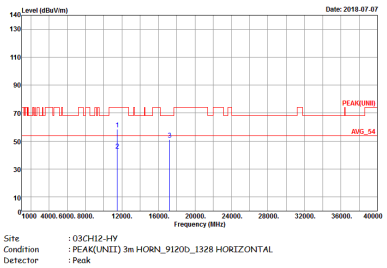
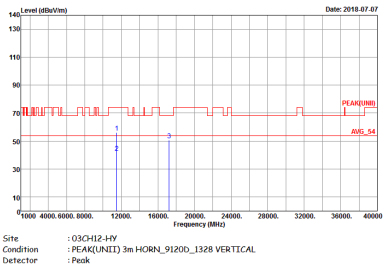
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
2	Horizontal	Vertical
Peak Avg.		

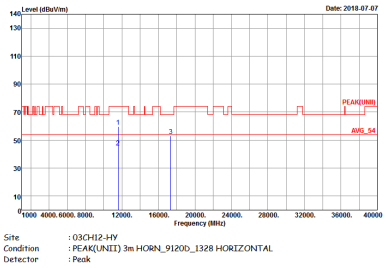
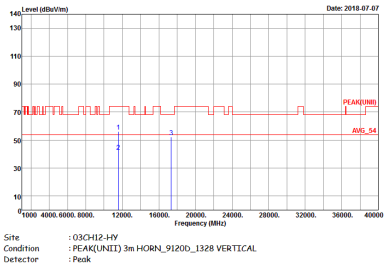
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
2	Horizontal	Vertical
Peak Avg.		

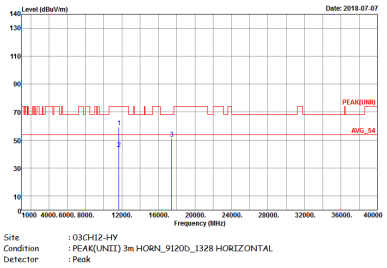
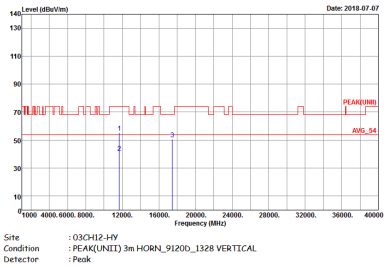
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
2	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

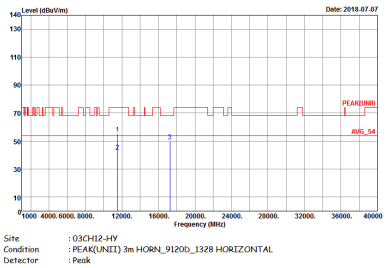
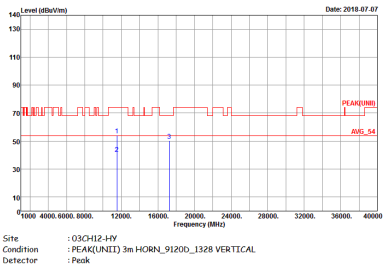
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
2	Horizontal	Vertical
Peak Avg.		

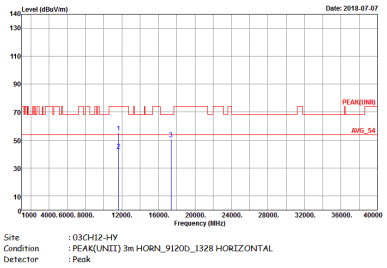
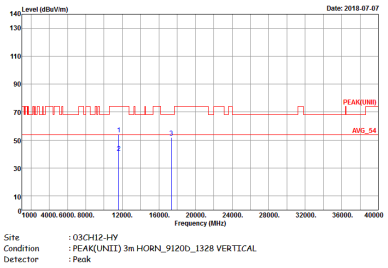
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
2	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz

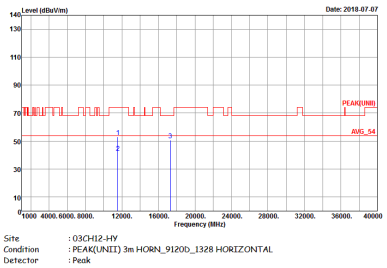
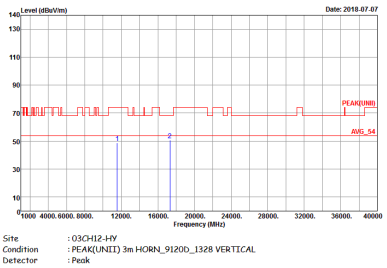
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
2	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz

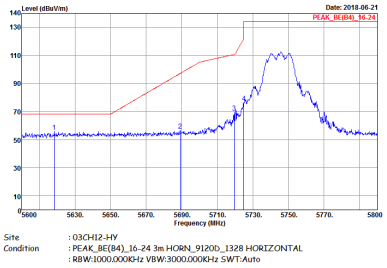
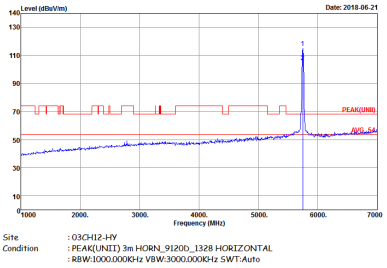
WIFI 802.11ac VHT80 (Harmonic @ 3m)

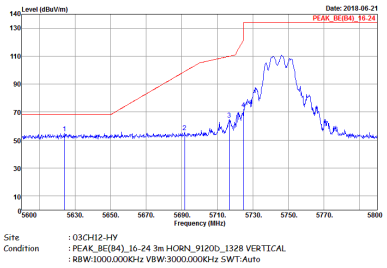
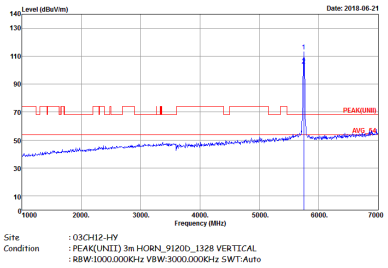
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
2	Horizontal	Vertical
Peak Avg.		

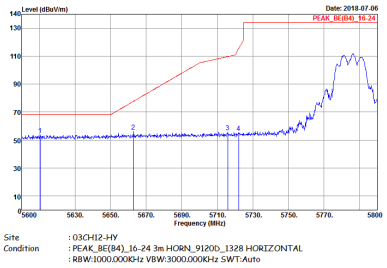
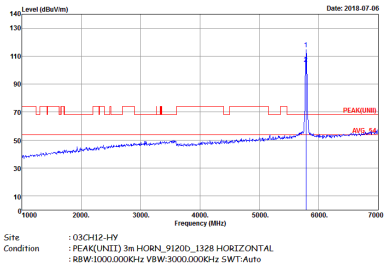
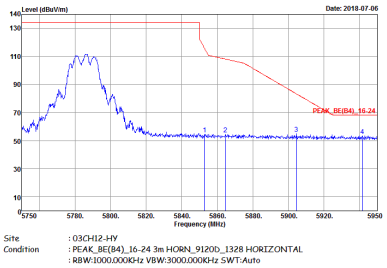
<For CDD Mode>

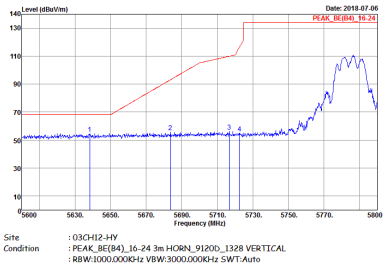
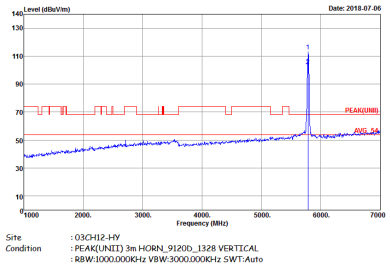
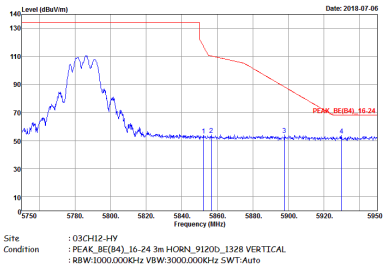
Band 4 - 5725~5850MHz

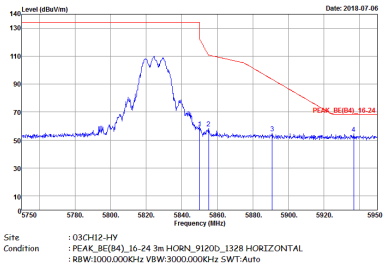
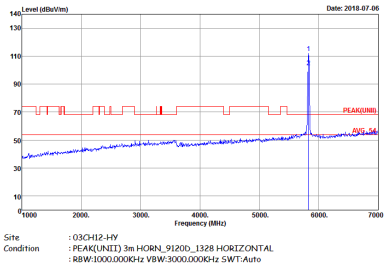
WIFI 802.11a (Band Edge @ 3m)

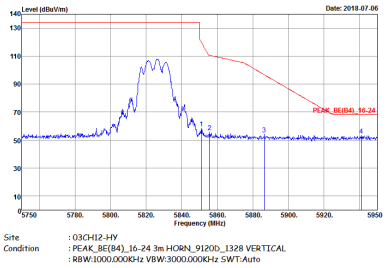
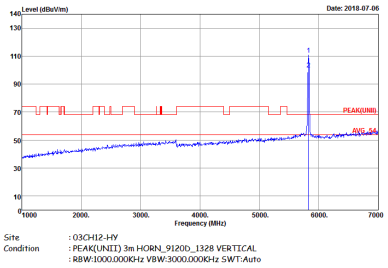
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1+2	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1+2	Vertical	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1+2	Horizontal	Fundamental
Peak		
Peak		Left blank

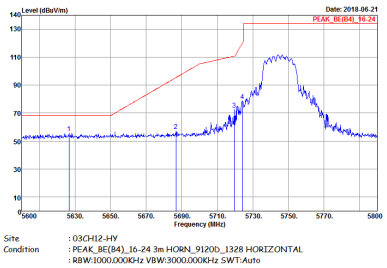
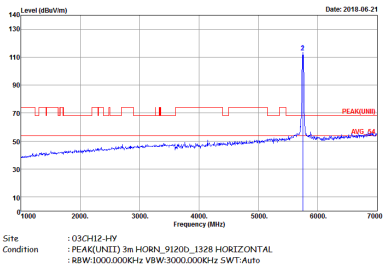
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1+2	Vertical	Fundamental
Peak		
Peak		Left blank

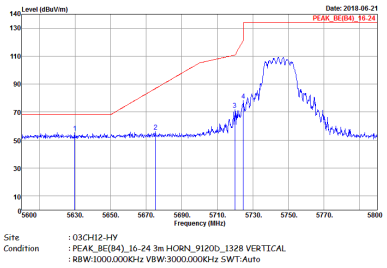
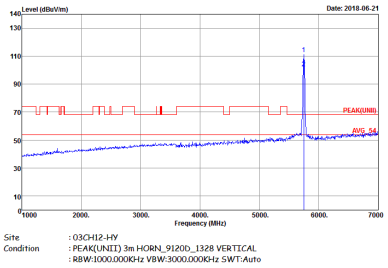
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1+2	Horizontal	Fundamental
Peak		

