FCC RADIO TEST REPORT

FCC ID	**:**	**2ASDU-7283**
Equipment	**:**	**Digital Media Streaming Device**
Model name	**:**	**A78V3N**
Applicant	**:**	**Newly Invented LLC** **16701 Melford Blvd, Suite 400 Bowie, Maryland 20715**
Standard	**:**	**FCC Part 15 SUBPART E §15.407**

The product was completed on Apr. 18, 2019. We, SPORTON INTERNATIONAL INC., EMC & Wireless Communications Laboratory, 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 INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Jones Tsai

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

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FR8D0631-01E	01	Initial issue of report	Apr. 29, 2019

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

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Wii Chang
Report Producer: Yimin Ho

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Digital Media Streaming Device
Model Name	A78V3N
FCC ID	2ASDU-7283
EUT supports Radios application	WLAN b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE

1.2 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Channel Frequency Range	5745 MHz ~ 5825 MHz
Maximum Output Power to Antenna <CDD Modes>	**<Ant. 0>** 802.11a : 20.18 dBm / 0.1042 W 802.11n HT20 : 19.48 dBm / 0.0887 W 802.11n HT40 : 18.94 dBm / 0.0783 W 802.11ac VHT20: 18.55 dBm / 0.0716 W 802.11ac VHT40: 18.46 dBm / 0.0701 W 802.11ac VHT80: 16.03 dBm / 0.0401 W **<Ant. 1>** 802.11a : 19.85 dBm / 0.0966 W 802.11n HT20 : 19.85 dBm / 0.0966 W 802.11n HT40 : 19.28 dBm / 0.0847 W 802.11ac VHT20: 18.98 dBm / 0.0791 W 802.11ac VHT40: 18.98 dBm / 0.0791 W 802.11ac VHT80: 16.04 dBm / 0.0402 W **MIMO <Ant. 0 + 1>** 802.11a : 22.80 dBm / 0.1905 W 802.11n HT20 : 22.97 dBm / 0.1982 W 802.11n HT40 : 23.10 dBm / 0.2042 W 802.11ac VHT20: 22.90 dBm / 0.1950 W 802.11ac VHT40: 23.08 dBm / 0.2032 W 802.11ac VHT80: 18.48 dBm / 0.0705 W
Maximum Output Power <TXBF Modes>	**MIMO <Ant. 0 + 1>** 802.11ac VHT20: 23.02 dBm / 0.2004 W 802.11ac VHT40: 22.94 dBm / 0.1968 W 802.11ac VHT80: 20.76 dBm / 0.1191 W

<table>
<tr><th colspan="2">Standards-related Product Specification</th></tr>
<tr><td>99% Occupied Bandwidth
<CDD Modes></td><td><Ant. 0>
802.11a : 22.18 MHz
802.11n HT20 : 21.93 MHz
802.11n HT40 : 42.36 MHz
802.11ac VHT80 : 77.08 MHz
<Ant. 1>
802.11a : 27.22 MHz
802.11n HT20 : 27.32 MHz
802.11n HT40 : 60.24 MHz
802.11ac VHT80 : 77.32 MHz
MIMO <Ant. 0>
802.11a : 25.77 MHz
802.11n HT20 : 26.82 MHz
802.11n HT40 : 46.85 MHz
802.11ac VHT80 : 76.84 MHz
MIMO <Ant. 1>
802.11a : 26.57 MHz
802.11n HT20 : 26.87 MHz
802.11n HT40 : 56.14 MHz
802.11ac VHT80 : 77.20 MHz</td></tr>
<tr><td>99% Occupied Bandwidth
<TXBF Modes></td><td>MIMO <Ant. 0>
802.11ac VHT20 : 21.88 MHz
802.11ac VHT40 : 46.15 MHz
802.11ac VHT80 : 77.08 MHz
MIMO <Ant. 1>
802.11ac VHT20 : 22.48 MHz
802.11ac VHT40 : 45.45 MHz
802.11ac VHT80 : 76.96 MHz</td></tr>
<tr><td>Antenna Gain / Gain</td><td>Ant. 0: Fixed Internal Antenna with gain 3.0 dBi
Ant. 1: Fixed Internal Antenna with gain 5.2 dBi</td></tr>
<tr><td>Type of Modulation</td><td>802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)
802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)</td></tr>
<tr><td>Antenna Function Description</td><td>
<table>
<tr><th></th><th>Ant. 0</th><th>Ant. 1</th></tr>
<tr><td>802.11 a/n/ac</td><td>V</td><td>V</td></tr>
<tr><td>802.11 a/n/ac MIMO</td><td>V</td><td>V</td></tr>
<tr><td>802.11ac TXBF</td><td>V</td><td>V</td></tr>
</table>
</td></tr>
</table>

Note: MIMO Ant. 0+1 is a calculated result from sum of the power MIMO Ant. 0 and MIMO Ant. 1.

1.3 Modification of EUT

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

1.4 Testing Location

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.

FCC designation No.: TW1190 and TW0007

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 414788 D01 Radiated Test Site v01r01.
- 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

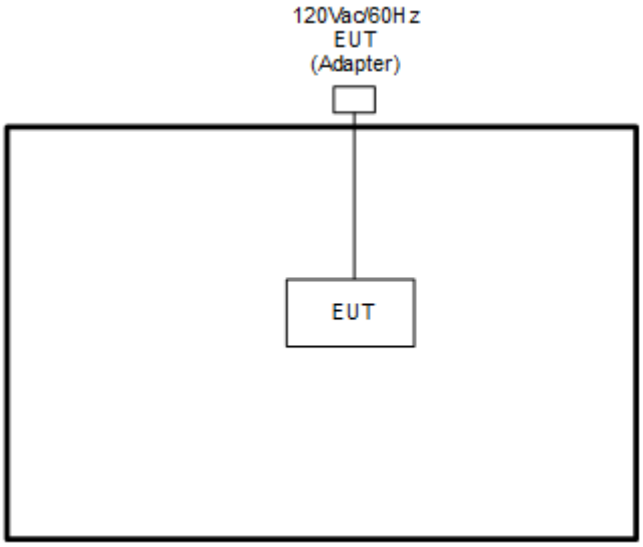
Modulation	Data Rate
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : WLAN (5GHz) Link + Bluetooth Link + LED On + 4K 60 10 bits + IR On + Adapter + HDMI + TV (Sony KD-55X85000D) + TV Resolution (4K 60Hz)

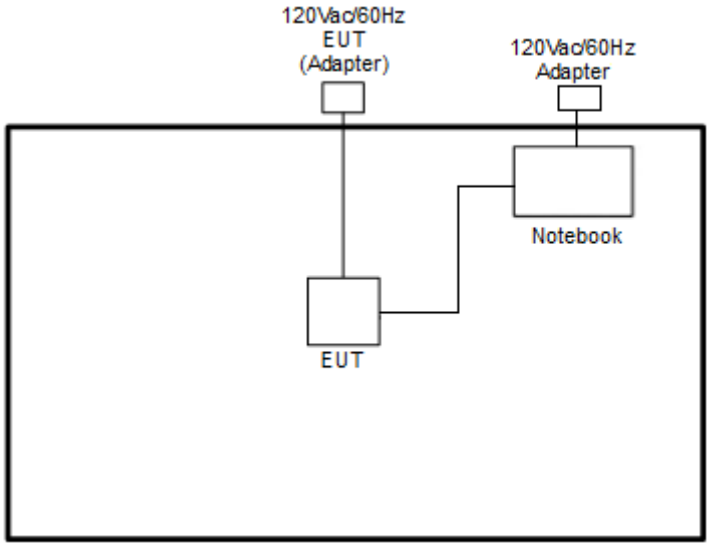
Ch. #		Band IV : 5725-5850 MHz			
		802.11a	802.11n HT20	802.11n HT40	802.11ac VHT80
L	Low	149	149	151	-
M	Middle	157	157	-	155
H	High	165	165	159	-

2.3 Connection Diagram of Test System

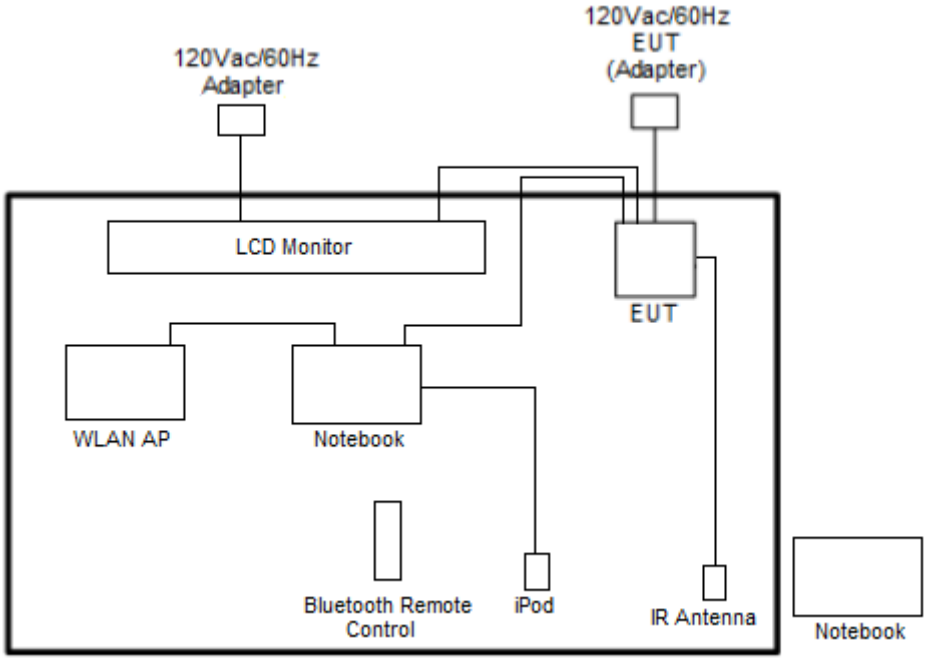
<CDD Mode>



<TXBF 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.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
2.	LCD Monitor	Sony	KD-55X8500D	FCC DoC	Shielded, 1.6 m	Unshielded, 1.8 m
3.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
4.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
5.	Notebook	ASUS	P2430U	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
6.	Notebook	Lenovo	E335	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
7.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

2.5 EUT Operation Test Setup

The RF test items, utility “Compliance Tool” 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.

For TXBF mode, the modulation modes and data rates manipulated by the command lines in the engineering program made the EUT link to another EUT by power under the normal operation. The “adb” software tool was used to enable the EUT to transmit signals continuously.

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.

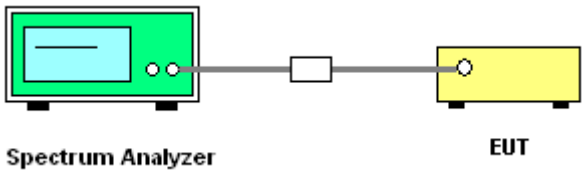
3.1.2 Measuring Instruments

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

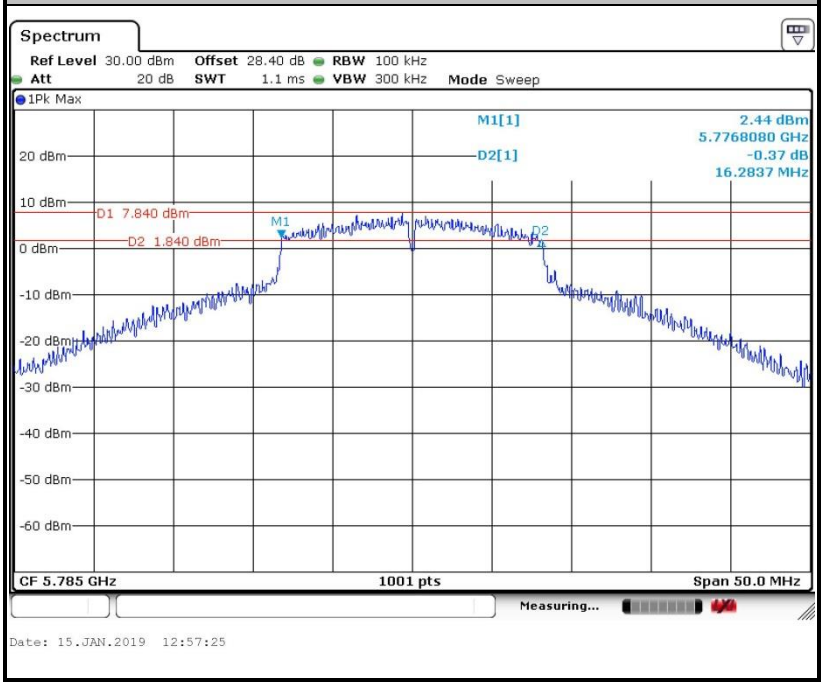


3.1.5 Test Result of 6dB and 26dB and 99% Occupied Bandwidth

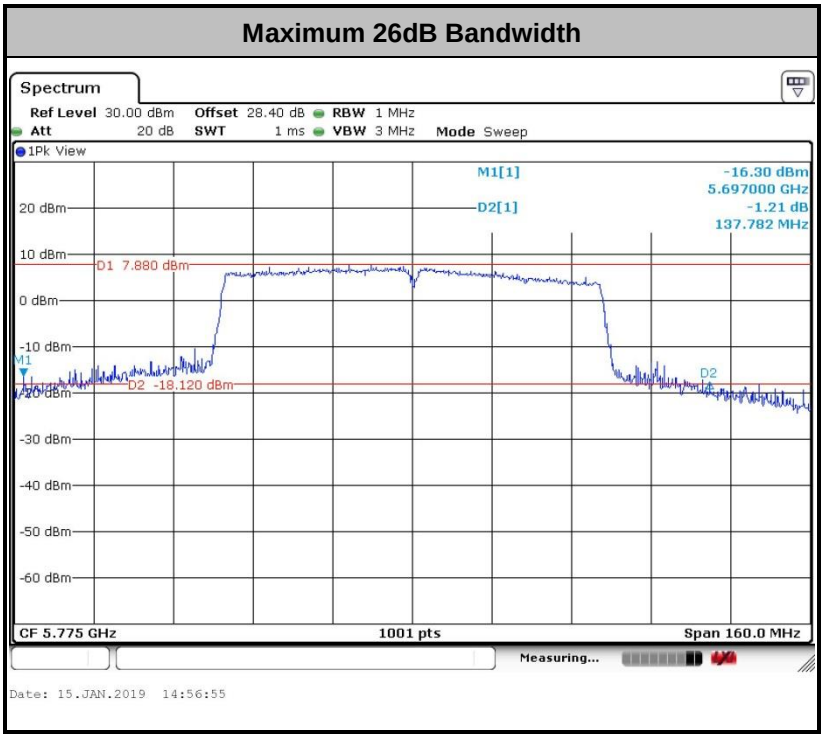
Please refer to Appendix A.

<CDD Mode>

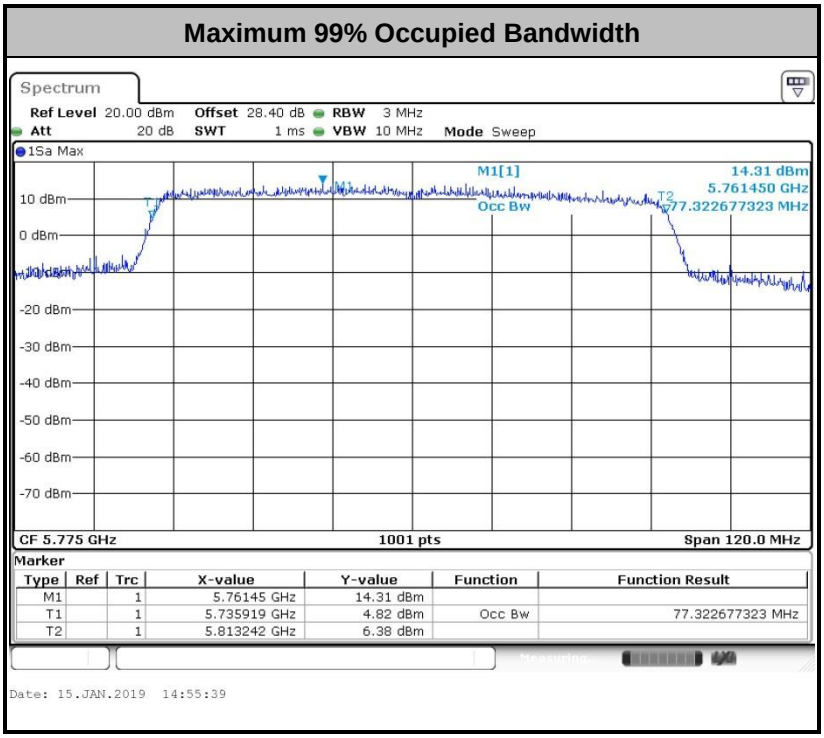
Minimum 6dB Bandwidth



Maximum 26dB Bandwidth



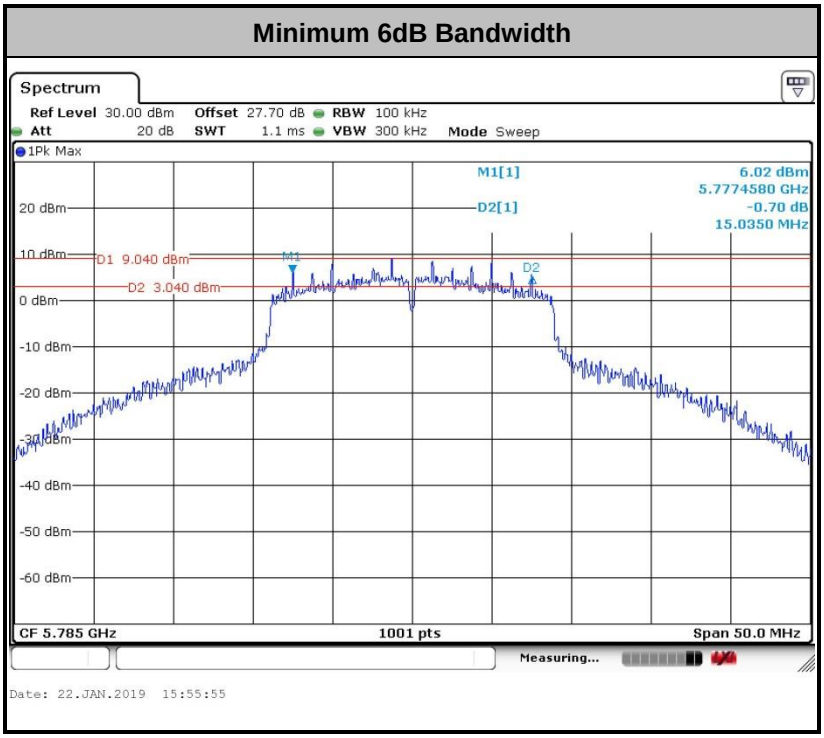
Maximum 99% Occupied Bandwidth



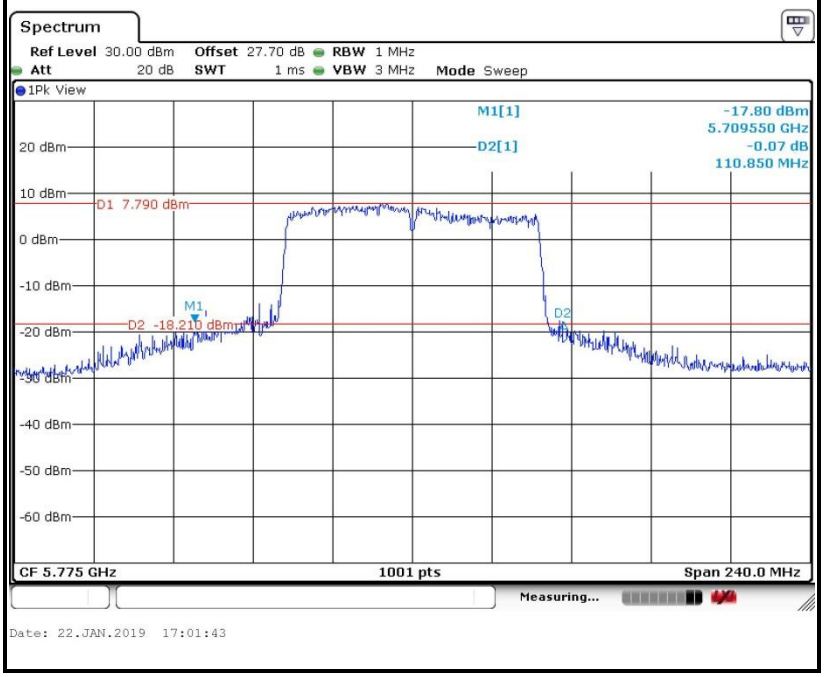
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<TXBF Modes>

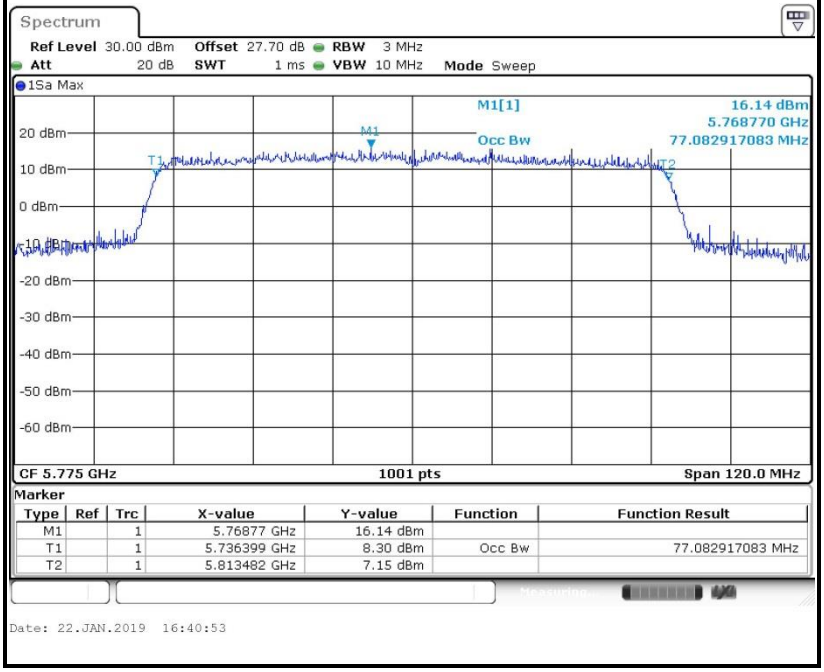
Minimum 6dB Bandwidth



Maximum 26dB Bandwidth



Maximum 99% Occupied Bandwidth



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

<CDD Modes>

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.

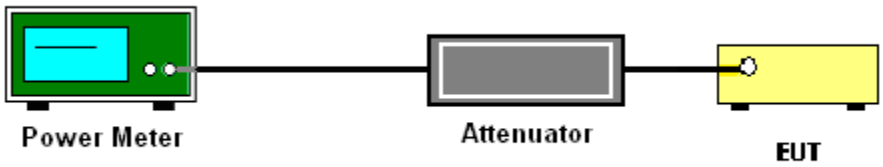
<TXBF Modes>

The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01 for TXBF modes.

Method PM-G (Measurement using a gated RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

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.

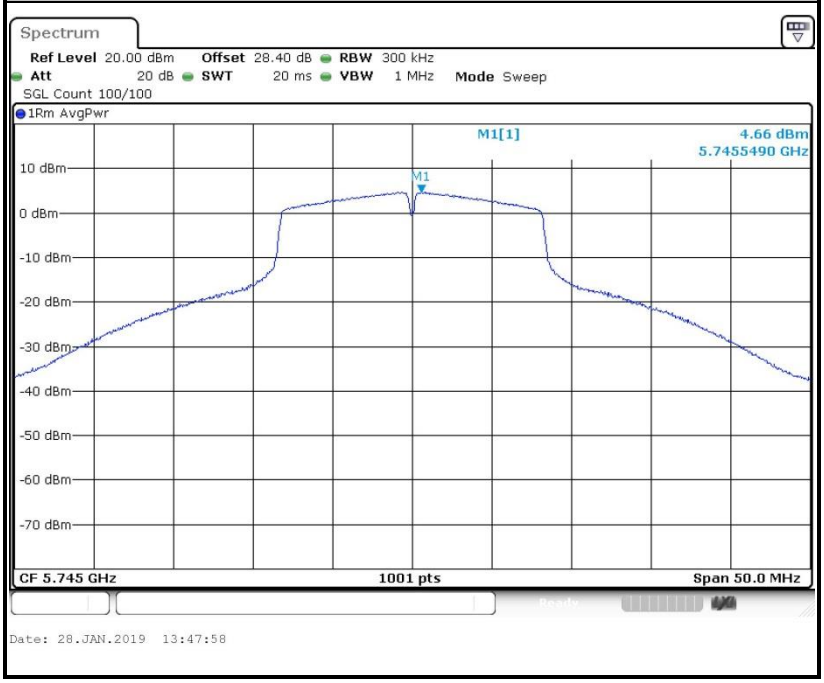
3.3.4 Test Setup

3.3.5 Test Result of Power Spectral Density

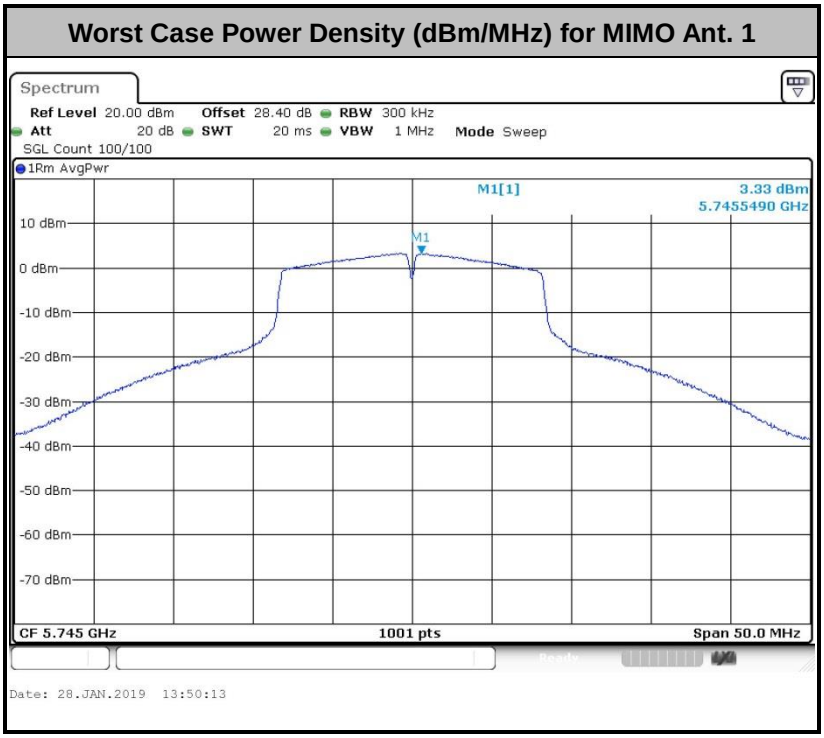
Please refer to Appendix A.

<CDD Modes>

Worst Case Power Density (dBm/MHz) for MIMO Ant. 0

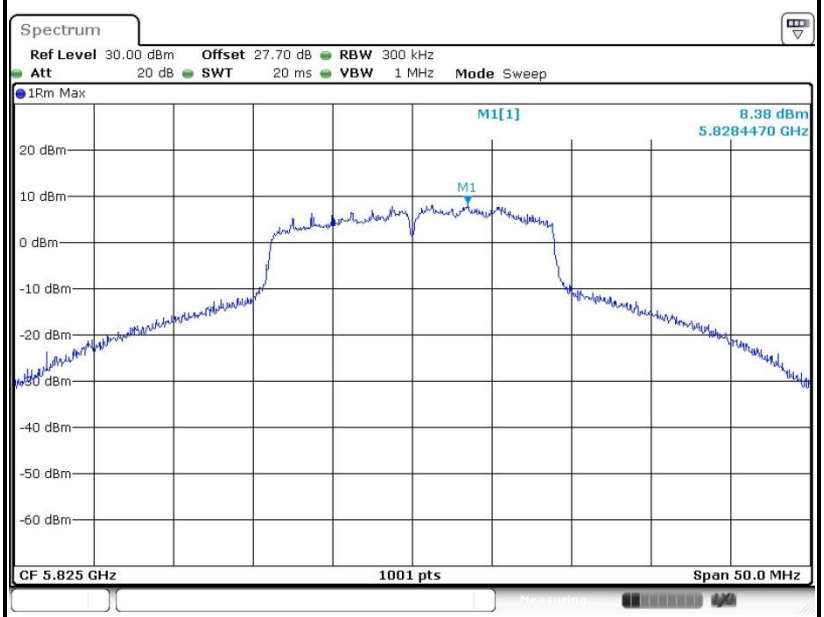


Worst Case Power Density (dBm/MHz) for MIMO Ant. 1

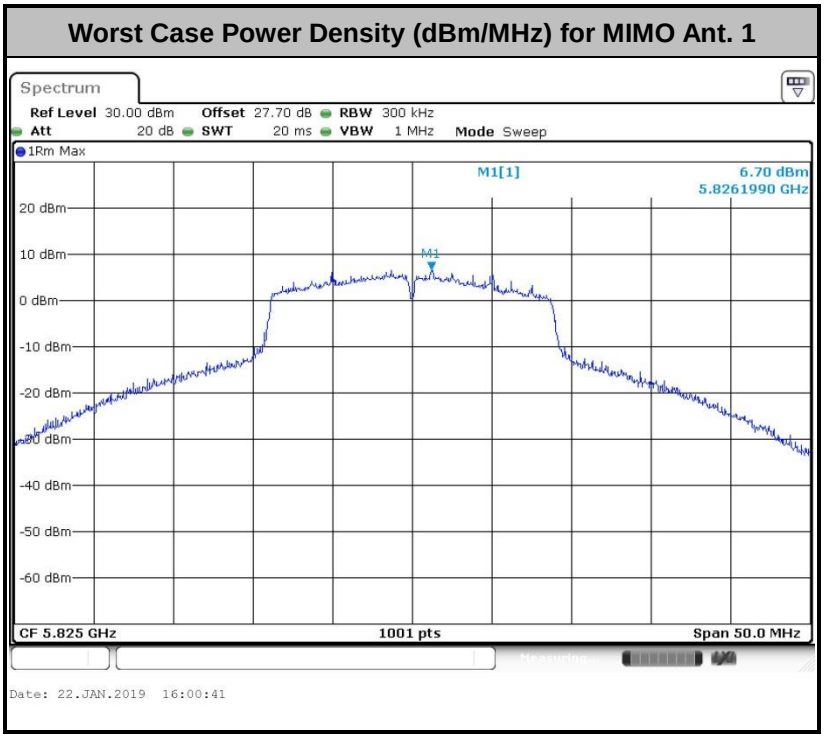


<TXBF Modes>

Worst Case Power Density (dBm/MHz) for MIMO Ant. 0



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



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

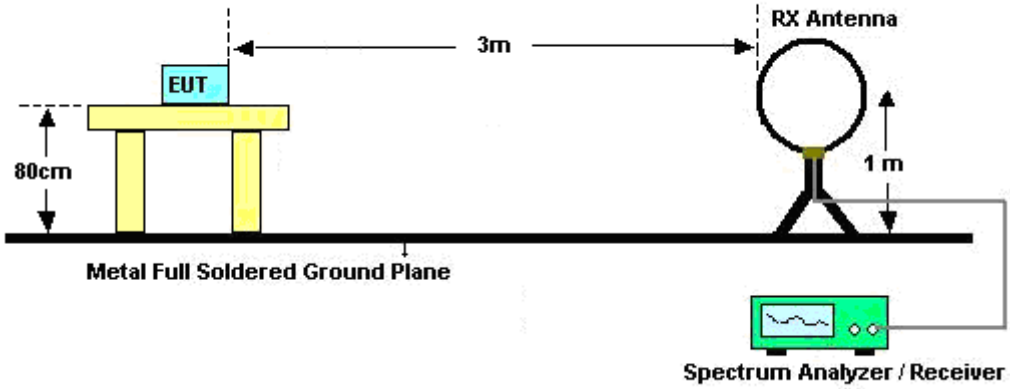
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

- 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.

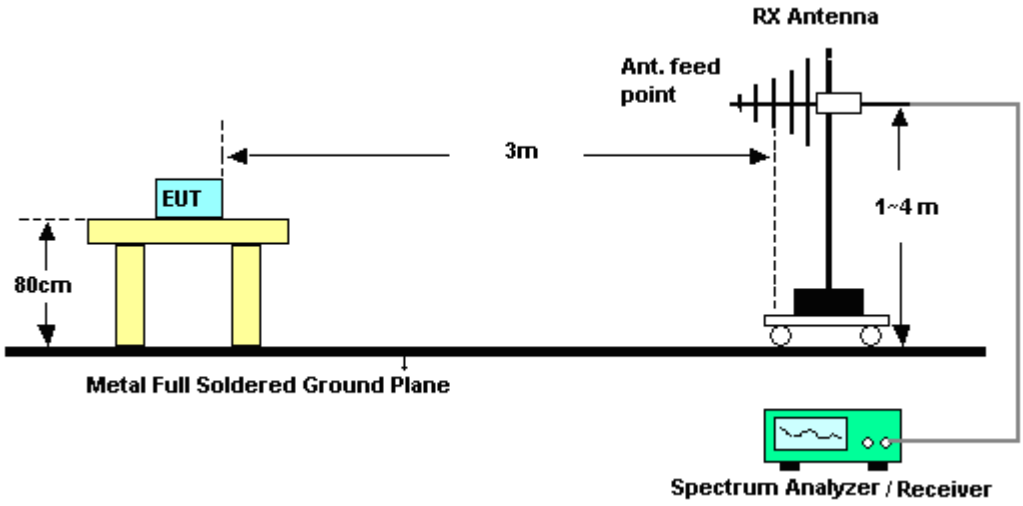
3.4.4 Test Setup

For radiated emissions below 30MHz

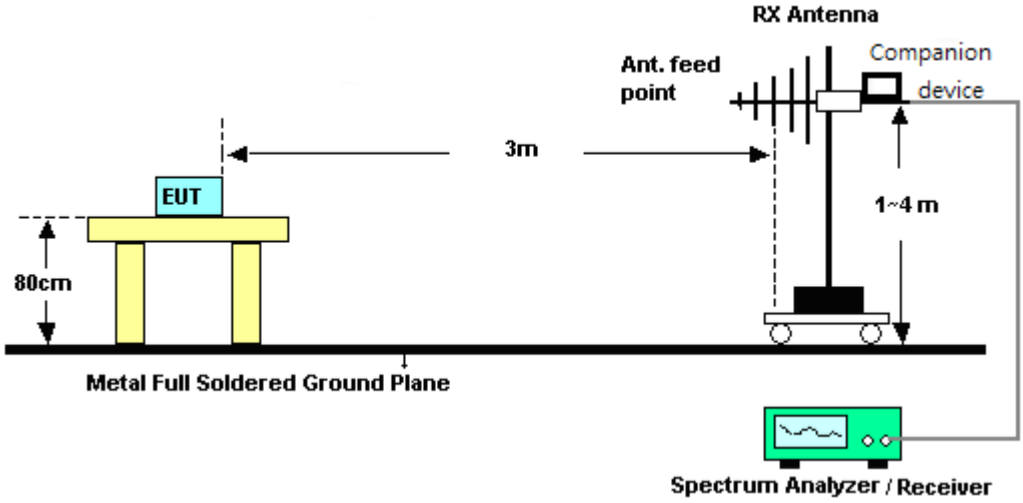


For radiated emissions from 30MHz to 1GHz

<CDD Mode>

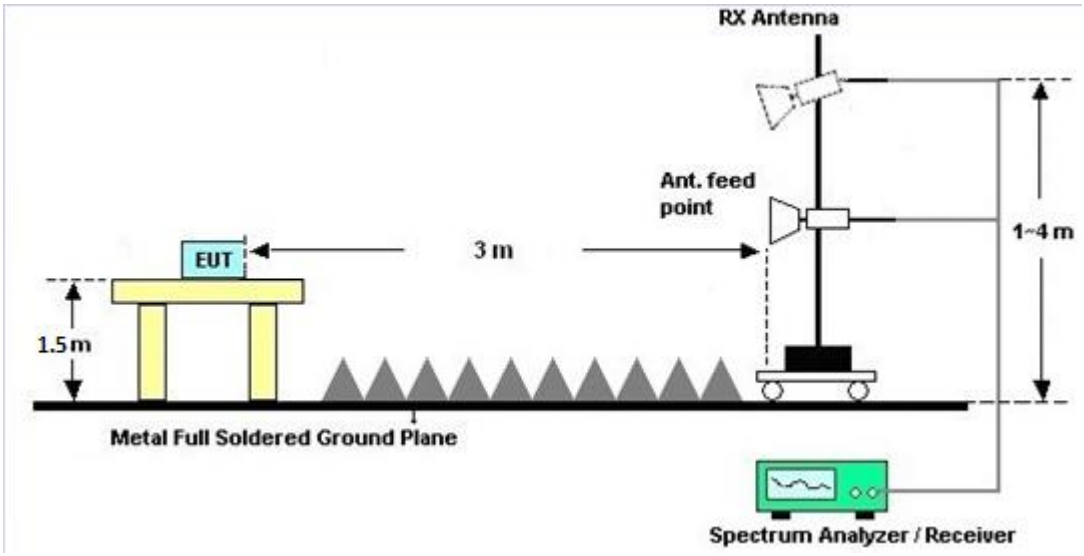


<TXBF Modes>

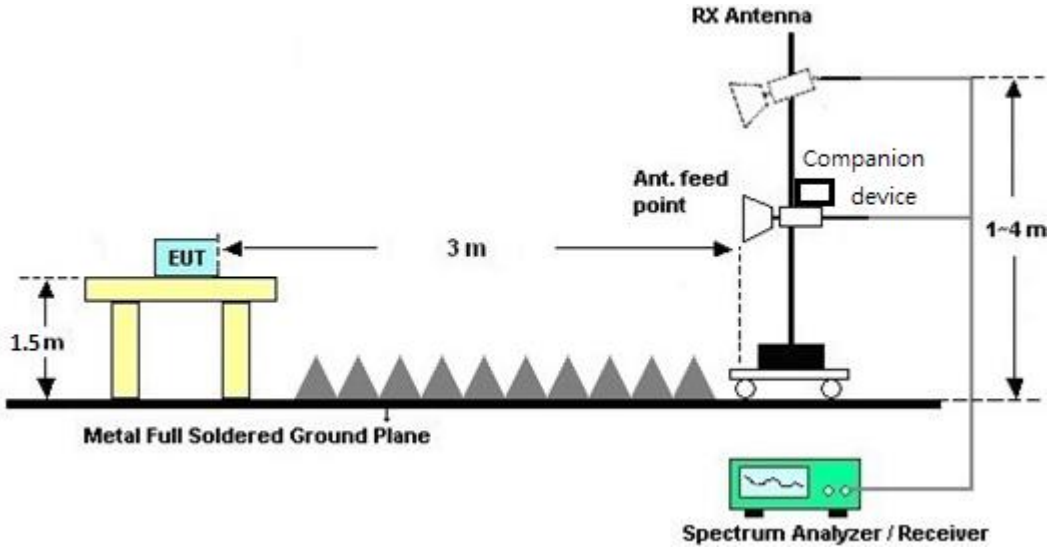


For radiated emissions above 1GHz

<CDD Mode>



<TXBF Modes>



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 alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, 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.

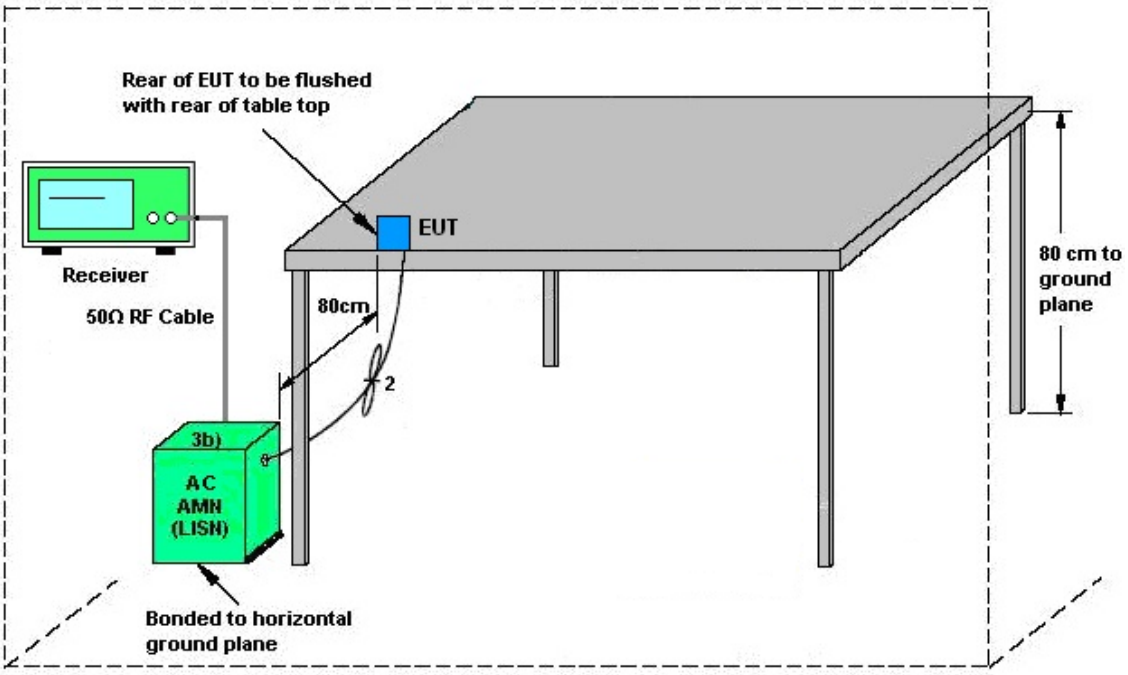
3.5.2 Measuring Instruments

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.

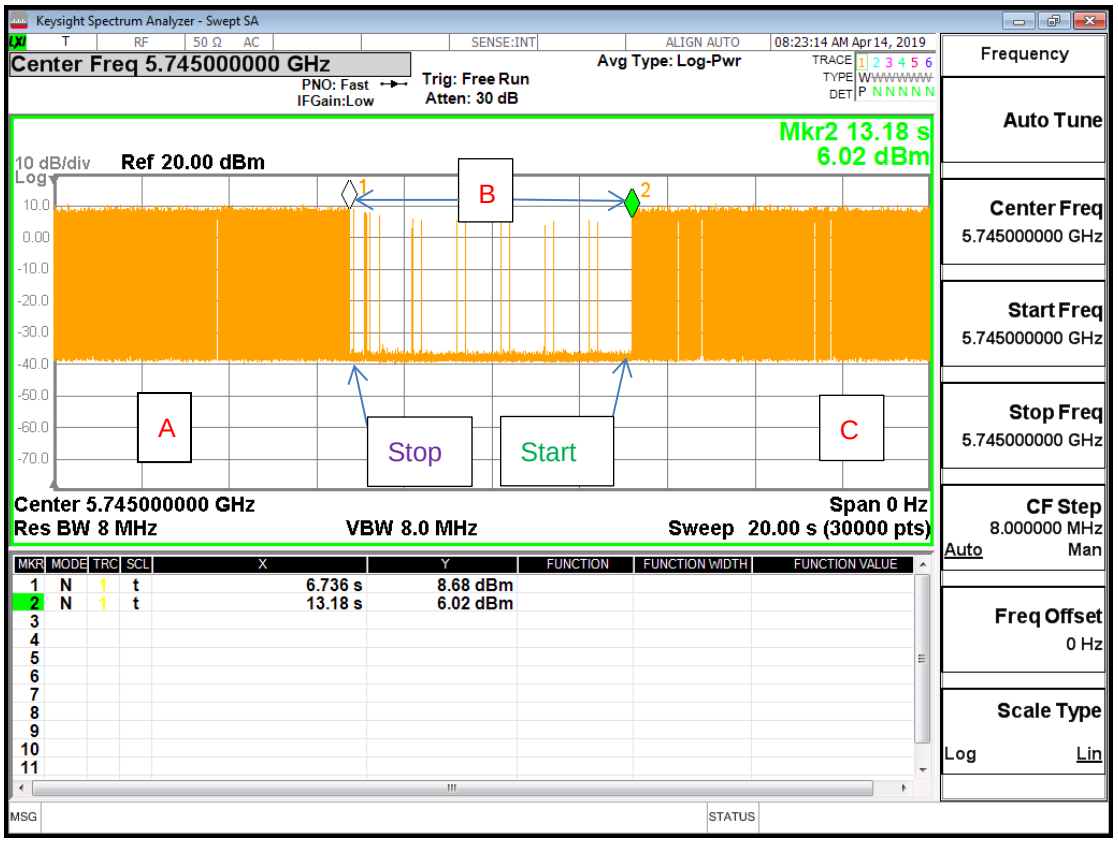
B. Information stop: stop supplying information to the access point.

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>

			DG for Power	DG for PSD	Power Limit Reduction	PSD Limit Reduction
	Ant. 0 (dBi)	Ant. 1 (dBi)	(dBi)	(dBi)	(dB)	(dB)
Band IV	3.00	5.20	5.20	7.18	0.00	1.18

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.