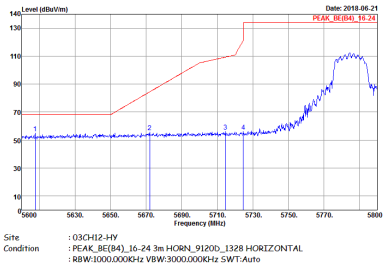
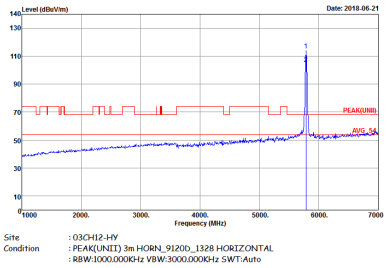
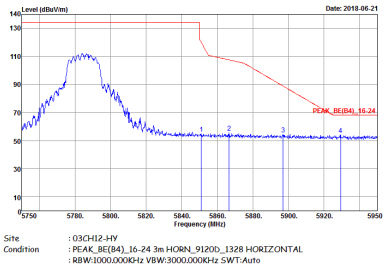
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1+2	Vertical	Fundamental
Peak		

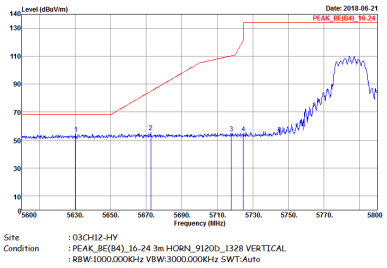
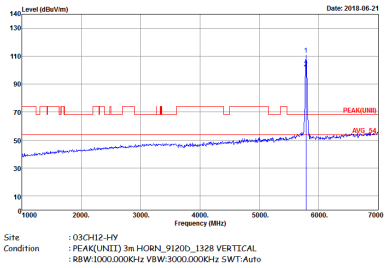
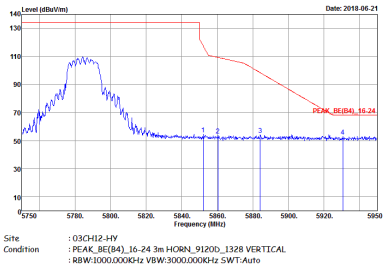
Band 4 5725~5850MHz

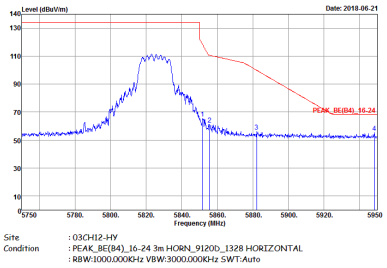
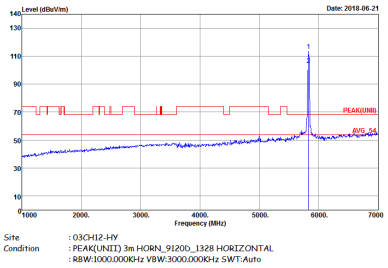
WIFI 802.11n HT20 (Band Edge @ 3m)

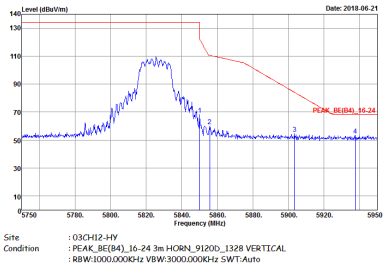
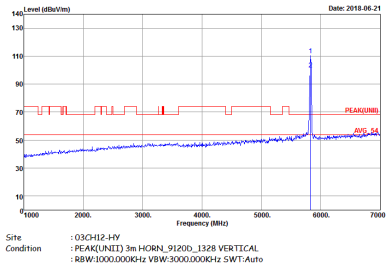
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
1+2	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
1+2	Vertical	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
1+2	Horizontal	Fundamental
Peak		
Peak		Left blank

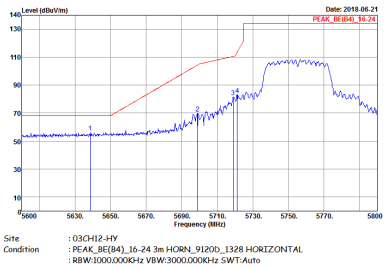
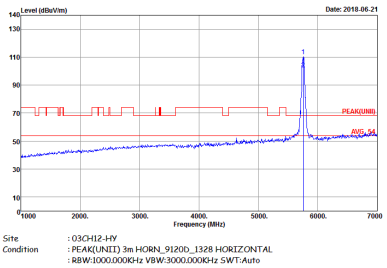
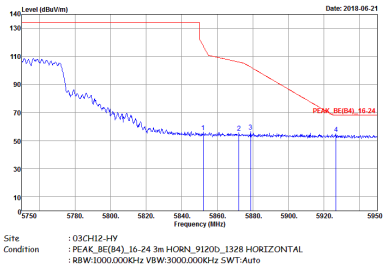
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
1+2	Vertical	Fundamental
Peak		
Peak		Left blank

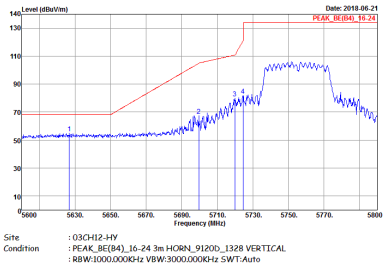
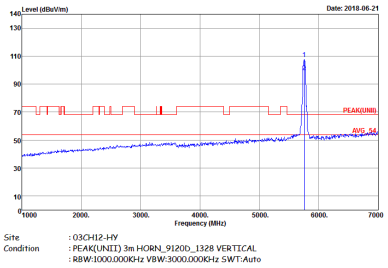
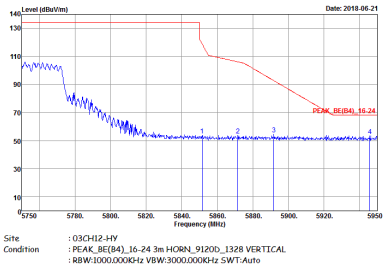
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
1+2	Horizontal	Fundamental
Peak		

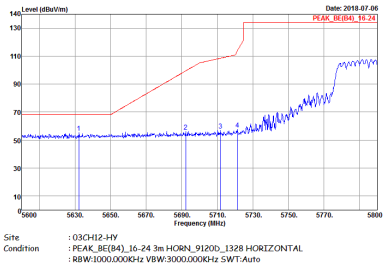
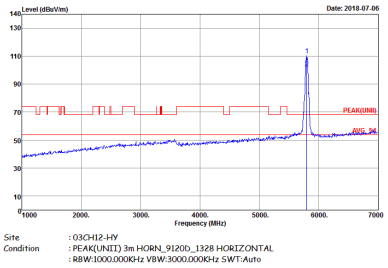
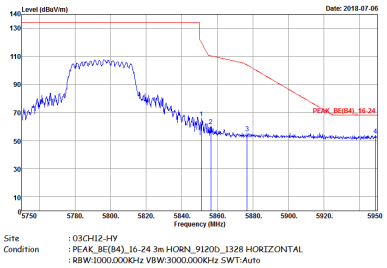
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
1+2	Vertical	Fundamental
Peak		

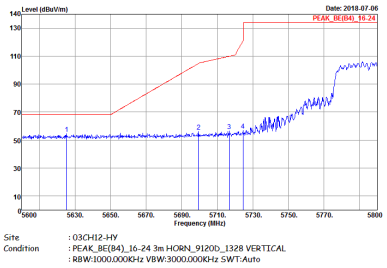
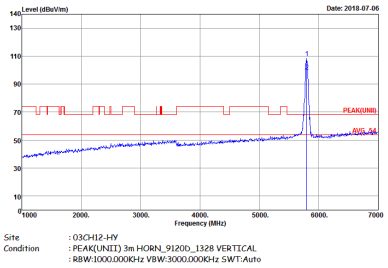
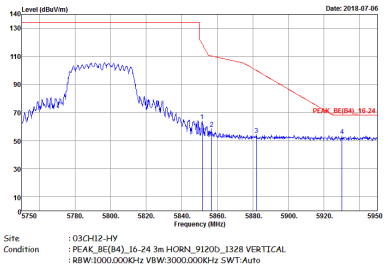
Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
1+2	Horizontal	Fundamental
Peak		
Peak		Left blank

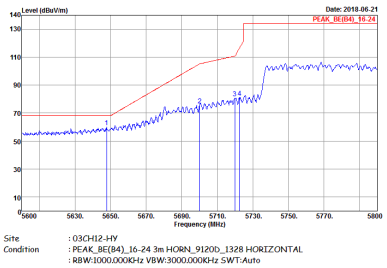
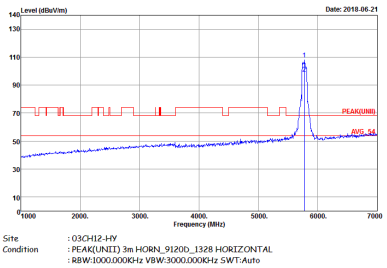
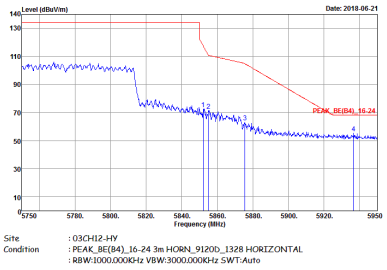
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
1+2	Vertical	Fundamental
Peak		
Peak		Left blank

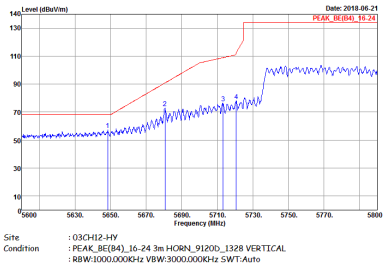
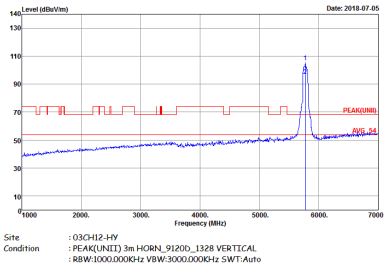
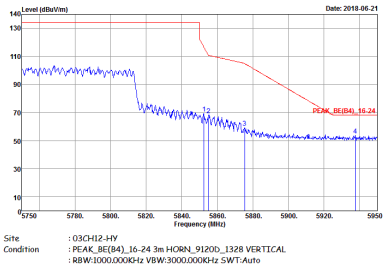
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
1+2	Horizontal	Fundamental
Peak		
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
1+2	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 5725~5850MHz

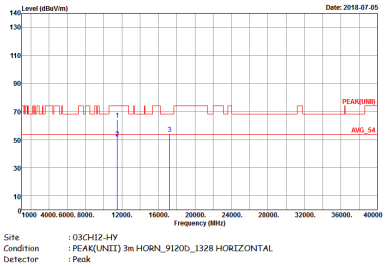
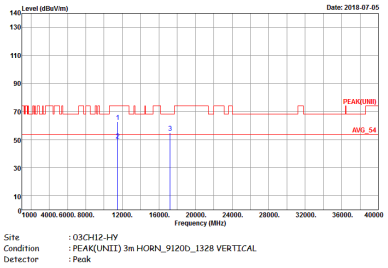
WIFI 802.11ac VHT80 (Band Edge @ 3m)

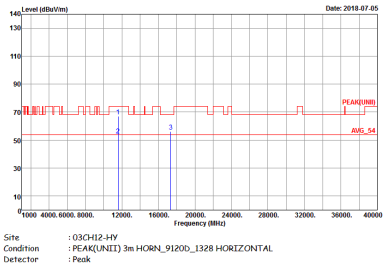
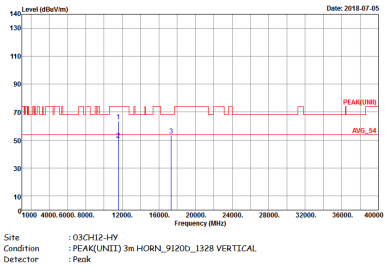
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1+2	Horizontal	Fundamental
Peak		
Peak		Left blank