			DG for Power	DG for PSD	Power Limit Reduction	PSD Limit Reduction
	Ant 0 (dBi)	Ant 1 (dBi)	(dBi)	(dBi)	(dB)	(dB)
Band IV	3.00	5.20	7.18	7.18	1.18	1.18

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
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Mar. 18, 2019	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9KHz~3.6GHz	Nov. 12, 2018	Mar. 18, 2019	Nov. 11, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 14, 2018	Mar. 18, 2019	Nov. 13, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 09, 2018	Mar. 18, 2019	Nov. 08, 2019	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Mar. 18, 2019	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Dec. 31, 2018	Mar. 18, 2019	Dec. 30, 2019	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Dec. 31, 2018	Mar. 18, 2019	Dec. 30, 2019	Conduction (CO05-HY)
Loop Antenna	TESEQ	HLA 6120	31244	9 kHz~30 MHz	Mar. 29, 2018	Jan. 02, 2019~ Jan. 11, 2019	Mar. 28, 2019	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	37059&01	30MHz~1GHz	Oct. 13, 2018	Jan. 02, 2019~ Jan. 11, 2019	Oct. 12, 2019	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1328	1GHz ~ 18GHz	Oct. 19, 2018	Jan. 02, 2019~ Apr. 16, 2019	Oct. 18, 2019	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170576	18GHz ~ 40GHz	May 08, 2018	Jan. 02, 2019~ Apr. 16, 2019	May 07, 2019	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103	161075	10MHz~1GHz	Mar. 26, 2018	Jan. 02, 2019~ Jan. 11, 2019	Mar. 25, 2019	Radiation (03CH12-HY)
Preamplifier	Agilent	8449B	3008A02375	1GHz~26.5GHz	May 28, 2018	Jan. 02, 2019~ Apr. 16, 2019	May 27, 2019	Radiation (03CH12-HY)
Preamplifier	Jet-Power	JPA0118-55-303K	1710001800054002	1GHz~18GHz	Apr. 17, 2018	Jan. 02, 2019~ Jan. 11, 2019	Apr. 16, 2019	Radiation (03CH12-HY)
Preamplifier	Jet-Power	JPA0118-55-303	1710001800054001	1GHz~18GHz	Apr. 16, 2018	Mar. 25, 2019~ Mar. 28, 2019	Apr. 15, 2019	Radiation (03CH12-HY)
Preamplifier	Jet-Power	JPA0118-55-303	1710001800054001	1GHz~18GHz	Apr. 15, 2019	Apr. 16, 2019	Apr. 14, 2020	Radiation (03CH12-HY)
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	Aug. 24, 2018	Jan. 02, 2019~ Apr. 16, 2019	Aug. 23, 2019	Radiation (03CH12-HY)
EMI Test Receiver	Rohde & Schwarz	FSV30	103738	9kHz~30GHz	May 22, 2018	Jan. 02, 2019~ Apr. 16, 2019	May 21, 2019	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Jan. 02, 2019~ Apr. 16, 2019	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jan. 02, 2019~ Apr. 16, 2019	N/A	Radiation (03CH12-HY)
Software	Audix	E3 6.2009-8-24	RK-000989	N/A	N/A	Jan. 02, 2019~ Apr. 16, 2019	N/A	Radiation (03CH12-HY)
Spectrum Analyzer	Keysight	N9010A	MY56070412	10Hz~7GHz	Aug. 16, 2018	Apr. 18, 2019	Aug. 15, 2019	DFS (DFS02-HY)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
<CDD Mode>								
Power Meter	Anritsu	ML2495A	1218006	N/A	Oct. 08, 2018	Dec. 27, 2018~ Mar. 31, 2019	Oct. 07, 2019	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1207363	300MHz~40GHz	Oct. 08, 2018	Dec. 27, 2018~ Mar. 31, 2019	Oct. 07, 2019	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Nov. 21, 2018	Dec. 27, 2018~ Mar. 31, 2019	Nov. 20, 2019	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101397	10Hz~40GHz	Nov. 13, 2018	Dec. 27, 2018~ Mar. 31, 2019	Nov. 12, 2019	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC1300484	N/A	Apr. 17, 2018	Dec. 27, 2018~ Mar. 31, 2019	Apr. 16, 2019	Conducted (TH05-HY)
<TXBF Mode>								
Power Sensor	DARE	RPR3006W	16I00054SNO12	10MHz~6GHz	Dec. 27, 2018	Jan. 10, 2019~ Mar. 31, 2019	Dec. 26, 2019	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Nov. 21, 2018	Jan. 10, 2019~ Mar. 31, 2019	Nov. 20, 2019	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101397	10Hz~40GHz	Nov. 13, 2018	Jan. 10, 2019~ Mar. 31, 2019	Nov. 12, 2019	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC1300484	N/A	Apr. 17, 2018	Jan. 10, 2019~ Mar. 31, 2019	Apr. 16, 2019	Conducted (TH05-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.2**

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:	Leo Li	Temperature:	21~25	°C
Test Date:	2018/12/27~2019/3/31	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 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	149	5745	18.23	25.82	38.71	43.46	16.33	16.33	0.5	Pass
11a	6Mbps	1	157	5785	22.18	27.22	41.51	45.50	16.33	16.28	0.5	Pass
11a	6Mbps	1	165	5825	18.83	25.37	40.16	43.21	16.33	16.28	0.5	Pass
HT20	MCS0	1	149	5745	19.78	27.32	39.01	47.20	17.58	17.58	0.5	Pass
HT20	MCS0	1	157	5785	21.38	26.17	43.66	46.00	17.58	17.58	0.5	Pass
HT20	MCS0	1	165	5825	21.93	24.13	42.66	44.71	17.58	17.58	0.5	Pass
HT40	MCS0	1	151	5755	38.96	50.25	82.81	87.84	36.32	36.32	0.5	Pass
HT40	MCS0	1	159	5795	42.36	60.24	86.94	95.93	36.32	36.32	0.5	Pass
VHT80	MCS0	1	155	5775	77.08	77.32	123.72	137.78	76.24	76.40	0.5	Pass
11a	6Mbps	2	149	5745	21.98	23.98	41.01	40.26	16.38	16.33	0.5	Pass
11a	6Mbps	2	157	5785	25.77	26.57	43.51	44.50	16.33	16.38	0.5	Pass
11a	6Mbps	2	165	5825	24.98	25.77	43.31	43.81	16.33	16.33	0.5	Pass
HT20	MCS0	2	149	5745	22.78	26.47	43.41	46.55	17.58	17.58	0.5	Pass
HT20	MCS0	2	157	5785	26.82	26.82	47.00	47.95	17.58	17.58	0.5	Pass
HT20	MCS0	2	165	5825	26.22	26.87	45.70	46.25	17.63	17.58	0.5	Pass
HT40	MCS0	2	151	5755	45.95	56.14	85.77	95.51	36.32	36.32	0.5	Pass
HT40	MCS0	2	159	5795	46.85	55.74	88.20	93.72	36.23	36.32	0.5	Pass
VHT80	MCS0	2	155	5775	76.84	77.20	106.93	135.23	76.40	76.24	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 0	Ant 1	Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	1	149	5745	0.00	0.00	20.04	19.85		30.00	30.00	3.00	5.20	Pass
11a	6Mbps	1	157	5785	0.00	0.00	20.18	19.71		30.00	30.00	3.00	5.20	Pass
11a	6Mbps	1	165	5825	0.00	0.00	18.90	18.92		30.00	30.00	3.00	5.20	Pass
HT20	MCS0	1	149	5745	0.00	0.00	19.40	19.85		30.00	30.00	3.00	5.20	Pass
HT20	MCS0	1	157	5785	0.00	0.00	19.48	18.99		30.00	30.00	3.00	5.20	Pass
HT20	MCS0	1	165	5825	0.00	0.00	19.16	17.99		30.00	30.00	3.00	5.20	Pass
HT40	MCS0	1	151	5755	0.00	0.00	18.94	19.20		30.00	30.00	3.00	5.20	Pass
HT40	MCS0	1	159	5795	0.00	0.00	18.89	19.28		30.00	30.00	3.00	5.20	Pass
VHT20	MCS0	1	149	5745	0.00	0.00	18.55	18.74		30.00	30.00	3.00	5.20	Pass
VHT20	MCS0	1	157	5785	0.00	0.00	18.10	18.98		30.00	30.00	3.00	5.20	Pass
VHT20	MCS0	1	165	5825	0.00	0.00	18.30	18.47		30.00	30.00	3.00	5.20	Pass
VHT40	MCS0	1	151	5755	0.00	0.00	18.41	18.85		30.00	30.00	3.00	5.20	Pass
VHT40	MCS0	1	159	5795	0.00	0.00	18.46	18.98		30.00	30.00	3.00	5.20	Pass
VHT80	MCS0	1	155	5775	0.00	0.00	16.03	16.04		30.00	30.00	3.00	5.20	Pass
11a	6Mbps	2	149	5745	0.00	0.00	20.45	19.00	22.80	30.00		5.20		Pass
11a	6Mbps	2	157	5785	0.00	0.00	19.43	20.04	22.76	30.00		5.20		Pass
11a	6Mbps	2	165	5825	0.00	0.00	20.01	19.25	22.66	30.00		5.20		Pass
HT20	MCS0	2	149	5745	0.00	0.00	20.20	19.70	22.97	30.00		5.20		Pass
HT20	MCS0	2	157	5785	0.00	0.00	20.50	19.16	22.89	30.00		5.20		Pass
HT20	MCS0	2	165	5825	0.00	0.00	20.14	18.50	22.41	30.00		5.20		Pass
HT40	MCS0	2	151	5755	0.00	0.00	20.35	19.82	23.10	30.00		5.20		Pass
HT40	MCS0	2	159	5795	0.00	0.00	18.87	18.75	21.82	30.00		5.20		Pass
VHT20	MCS0	2	149	5745	0.00	0.00	20.15	19.61	22.90	30.00		5.20		Pass
VHT20	MCS0	2	157	5785	0.00	0.00	20.46	19.12	22.85	30.00		5.20		Pass
VHT20	MCS0	2	165	5825	0.00	0.00	20.10	18.47	22.37	30.00		5.20		Pass
VHT40	MCS0	2	151	5755	0.00	0.00	20.32	19.80	23.08	30.00		5.20		Pass
VHT40	MCS0	2	159	5795	0.00	0.00	18.85	18.72	21.80	30.00		5.20		Pass
VHT80	MCS0	2	155	5775	0.00	0.00	15.21	15.72	18.48	30.00		5.20		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 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	1	149	5745	0.00	0.00	2.22	2.22	6.47	6.28		30.00	30.00	3.00	5.20	Pass
11a	6Mbps	1	157	5785	0.00	0.00	2.22	2.22	6.48	6.27		30.00	30.00	3.00	5.20	Pass
11a	6Mbps	1	165	5825	0.00	0.00	2.22	2.22	5.62	5.43		30.00	30.00	3.00	5.20	Pass
HT20	MCS0	1	149	5745	0.00	0.00	2.22	2.22	6.00	6.32		30.00	30.00	3.00	5.20	Pass
HT20	MCS0	1	157	5785	0.00	0.00	2.22	2.22	6.06	5.40		30.00	30.00	3.00	5.20	Pass
HT20	MCS0	1	165	5825	0.00	0.00	2.22	2.22	5.74	4.61		30.00	30.00	3.00	5.20	Pass
HT40	MCS0	1	151	5755	0.00	0.00	2.22	2.22	2.20	2.54		30.00	30.00	3.00	5.20	Pass
HT40	MCS0	1	159	5795	0.00	0.00	2.22	2.22	2.10	2.20		30.00	30.00	3.00	5.20	Pass
VHT80	MCS0	1	155	5775	0.00	0.00	2.22	2.22	-3.98	-4.34		30.00	30.00	3.00	5.20	Pass
11a	6Mbps	2	149	5745	0.00	0.00	2.22		6.88	5.55	9.89	28.82		7.18		Pass
11a	6Mbps	2	157	5785	0.00	0.00	2.22		6.71	5.50	9.72	28.82		7.18		Pass
11a	6Mbps	2	165	5825	0.00	0.00	2.22		6.59	5.77	9.60	28.82		7.18		Pass
HT20	MCS0	2	149	5745	0.00	0.00	2.22		6.62	6.00	9.63	28.82		7.18		Pass
HT20	MCS0	2	157	5785	0.00	0.00	2.22		6.83	5.38	9.84	28.82		7.18		Pass
HT20	MCS0	2	165	5825	0.00	0.00	2.22		6.37	4.82	9.38	28.82		7.18		Pass
HT40	MCS0	2	151	5755	0.00	0.00	2.22		3.33	2.57	6.34	28.82		7.18		Pass
HT40	MCS0	2	159	5795	0.00	0.00	2.22		1.92	1.89	4.93	28.82		7.18		Pass
VHT80	MCS0	2	155	5775	0.00	0.00	2.22		-4.61	-4.99	-1.60	28.82		7.18		Pass

Note: PSD Sum = Max PSD(Ant. 0, Ant. 1) + 10 log (n)

<TXBF Mode>

Test Engineer:	Derek Hsu	Temperature:	21~25	°C
Test Date:	2019/01/10~2019/03/31	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 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1		
VHT20	MCS0	2	149	5745	19.28	18.83	39.20	40.40	15.04	15.98	0.5	Pass
VHT20	MCS0	2	157	5785	20.88	21.23	43.16	42.56	16.03	15.04	0.5	Pass
VHT20	MCS0	2	165	5825	21.88	22.48	44.06	41.48	15.63	15.63	0.5	Pass
VHT40	MCS0	2	151	5755	38.56	37.86	79.24	71.45	33.72	34.98	0.5	Pass
VHT40	MCS0	2	159	5795	46.15	45.45	82.96	77.92	34.98	33.81	0.5	Pass
VHT80	MCS0	2	155	5775	77.08	76.96	94.71	110.85	66.33	73.85	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 0	Ant 1	Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1	
VHT20	MCS0	2	149	5745	0.00	0.00	20.30	19.70	23.02	28.82		7.18		Pass
VHT20	MCS0	2	157	5785	0.00	0.00	20.30	19.50	22.93	28.82		7.18		Pass
VHT20	MCS0	2	165	5825	0.00	0.00	20.30	19.30	22.84	28.82		7.18		Pass
VHT40	MCS0	2	151	5755	0.00	0.00	20.00	19.40	22.72	28.82		7.18		Pass
VHT40	MCS0	2	159	5795	0.00	0.00	20.40	19.40	22.94	28.82		7.18		Pass
VHT80	MCS0	2	155	5775	0.00	0.00	16.70	18.60	20.76	28.82		7.18		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 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1	
VHT20	MCS0	2	149	5745	0.00	0.00	2.22		10.06	9.49	13.07	28.82		7.18		Pass
VHT20	MCS0	2	157	5785	0.00	0.00	2.22		10.03	8.77	13.04	28.82		7.18		Pass
VHT20	MCS0	2	165	5825	0.00	0.00	2.22		10.60	8.92	13.61	28.82		7.18		Pass
VHT40	MCS0	2	151	5755	0.00	0.00	2.22		6.66	6.33	9.67	28.82		7.18		Pass
VHT40	MCS0	2	159	5795	0.00	0.00	2.22		6.84	6.22	9.85	28.82		7.18		Pass
VHT80	MCS0	2	155	5775	0.00	0.00	2.22		1.16	1.46	4.47	28.82		7.18		Pass

Note: PSD Sum = Max PSD(Ant. 0, Ant. 1) + 10 log (n)

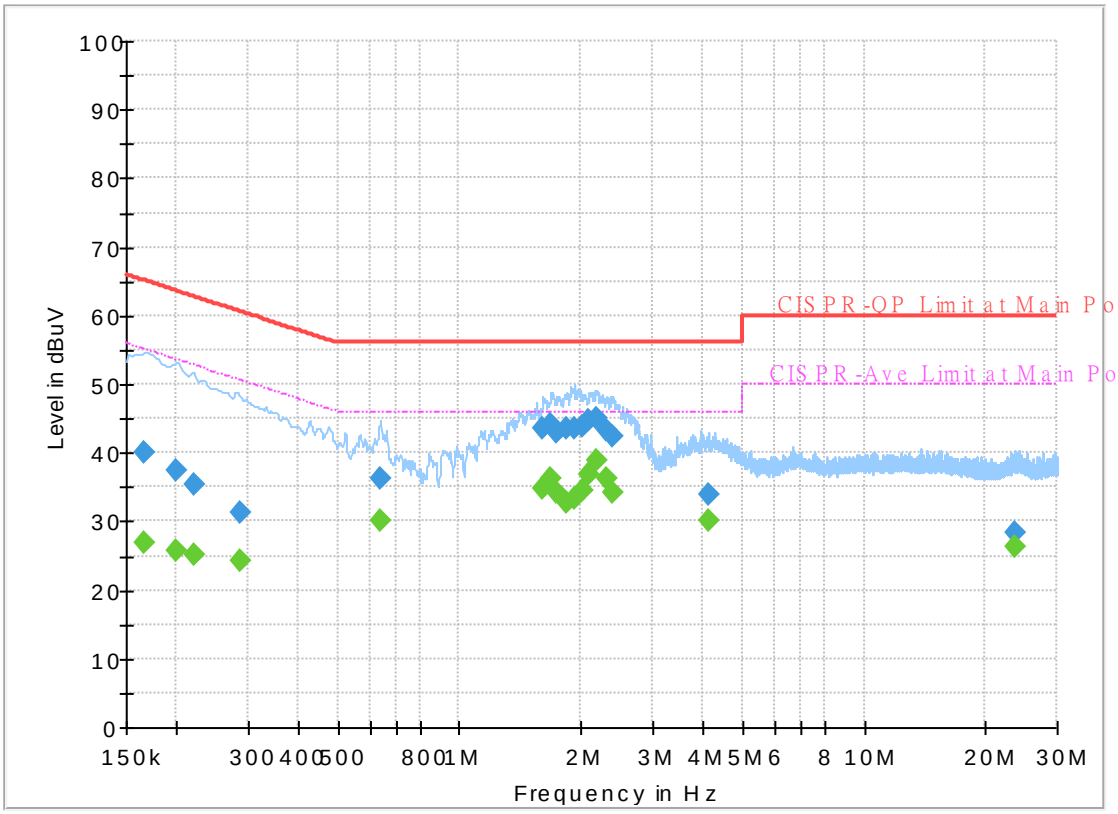
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Jimmy Chang	**Temperature :**	22~24℃
		Relative Humidity :	52~55%

EUT Information

Report NO :	8D0631-01
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

Full Spectrum



Final_Result

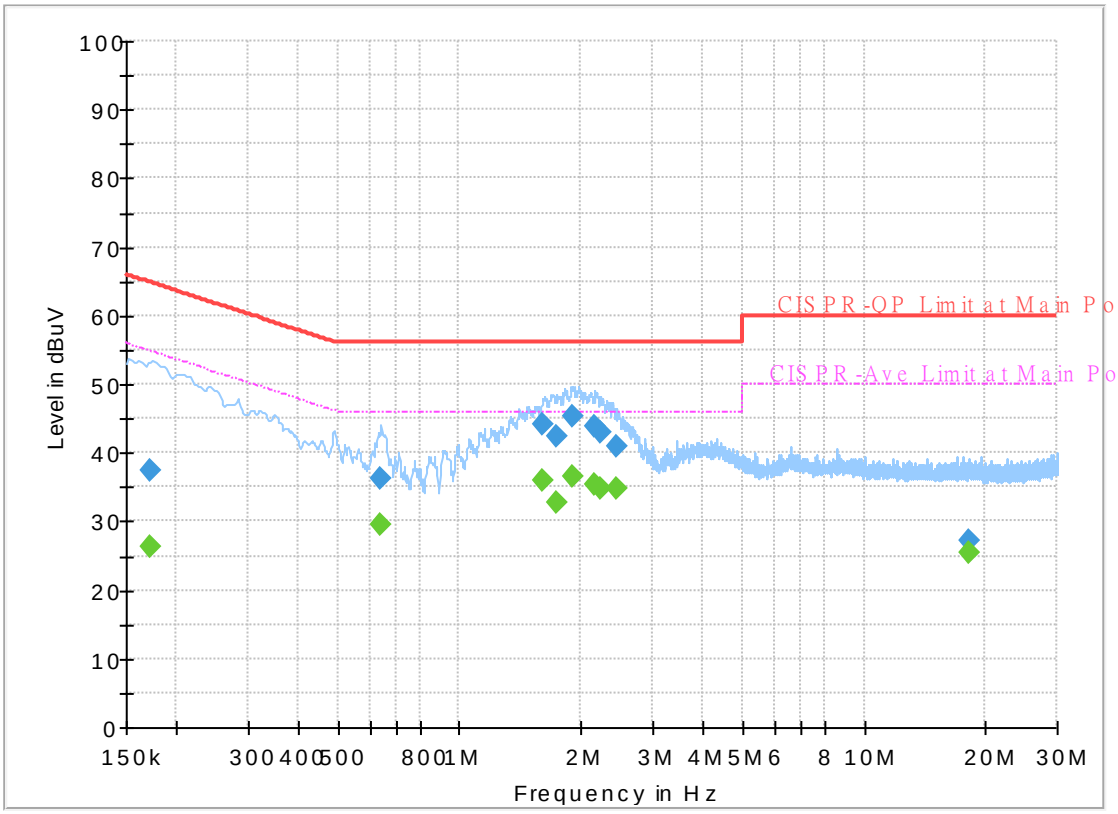
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.165750	---	26.91	55.17	28.26	L1	OFF	19.5
0.165750	40.19	---	65.17	24.98	L1	OFF	19.5
0.199500	---	25.87	53.63	27.76	L1	OFF	19.5
0.199500	37.54	---	63.63	26.09	L1	OFF	19.5
0.222000	---	25.09	52.74	27.65	L1	OFF	19.5
0.222000	35.33	---	62.74	27.41	L1	OFF	19.5
0.287250	---	24.27	50.60	26.33	L1	OFF	19.5
0.287250	31.28	---	60.60	29.32	L1	OFF	19.5
0.638250	---	30.16	46.00	15.84	L1	OFF	19.6
0.638250	36.38	---	56.00	19.62	L1	OFF	19.6
1.605750	---	34.78	46.00	11.22	L1	OFF	19.6
1.605750	43.44	---	56.00	12.56	L1	OFF	19.6
1.682250	---	36.22	46.00	9.78	L1	OFF	19.6
1.682250	44.27	---	56.00	11.73	L1	OFF	19.6
1.747500	---	34.08	46.00	11.92	L1	OFF	19.6
1.747500	43.05	---	56.00	12.95	L1	OFF	19.6
1.848750	---	32.80	46.00	13.20	L1	OFF	19.6
1.848750	43.63	---	56.00	12.37	L1	OFF	19.6
1.918500	---	33.33	46.00	12.67	L1	OFF	19.6
1.918500	43.70	---	56.00	12.30	L1	OFF	19.6
2.019750	---	34.50	46.00	11.50	L1	OFF	19.6