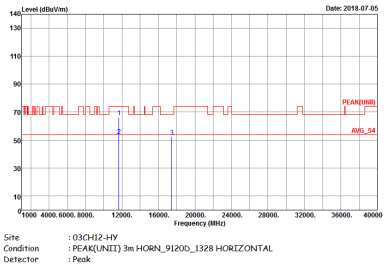
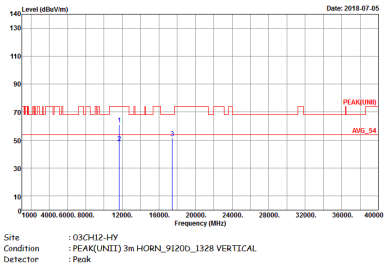
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1+2	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

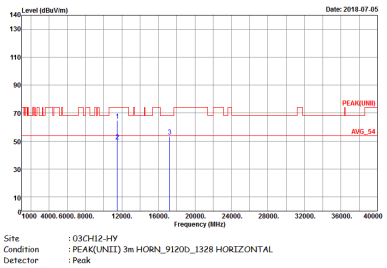
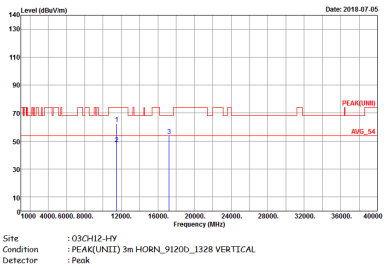
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
1+2	Horizontal	Vertical
Peak Avg.		

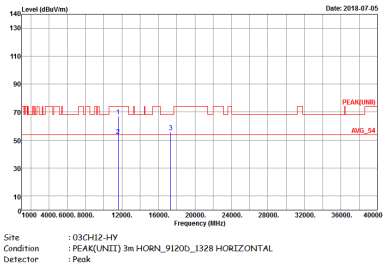
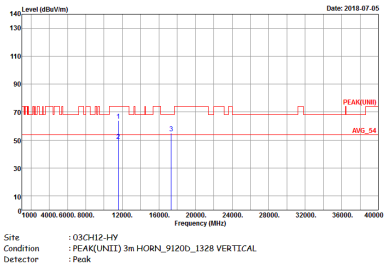
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
1+2	Horizontal	Vertical
Peak Avg.		

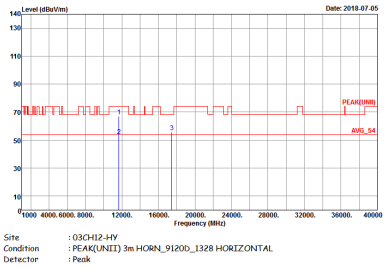
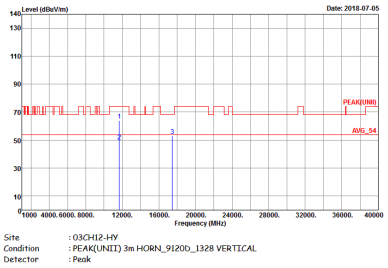
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
1+2	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

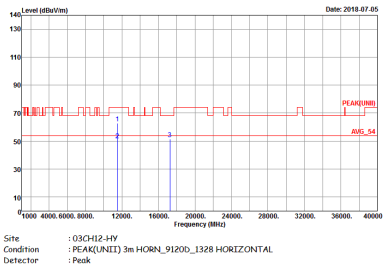
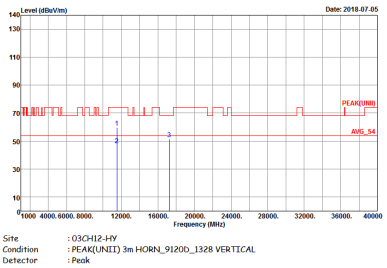
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
1+2	Horizontal	Vertical
Peak Avg.		

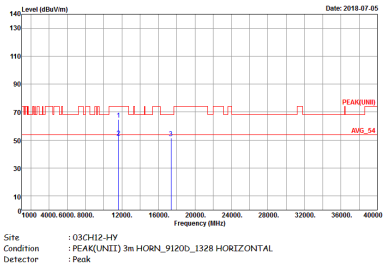
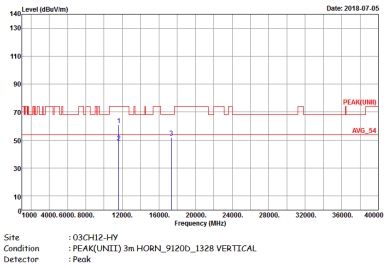
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
1+2	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz

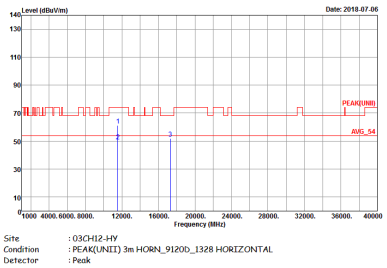
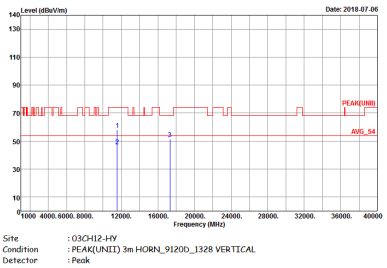
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
1+2	Horizontal	Vertical
Peak Avg.		

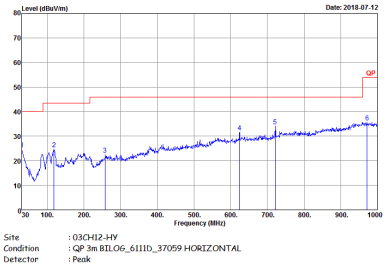
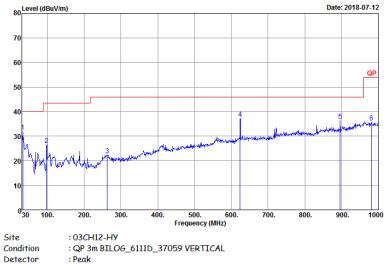
Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1+2	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

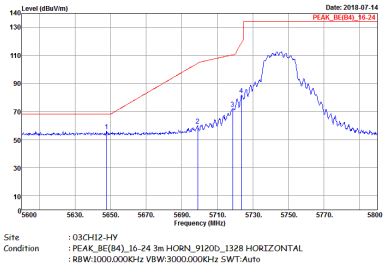
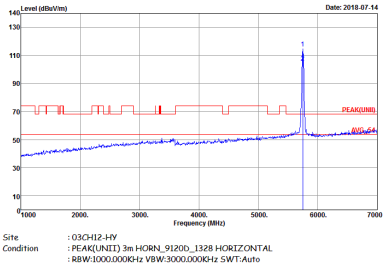
5GHz WIFI 802.11a (LF)

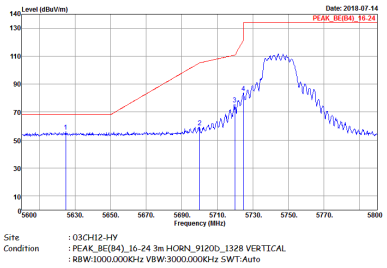
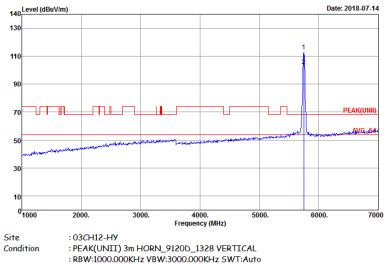
WIFI	5GHz 5725~5850MHz	
ANT	802.11a LF	
1+2	Horizontal	Vertical
QP / Peak		

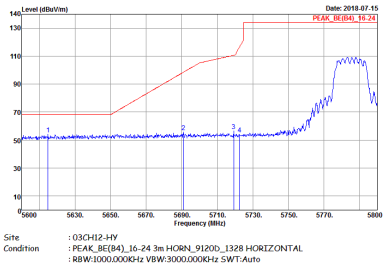
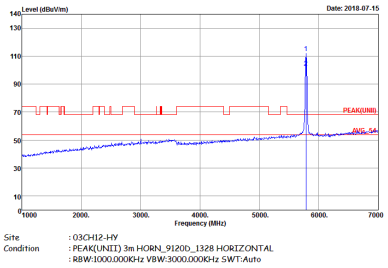
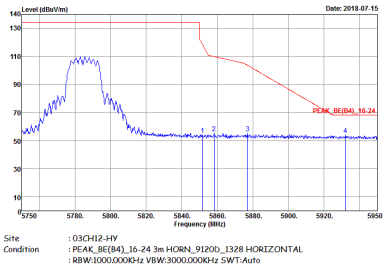
<For TXBF Mode>

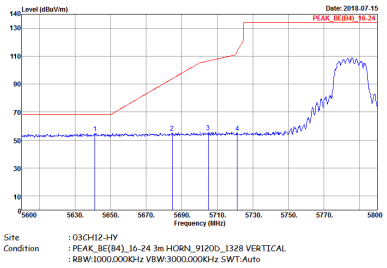
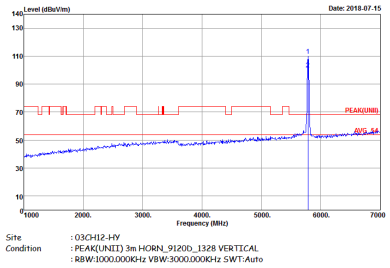
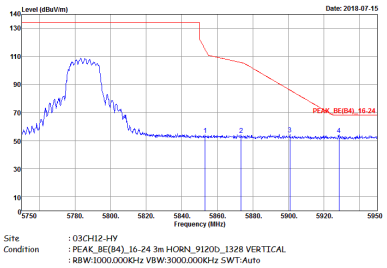
Band 4 - 5725~5850MHz

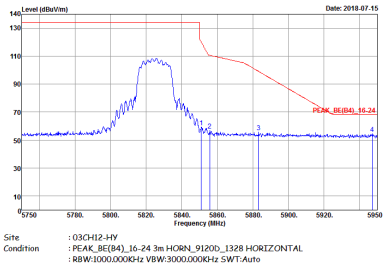
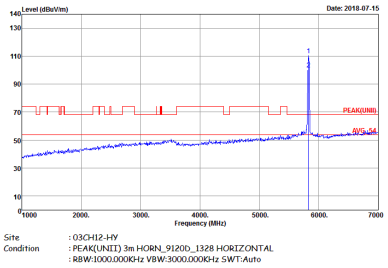
WIFI 802.11ac VHT20 (Band Edge @ 3m)

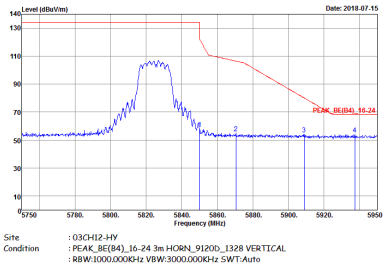
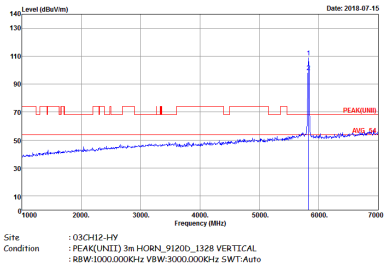
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
1+2	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
1+2	Vertical	Fundamental
Peak Avg.		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1+2	Horizontal	Fundamental
Peak		
Peak		Left blank