2.019750	43.83	---	56.00	12.17	L1	OFF	19.6
2.096250	---	36.78	46.00	9.22	L1	OFF	19.4
2.096250	44.72	---	56.00	11.28	L1	OFF	19.4
2.181750	---	38.87	46.00	7.13	L1	OFF	19.5
2.181750	45.11	---	56.00	10.89	L1	OFF	19.5
2.314500	---	36.19	46.00	9.81	L1	OFF	19.5
2.314500	43.22	---	56.00	12.78	L1	OFF	19.5
2.404500	---	34.14	46.00	11.86	L1	OFF	19.6
2.404500	42.38	---	56.00	13.62	L1	OFF	19.6
4.123500	---	30.21	46.00	15.79	L1	OFF	19.7
4.123500	34.00	---	56.00	22.00	L1	OFF	19.7
23.592750	---	26.24	50.00	23.76	L1	OFF	20.3
23.592750	28.36	---	60.00	31.64	L1	OFF	20.3

EUT Information

Report NO :	8D0631-01
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.172500	---	26.34	54.84	28.50	N	OFF	19.5
0.172500	37.46	---	64.84	27.38	N	OFF	19.5
0.638250	---	29.65	46.00	16.35	N	OFF	19.6
0.638250	36.37	---	56.00	19.63	N	OFF	19.6
1.605750	---	35.96	46.00	10.04	N	OFF	19.6
1.605750	44.09	---	56.00	11.91	N	OFF	19.6
1.734000	---	32.73	46.00	13.27	N	OFF	19.6
1.734000	42.48	---	56.00	13.52	N	OFF	19.6
1.911750	---	36.57	46.00	9.43	N	OFF	19.6
1.911750	45.18	---	56.00	10.82	N	OFF	19.6
2.163750	---	35.33	46.00	10.67	N	OFF	19.5
2.163750	43.94	---	56.00	12.06	N	OFF	19.5
2.242500	---	34.87	46.00	11.13	N	OFF	19.5
2.242500	43.05	---	56.00	12.95	N	OFF	19.5
2.456250	---	34.85	46.00	11.15	N	OFF	19.6
2.456250	41.07	---	56.00	14.93	N	OFF	19.6
18.179250	---	25.52	50.00	24.48	N	OFF	20.2
18.179250	27.28	---	60.00	32.72	N	OFF	20.2

Appendix C. Radiated Spurious Emission

Test Engineer :	Jack Cheng, Lance Chiang and Chuan Chu	Temperature :	22~24°C
		Relative Humidity :	56~60%

<CDD Mode>

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 0	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		5627.4	56.19	-12.01	68.2	45.21	31.75	10.44	31.21	242	182	P	H
		5699.8	68.89	-36.16	105.05	57.64	32	10.5	31.25	242	182	P	H
		5719.2	83.05	-27.53	110.58	71.75	32.04	10.52	31.26	242	182	P	H
		5724.8	89.83	-31.91	121.74	78.52	32.05	10.52	31.26	242	182	P	H
	*	5745	115.26	-	-	103.9	32.09	10.54	31.27	242	182	P	H
	*	5745	104.58	-	-	93.22	32.09	10.54	31.27	242	182	A	H
		5618.8	54.64	-13.56	68.2	43.65	31.76	10.44	31.21	400	76	P	V
		5699.4	60.41	-44.35	104.76	49.16	32	10.5	31.25	400	76	P	V
		5719.4	77.12	-33.51	110.63	65.82	32.04	10.52	31.26	400	76	P	V
		5724.8	83.14	-38.6	121.74	71.83	32.05	10.52	31.26	400	76	P	V
	*	5745	108.82	-	-	97.46	32.09	10.54	31.27	400	76	P	V
	*	5745	98.23	-	-	86.87	32.09	10.54	31.27	400	76	A	V

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 157 5785MHz		5616	57.27	-10.93	68.2	46.28	31.77	10.43	31.21	247	180	P	H
		5699.2	58.85	-45.76	104.61	47.6	32	10.5	31.25	247	180	P	H
		5719.2	61.15	-49.43	110.58	49.85	32.04	10.52	31.26	247	180	P	H
		5722	61.84	-53.52	115.36	50.54	32.04	10.52	31.26	247	180	P	H
	*	5785	115.18	-	-	103.73	32.17	10.57	31.29	247	180	P	H
	*	5785	104.41	-	-	92.96	32.17	10.57	31.29	247	180	A	H
		5853.8	56.09	-57.45	113.54	44.48	32.31	10.62	31.32	247	180	P	H
		5866.4	56.43	-51.18	107.61	44.8	32.33	10.63	31.33	247	180	P	H
		5898.8	57.08	-30.47	87.55	45.37	32.4	10.65	31.34	247	180	P	H
		5941.4	57.15	-11.05	68.2	45.26	32.57	10.69	31.37	247	180	P	H
		5616.2	54.45	-13.75	68.2	43.46	31.77	10.43	31.21	397	70	P	V
		5671.2	55.57	-28.36	83.93	44.49	31.83	10.48	31.23	397	70	P	V
		5707.4	55.39	-51.88	107.27	44.13	32.01	10.51	31.26	397	70	P	V
		5723.6	55.27	-63.74	119.01	43.96	32.05	10.52	31.26	397	70	P	V
	*	5785	108.55	-	-	97.1	32.17	10.57	31.29	397	70	P	V
	*	5785	97.91	-	-	86.46	32.17	10.57	31.29	397	70	A	V
		5851.8	55.4	-62.69	118.09	43.8	32.3	10.62	31.32	397	70	P	V
		5862.8	55.83	-52.78	108.61	44.2	32.33	10.63	31.33	397	70	P	V
		5891.4	56.4	-36.63	93.03	44.71	32.38	10.65	31.34	397	70	P	V
		5943.4	55.98	-12.22	68.2	44.09	32.57	10.69	31.37	397	70	P	V

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 165 5825MHz	*	5825	113.69	-	-	102.15	32.25	10.6	31.31	234	180	P	H
	*	5825	103.04	-	-	91.5	32.25	10.6	31.31	234	180	A	H
		5850	80.58	-41.62	122.2	68.98	32.3	10.62	31.32	234	180	P	H
		5855.2	76.42	-34.32	110.74	64.81	32.31	10.62	31.32	234	180	P	H
		5875	60.84	-44.36	105.2	49.18	32.35	10.64	31.33	234	180	P	H
		5939.4	56.24	-11.96	68.2	44.37	32.56	10.68	31.37	234	180	P	H
	*	5825	106.3	-	-	94.76	32.25	10.6	31.31	400	126	P	V
	*	5825	95.71	-	-	84.17	32.25	10.6	31.31	400	126	A	V
		5850.4	72.65	-48.64	121.29	61.05	32.3	10.62	31.32	400	126	P	V
		5855	68.4	-42.4	110.8	56.79	32.31	10.62	31.32	400	126	P	V
		5906.4	55.82	-26.11	81.93	44.07	32.43	10.66	31.34	400	126	P	V
		5940.2	55.72	-12.48	68.2	43.84	32.56	10.69	31.37	400	126	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		11490	46.59	-27.41	74	51.92	39.78	16.49	61.6	100	0	P	H
		17235	52.08	-16.12	68.2	46.38	40.7	20.78	55.78	100	0	P	H
		11490	47.39	-26.61	74	52.72	39.78	16.49	61.6	100	0	P	V
		17235	52.45	-15.75	68.2	46.75	40.7	20.78	55.78	100	0	P	V
802.11a CH 157 5785MHz		11570	43.54	-30.46	74	49.33	39.66	16.3	61.75	100	0	P	H
		17355	45.7	-22.5	68.2	38.82	41.4	21	55.52	100	0	P	H
		11570	43.25	-30.75	74	49.04	39.66	16.3	61.75	100	0	P	V
		17355	45.85	-22.35	68.2	38.97	41.4	21	55.52	100	0	P	V
802.11a CH 165 5825MHz		11650	47.23	-26.77	74	53.19	39.35	16.62	61.93	100	0	P	H
		17475	50.71	-17.49	68.2	42.83	42.17	20.97	55.26	100	0	P	H
		11650	48.71	-25.29	74	54.67	39.35	16.62	61.93	100	0	P	V
		17475	50.87	-17.33	68.2	42.99	42.17	20.97	55.26	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.
0		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5609.8	56.79	-11.41	68.2	45.79	31.78	10.43	31.21	263	183	P	H
		5699.8	70.66	-34.39	105.05	59.41	32	10.5	31.25	263	183	P	H
		5719.8	84.79	-25.95	110.74	73.49	32.04	10.52	31.26	263	183	P	H
		5725	91.38	-30.82	122.2	80.07	32.05	10.52	31.26	263	183	P	H
802.11n	*	5745	115.09	-	-	103.73	32.09	10.54	31.27	263	183	P	H
HT20	*	5745	104.2	-	-	92.84	32.09	10.54	31.27	263	183	A	H
CH 149		5631.6	54.7	-13.5	68.2	43.73	31.74	10.45	31.22	398	83	P	V
5745MHz		5698.8	61.11	-43.21	104.32	49.87	31.99	10.5	31.25	398	83	P	V
		5720	78.08	-32.72	110.8	66.78	32.04	10.52	31.26	398	83	P	V
		5724.8	83.52	-38.22	121.74	72.21	32.05	10.52	31.26	398	83	P	V
	*	5745	108.73	-	-	97.37	32.09	10.54	31.27	398	83	P	V
	*	5745	97.88	-	-	86.52	32.09	10.54	31.27	398	83	A	V

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5642.8	56.83	-11.37	68.2	45.89	31.71	10.45	31.22	247	176	P	H
		5698	58.3	-45.43	103.73	47.06	31.99	10.5	31.25	247	176	P	H
		5716.2	62.31	-47.43	109.74	51.03	32.03	10.51	31.26	247	176	P	H
		5725	64.13	-58.07	122.2	52.82	32.05	10.52	31.26	247	176	P	H
	*	5785	114.82	-	-	103.37	32.17	10.57	31.29	247	176	P	H
	*	5785	103.81	-	-	92.36	32.17	10.57	31.29	247	176	A	H
		5852	57.01	-60.63	117.64	45.41	32.3	10.62	31.32	247	176	P	H
		5856.2	56.54	-53.92	110.46	44.93	32.31	10.62	31.32	247	176	P	H
802.11n		5891	56.79	-36.54	93.33	45.1	32.38	10.65	31.34	247	176	P	H
HT20		5944.2	57.07	-11.13	68.2	45.17	32.58	10.69	31.37	247	176	P	H
CH 157		5608.4	55.36	-12.84	68.2	44.36	31.78	10.43	31.21	397	71	P	V
5785MHz		5688.6	55.48	-41.31	96.79	44.31	31.93	10.49	31.25	397	71	P	V
		5719.2	56.74	-53.84	110.58	45.44	32.04	10.52	31.26	397	71	P	V
		5724	57.02	-62.9	119.92	45.71	32.05	10.52	31.26	397	71	P	V
	*	5785	108.5	-	-	97.05	32.17	10.57	31.29	397	71	P	V
	*	5785	97.65	-	-	86.2	32.17	10.57	31.29	397	71	A	V
		5852.2	55.03	-62.15	117.18	43.43	32.3	10.62	31.32	397	71	P	V
		5871.8	56.21	-49.88	106.09	44.57	32.34	10.63	31.33	397	71	P	V
		5914.2	56.1	-20.07	76.17	44.32	32.46	10.67	31.35	397	71	P	V
		5944.2	56.24	-11.96	68.2	44.34	32.58	10.69	31.37	397	71	P	V

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
	*	5825	113.79	-	-	102.25	32.25	10.6	31.31	236	180	P	H
	*	5825	102.86	-	-	91.32	32.25	10.6	31.31	236	180	A	H
		5850.6	81.68	-39.15	120.83	70.08	32.3	10.62	31.32	236	180	P	H
		5855	79.31	-31.49	110.8	67.7	32.31	10.62	31.32	236	180	P	H
802.11n		5881	60.15	-40.59	100.74	48.48	32.36	10.64	31.33	236	180	P	H
HT20		5938.6	56.7	-11.5	68.2	44.84	32.55	10.68	31.37	236	180	P	H
CH 165	*	5825	106.24	-	-	94.7	32.25	10.6	31.31	399	126	P	V
5825MHz	*	5825	95.38	-	-	83.84	32.25	10.6	31.31	399	126	A	V
		5850.4	74	-47.29	121.29	62.4	32.3	10.62	31.32	399	126	P	V
		5855	69.31	-41.49	110.8	57.7	32.31	10.62	31.32	399	126	P	V
		5924.6	56.06	-12.43	68.49	44.24	32.5	10.67	31.35	399	126	P	V
		5939.4	56.91	-11.29	68.2	45.04	32.56	10.68	31.37	399	126	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n		11490	47.65	-26.35	74	52.98	39.78	16.49	61.6	100	0	P	H
HT20		17235	51.91	-16.29	68.2	46.21	40.7	20.78	55.78	100	0	P	H
CH 149		11490	47.28	-26.72	74	52.61	39.78	16.49	61.6	100	0	P	V
5745MHz		17235	52.06	-16.14	68.2	46.36	40.7	20.78	55.78	100	0	P	V
802.11n		11570	49.25	-24.75	74	54.79	39.66	16.55	61.75	100	0	P	H
HT20		17355	52.09	-16.11	68.2	45.33	41.4	20.88	55.52	100	0	P	H
CH 157		11570	48.4	-25.6	74	53.94	39.66	16.55	61.75	100	0	P	V
5785MHz		17355	51.96	-16.24	68.2	45.2	41.4	20.88	55.52	100	0	P	V
802.11n		11650	47.47	-26.53	74	53.43	39.35	16.62	61.93	100	0	P	H
HT20		17475	50.05	-18.15	68.2	42.17	42.17	20.97	55.26	100	0	P	H
CH 165		11650	48.8	-25.2	74	54.76	39.35	16.62	61.93	100	0	P	V
5825MHz		17475	50.17	-18.03	68.2	42.29	42.17	20.97	55.26	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.
0		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5640.8	61.05	-7.15	68.2	50.1	31.72	10.45	31.22	246	183	P	H
		5696.2	77.52	-24.88	102.4	66.29	31.98	10.5	31.25	246	183	P	H
		5719.6	90.27	-20.42	110.69	78.97	32.04	10.52	31.26	246	183	P	H
		5722.8	91.75	-25.43	117.18	80.44	32.05	10.52	31.26	246	183	P	H
	*	5755	112.16	-	-	100.78	32.11	10.54	31.27	246	183	P	H
	*	5755	100.07	-	-	88.69	32.11	10.54	31.27	246	183	A	H
		5850.6	57.18	-63.65	120.83	45.58	32.3	10.62	31.32	246	183	P	H
		5855	56.55	-54.25	110.8	44.94	32.31	10.62	31.32	246	183	P	H
802.11n		5883	56.83	-42.43	99.26	45.15	32.37	10.64	31.33	246	183	P	H
HT40		5929.6	56.29	-11.91	68.2	44.44	32.52	10.68	31.35	246	183	P	H
CH 151		5648.2	57	-11.2	68.2	46.06	31.7	10.46	31.22	396	74	P	V
5755MHz		5696.4	70.4	-32.15	102.55	59.17	31.98	10.5	31.25	396	74	P	V
		5720	83.3	-27.5	110.8	72	32.04	10.52	31.26	396	74	P	V
		5723.6	85.73	-33.28	119.01	74.42	32.05	10.52	31.26	396	74	P	V
	*	5755	105.87	-	-	94.49	32.11	10.54	31.27	396	74	P	V
	*	5755	94.22	-	-	82.84	32.11	10.54	31.27	396	74	A	V
		5850	54.61	-67.59	122.2	43.01	32.3	10.62	31.32	396	74	P	V
		5867	54.99	-52.45	107.44	43.36	32.33	10.63	31.33	396	74	P	V
		5922.6	56.65	-13.32	69.97	44.84	32.49	10.67	31.35	396	74	P	V
		5930.6	56.01	-12.19	68.2	44.16	32.52	10.68	31.35	396	74	P	V

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 159 5795MHz		5647.8	57.52	-10.68	68.2	46.58	31.7	10.46	31.22	260	181	P	H
		5699.6	67.49	-37.42	104.91	56.24	32	10.5	31.25	260	181	P	H
		5719.4	73.46	-37.17	110.63	62.16	32.04	10.52	31.26	260	181	P	H
		5724.2	76.7	-43.68	120.38	65.39	32.05	10.52	31.26	260	181	P	H
	*	5795	111.68	-	-	100.2	32.19	10.58	31.29	260	181	P	H
	*	5795	99.91	-	-	88.43	32.19	10.58	31.29	260	181	A	H
		5852.8	74.68	-41.14	115.82	63.07	32.31	10.62	31.32	260	181	P	H
		5858.8	73.09	-36.64	109.73	61.48	32.32	10.62	31.33	260	181	P	H
		5875.4	65.6	-39.3	104.9	53.94	32.35	10.64	31.33	260	181	P	H
		5931	56.82	-11.38	68.2	44.97	32.52	10.68	31.35	260	181	P	H
		5632.4	55.43	-12.77	68.2	44.46	31.74	10.45	31.22	338	68	P	V
		5699.4	61.52	-43.24	104.76	50.27	32	10.5	31.25	338	68	P	V
		5719.2	65.25	-45.33	110.58	53.95	32.04	10.52	31.26	338	68	P	V
		5724.2	67.89	-52.49	120.38	56.58	32.05	10.52	31.26	338	68	P	V
	*	5795	105.31	-	-	93.83	32.19	10.58	31.29	338	68	P	V
	*	5795	93.43	-	-	81.95	32.19	10.58	31.29	338	68	A	V
		5850	68.03	-54.17	122.2	56.43	32.3	10.62	31.32	338	68	P	V
		5859.2	67.06	-42.56	109.62	55.45	32.32	10.62	31.33	338	68	P	V
		5884.6	58.71	-39.36	98.07	47.04	32.37	10.64	31.34	338	68	P	V
		5932.4	56.34	-11.86	68.2	44.48	32.53	10.68	31.35	338	68	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 Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n		11510	47.03	-26.97	74	52.37	39.78	16.5	61.62	100	0	P	H
HT40		17265	50.42	-17.78	68.2	44.53	40.8	20.81	55.72	100	0	P	H
CH 151		11510	46.56	-27.44	74	51.9	39.78	16.5	61.62	100	0	P	V
5755MHz		17265	49.08	-19.12	68.2	43.19	40.8	20.81	55.72	100	0	P	V
802.11n		11590	47.11	-26.89	74	52.72	39.62	16.57	61.8	100	0	P	H
HT40		17385	51.39	-16.81	68.2	44.27	41.67	20.9	55.45	100	0	P	H
CH 159		11590	46.42	-27.58	74	52.03	39.62	16.57	61.8	100	0	P	V
5795MHz		17385	50.74	-17.46	68.2	43.62	41.67	20.9	55.45	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.
0		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 155 5775MHz		5649	66.49	-1.71	68.2	57.78	31.7	10.46	33.45	240	182	P	H
		5697	82.02	-20.97	102.99	73.02	31.98	10.48	33.46	240	182	P	H
		5716.8	84.56	-25.35	109.91	75.5	32.03	10.49	33.46	240	182	P	H
		5722.8	85.24	-31.94	117.18	76.15	32.05	10.5	33.46	240	182	P	H
	*	5775	108.43	-	-	99.22	32.15	10.53	33.47	240	182	P	H
	*	5775	95.73	-	-	86.52	32.15	10.53	33.47	240	182	A	H
		5852	75.26	-42.38	117.64	65.85	32.3	10.59	33.48	240	182	P	H
		5855.2	75.02	-35.72	110.74	65.6	32.31	10.59	33.48	240	182	P	H
		5875.2	66.6	-38.45	105.05	57.12	32.35	10.61	33.48	240	182	P	H
		5931.4	57.17	-11.03	68.2	47.47	32.53	10.66	33.49	240	182	P	H
		5646	59	-9.2	68.2	50.28	31.71	10.46	33.45	363	83	P	V
		5699.8	73.72	-31.33	105.05	64.7	32	10.48	33.46	363	83	P	V
		5718.8	77.07	-33.39	110.46	67.99	32.04	10.5	33.46	363	83	P	V
		5723.6	78.03	-40.98	119.01	68.94	32.05	10.5	33.46	363	83	P	V
	*	5775	100.65	-	-	91.44	32.15	10.53	33.47	363	83	P	V
	*	5775	88.01	-	-	78.8	32.15	10.53	33.47	363	83	A	V
		5853.8	69.14	-44.4	113.54	59.72	32.31	10.59	33.48	363	83	P	V
		5862.2	66.63	-42.15	108.78	57.19	32.32	10.6	33.48	363	83	P	V
		5876.8	60.32	-43.54	103.86	50.84	32.35	10.61	33.48	363	83	P	V
		5927.4	56.17	-12.03	68.2	46.5	32.51	10.65	33.49	363	83	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 Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 155 5775MHz		11550	46.71	-27.29	74	52.18	39.7	16.54	61.71	100	0	P	H
		17325	50.16	-18.04	68.2	43.77	41.12	20.85	55.58	100	0	P	H
		11550	46.15	-27.85	74	51.62	39.7	16.54	61.71	100	0	P	V
		17325	50.37	-17.83	68.2	43.98	41.12	20.85	55.58	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 VHT80 (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.
0		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
5GHz 802.11ac VHT80 LF		79.14	28.22	-11.78	40	44.2	13.2	1.27	30.45	-	-	P	H
		126.12	36.85	-6.65	43.5	48.21	17.47	1.57	30.4	-	-	P	H
		219.81	44.03	-1.97	46	57.09	15.05	2.17	30.28	155	266	QP	H
		219.81	49.33	-	-	62.39	15.05	2.17	30.28	155	266	P	H
		559.7	33.14	-12.86	46	33.55	25.95	3.33	29.69	-	-	P	H
		705.3	38.68	-7.32	46	38.09	26.4	3.7	29.51	-	-	P	H
		956.6	37.28	-8.72	46	31.01	30.81	4.44	28.98	-	-	P	H
		45.93	33.41	-6.59	40	46.63	16.25	0.94	30.41	-	-	P	V
		172.56	29.46	-14.04	43.5	42.52	15.32	1.97	30.35	-	-	P	V
		220.35	41.36	-4.64	46	54.42	15.05	2.17	30.28	100	0	P	V
		610.1	36.56	-9.44	46	37.4	25.32	3.46	29.62	-	-	P	V
		705.3	38.19	-7.81	46	37.6	26.4	3.7	29.51	-	-	P	V
		958.7	37.52	-8.48	46	31.16	30.88	4.45	28.97	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Band 4 - 5725~5850MHz

WIFI 802.11a (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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		5636.6	55.47	-12.73	68.2	44.51	31.73	10.45	31.22	254	180	P	H
		5699.8	68.58	-36.47	105.05	57.33	32	10.5	31.25	254	180	P	H
		5719.6	82.98	-27.71	110.69	71.68	32.04	10.52	31.26	254	180	P	H
		5724.8	89.88	-31.86	121.74	78.57	32.05	10.52	31.26	254	180	P	H
	*	5745	114.97	-	-	103.61	32.09	10.54	31.27	254	180	P	H
	*	5745	104.48	-	-	93.12	32.09	10.54	31.27	254	180	A	H
		5642.8	54.52	-13.68	68.2	43.58	31.71	10.45	31.22	400	276	P	V
		5699.6	59.38	-45.53	104.91	48.13	32	10.5	31.25	400	276	P	V
		5719.6	73.73	-36.96	110.69	62.43	32.04	10.52	31.26	400	276	P	V
		5724.8	81.04	-40.7	121.74	69.73	32.05	10.52	31.26	400	276	P	V
	*	5745	107.37	-	-	96.01	32.09	10.54	31.27	400	276	P	V
	*	5745	96.63	-	-	85.27	32.09	10.54	31.27	400	276	A	V

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 157 5785MHz		5636	55.39	-12.81	68.2	44.43	31.73	10.45	31.22	264	176	P	H
		5699.2	57.14	-47.47	104.61	45.89	32	10.5	31.25	264	176	P	H
		5719	60.27	-50.25	110.52	48.97	32.04	10.52	31.26	264	176	P	H
		5722.4	60.8	-55.47	116.27	49.5	32.04	10.52	31.26	264	176	P	H
	*	5785	115.79	-	-	104.34	32.17	10.57	31.29	264	176	P	H
	*	5785	104.98	-	-	93.53	32.17	10.57	31.29	264	176	A	H
		5851	57.82	-62.1	119.92	46.22	32.3	10.62	31.32	264	176	P	H
		5862.4	56.32	-52.41	108.73	44.7	32.32	10.63	31.33	264	176	P	H
		5921.4	57.31	-13.54	70.85	45.5	32.49	10.67	31.35	264	176	P	H
		5950	57.06	-11.14	68.2	45.14	32.6	10.69	31.37	264	176	P	H
		5602	54.95	-13.25	68.2	43.93	31.8	10.42	31.2	395	276	P	V
		5698.4	55.32	-48.7	104.02	44.08	31.99	10.5	31.25	395	276	P	V
		5713	55.28	-53.56	108.84	44	32.03	10.51	31.26	395	276	P	V
		5722	54.96	-60.4	115.36	43.66	32.04	10.52	31.26	395	276	P	V
	*	5785	108.01	-	-	96.56	32.17	10.57	31.29	395	276	P	V
	*	5785	97.26	-	-	85.81	32.17	10.57	31.29	395	276	A	V
		5850	55.3	-66.9	122.2	43.7	32.3	10.62	31.32	395	276	P	V
		5858.4	56.04	-53.81	109.85	44.43	32.32	10.62	31.33	395	276	P	V
		5901.4	56.34	-29.28	85.62	44.61	32.41	10.66	31.34	395	276	P	V
		5934	56.66	-11.54	68.2	44.79	32.54	10.68	31.35	395	276	P	V

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 165 5825MHz	*	5825	113.66	-	-	102.12	32.25	10.6	31.31	255	176	P	H
	*	5825	103.15	-	-	91.61	32.25	10.6	31.31	255	176	A	H
		5850.2	81.15	-40.59	121.74	69.55	32.3	10.62	31.32	255	176	P	H
		5855.2	77.16	-33.58	110.74	65.55	32.31	10.62	31.32	255	176	P	H
		5875	61.5	-43.7	105.2	49.84	32.35	10.64	31.33	255	176	P	H
		5936.6	56.33	-11.87	68.2	44.47	32.55	10.68	31.37	255	176	P	H
	*	5825	106.67	-	-	95.13	32.25	10.6	31.31	389	273	P	V
	*	5825	95.95	-	-	84.41	32.25	10.6	31.31	389	273	A	V
		5850.4	73.14	-48.15	121.29	61.54	32.3	10.62	31.32	389	273	P	V
		5855.2	69.59	-41.15	110.74	57.98	32.31	10.62	31.32	389	273	P	V
		5921.8	56.58	-13.98	70.56	44.77	32.49	10.67	31.35	389	273	P	V
		5946.4	55.54	-12.66	68.2	43.63	32.59	10.69	31.37	389	273	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.	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		11490	42.53	-31.47	74	48.14	39.78	16.21	61.6	100	0	P	H
		17235	44.09	-24.11	68.2	38.25	40.7	20.92	55.78	100	0	P	H
		11490	41.89	-32.11	74	47.5	39.78	16.21	61.6	100	0	P	V
		17235	45.37	-22.83	68.2	39.53	40.7	20.92	55.78	100	0	P	V
802.11a CH 157 5785MHz		11570	49.34	-24.66	74	54.88	39.66	16.55	61.75	100	0	P	H
		17355	50.81	-17.39	68.2	44.05	41.4	20.88	55.52	100	0	P	H
		11570	48.97	-25.03	74	54.51	39.66	16.55	61.75	100	0	P	V
		17355	50.38	-17.82	68.2	43.62	41.4	20.88	55.52	100	0	P	V
802.11a CH 165 5825MHz		11650	48.51	-25.49	74	54.47	39.35	16.62	61.93	100	0	P	H
		17475	50.35	-17.85	68.2	42.47	42.17	20.97	55.26	100	0	P	H
		11650	47.62	-26.38	74	53.58	39.35	16.62	61.93	100	0	P	V
		17475	50.18	-18.02	68.2	42.3	42.17	20.97	55.26	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)
		5635.2	55.56	-12.64	68.2	44.6	31.73	10.45	31.22	254	180	P	H
		5698.4	69.74	-34.28	104.02	58.5	31.99	10.5	31.25	254	180	P	H
		5719.4	85.12	-25.51	110.63	73.82	32.04	10.52	31.26	254	180	P	H
		5724.2	91.02	-29.36	120.38	79.71	32.05	10.52	31.26	254	180	P	H
802.11n	*	5745	114.61	-	-	103.25	32.09	10.54	31.27	254	180	P	H
HT20	*	5745	104.03	-	-	92.67	32.09	10.54	31.27	254	180	A	H
CH 149		5617.8	54.91	-13.29	68.2	43.93	31.76	10.43	31.21	399	270	P	V
5745MHz		5699.8	59.74	-45.31	105.05	48.49	32	10.5	31.25	399	270	P	V
		5719.8	74.43	-36.31	110.74	63.13	32.04	10.52	31.26	399	270	P	V
		5724.6	81.63	-39.66	121.29	70.32	32.05	10.52	31.26	399	270	P	V
	*	5745	107.1	-	-	95.74	32.09	10.54	31.27	399	270	P	V
	*	5745	96.27	-	-	84.91	32.09	10.54	31.27	399	270	A	V

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)
		5632.2	56.15	-12.05	68.2	45.18	31.74	10.45	31.22	265	177	P	H
		5697.2	58.44	-44.7	103.14	47.21	31.98	10.5	31.25	265	177	P	H
		5719.8	62.4	-48.34	110.74	51.1	32.04	10.52	31.26	265	177	P	H
		5721.2	62.37	-51.17	113.54	51.07	32.04	10.52	31.26	265	177	P	H
	*	5785	115.79	-	-	104.34	32.17	10.57	31.29	265	177	P	H
	*	5785	104.84	-	-	93.39	32.17	10.57	31.29	265	177	A	H
		5852.4	56.61	-60.12	116.73	45.01	32.3	10.62	31.32	265	177	P	H
		5874.6	56.45	-48.86	105.31	44.79	32.35	10.64	31.33	265	177	P	H
802.11n		5904	56.64	-27.06	83.7	44.9	32.42	10.66	31.34	265	177	P	H
HT20		5941.4	56.4	-11.8	68.2	44.51	32.57	10.69	31.37	265	177	P	H
CH 157		5616	55.09	-13.11	68.2	44.1	31.77	10.43	31.21	395	276	P	V
5785MHz		5695	55.69	-45.82	101.51	44.47	31.97	10.5	31.25	395	276	P	V
		5709.2	56.11	-51.67	107.78	44.84	32.02	10.51	31.26	395	276	P	V
		5721.2	55.51	-58.03	113.54	44.21	32.04	10.52	31.26	395	276	P	V
	*	5785	107.75	-	-	96.3	32.17	10.57	31.29	395	276	P	V
	*	5785	96.93	-	-	85.48	32.17	10.57	31.29	395	276	A	V
		5854.6	55.35	-56.36	111.71	43.74	32.31	10.62	31.32	395	276	P	V
		5873.8	55.65	-49.89	105.54	43.99	32.35	10.64	31.33	395	276	P	V
		5895	56.05	-34.31	90.36	44.35	32.39	10.65	31.34	395	276	P	V
		5933.2	56.45	-11.75	68.2	44.59	32.53	10.68	31.35	395	276	P	V

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)
	*	5825	113.5	-	-	101.96	32.25	10.6	31.31	350	179	P	H
	*	5825	102.6	-	-	91.06	32.25	10.6	31.31	350	179	A	H
		5850	81.64	-40.56	122.2	70.04	32.3	10.62	31.32	350	179	P	H
		5855.2	78.61	-32.13	110.74	67	32.31	10.62	31.32	350	179	P	H
802.11n		5875.2	58.9	-46.15	105.05	47.24	32.35	10.64	31.33	350	179	P	H
HT20		5931.6	55.63	-12.57	68.2	43.77	32.53	10.68	31.35	350	179	P	H
CH 165	*	5825	106.16	-	-	94.62	32.25	10.6	31.31	388	281	P	V
5825MHz	*	5825	95.15	-	-	83.61	32.25	10.6	31.31	388	281	A	V
		5850.4	76.86	-44.43	121.29	65.26	32.3	10.62	31.32	388	281	P	V
		5855.2	71.55	-39.19	110.74	59.94	32.31	10.62	31.32	388	281	P	V
		5892.4	56.89	-35.4	92.29	45.2	32.38	10.65	31.34	388	281	P	V
		5937.4	56.61	-11.59	68.2	44.75	32.55	10.68	31.37	388	281	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.	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		11490	48.39	-25.61	74	53.72	39.78	16.49	61.6	100	0	P	H
		17235	49.64	-18.56	68.2	43.94	40.7	20.78	55.78	100	0	P	H
		11490	53.35	-20.65	74	58.68	39.78	16.49	61.6	103	78	P	V
		11490	39.46	-14.54	54	44.79	39.78	16.49	61.6	103	78	A	V
		17235	50.13	-18.07	68.2	44.43	40.7	20.78	55.78	100	0	P	V
802.11n HT20 CH 157 5785MHz		11570	48.93	-25.07	74	54.47	39.66	16.55	61.75	100	0	P	H
		17355	50.19	-18.01	68.2	43.43	41.4	20.88	55.52	100	0	P	H
		11570	48.32	-25.68	74	53.86	39.66	16.55	61.75	100	0	P	V
		17355	50.12	-18.08	68.2	43.36	41.4	20.88	55.52	100	0	P	V
802.11n HT20 CH 165 5825MHz		11650	46.96	-27.04	74	52.92	39.35	16.62	61.93	100	0	P	H
		17475	49.79	-18.41	68.2	41.91	42.17	20.97	55.26	100	0	P	H
		11650	48.36	-25.64	74	54.32	39.35	16.62	61.93	100	0	P	V
		17475	50.06	-18.14	68.2	42.18	42.17	20.97	55.26	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)
		5648.6	64.49	-3.71	68.2	53.55	31.7	10.46	31.22	249	181	P	H
		5697.2	80.17	-22.97	103.14	68.94	31.98	10.5	31.25	249	181	P	H
		5719.4	92.52	-18.11	110.63	81.22	32.04	10.52	31.26	249	181	P	H
		5722.8	93.73	-23.45	117.18	82.42	32.05	10.52	31.26	249	181	P	H
	*	5755	112.51	-	-	101.13	32.11	10.54	31.27	249	181	P	H
	*	5755	100.78	-	-	89.4	32.11	10.54	31.27	249	181	A	H
		5855	61.94	-48.86	110.8	50.33	32.31	10.62	31.32	249	181	P	H
		5861	61.54	-47.58	109.12	49.92	32.32	10.63	31.33	249	181	P	H
802.11n		5911.8	55.97	-21.97	77.94	44.21	32.45	10.66	31.35	249	181	P	H
HT40		5936.2	55.75	-12.45	68.2	43.9	32.54	10.68	31.37	249	181	P	H
CH 151		5645	57.69	-10.51	68.2	46.74	31.71	10.46	31.22	398	276	P	V
5755MHz		5698.6	69.22	-34.95	104.17	57.98	31.99	10.5	31.25	398	276	P	V
		5719.6	82.08	-28.61	110.69	70.78	32.04	10.52	31.26	398	276	P	V
		5723	83.87	-33.77	117.64	72.56	32.05	10.52	31.26	398	276	P	V
	*	5755	104.49	-	-	93.11	32.11	10.54	31.27	398	276	P	V
	*	5755	92.93	-	-	81.55	32.11	10.54	31.27	398	276	A	V
		5851.6	55.68	-62.87	118.55	44.08	32.3	10.62	31.32	398	276	P	V
		5861.8	55.67	-53.22	108.89	44.05	32.32	10.63	31.33	398	276	P	V
		5918.8	55.73	-17.04	72.77	43.93	32.48	10.67	31.35	398	276	P	V
		5930.6	55.75	-12.45	68.2	43.9	32.52	10.68	31.35	398	276	P	V

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 159 5795MHz		5648.4	56.92	-11.28	68.2	45.98	31.7	10.46	31.22	266	179	P	H
		5698.2	69.06	-34.81	103.87	57.82	31.99	10.5	31.25	266	179	P	H
		5719.8	72.28	-38.46	110.74	60.98	32.04	10.52	31.26	266	179	P	H
		5723.6	76.98	-42.03	119.01	65.67	32.05	10.52	31.26	266	179	P	H
	*	5795	111.68	-	-	100.2	32.19	10.58	31.29	266	179	P	H
	*	5795	100.2	-	-	88.72	32.19	10.58	31.29	266	179	A	H
		5850.6	75.21	-45.62	120.83	63.61	32.3	10.62	31.32	266	179	P	H
		5855.8	75.31	-35.27	110.58	63.7	32.31	10.62	31.32	266	179	P	H
		5883.6	64.71	-34.1	98.81	53.04	32.37	10.64	31.34	266	179	P	H
		5948.8	55.64	-12.56	68.2	43.72	32.6	10.69	31.37	266	179	P	H
		5604.8	54.37	-13.83	68.2	43.37	31.79	10.42	31.21	393	272	P	V
		5684.2	58.86	-34.68	93.54	47.71	31.91	10.49	31.25	393	272	P	V
		5718.4	62.71	-47.64	110.35	51.42	32.04	10.51	31.26	393	272	P	V
		5723.8	65.73	-53.73	119.46	54.42	32.05	10.52	31.26	393	272	P	V
	*	5795	104.11	-	-	92.63	32.19	10.58	31.29	393	272	P	V
	*	5795	92.71	-	-	81.23	32.19	10.58	31.29	393	272	A	V
		5851.6	66.55	-52	118.55	54.95	32.3	10.62	31.32	393	272	P	V
		5855.2	64.46	-46.28	110.74	52.85	32.31	10.62	31.32	393	272	P	V
		5875.8	57.89	-46.72	104.61	46.23	32.35	10.64	31.33	393	272	P	V
		5929.2	55.42	-12.78	68.2	43.57	32.52	10.68	31.35	393	272	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 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		11510	46.97	-27.03	74	52.31	39.78	16.5	61.62	100	0	P	H
		17265	49.22	-18.98	68.2	43.33	40.8	20.81	55.72	100	0	P	H
		11510	52	-22	74	57.34	39.78	16.5	61.62	112	78	P	V
		11510	39.64	-14.36	54	44.98	39.78	16.5	61.62	112	78	A	V
		17265	49.08	-19.12	68.2	43.19	40.8	20.81	55.72	100	0	P	V
802.11n HT40 CH 159 5795MHz		11590	46.28	-27.72	74	51.89	39.62	16.57	61.8	100	0	P	H
		17385	50.13	-18.07	68.2	43.01	41.67	20.9	55.45	100	0	P	H
		11590	46.8	-27.2	74	52.41	39.62	16.57	61.8	100	0	P	V
		17385	50.16	-18.04	68.2	43.04	41.67	20.9	55.45	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		5648	65.78	-2.42	68.2	57.07	31.7	10.46	33.45	253	176	P	H
		5699.8	79.06	-25.99	105.05	70.04	32	10.48	33.46	253	176	P	H
		5719.4	82.78	-27.85	110.63	73.7	32.04	10.5	33.46	253	176	P	H
		5720.8	82.38	-30.24	112.62	73.3	32.04	10.5	33.46	253	176	P	H
	*	5775	107.9	-	-	98.69	32.15	10.53	33.47	253	176	P	H
	*	5775	95.73	-	-	86.52	32.15	10.53	33.47	253	176	A	H
		5851.2	76.1	-43.36	119.46	66.69	32.3	10.59	33.48	253	176	P	H
		5855.4	74.86	-35.83	110.69	65.44	32.31	10.59	33.48	253	176	P	H
		5875	67.17	-38.03	105.2	57.69	32.35	10.61	33.48	253	176	P	H
		5925.6	56.9	-11.3	68.2	47.24	32.5	10.65	33.49	253	176	P	H
		5642.8	58.82	-9.38	68.2	50.11	31.71	10.45	33.45	382	270	P	V
		5699.6	70.81	-34.1	104.91	61.79	32	10.48	33.46	382	270	P	V
		5716.8	73.68	-36.23	109.91	64.62	32.03	10.49	33.46	382	270	P	V
		5723	75.59	-42.05	117.64	66.5	32.05	10.5	33.46	382	270	P	V
	*	5775	101.92	-	-	92.71	32.15	10.53	33.47	382	270	P	V
	*	5775	89.47	-	-	80.26	32.15	10.53	33.47	382	270	A	V
		5850.2	67.93	-53.81	121.74	58.52	32.3	10.59	33.48	382	270	P	V
		5861	65.43	-43.69	109.12	56	32.32	10.59	33.48	382	270	P	V
		5876.4	60.45	-43.71	104.16	50.97	32.35	10.61	33.48	382	270	P	V
		5931.2	55.45	-12.75	68.2	45.76	32.52	10.66	33.49	382	270	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 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		11550	46.12	-27.88	74	51.59	39.7	16.54	61.71	100	0	P	H
		17325	49.61	-18.59	68.2	43.22	41.12	20.85	55.58	100	0	P	H
		11550	46.76	-27.24	74	52.23	39.7	16.54	61.71	100	0	P	V
		17325	49.56	-18.64	68.2	43.17	41.12	20.85	55.58	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

5GHz WIFI 802.11n HT40 (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		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
5GHz 802.11n HT40 LF		80.76	30.56	-9.44	40	46.42	13.3	1.29	30.45	-	-	P	H
		125.04	35.73	-7.77	43.5	47.03	17.53	1.57	30.4	-	-	P	H
		220.35	44.24	-1.76	46	57.3	15.05	2.17	30.28	126	82	QP	H
	*	220.35	50.14	-	-	63.2	15.05	2.17	30.28	126	82	P	H
		559.7	34.28	-11.72	46	34.69	25.95	3.33	29.69	-	-	P	H
		705.3	40.81	-5.19	46	40.22	26.4	3.7	29.51	-	-	P	H
		966.4	37.1	-16.9	54	30.72	30.88	4.45	28.95	-	-	P	H
		47.01	33.1	-6.9	40	47.16	15.42	0.95	30.43	-	-	P	V
		173.1	30.15	-13.35	43.5	43.27	15.26	1.97	30.35	-	-	P	V
		221.7	40.88	-5.12	46	53.72	15.26	2.18	30.28	100	0	P	V
		611.5	35.98	-10.02	46	36.78	25.36	3.46	29.62	-	-	P	V
		705.3	38.83	-7.17	46	38.24	26.4	3.7	29.51	-	-	P	V
		960.8	37.41	-16.59	54	30.98	30.94	4.45	28.96	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Band 4 - 5725~5850MHz

WIFI 802.11a (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.	
0+1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		5600.2	56.08	-12.12	68.2	45.05	31.8	10.43	31.2	255	174	P	H
		5699.8	66.07	-38.98	105.05	54.84	32	10.48	31.25	255	174	P	H
		5719.4	77.71	-32.92	110.63	66.43	32.04	10.5	31.26	255	174	P	H
		5725	87.94	-34.26	122.2	76.65	32.05	10.5	31.26	255	174	P	H
	*	5745	119.41	-	-	108.08	32.09	10.51	31.27	255	174	P	H
	*	5745	112.1	-	-	100.77	32.09	10.51	31.27	255	174	A	H
		5627.6	51.28	-16.92	68.2	40.3	31.74	10.45	31.21	400	267	P	V
		5691.2	55.55	-43.16	98.71	44.37	31.95	10.48	31.25	400	267	P	V
		5720	72.07	-38.73	110.8	60.79	32.04	10.5	31.26	400	267	P	V
		5725	73.8	-48.4	122.2	62.51	32.05	10.5	31.26	400	267	P	V
	*	5745	113.33	-	-	102	32.09	10.51	31.27	400	267	P	V
	*	5745	105.62	-	-	94.29	32.09	10.51	31.27	400	267	A	V

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0+1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 157 5785MHz		5625.2	53.66	-14.54	68.2	42.68	31.75	10.44	31.21	249	176	P	H
		5694	55.27	-45.51	100.78	44.08	31.96	10.48	31.25	249	176	P	H
		5718.6	55.45	-54.96	110.41	44.17	32.04	10.5	31.26	249	176	P	H
		5724	61.71	-58.21	119.92	50.42	32.05	10.5	31.26	249	176	P	H
	*	5785	118.85	-	-	107.44	32.17	10.53	31.29	249	176	P	H
	*	5785	111.94	-	-	100.53	32.17	10.53	31.29	249	176	A	H
		5854	53.2	-59.88	113.08	41.62	32.31	10.59	31.32	249	176	P	H
		5858.4	52.88	-56.97	109.85	41.3	32.32	10.59	31.33	249	176	P	H
		5893	52.76	-39.08	91.84	41.09	32.39	10.62	31.34	249	176	P	H
		5930.2	51.59	-16.61	68.2	39.76	32.52	10.66	31.35	249	176	P	H
		5625.4	52.01	-16.19	68.2	41.03	31.75	10.44	31.21	395	269	P	V
		5695.4	51.61	-50.2	101.81	40.41	31.97	10.48	31.25	395	269	P	V
		5719.2	53.16	-57.42	110.58	41.88	32.04	10.5	31.26	395	269	P	V
		5721.6	54.22	-60.23	114.45	42.94	32.04	10.5	31.26	395	269	P	V
	*	5785	111.67	-	-	100.26	32.17	10.53	31.29	395	269	P	V
	*	5785	104.99	-	-	93.58	32.17	10.53	31.29	395	269	A	V
		5854.6	53.72	-57.99	111.71	42.14	32.31	10.59	31.32	395	269	P	V
		5872.6	53.59	-52.28	105.87	41.96	32.35	10.61	31.33	395	269	P	V
		5897.8	51.86	-36.43	88.29	40.17	32.4	10.63	31.34	395	269	P	V
		5934.8	51.86	-16.34	68.2	40.03	32.54	10.66	31.37	395	269	P	V