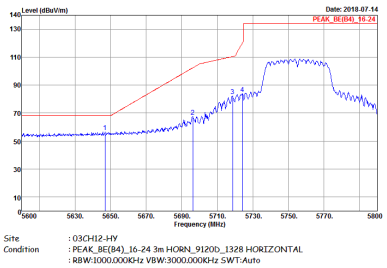
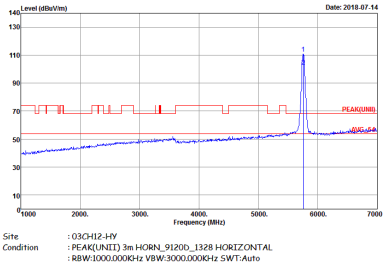
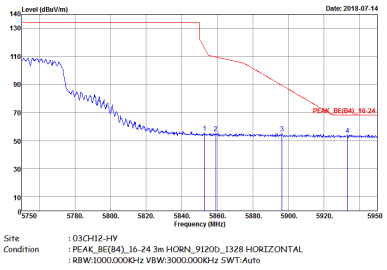
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1+2	Vertical	Fundamental
Peak		
Peak		Left blank

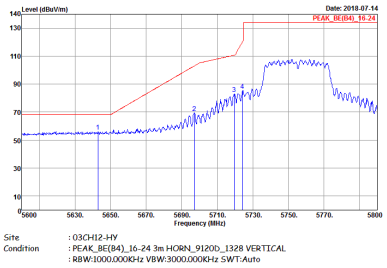
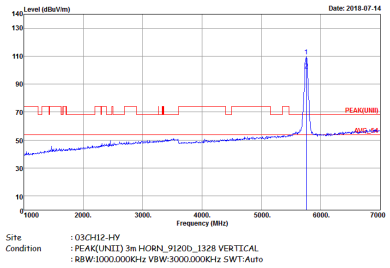
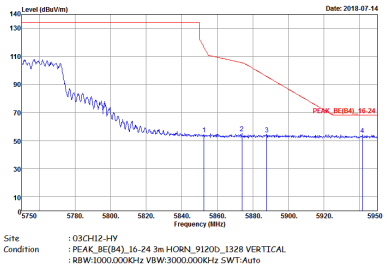
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
1+2	Horizontal	Fundamental
Peak		

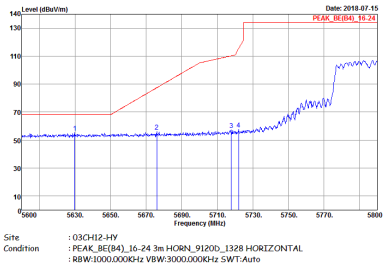
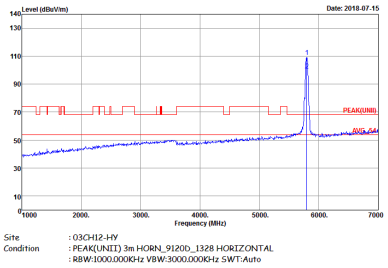
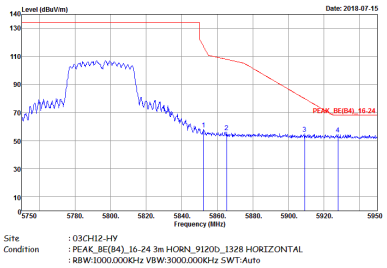
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
1+2	Vertical	Fundamental
Peak Avg.		

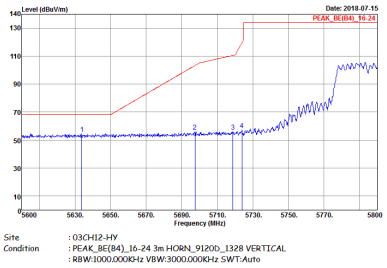
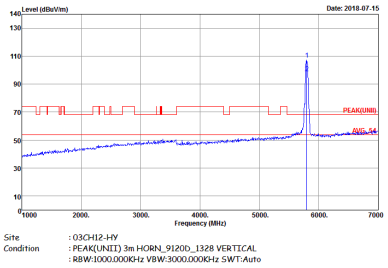
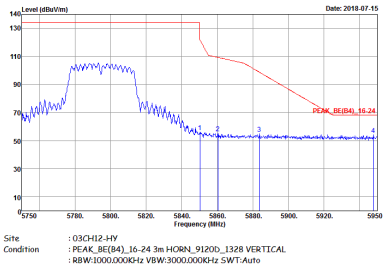
Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1+2	Horizontal	Fundamental
Peak		
Peak		Left blank

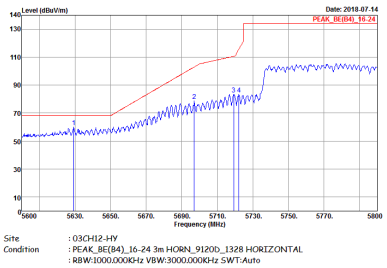
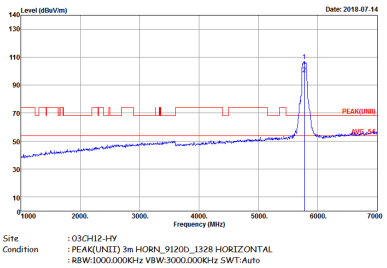
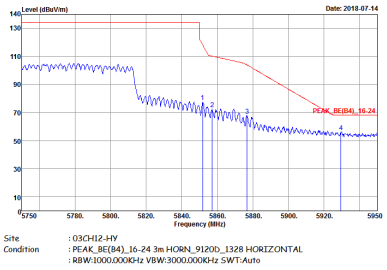
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1+2	Vertical	Fundamental
Peak		
Peak		Left blank

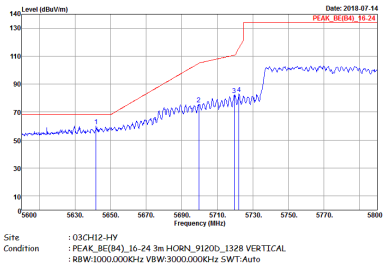
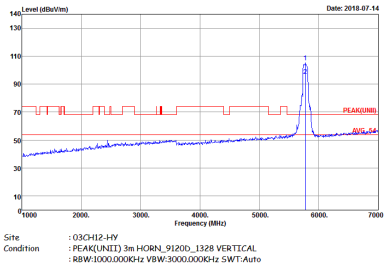
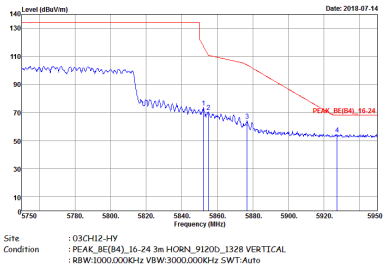
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1+2	Horizontal	Fundamental
Peak		
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1+2	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 5725~5850MHz

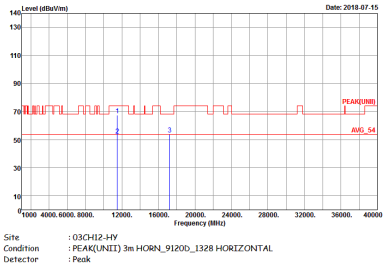
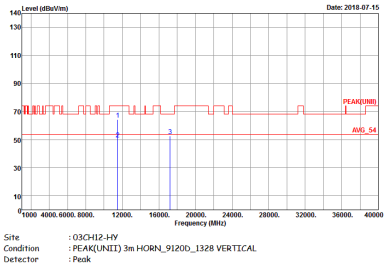
WIFI 802.11ac VHT80 (Band Edge @ 3m)

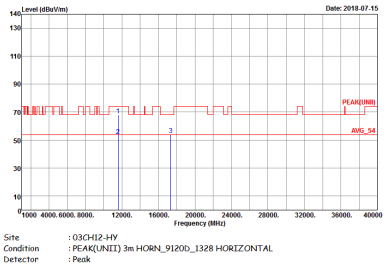
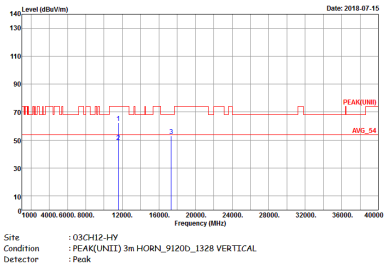
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1+2	Horizontal	Fundamental
Peak		
Peak		Left blank

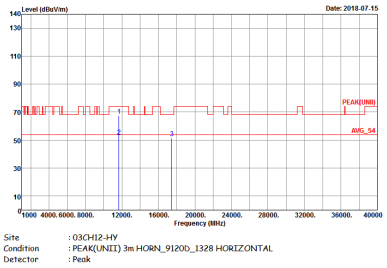
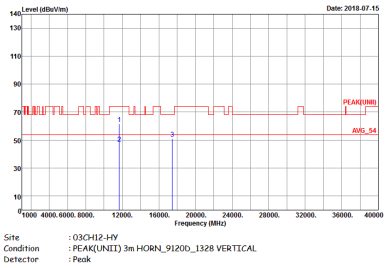
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1+2	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 - 5725~5850MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

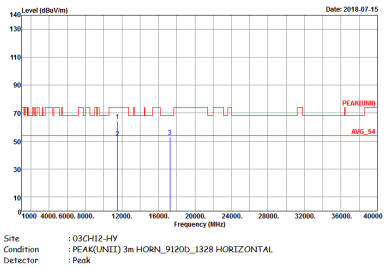
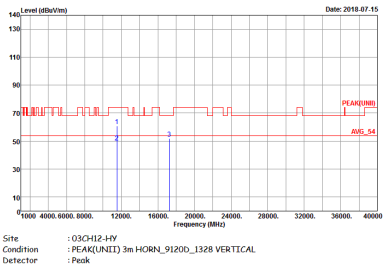
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
1+2	Horizontal	Vertical
Peak Avg.		

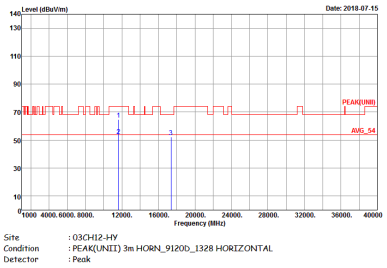
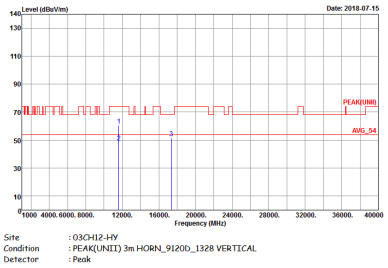
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
1+2	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz

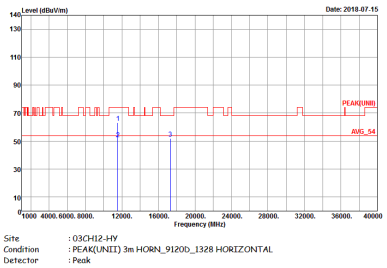
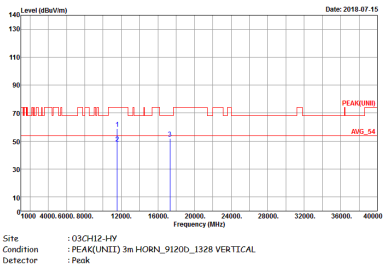
WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1+2	Horizontal	Vertical
Peak Avg.		