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0+1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 165 5825MHz	*	5825	119.03	-	-	107.53	32.25	10.56	31.31	249	174	P	H
	*	5825	111.15	-	-	99.65	32.25	10.56	31.31	249	174	A	H
		5851.4	80.65	-38.36	119.01	69.08	32.3	10.59	31.32	249	174	P	H
		5856.4	73.73	-36.68	110.41	62.15	32.31	10.59	31.32	249	174	P	H
		5875.2	58.66	-46.39	105.05	47.03	32.35	10.61	31.33	249	174	P	H
		5928.2	53.04	-15.16	68.2	41.22	32.51	10.66	31.35	249	174	P	H
	*	5825	110.48	-	-	98.98	32.25	10.56	31.31	374	273	P	V
	*	5825	103.4	-	-	91.9	32.25	10.56	31.31	374	273	A	V
		5850	71.5	-50.7	122.2	59.93	32.3	10.59	31.32	374	273	P	V
		5856.8	65.98	-44.32	110.3	54.4	32.31	10.59	31.32	374	273	P	V
		5892	53.2	-39.38	92.58	41.54	32.38	10.62	31.34	374	273	P	V
		5932.6	52.36	-15.84	68.2	40.52	32.53	10.66	31.35	374	273	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0+1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		11490	42.59	-31.41	74	48.31	39.78	15.7	61.71	100	0	P	H
		17235	45.94	-22.26	68.2	42.45	40.7	20.28	58.13	100	0	P	H
		11490	42.37	-31.63	74	48.09	39.78	15.7	61.71	100	0	P	V
		17235	48.27	-19.93	68.2	44.78	40.7	20.28	58.13	100	0	P	V
802.11a CH 157 5785MHz		11570	42.7	-31.3	74	48.49	39.66	15.79	61.75	100	0	P	H
		17355	43.82	-24.38	68.2	36.94	41.4	20.37	55.52	100	0	P	H
		11570	43.42	-30.58	74	49.21	39.66	15.79	61.75	100	0	P	V
		17355	44.1	-24.1	68.2	37.22	41.4	20.37	55.52	100	0	P	V
802.11a CH 165 5825MHz		11650	42.08	-31.92	74	47.99	39.35	15.87	61.64	100	0	P	H
		17475	45.52	-22.68	68.2	39.6	42.17	20.47	57.34	100	0	P	H
		11650	41.24	-32.76	74	47.15	39.35	15.87	61.64	100	0	P	V
		17475	47	-21.2	68.2	41.08	42.17	20.47	57.34	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.
0+1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5649.4	57.08	-11.12	68.2	46.14	31.7	10.46	31.22	267	181	P	H
		5697.8	67.64	-35.94	103.58	56.4	31.99	10.5	31.25	267	181	P	H
		5720	84.71	-26.09	110.8	73.41	32.04	10.52	31.26	267	181	P	H
		5723.8	90.74	-28.72	119.46	79.43	32.05	10.52	31.26	267	181	P	H
802.11n	*	5745	118.73	-	-	107.37	32.09	10.54	31.27	267	181	P	H
HT20	*	5745	106.38	-	-	95.02	32.09	10.54	31.27	267	181	A	H
CH 149		5619.4	54.79	-13.41	68.2	43.8	31.76	10.44	31.21	400	272	P	V
5745MHz		5700	60.42	-44.78	105.2	49.17	32	10.5	31.25	400	272	P	V
		5717.4	75.54	-34.53	110.07	64.26	32.03	10.51	31.26	400	272	P	V
		5725	82.45	-39.75	122.2	71.14	32.05	10.52	31.26	400	272	P	V
	*	5745	110.08	-	-	98.72	32.09	10.54	31.27	400	272	P	V
	*	5745	97.58	-	-	86.22	32.09	10.54	31.27	400	272	A	V

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0+1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5641	57.01	-11.19	68.2	46.06	31.72	10.45	31.22	263	176	P	H
		5670.4	57.77	-25.57	83.34	46.7	31.82	10.48	31.23	263	176	P	H
		5719.4	60.88	-49.75	110.63	49.58	32.04	10.52	31.26	263	176	P	H
		5724.6	62.35	-58.94	121.29	51.04	32.05	10.52	31.26	263	176	P	H
	*	5785	119.03	-	-	107.58	32.17	10.57	31.29	263	176	P	H
	*	5785	106.71	-	-	95.26	32.17	10.57	31.29	263	176	A	H
		5852.6	57.45	-58.82	116.27	45.84	32.31	10.62	31.32	263	176	P	H
		5856.6	56.31	-54.04	110.35	44.7	32.31	10.62	31.32	263	176	P	H
802.11n		5879	56.36	-45.87	102.23	44.69	32.36	10.64	31.33	263	176	P	H
HT20		5944.4	57.35	-10.85	68.2	45.45	32.58	10.69	31.37	263	176	P	H
CH 157		5601.8	56.09	-12.11	68.2	45.07	31.8	10.42	31.2	396	271	P	V
5785MHz		5686.2	55.79	-39.23	95.02	44.63	31.92	10.49	31.25	396	271	P	V
		5712.6	56.44	-52.29	108.73	45.16	32.03	10.51	31.26	396	271	P	V
		5723.8	56.4	-63.06	119.46	45.09	32.05	10.52	31.26	396	271	P	V
	*	5785	110.3	-	-	98.85	32.17	10.57	31.29	396	271	P	V
	*	5785	97.86	-	-	86.41	32.17	10.57	31.29	396	271	A	V
		5854.6	55.21	-56.5	111.71	43.6	32.31	10.62	31.32	396	271	P	V
		5862.6	55.43	-53.24	108.67	43.8	32.33	10.63	31.33	396	271	P	V
		5916.4	56.05	-18.49	74.54	44.26	32.47	10.67	31.35	396	271	P	V
		5931.6	55.78	-12.42	68.2	43.92	32.53	10.68	31.35	396	271	P	V

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0+1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
	*	5825	117.42	-	-	105.88	32.25	10.6	31.31	262	177	P	H
	*	5825	105.14	-	-	93.6	32.25	10.6	31.31	262	177	A	H
		5850	82.03	-40.17	122.2	70.43	32.3	10.62	31.32	262	177	P	H
		5856.2	77.27	-33.19	110.46	65.66	32.31	10.62	31.32	262	177	P	H
802.11n		5875.4	60.97	-43.93	104.9	49.31	32.35	10.64	31.33	262	177	P	H
HT20		5931.6	56.13	-12.07	68.2	44.27	32.53	10.68	31.35	262	177	P	H
CH 165	*	5825	108.39	-	-	96.85	32.25	10.6	31.31	390	274	P	V
5825MHz	*	5825	96.32	-	-	84.78	32.25	10.6	31.31	390	274	A	V
		5853.2	73.89	-41.01	114.9	62.28	32.31	10.62	31.32	390	274	P	V
		5855	70.3	-40.5	110.8	58.69	32.31	10.62	31.32	390	274	P	V
		5912.8	55.92	-21.28	77.2	44.16	32.45	10.66	31.35	390	274	P	V
		5925.2	55.87	-12.33	68.2	44.05	32.5	10.67	31.35	390	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0+1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 149 5745MHz		11490	48.53	-25.47	74	53.86	39.78	15.98	61.6	100	0	P	H
		17235	53.02	-15.18	68.2	47.32	40.7	20.14	55.78	100	0	P	H
		11490	49.42	-24.58	74	54.75	39.78	15.98	61.6	100	0	P	V
		17235	51.91	-16.29	68.2	46.21	40.7	20.14	55.78	100	0	P	V
802.11n HT20 CH 157 5785MHz		11570	48.48	-25.52	74	54.02	39.66	16.04	61.75	100	0	P	H
		17355	50.91	-17.29	68.2	44.15	41.4	20.25	55.52	100	0	P	H
		11570	52.89	-21.11	74	58.43	39.66	16.04	61.75	100	72	P	V
		11570	38.32	-15.68	54	43.86	39.66	16.04	61.75	100	72	A	V
		17355	52.15	-16.05	68.2	45.39	41.4	20.25	55.52	100	0	P	V
802.11n HT20 CH 165 5825MHz		11650	48.89	-25.11	74	54.85	39.35	16.11	61.93	100	0	P	H
		17475	50.28	-17.92	68.2	42.4	42.17	20.35	55.26	100	0	P	H
		11650	48.54	-25.46	74	54.5	39.35	16.11	61.93	100	0	P	V
		17475	50.57	-17.63	68.2	42.69	42.17	20.35	55.26	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.
0+1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5644.6	63.86	-4.34	68.2	52.91	31.71	10.46	31.22	249	178	P	H
		5695.2	82.24	-19.42	101.66	71.02	31.97	10.5	31.25	249	178	P	H
		5719.4	92.43	-18.2	110.63	81.13	32.04	10.52	31.26	249	178	P	H
		5724.6	94.95	-26.34	121.29	83.64	32.05	10.52	31.26	249	178	P	H
	*	5755	115.39	-	-	104.01	32.11	10.54	31.27	249	178	P	H
	*	5755	103.21	-	-	91.83	32.11	10.54	31.27	249	178	A	H
		5850.2	61.14	-60.6	121.74	49.54	32.3	10.62	31.32	249	178	P	H
		5857.2	60.49	-49.69	110.18	48.88	32.31	10.62	31.32	249	178	P	H
802.11n		5881.6	56.67	-43.63	100.3	45	32.36	10.64	31.33	249	178	P	H
HT40		5943.2	56.72	-11.48	68.2	44.83	32.57	10.69	31.37	249	178	P	H
CH 151		5648.8	58.16	-10.04	68.2	47.22	31.7	10.46	31.22	377	95	P	V
5755MHz		5698.8	72.5	-31.82	104.32	61.26	31.99	10.5	31.25	377	95	P	V
		5719.8	84.3	-26.44	110.74	73	32.04	10.52	31.26	377	95	P	V
		5724.6	86.95	-34.34	121.29	75.64	32.05	10.52	31.26	377	95	P	V
	*	5755	107.53	-	-	96.15	32.11	10.54	31.27	377	95	P	V
	*	5755	95.37	-	-	83.99	32.11	10.54	31.27	377	95	A	V
		5850	55.03	-67.17	122.2	43.43	32.3	10.62	31.32	377	95	P	V
		5859	55.43	-54.25	109.68	43.82	32.32	10.62	31.33	377	95	P	V
		5897.8	55.1	-33.19	88.29	43.39	32.4	10.65	31.34	377	95	P	V
		5931.8	55.73	-12.47	68.2	43.87	32.53	10.68	31.35	377	95	P	V

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0+1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 159 5795MHz		5645.4	56.69	-11.51	68.2	45.74	31.71	10.46	31.22	264	180	P	H
		5693.2	66.53	-33.66	100.19	55.33	31.96	10.49	31.25	264	180	P	H
		5719.8	71.58	-39.16	110.74	60.28	32.04	10.52	31.26	264	180	P	H
		5724.6	75.71	-45.58	121.29	64.4	32.05	10.52	31.26	264	180	P	H
	*	5795	114.95	-	-	103.47	32.19	10.58	31.29	264	180	P	H
	*	5795	102.37	-	-	90.89	32.19	10.58	31.29	264	180	A	H
		5850.6	74.78	-46.05	120.83	63.18	32.3	10.62	31.32	264	180	P	H
		5856.4	72.34	-38.07	110.41	60.73	32.31	10.62	31.32	264	180	P	H
		5880	64.95	-36.54	101.49	53.28	32.36	10.64	31.33	264	180	P	H
		5927.2	55.89	-12.31	68.2	44.05	32.51	10.68	31.35	264	180	P	H
		5643.6	54.64	-13.56	68.2	43.7	31.71	10.45	31.22	396	272	P	V
		5694.8	57.47	-43.9	101.37	46.25	31.97	10.5	31.25	396	272	P	V
		5716.8	62.35	-47.56	109.91	51.07	32.03	10.51	31.26	396	272	P	V
		5724.8	65.83	-55.91	121.74	54.52	32.05	10.52	31.26	396	272	P	V
	*	5795	106.47	-	-	94.99	32.19	10.58	31.29	396	272	P	V
	*	5795	93.8	-	-	82.32	32.19	10.58	31.29	396	272	A	V
		5854.4	65.61	-46.56	112.17	54	32.31	10.62	31.32	396	272	P	V
		5860.8	63.65	-45.52	109.17	52.03	32.32	10.63	31.33	396	272	P	V
		5875	56.67	-48.53	105.2	45.01	32.35	10.64	31.33	396	272	P	V
		5943	55.88	-12.32	68.2	43.99	32.57	10.69	31.37	396	272	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 Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0+1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n		11510	47.61	-26.39	74	52.95	39.78	15.99	61.62	100	0	P	H
HT40		17265	49.46	-18.74	68.2	43.57	40.8	20.17	55.72	100	0	P	H
CH 151		11510	47.67	-26.33	74	53.01	39.78	15.99	61.62	100	0	P	V
5755MHz		17265	50.88	-17.32	68.2	44.99	40.8	20.17	55.72	100	0	P	V
802.11n		11590	47.86	-26.14	74	53.47	39.62	16.06	61.8	100	0	P	H
HT40		17385	50.3	-17.9	68.2	43.18	41.67	20.27	55.45	100	0	P	H
CH 159		11590	48.13	-25.87	74	53.74	39.62	16.06	61.8	100	0	P	V
5795MHz		17385	51.88	-16.32	68.2	44.76	41.67	20.27	55.45	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.
0+1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 155 5775MHz		5650	65.5	-2.7	68.2	56.79	31.7	10.46	33.45	252	180	P	H
		5698.2	80.09	-23.78	103.87	71.08	31.99	10.48	33.46	252	180	P	H
		5713.4	85.37	-23.58	108.95	76.31	32.03	10.49	33.46	252	180	P	H
		5720.2	84.64	-26.62	111.26	75.56	32.04	10.5	33.46	252	180	P	H
		5775	112.47	-	-	103.26	32.15	10.53	33.47	252	180	P	H
		5775	100.21	-	-	91	32.15	10.53	33.47	252	180	A	H
		5850	74.45	-47.75	122.2	65.04	32.3	10.59	33.48	252	180	P	H
		5855.8	72.62	-37.96	110.58	63.2	32.31	10.59	33.48	252	180	P	H
		5876.2	64.63	-39.68	104.31	55.15	32.35	10.61	33.48	252	180	P	H
		5937.8	55.75	-12.45	68.2	46.03	32.55	10.66	33.49	252	180	P	H
		5646	55.77	-12.43	68.2	47.05	31.71	10.46	33.45	347	280	P	V
		5696.8	67.96	-34.88	102.84	58.96	31.98	10.48	33.46	347	280	P	V
		5713.4	73.89	-35.06	108.95	64.83	32.03	10.49	33.46	347	280	P	V
		5722	72.95	-42.41	115.36	63.87	32.04	10.5	33.46	347	280	P	V
		5775	102.39	-	-	93.18	32.15	10.53	33.47	347	280	P	V
		5775	89.57	-	-	80.36	32.15	10.53	33.47	347	280	A	V
		5850.2	64.05	-57.69	121.74	54.64	32.3	10.59	33.48	347	280	P	V
		5856.6	63.05	-47.3	110.35	53.63	32.31	10.59	33.48	347	280	P	V
		5876.4	56.01	-48.15	104.16	46.53	32.35	10.61	33.48	347	280	P	V
		5940.4	54.61	-13.59	68.2	44.87	32.56	10.67	33.49	347	280	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 Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0+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	47.88	-26.12	74	53.35	39.7	16.54	61.71	100	0	P	H
		17325	50.12	-18.08	68.2	43.73	41.12	20.85	55.58	100	0	P	H
		11550	46.54	-27.46	74	52.01	39.7	16.54	61.71	100	0	P	V
		17325	49.98	-18.22	68.2	43.59	41.12	20.85	55.58	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 VHT80 (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.
0+1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
5GHz 802.11ac VHT80 LF		80.49	33.25	-6.75	40	49.12	13.3	1.22	30.45	-	-	P	H
		125.31	36.89	-6.61	43.5	48.19	17.53	1.53	30.4	-	-	P	H
		220.89	45.05	-0.95	46	58.01	15.15	2.03	30.28	160	253	QP	H
		220.89	51.15	-	-	64.11	15.15	2.03	30.28	160	253	P	H
		609.4	35.81	-10.19	46	36.65	25.33	3.36	29.62	-	-	P	H
		704.6	41.94	-4.06	46	41.37	26.38	3.6	29.51	-	-	P	H
		894.3	37.9	-8.1	46	33.89	28.93	4.07	29.15	-	-	P	H
		45.93	32.35	-7.65	40	45.57	16.25	0.93	30.41	-	-	P	V
		172.83	31.28	-12.22	43.5	44.34	15.32	1.8	30.35	-	-	P	V
		220.89	40.05	-5.95	46	53.01	15.15	2.03	30.28	194	15	QP	V
		220.89	44.95	-	-	57.91	15.15	2.03	30.28	194	15	P	V
		611.5	38.41	-7.59	46	39.21	25.36	3.37	29.62	-	-	P	V
		704.6	39.88	-6.12	46	39.31	26.38	3.6	29.51	-	-	P	V
		992.3	37.49	-16.51	54	31.5	30.37	4.27	28.87	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

<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.	
0+1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5636	57.59	-10.61	68.2	48.86	31.73	10.45	33.45	253	174	P	H
		5697	57.97	-45.02	102.99	48.95	31.98	10.5	33.46	253	174	P	H
		5720	65.99	-44.81	110.8	56.89	32.04	10.52	33.46	253	174	P	H
		5724	76.04	-43.88	119.92	66.93	32.05	10.52	33.46	253	174	P	H
802.11ac	*	5745	116.12	-	-	106.95	32.09	10.54	33.46	253	174	P	H
VHT20	*	5745	99.48	-	-	90.31	32.09	10.54	33.46	253	174	A	H
CH 149		5623.8	54.98	-13.22	68.2	46.24	31.75	10.44	33.45	317	70	P	V
5745MHz		5680	54.82	-35.62	90.44	45.92	31.88	10.48	33.46	317	70	P	V
		5720	60.23	-50.57	110.8	51.13	32.04	10.52	33.46	317	70	P	V
		5724.6	72.5	-48.79	121.29	63.39	32.05	10.52	33.46	317	70	P	V
	*	5745	106.97	-	-	97.8	32.09	10.54	33.46	317	70	P	V
	*	5745	93.65	-	-	84.48	32.09	10.54	33.46	317	70	A	V

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0+1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5602.8	56.4	-11.8	68.2	47.63	31.79	10.42	33.44	232	175	P	H
		5695.6	57.44	-44.52	101.96	48.43	31.97	10.5	33.46	232	175	P	H
		5716.2	58.2	-51.54	109.74	49.12	32.03	10.51	33.46	232	175	P	H
		5723.2	57.1	-61	118.1	47.99	32.05	10.52	33.46	232	175	P	H
	*	5785	115.69	-	-	106.42	32.17	10.57	33.47	232	175	P	H
	*	5785	99.15	-	-	89.88	32.17	10.57	33.47	232	175	A	H
		5852	54.82	-62.82	117.64	45.38	32.3	10.62	33.48	232	175	P	H
		5868.4	55.41	-51.64	107.05	45.92	32.34	10.63	33.48	232	175	P	H
802.11ac		5904	55.15	-28.55	83.7	45.56	32.42	10.66	33.49	232	175	P	H
VHT20		5926.2	54.92	-13.28	68.2	45.24	32.5	10.67	33.49	232	175	P	H
CH 157		5644.6	54.53	-13.67	68.2	45.81	31.71	10.46	33.45	379	70	P	V
5785MHz		5669.8	54.85	-28.04	82.89	46	31.82	10.48	33.45	379	70	P	V
		5703	55.34	-50.7	106.04	46.29	32.01	10.5	33.46	379	70	P	V
		5724.6	54.73	-66.56	121.29	45.62	32.05	10.52	33.46	379	70	P	V
	*	5785	106.58	-	-	97.31	32.17	10.57	33.47	379	70	P	V
	*	5785	92.84	-	-	83.57	32.17	10.57	33.47	379	70	A	V
		5854.2	54.15	-58.47	112.62	44.7	32.31	10.62	33.48	379	70	P	V
		5865.8	54.63	-53.14	107.77	45.15	32.33	10.63	33.48	379	70	P	V
		5916.2	54.97	-19.72	74.69	45.33	32.46	10.67	33.49	379	70	P	V
		5947.8	54.52	-13.68	68.2	44.73	32.59	10.69	33.49	379	70	P	V