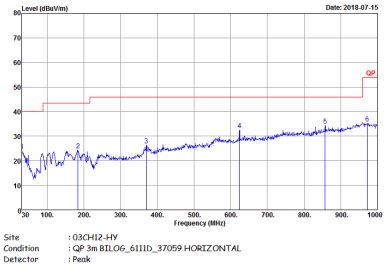
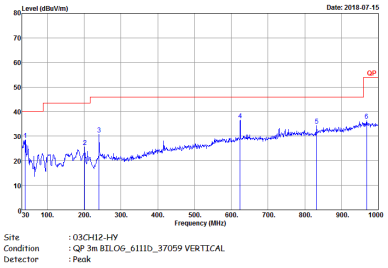
Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1+2	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

5GHz WIFI 802.11ac VHT20 (LF)

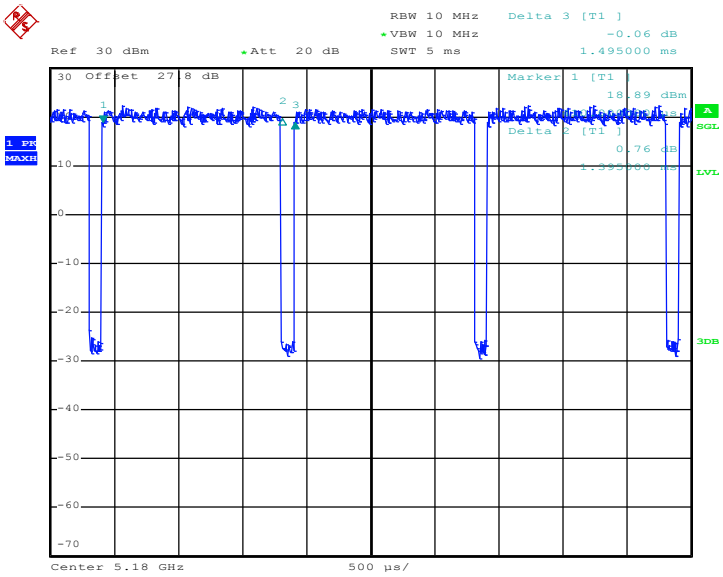
WIFI	5GHz 5725~5850MHz	
ANT	802.11ac VHT20 LF	
1+2	Horizontal	Vertical
QP / Peak		

Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
1	802.11a	93.31	1395.00	0.72	1kHz	0.30
2	802.11a	93.33	1400.00	0.71	1kHz	0.30
1+2	802.11a for Ant. 1	93.33	1400.00	0.71	1kHz	0.30
1+2	802.11a for Ant. 2	93.33	1400.00	0.71	1kHz	0.30
1	5GHz 802.11n HT20	92.91	1310.00	0.76	1kHz	0.32
2	5GHz 802.11n HT20	92.20	1300.00	0.77	1kHz	0.35
1+2	5GHz 802.11n HT20 for Ant. 1	92.91	1310.00	0.76	1kHz	0.32
1+2	5GHz 802.11n HT20 for Ant. 2	92.91	1310.00	0.76	1kHz	0.32
1	5GHz 802.11n HT40	85.33	640.00	1.56	3kHz	0.69
2	5GHz 802.11n HT40	85.33	640.00	1.56	3kHz	0.69
1+2	5GHz 802.11n HT40 for Ant. 1	86.58	645.00	1.55	3kHz	0.63
1+2	5GHz 802.11n HT40 for Ant. 2	85.43	645.00	1.55	3kHz	0.68
1	5GHz 802.11ac VHT20	92.25	1310.00	0.76	1kHz	0.35
2	5GHz 802.11ac VHT20	92.96	1320.00	0.76	1kHz	0.32
1+2	5GHz 802.11ac VHT20 for Ant. 1	92.96	1320.00	0.76	1kHz	0.32
1+2	5GHz 802.11ac VHT20 for Ant. 2	92.25	1310.00	0.76	1kHz	0.35
1	5GHz 802.11ac VHT40	86.09	650.00	1.54	3kHz	0.65
2	5GHz 802.11ac VHT40	85.53	650.00	1.54	3kHz	0.68
1+2	5GHz 802.11ac VHT40 for Ant. 1	85.53	650.00	1.54	3kHz	0.68
1+2	5GHz 802.11ac VHT40 for Ant. 2	85.53	650.00	1.54	3kHz	0.68
1	5GHz 802.11ac VHT80	76.42	324.00	3.09	10kHz	1.17
2	5GHz 802.11ac VHT80	76.19	320.00	3.13	10kHz	1.18
1+2	5GHz 802.11ac VHT80 for Ant. 1	76.30	322.00	3.11	10kHz	1.17
1+2	5GHz 802.11ac VHT80 for Ant. 2	76.42	324.00	3.09	10kHz	1.17

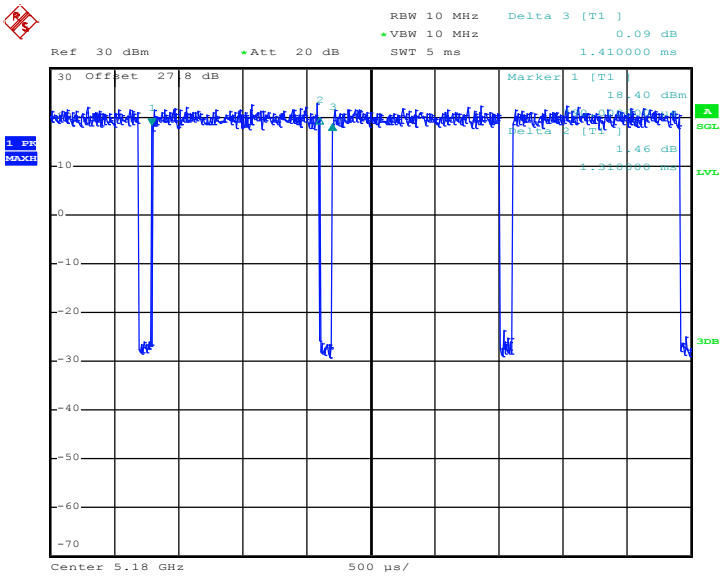
<Ant. 1>

802.11a



Date: 16.JUN.2018 01:20:09

802.11n HT20



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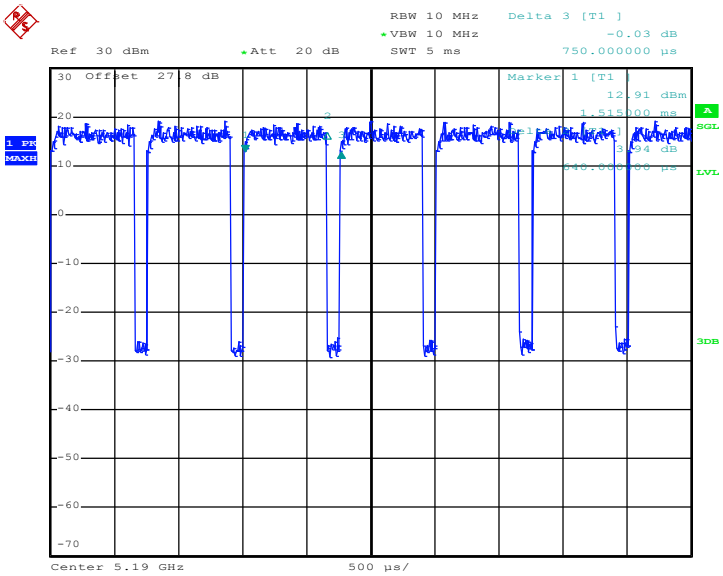
802.11n HT40



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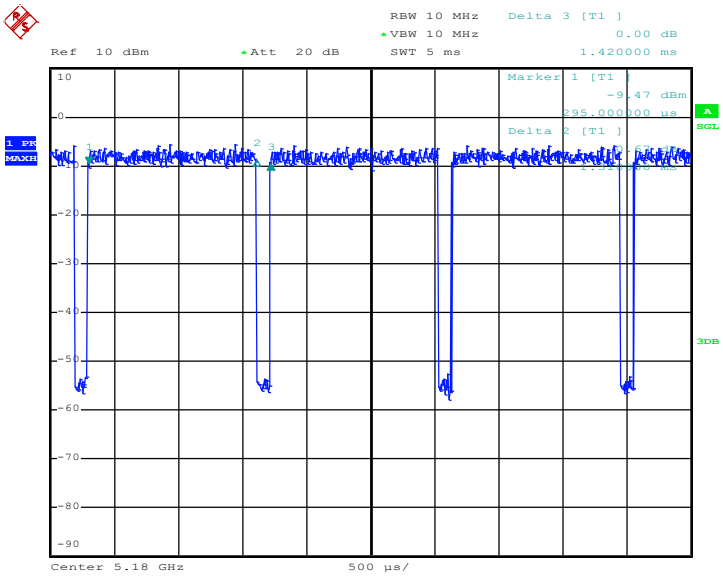
802.11ac VHT20



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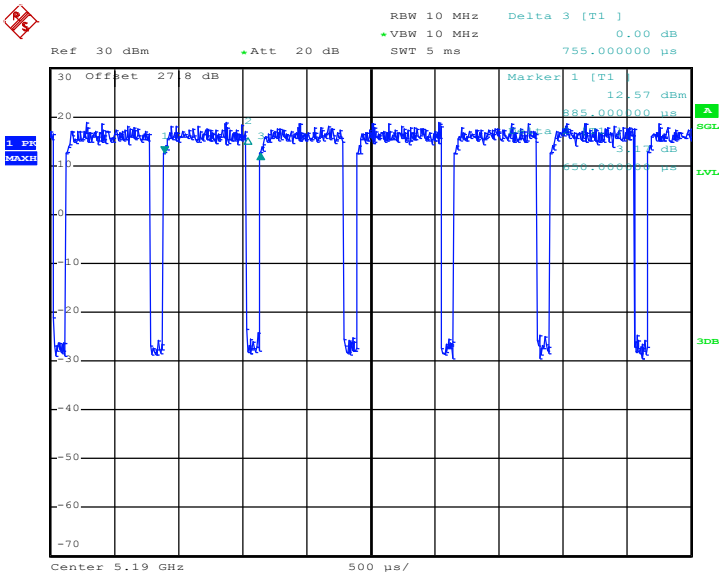
802.11ac VHT40



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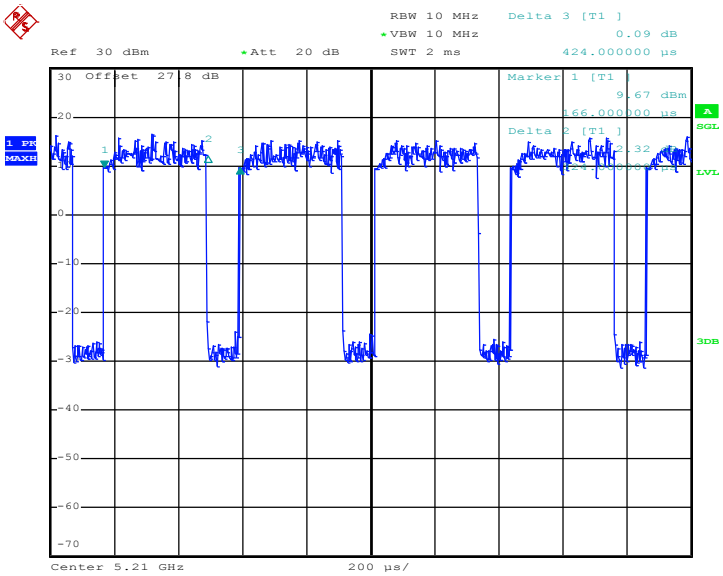
802.11ac VHT80