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0+1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
	*	5825	115.2	-	-	105.83	32.25	10.6	33.48	258	179	P	H
	*	5825	98.84	-	-	89.47	32.25	10.6	33.48	258	179	A	H
		5850.2	63.44	-58.3	121.74	54	32.3	10.62	33.48	258	179	P	H
		5855	60.81	-49.99	110.8	51.36	32.31	10.62	33.48	258	179	P	H
802.11ac		5878.4	56.12	-46.55	102.67	46.6	32.36	10.64	33.48	258	179	P	H
VHT20		5932.6	54.84	-13.36	68.2	45.12	32.53	10.68	33.49	258	179	P	H
CH 165	*	5825	106.73	-	-	97.36	32.25	10.6	33.48	388	131	P	V
5825MHz	*	5825	93.43	-	-	84.06	32.25	10.6	33.48	388	131	A	V
		5851	57.64	-62.28	119.92	48.2	32.3	10.62	33.48	388	131	P	V
		5855.6	56.66	-53.97	110.63	47.21	32.31	10.62	33.48	388	131	P	V
		5897.4	54.67	-33.92	88.59	45.12	32.39	10.65	33.49	388	131	P	V
		5926.8	54.86	-13.34	68.2	45.16	32.51	10.68	33.49	388	131	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0+1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac		11490	45.88	-28.12	74	51.21	39.78	16.49	61.6	100	0	P	H
VHT20		17235	47.33	-20.87	68.2	41.63	40.7	20.78	55.78	100	0	P	H
CH 149		11490	45.48	-28.52	74	50.81	39.78	16.49	61.6	100	0	P	V
5745MHz		17235	46.85	-21.35	68.2	41.15	40.7	20.78	55.78	100	0	P	V
802.11ac		11570	45.63	-28.37	74	51.17	39.66	16.55	61.75	100	0	P	H
VHT20		17355	47.55	-20.65	68.2	40.79	41.4	20.88	55.52	100	0	P	H
CH 157		11570	45.93	-28.07	74	51.47	39.66	16.55	61.75	100	0	P	V
5785MHz		17355	47.6	-20.6	68.2	40.84	41.4	20.88	55.52	100	0	P	V
802.11ac		11650	44.9	-29.1	74	50.86	39.35	16.62	61.93	100	0	P	H
VHT20		17475	47.53	-20.67	68.2	39.65	42.17	20.97	55.26	100	0	P	H
CH 165		11650	45.83	-28.17	74	51.79	39.35	16.62	61.93	100	0	P	V
5825MHz		17475	47.06	-21.14	68.2	39.18	42.17	20.97	55.26	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.
0+1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5612.6	56.9	-11.3	68.2	48.15	31.77	10.43	33.45	229	174	P	H
		5699.2	62.05	-42.56	104.61	53.01	32	10.5	33.46	229	174	P	H
		5718.4	80.71	-29.64	110.35	71.62	32.04	10.51	33.46	229	174	P	H
		5722.2	79.27	-36.55	115.82	70.17	32.04	10.52	33.46	229	174	P	H
	*	5755	111.76	-	-	102.58	32.11	10.54	33.47	229	174	P	H
	*	5755	96.72	-	-	87.54	32.11	10.54	33.47	229	174	A	H
		5851.6	53.75	-64.8	118.55	44.31	32.3	10.62	33.48	229	174	P	H
		5856	54.23	-56.29	110.52	44.78	32.31	10.62	33.48	229	174	P	H
802.11ac		5886.8	55.27	-41.17	96.44	45.73	32.37	10.65	33.48	229	174	P	H
VHT40		5942	54.13	-14.07	68.2	44.36	32.57	10.69	33.49	229	174	P	H
CH 151		5628.4	54.22	-13.98	68.2	45.49	31.74	10.44	33.45	387	70	P	V
5755MHz		5699	56.92	-47.54	104.46	47.89	31.99	10.5	33.46	387	70	P	V
		5718	71.02	-39.22	110.24	61.93	32.04	10.51	33.46	387	70	P	V
		5724.8	73.35	-48.39	121.74	64.24	32.05	10.52	33.46	387	70	P	V
	*	5755	102.45	-	-	93.27	32.11	10.54	33.47	387	70	P	V
	*	5755	88.99	-	-	79.81	32.11	10.54	33.47	387	70	A	V
		5853	54.56	-60.8	115.36	45.11	32.31	10.62	33.48	387	70	P	V
		5855.4	54.49	-56.2	110.69	45.04	32.31	10.62	33.48	387	70	P	V
		5905.8	54.43	-27.94	82.37	44.84	32.42	10.66	33.49	387	70	P	V
		5934.2	54.51	-13.69	68.2	44.78	32.54	10.68	33.49	387	70	P	V

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0+1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 CH 159 5795MHz		5636	54.98	-13.22	68.2	46.25	31.73	10.45	33.45	269	181	P	H
		5699.2	55.98	-48.63	104.61	46.94	32	10.5	33.46	269	181	P	H
		5712.4	58.08	-50.59	108.67	49.01	32.02	10.51	33.46	269	181	P	H
		5722.8	59.77	-57.41	117.18	50.66	32.05	10.52	33.46	269	181	P	H
	*	5795	111.82	-	-	102.52	32.19	10.58	33.47	269	181	P	H
	*	5795	94.48	-	-	85.18	32.19	10.58	33.47	269	181	A	H
		5851.2	56.39	-63.07	119.46	46.95	32.3	10.62	33.48	269	181	P	H
		5857.2	58.37	-51.81	110.18	48.92	32.31	10.62	33.48	269	181	P	H
		5911.4	54.58	-23.65	78.23	44.96	32.45	10.66	33.49	269	181	P	H
		5942	54.32	-13.88	68.2	44.55	32.57	10.69	33.49	269	181	P	H
		5609.8	53.63	-14.57	68.2	44.87	31.78	10.43	33.45	377	69	P	V
		5694.4	53.76	-47.31	101.07	44.75	31.97	10.5	33.46	377	69	P	V
		5720	55.19	-55.61	110.8	46.09	32.04	10.52	33.46	377	69	P	V
		5724.6	54.07	-67.22	121.29	44.98	32.05	10.5	33.46	377	69	P	V
	*	5795	102.54	-	-	93.24	32.19	10.58	33.47	377	69	P	V
	*	5795	88.55	-	-	79.25	32.19	10.58	33.47	377	69	A	V
		5852.6	53.76	-62.51	116.27	44.31	32.31	10.62	33.48	377	69	P	V
		5862.8	54.19	-54.42	108.61	44.71	32.33	10.63	33.48	377	69	P	V
		5908	53.69	-27.05	80.74	44.09	32.43	10.66	33.49	377	69	P	V
		5942.2	53.42	-14.78	68.2	43.65	32.57	10.69	33.49	377	69	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 Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0+1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac		11510	46.18	-27.82	74	51.52	39.78	16.5	61.62	100	0	P	H
VHT40		17265	47.07	-21.13	68.2	41.18	40.8	20.81	55.72	100	0	P	H
CH 151		11510	46.3	-27.7	74	51.64	39.78	16.5	61.62	100	0	P	V
5755MHz		17265	46.5	-21.7	68.2	40.61	40.8	20.81	55.72	100	0	P	V
802.11ac		11590	47.21	-26.79	74	52.82	39.62	16.57	61.8	100	0	P	H
VHT40		17385	48.66	-19.54	68.2	41.54	41.67	20.9	55.45	100	0	P	H
CH 159		11590	46.15	-27.85	74	51.76	39.62	16.57	61.8	100	0	P	V
5795MHz		17385	48.45	-19.75	68.2	41.33	41.67	20.9	55.45	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.
0+1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 155 5775MHz		5623	61.05	-7.15	68.2	52.31	31.75	10.44	33.45	232	182	P	H
		5682.2	81.07	-11	92.07	72.16	31.89	10.48	33.46	232	182	P	H
		5717.8	80.82	-29.36	110.18	71.75	32.04	10.49	33.46	232	182	P	H
		5723.6	81.11	-37.9	119.01	72.02	32.05	10.5	33.46	232	182	P	H
	*	5775	117.14	-	-	107.93	32.15	10.53	33.47	232	182	P	H
	*	5775	104.59	-	-	95.38	32.15	10.53	33.47	232	182	A	H
		5851.4	72.33	-46.68	119.01	62.92	32.3	10.59	33.48	232	182	P	H
		5857.8	72.85	-37.16	110.01	63.42	32.32	10.59	33.48	232	182	P	H
		5878	63.25	-39.72	102.97	53.76	32.36	10.61	33.48	232	182	P	H
		5946.6	56.61	-11.59	68.2	46.84	32.59	10.67	33.49	232	182	P	H
		5649.8	56.92	-11.28	68.2	48.21	31.7	10.46	33.45	400	266	P	V
		5688	72.62	-23.73	96.35	63.67	31.93	10.48	33.46	400	266	P	V
		5719.2	77.46	-33.12	110.58	68.38	32.04	10.5	33.46	400	266	P	V
		5723	76.79	-40.85	117.64	67.7	32.05	10.5	33.46	400	266	P	V
	*	5775	108.63	-	-	99.42	32.15	10.53	33.47	400	266	P	V
	*	5775	96.2	-	-	86.99	32.15	10.53	33.47	400	266	A	V
		5850.4	61.39	-59.9	121.29	51.98	32.3	10.59	33.48	400	266	P	V
		5865	62.38	-45.62	108	52.93	32.33	10.6	33.48	400	266	P	V
		5875.4	55.56	-49.34	104.9	46.08	32.35	10.61	33.48	400	266	P	V
		5945.4	55.34	-12.86	68.2	45.58	32.58	10.67	33.49	400	266	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 Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0+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	45.19	-28.81	74	50.92	39.7	16.28	61.71	100	0	P	H
		17325	46.55	-21.65	68.2	40.03	41.12	20.98	55.58	100	0	P	H
		11550	44.57	-29.43	74	50.3	39.7	16.28	61.71	100	0	P	V
		17325	45.35	-22.85	68.2	38.83	41.12	20.98	55.58	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 VHT80 (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.
0+1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
5GHz 802.11ac VHT80 LF		165.81	39.45	-4.05	43.5	52.04	15.85	1.92	30.36	-	-	P	H
		221.16	43.57	-2.43	46	56.53	15.15	2.17	30.28	166	255	QP	H
		221.16	48.57	-	-	61.53	15.15	2.17	30.28	162	255	P	H
		269.49	41.03	-4.97	46	49.77	19.08	2.38	30.2	-	-	P	H
		698.3	37.88	-8.12	46	37.4	26.31	3.69	29.52	-	-	P	H
		771.8	39.36	-6.64	46	36.87	27.96	3.89	29.36	-	-	P	H
		904.8	38.44	-7.56	46	34.27	29.03	4.27	29.13	-	-	P	H
		81.03	35.79	-4.21	40	51.52	13.42	1.29	30.44	-	-	P	V
		220.08	41.98	-4.02	46	55.04	15.05	2.17	30.28	100	0	P	V
		267.6	38.73	-7.27	46	47.31	19.25	2.37	30.2	-	-	P	V
		610.1	39.22	-6.78	46	40.06	25.32	3.46	29.62	-	-	P	V
		702.5	39.67	-6.33	46	39.15	26.34	3.7	29.52	-	-	P	V
		899.2	39.96	-6.04	46	35.96	28.89	4.25	29.14	-	-	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 :	Jack Cheng, Lance Chiang and Chuan Chu	Temperature :	22~24°C
		Relative Humidity :	56~60%

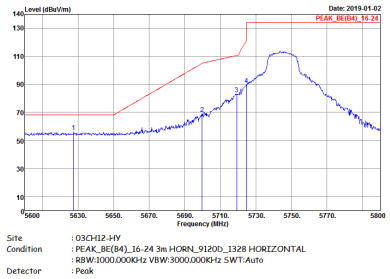
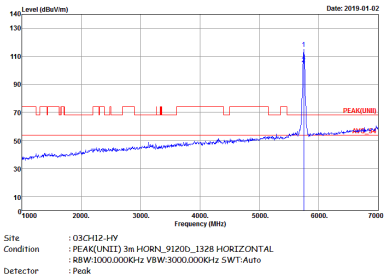
Note symbol

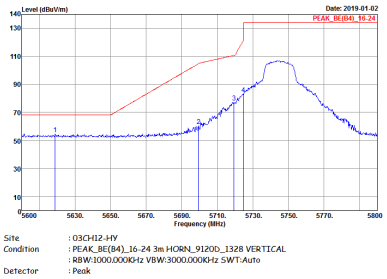
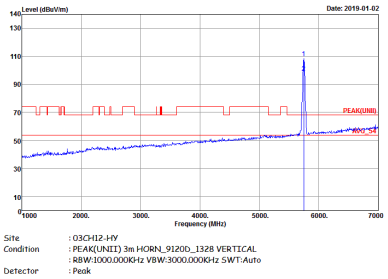
-L	**Low channel location**
-R	**High channel location**

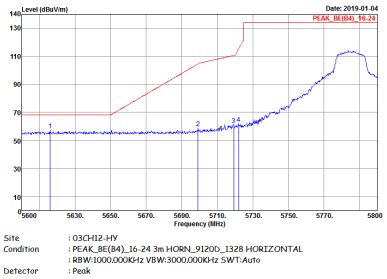
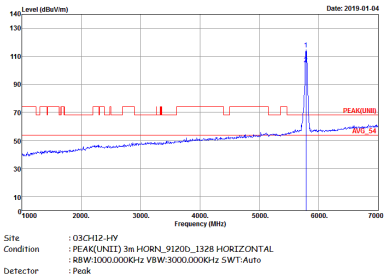
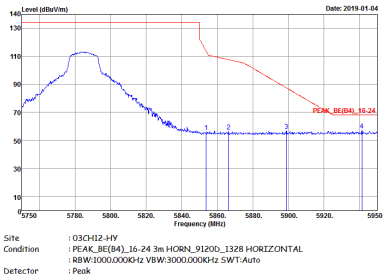
<CDD Mode>

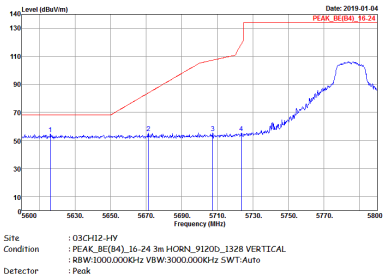
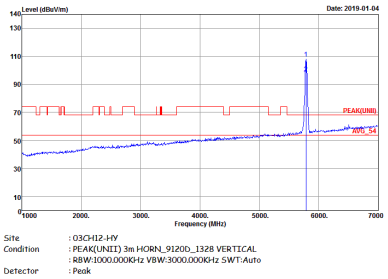
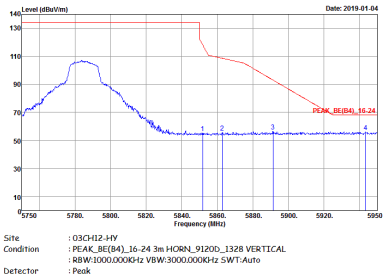
Band 4 - 5725~5850MHz

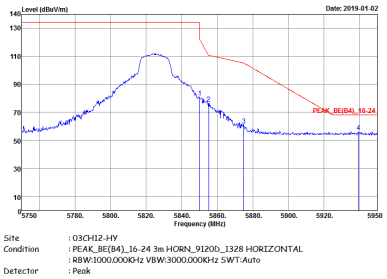
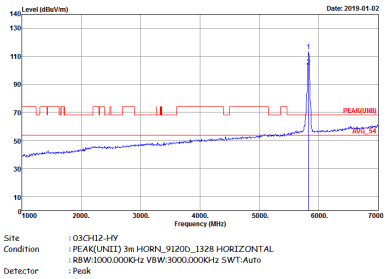
WIFI 802.11a (Band Edge @ 3m)

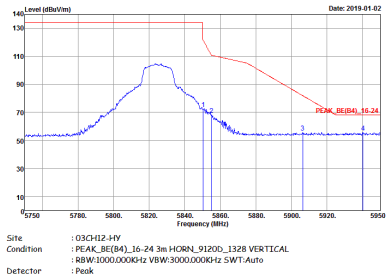
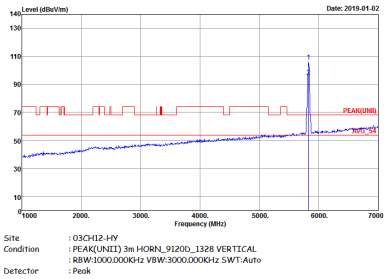
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
0	Horizontal	Fundamental
Peak		

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

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

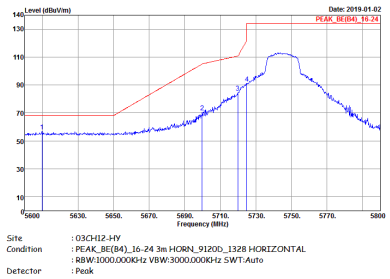
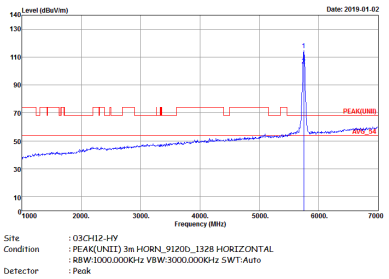
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
0	Vertical	Fundamental
Peak		
Peak		Left blank

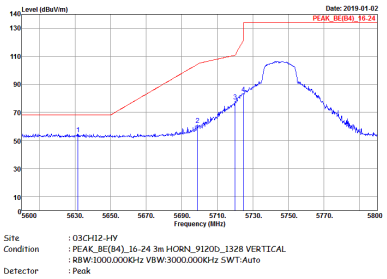
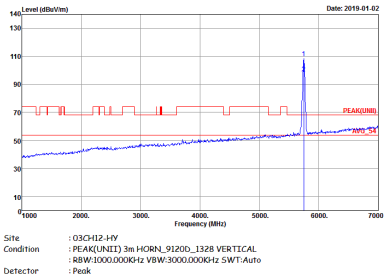
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
0	Horizontal	Fundamental
Peak		

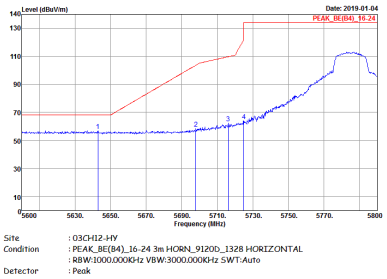
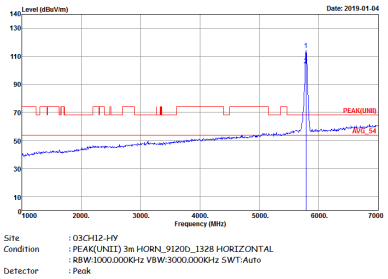
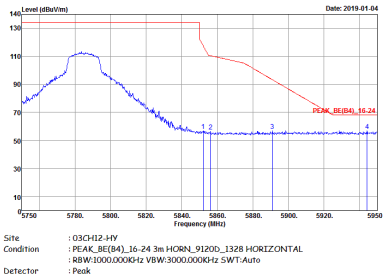
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
0	Vertical	Fundamental
Peak		

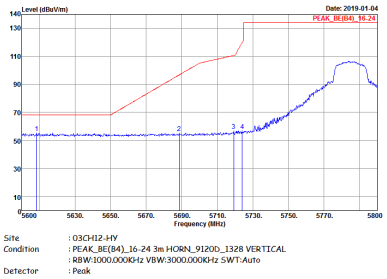
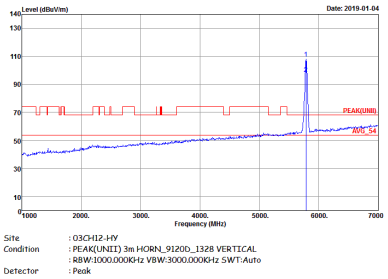
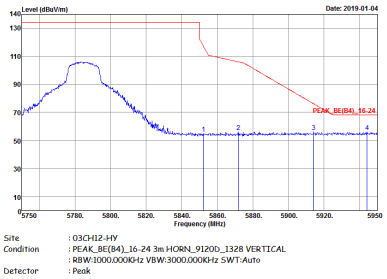
Band 4 5725~5850MHz

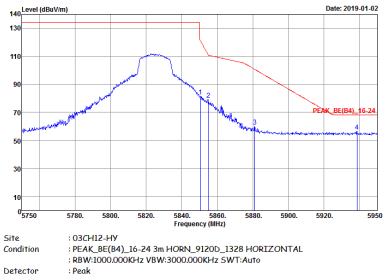
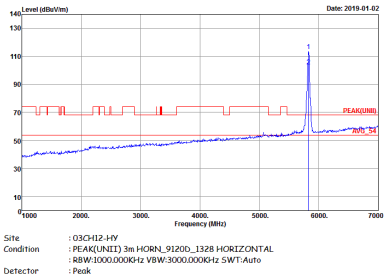
WIFI 802.11n HT20 (Band Edge @ 3m)

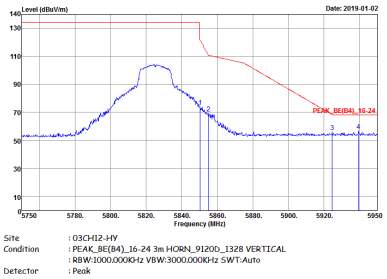
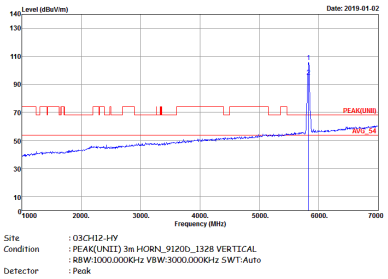
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
0	Horizontal	Fundamental
Peak		

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

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

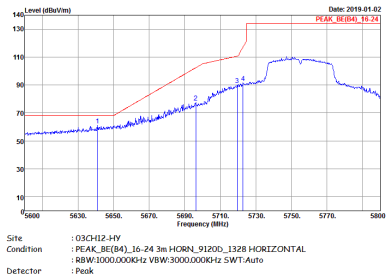
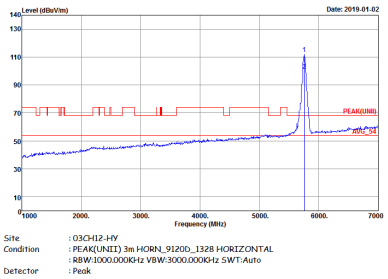
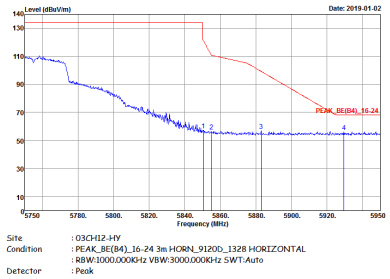
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
0	Vertical	Fundamental
Peak		
Peak		Left blank

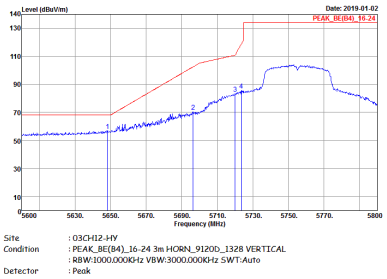
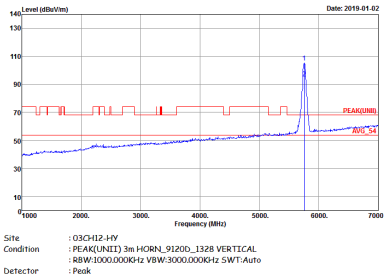
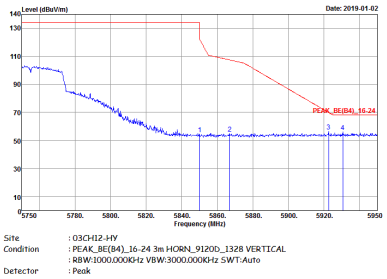
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
0	Horizontal	Fundamental
Peak		

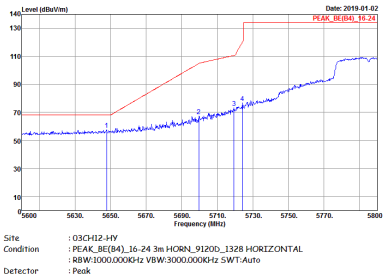
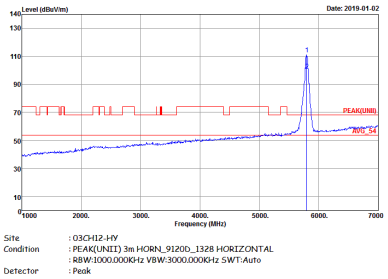
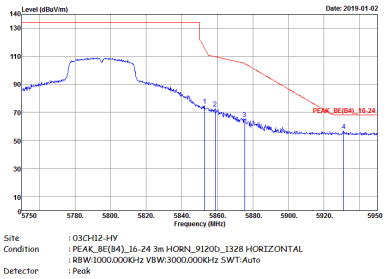
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
0	Vertical	Fundamental
Peak		