Date: 16.JUN.2018 01:04:04

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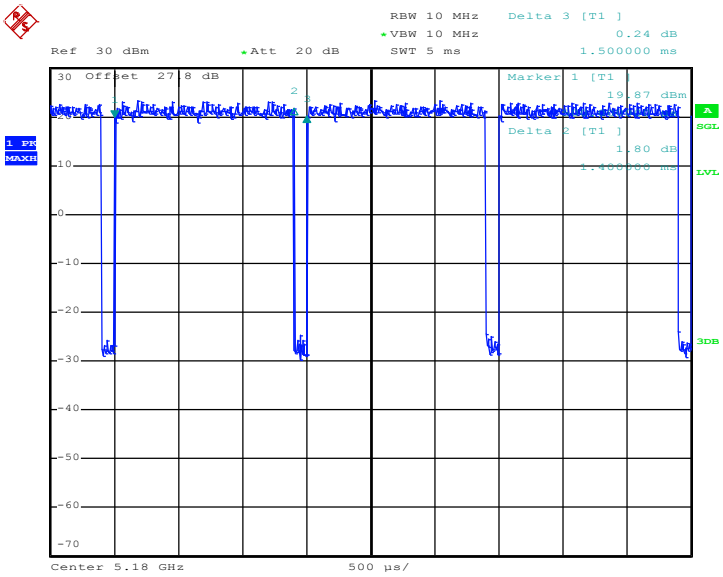
802.11a



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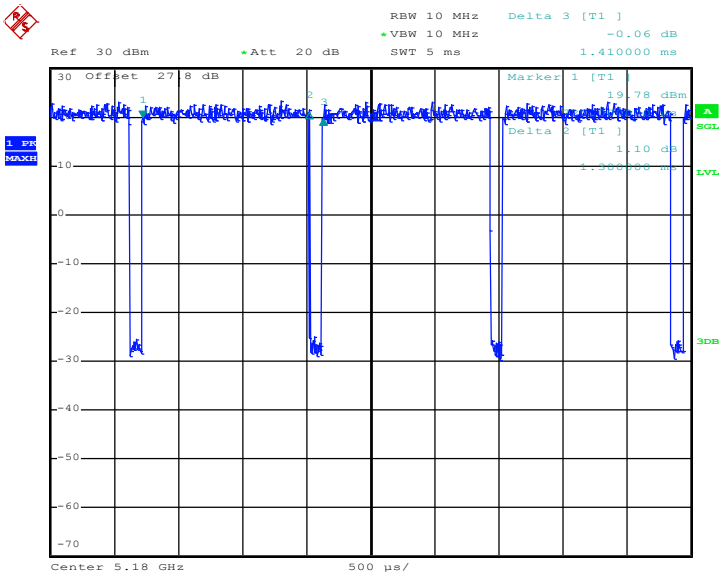
802.11n HT20



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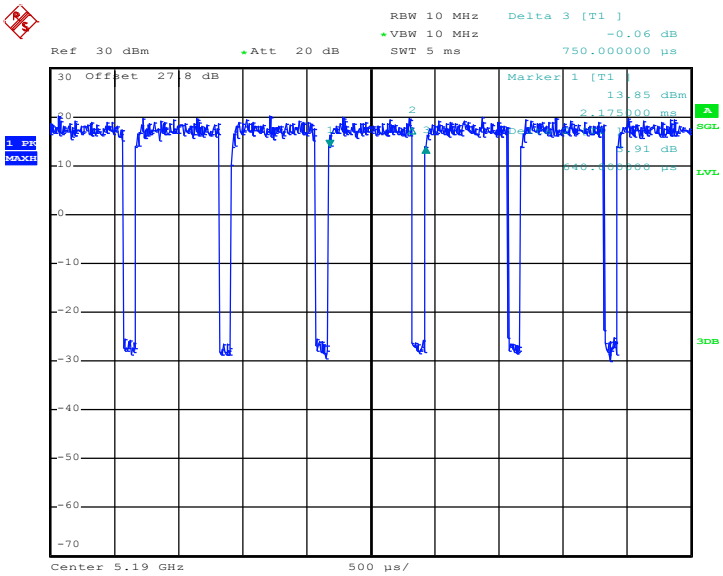
802.11n HT40



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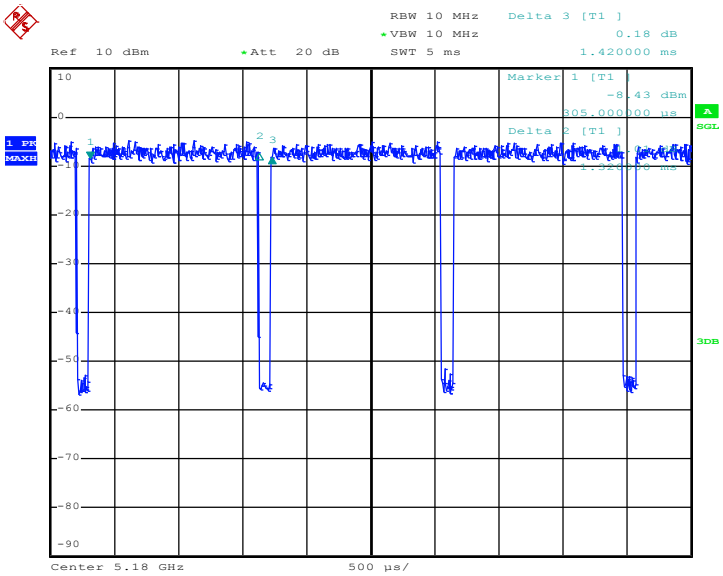
802.11ac VHT20



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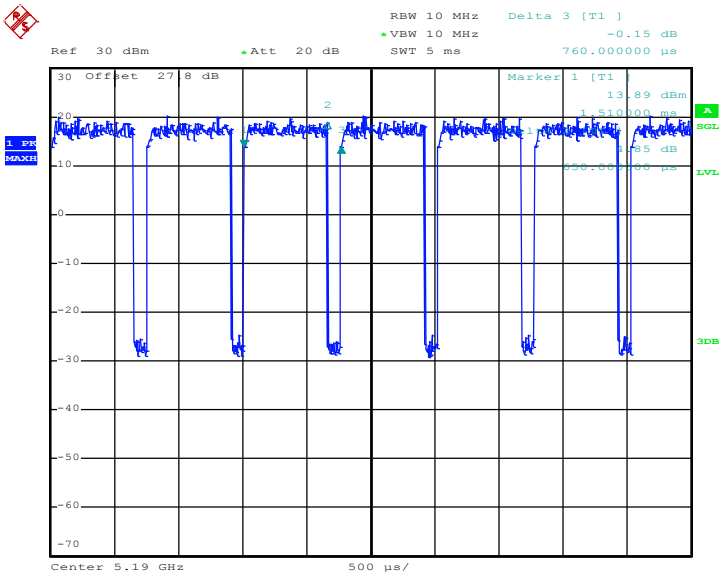
802.11ac VHT40



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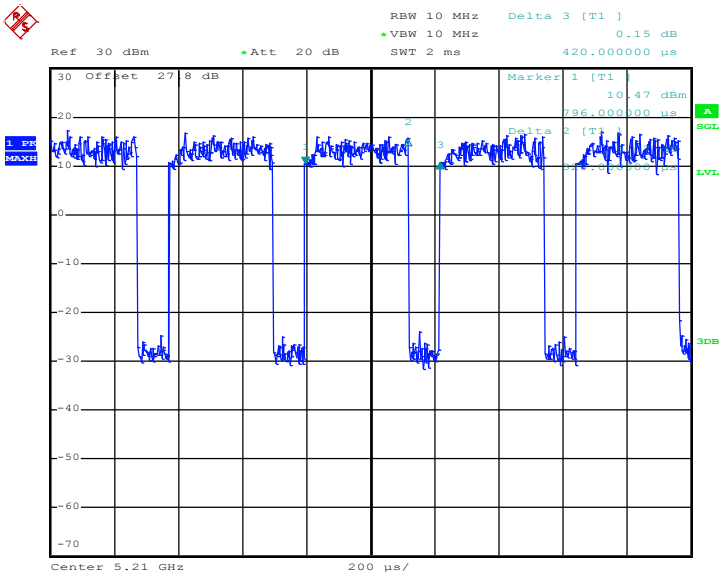
802.11ac VHT80



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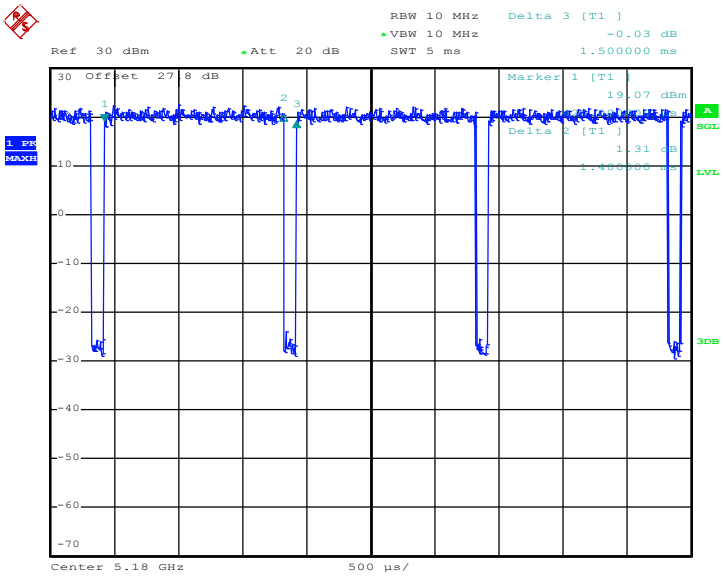
MIMO<Ant. 1>

802.11a



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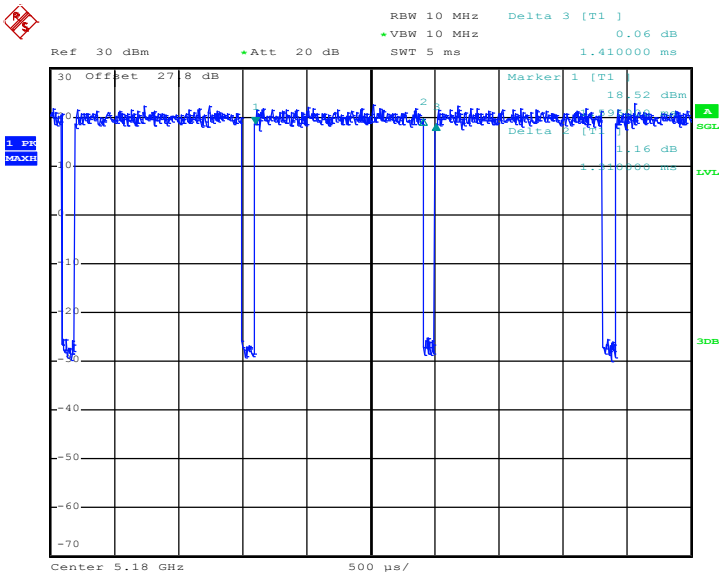
802.11n HT20



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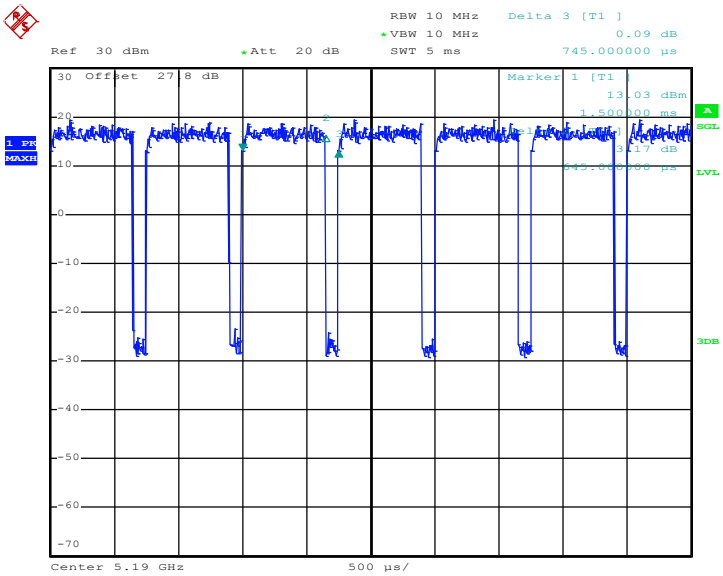
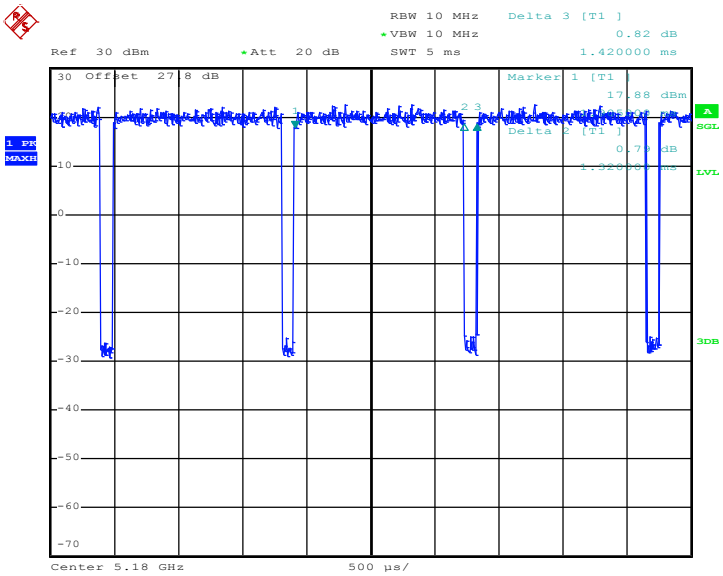
802.11n HT40



Date: 16.JUN.2018 01:11:31

802.11ac VHT20



Date: 16.JUN.2018 01:17:37

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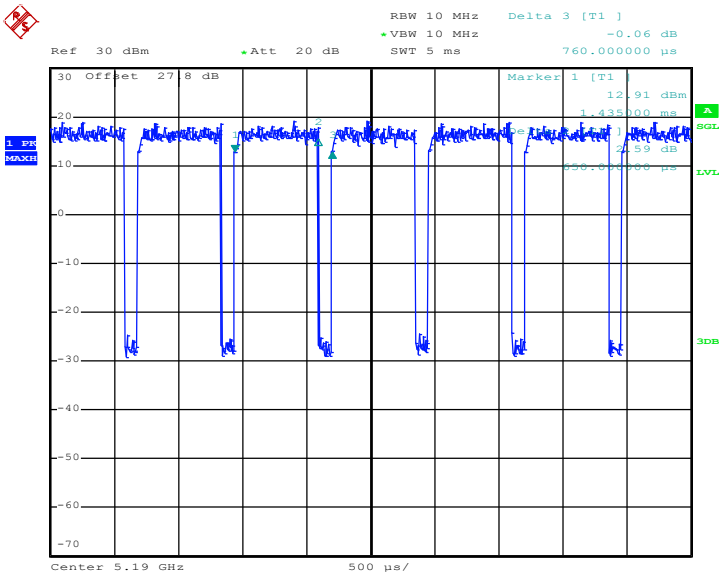
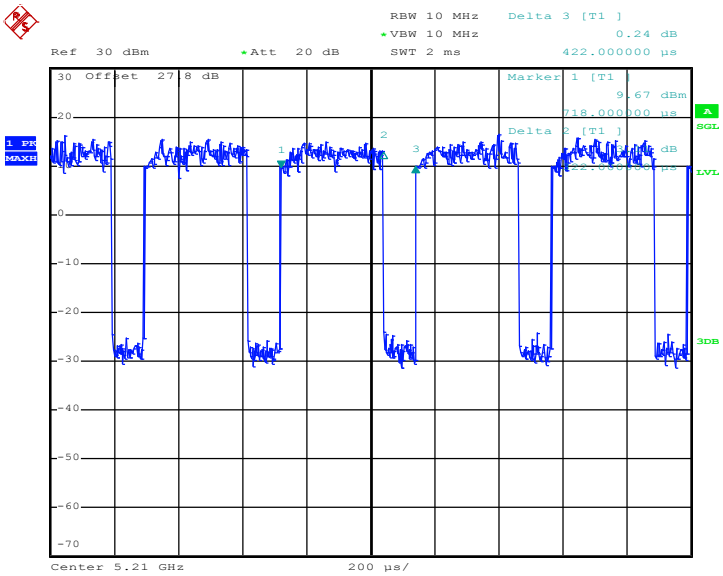


Date: 16.JUN.2018 01:08:11

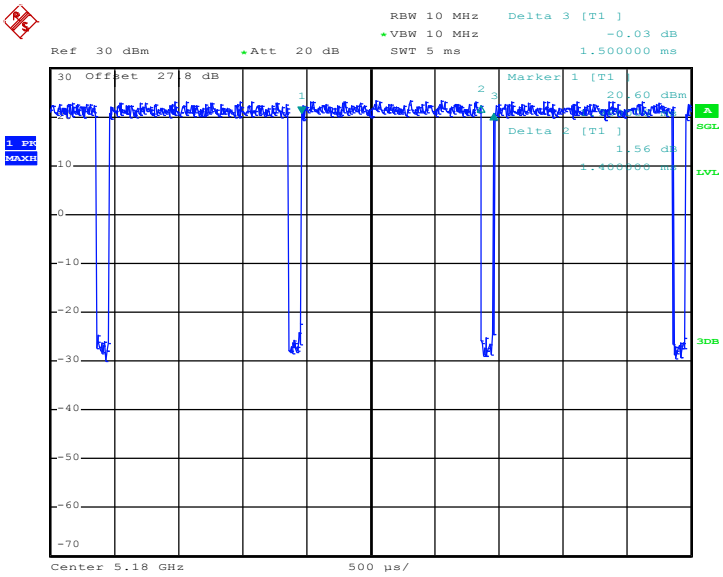
802.11ac VHT80



Date: 16.JUN.2018 01:03:06

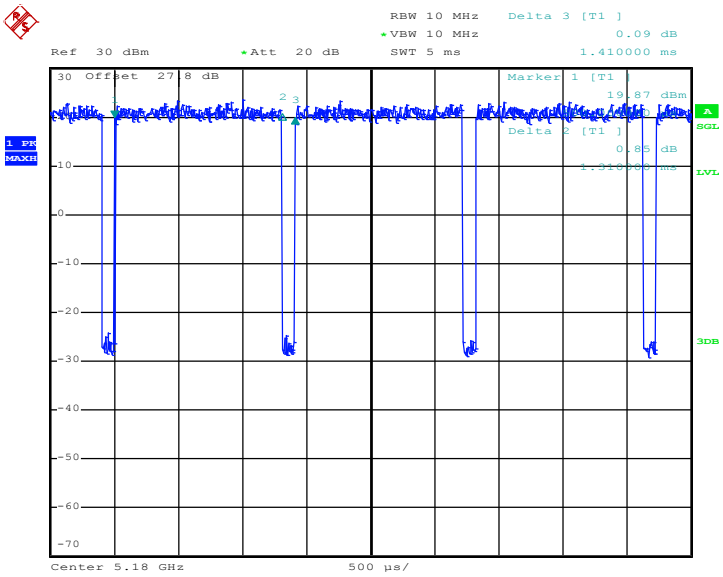
MIMO<Ant. 2>

802.11a



Date: 16.JUN.2018 01:22:42

802.11n HT20



Date: 16.JUN.2018 01:16:06

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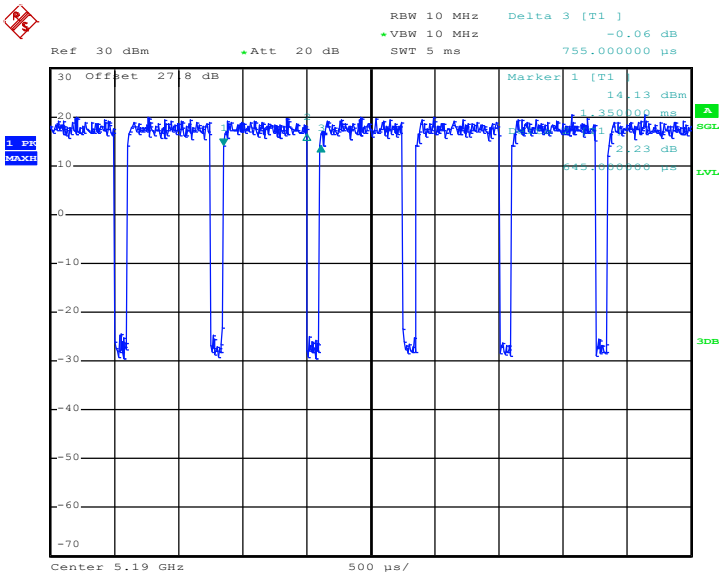

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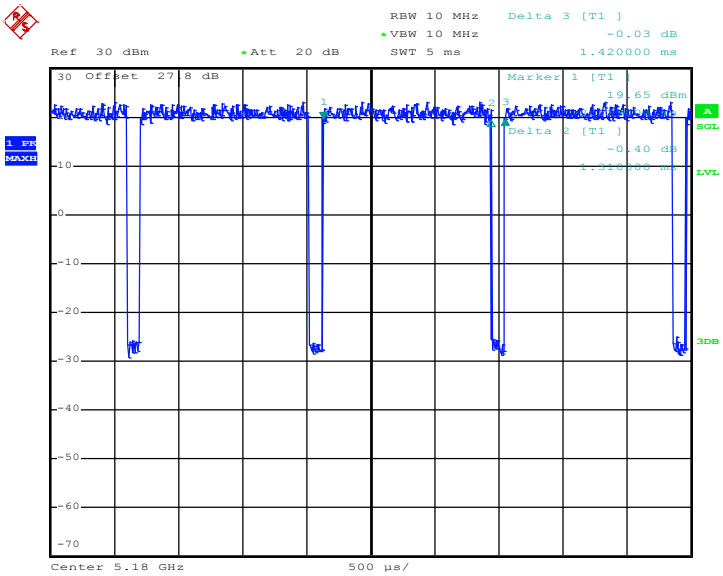

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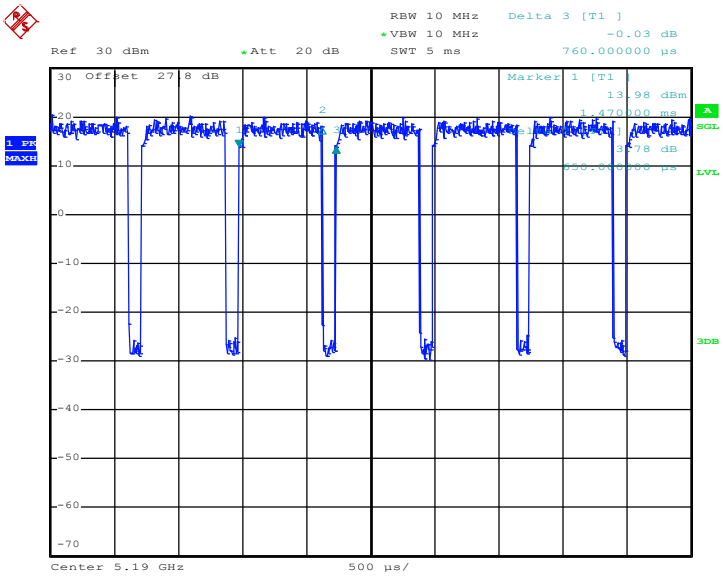
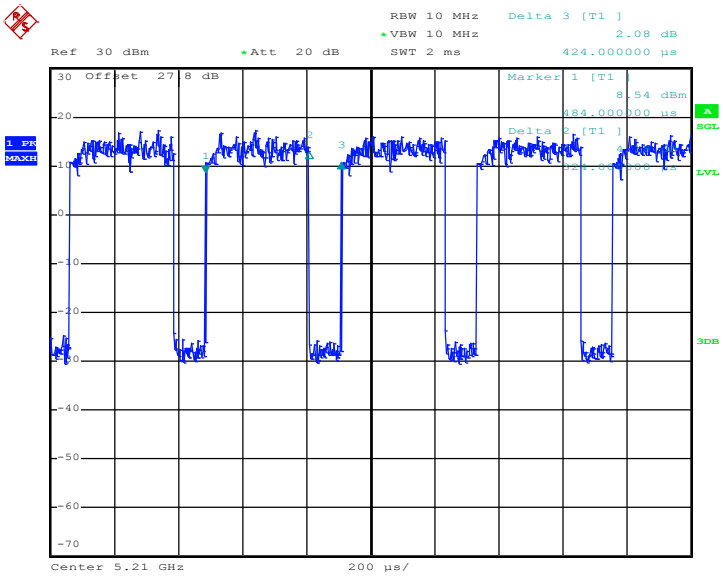


Date: 16.JUN.2018 01:09:11

802.11ac VHT80



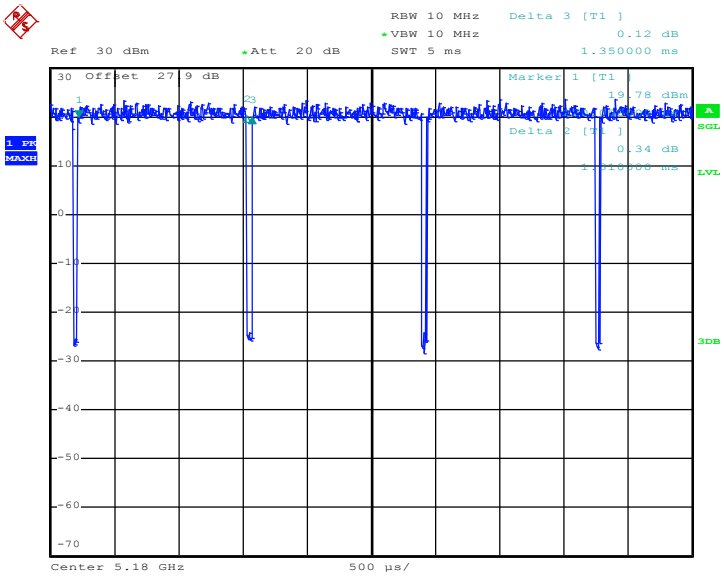
Date: 16.JUN.2018 01:02:31

<For TXBF Mode>

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
1+2	5GHz 802.11ac VHT20 for Ant. 1	97.04	1310.00	0.76	1kHz	0.13
1+2	5GHz 802.11ac VHT20 for Ant. 2	97.04	1310.00	0.76	1kHz	0.13
1+2	5GHz 802.11ac VHT40 for Ant. 1	94.78	654.00	1.53	3kHz	0.23
1+2	5GHz 802.11ac VHT40 for Ant. 2	94.74	648.00	1.54	3kHz	0.23
1+2	5GHz 802.11ac VHT80 for Ant. 1	89.01	324.00	3.09	10kHz	0.51
1+2	5GHz 802.11ac VHT80 for Ant. 2	89.89	320.00	3.13	10kHz	0.46

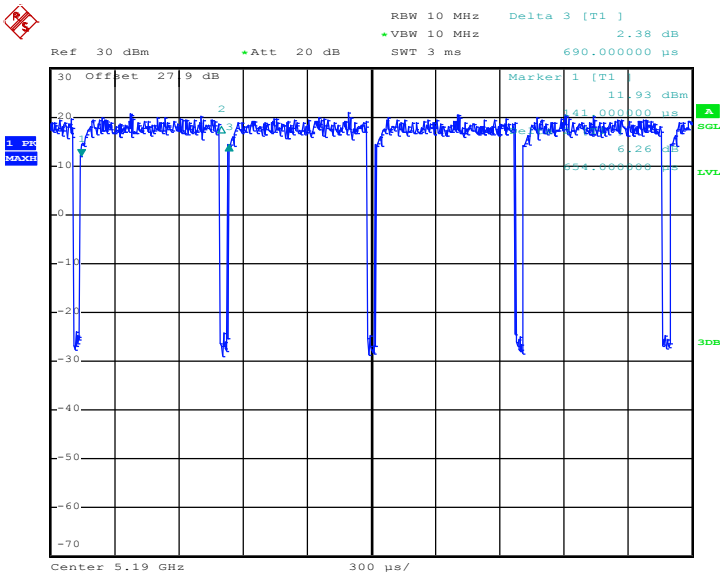
MIMO<Ant. 1>

802.11ac VHT20



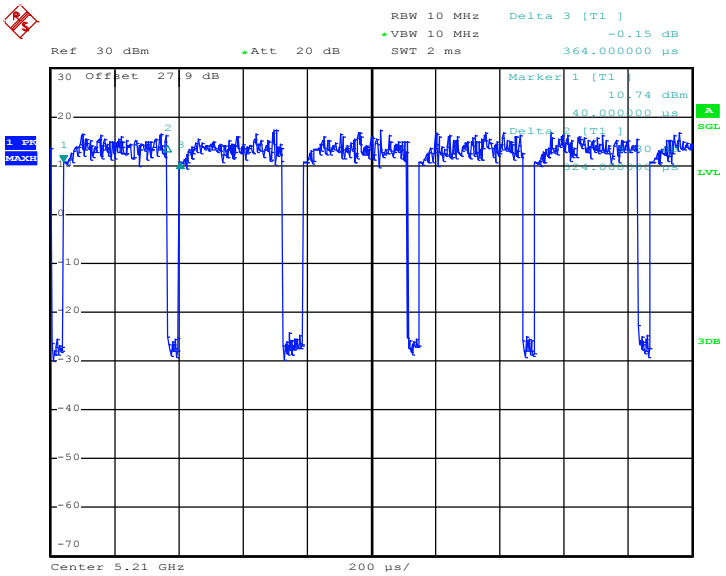
Date: 12.JUL.2018 09:16:09

802.11ac VHT40



Date: 12.JUL.2018 09:27:33

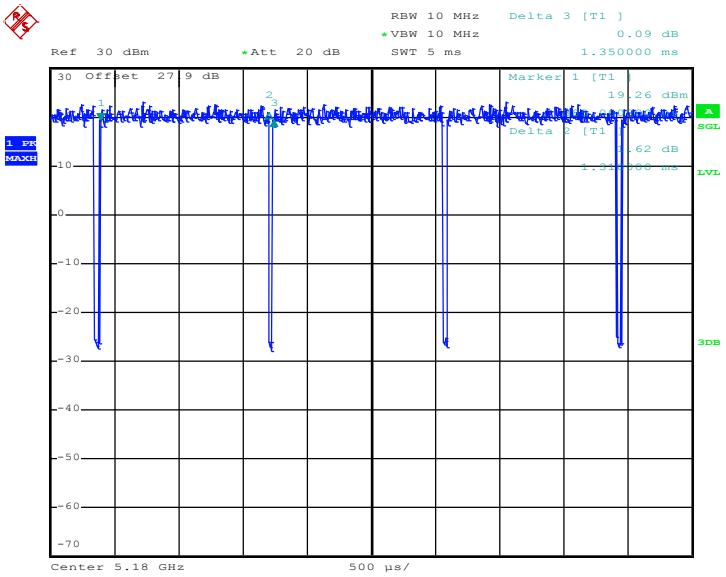
802.11ac VHT80



Date: 12.JUL.2018 09:33:50

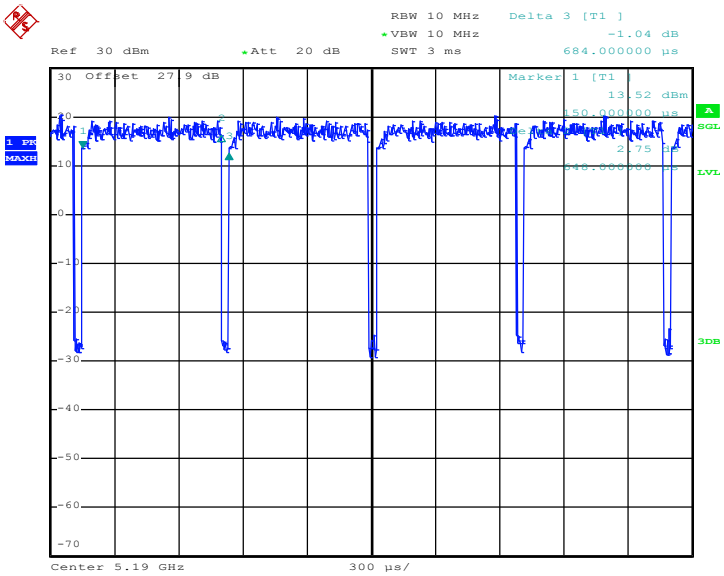
MIMO<Ant. 2>

802.11ac VHT20



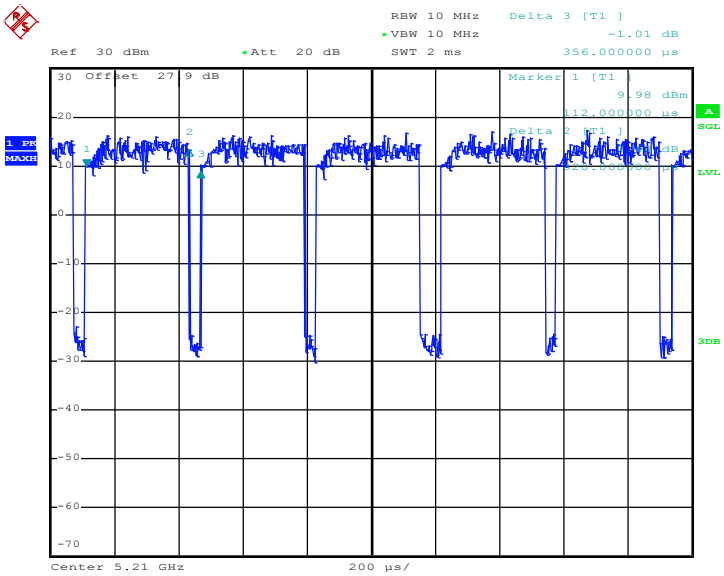
Date: 12.JUL.2018 09:18:00

802.11ac VHT40



Date: 12.JUL.2018 09:28:20

802.11ac VHT80



Date: 12.JUL.2018 09:35:20

THE END