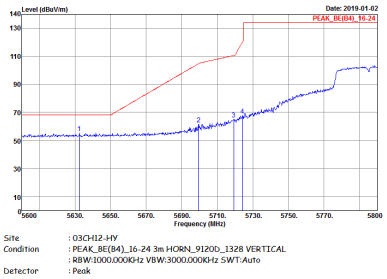
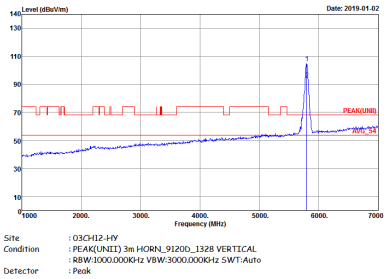
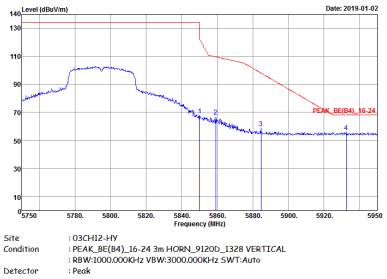
Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

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

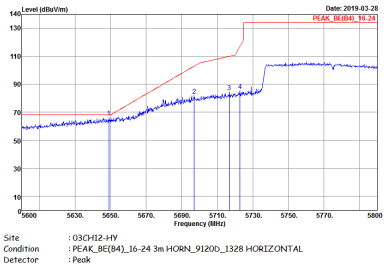
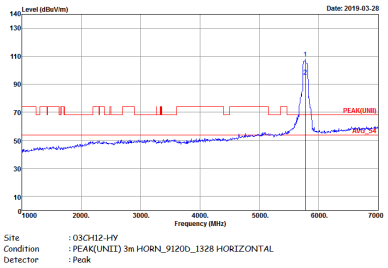
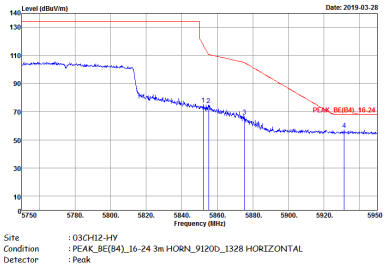
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
0	Vertical	Fundamental
Peak		
Peak		Left blank

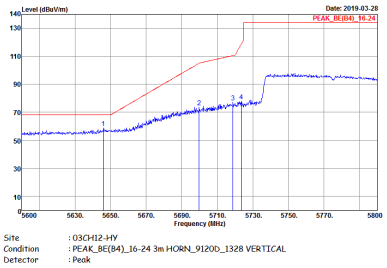
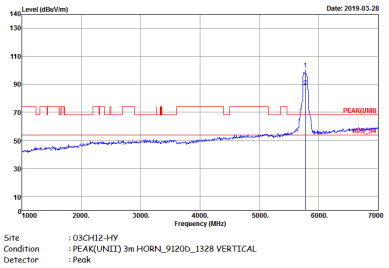
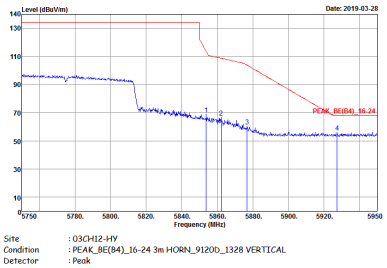
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
0	Horizontal	Fundamental
Peak		
Peak		Left blank

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

Band 4 5725~5850MHz

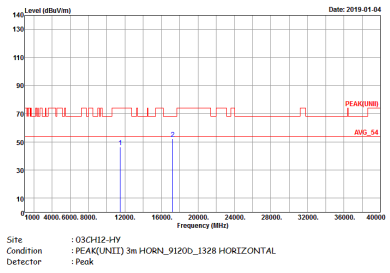
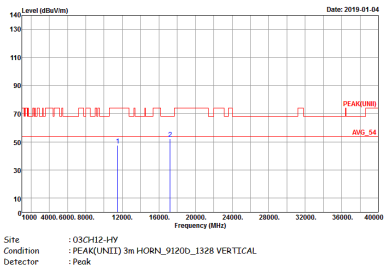
WIFI 802.11ac VHT80 (Band Edge @ 3m)

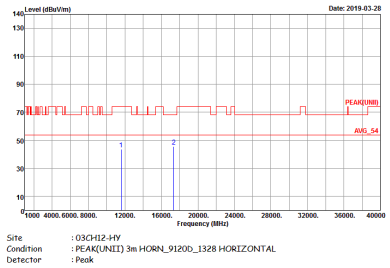
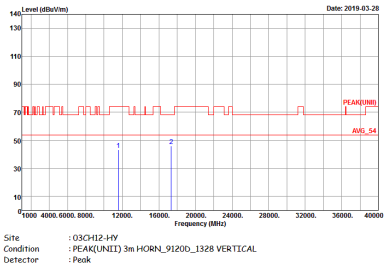
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0	Horizontal	Fundamental
Peak		
Peak		Left blank

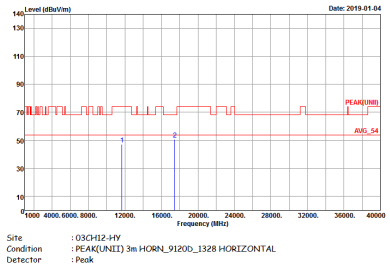
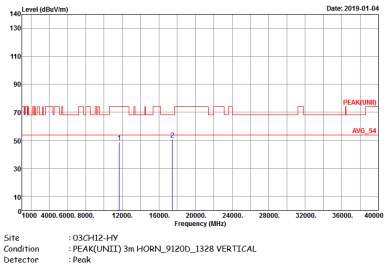
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

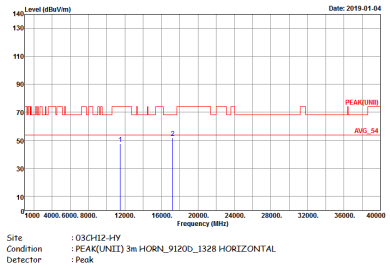
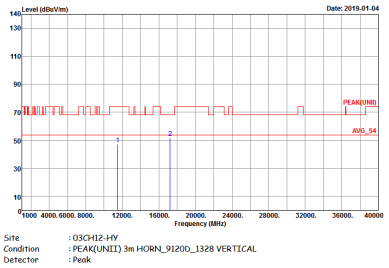
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
0	Horizontal	Vertical
Peak Avg.		

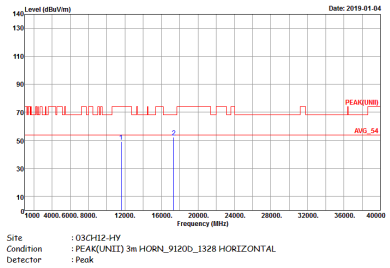
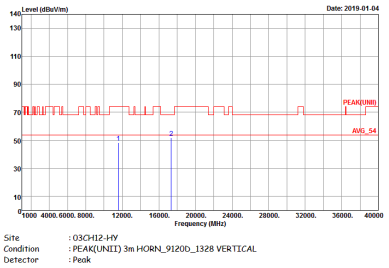
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
0	Horizontal	Vertical
Peak Avg.		

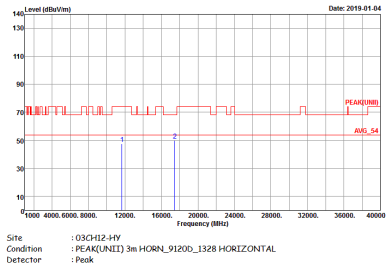
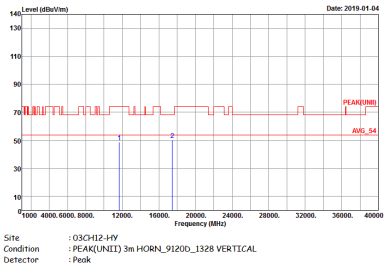
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
0	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

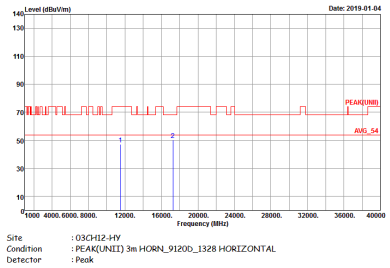
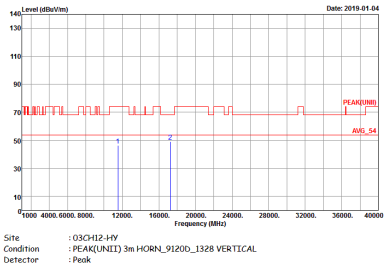
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
0	Horizontal	Vertical
Peak Avg.		

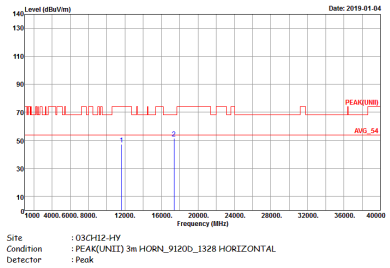
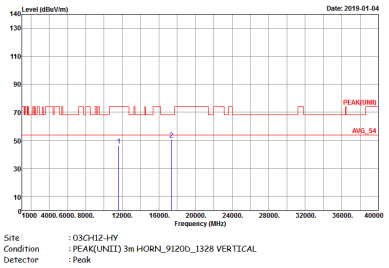
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
0	Horizontal	Vertical
Peak Avg.		

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

Band 4 5725~5850MHz

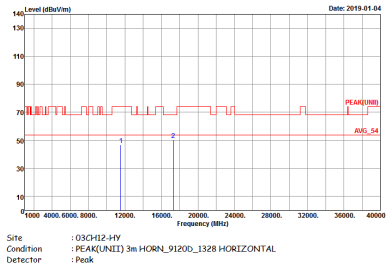
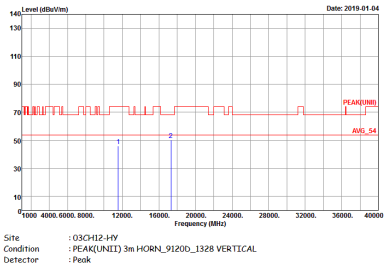
WIFI 802.11n HT40 (Harmonic @ 3m)

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

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

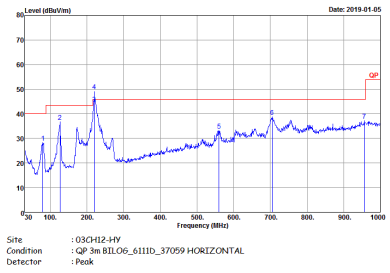
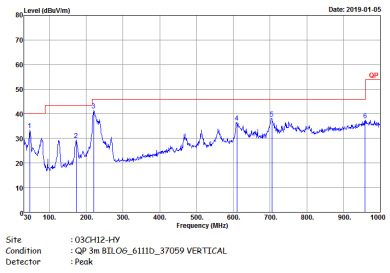
Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

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

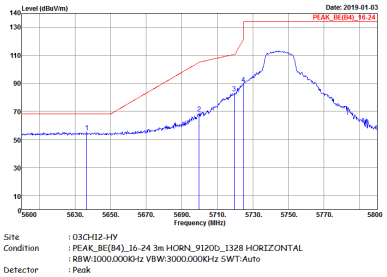
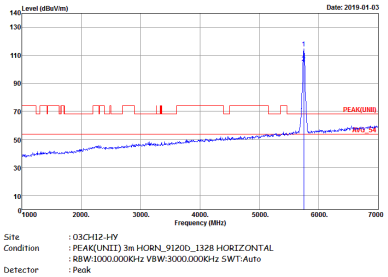
Emission below 1GHz

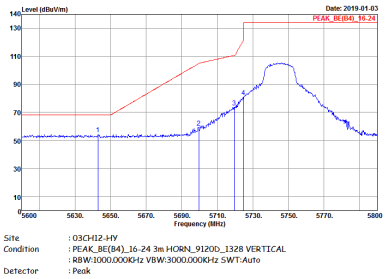
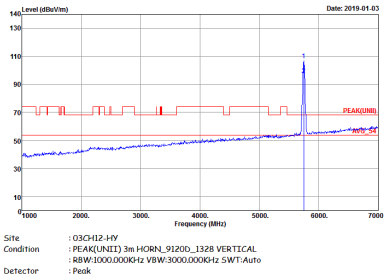
5GHz WIFI 802.11ac VHT80 (LF)

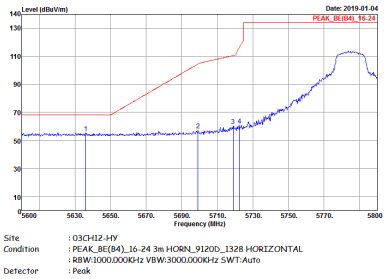
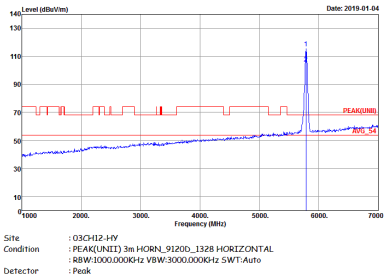
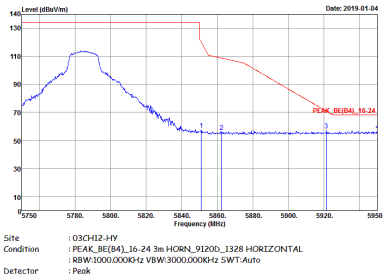
WIFI	5GHz 5725~5850MHz	
ANT	802.11ac VHT80 LF	
0	Horizontal	Vertical
QP / Peak		

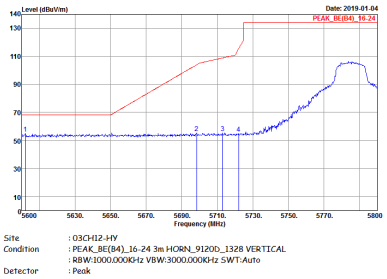
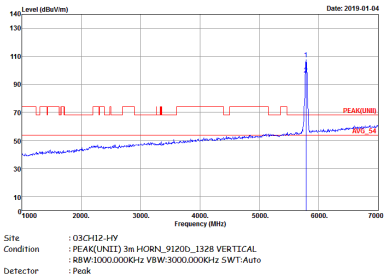
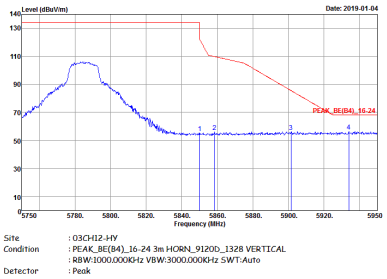
Band 4 - 5725~5850MHz

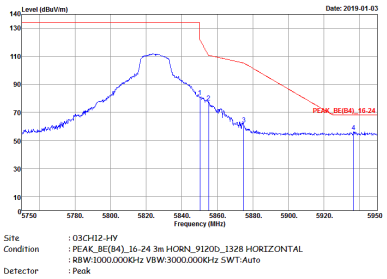
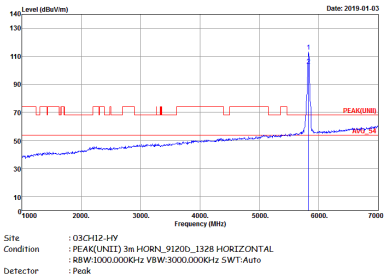
WIFI 802.11a (Band Edge @ 3m)

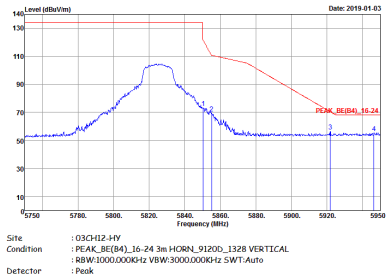
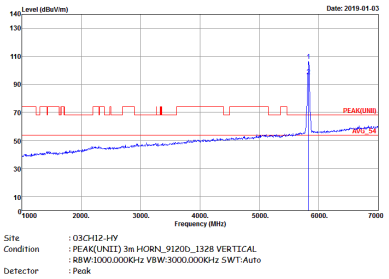
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1	Horizontal	Fundamental
Peak		

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

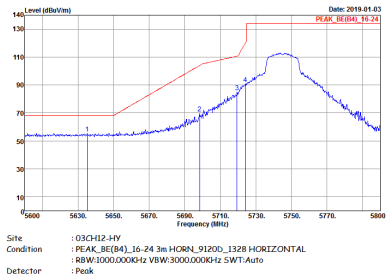
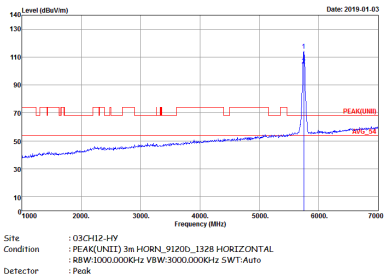
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1	Vertical	Fundamental
Peak		
Peak		Left blank

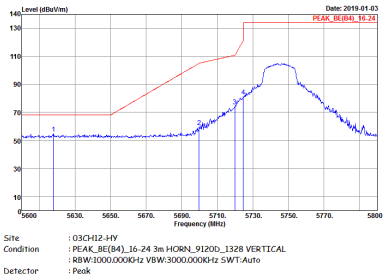
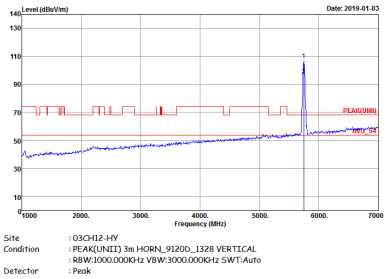
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1	Horizontal	Fundamental
Peak		

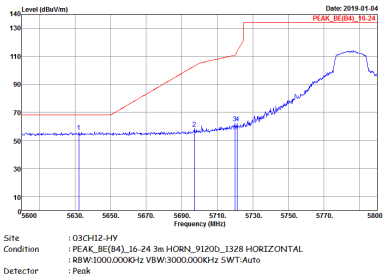
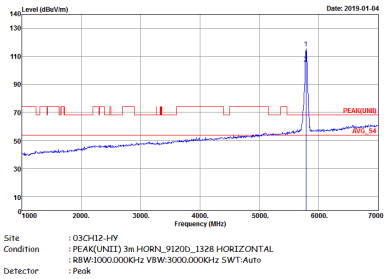
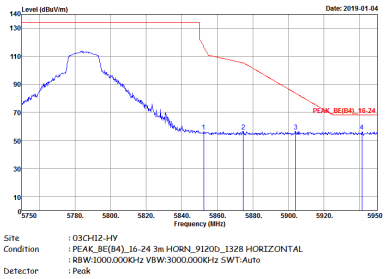
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1	Vertical	Fundamental
Peak		

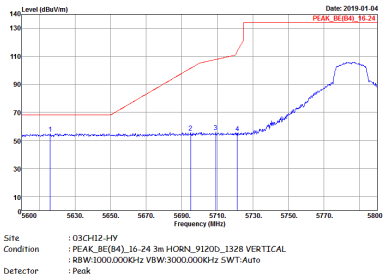
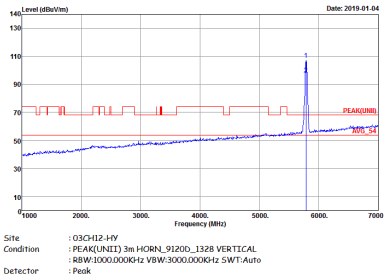
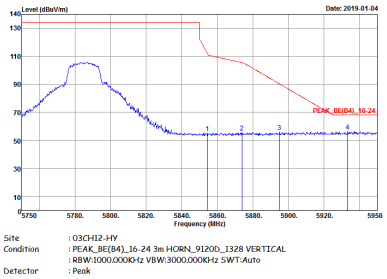
Band 4 5725~5850MHz

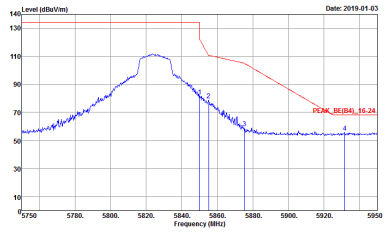
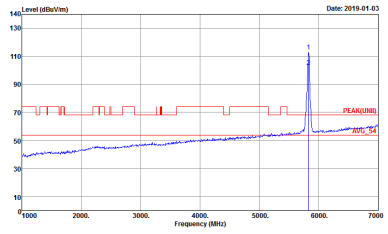
WIFI 802.11n HT20 (Band Edge @ 3m)

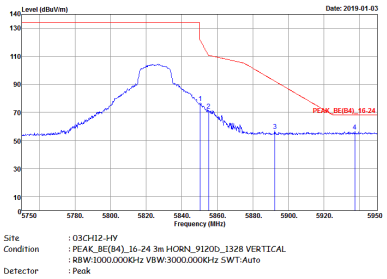
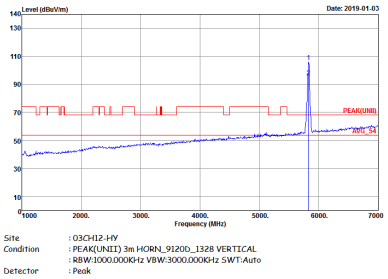
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
1	Horizontal	Fundamental
Peak		

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

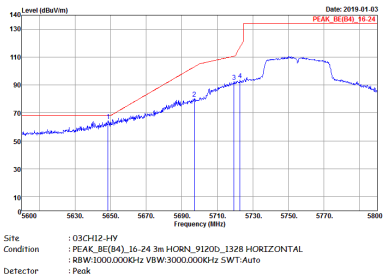
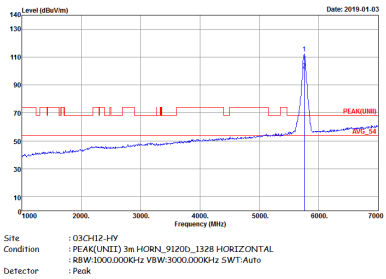
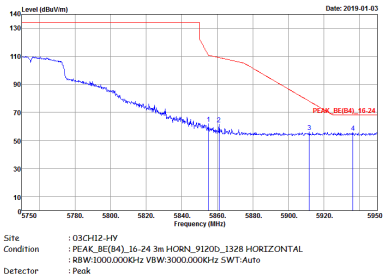
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
1	Vertical	Fundamental
Peak		
Peak		Left blank

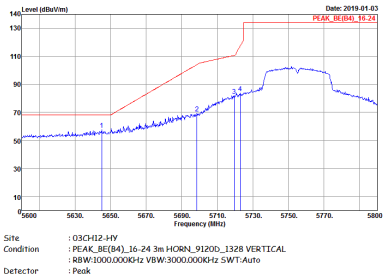
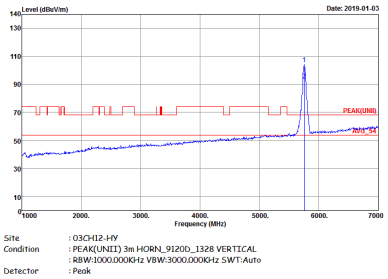
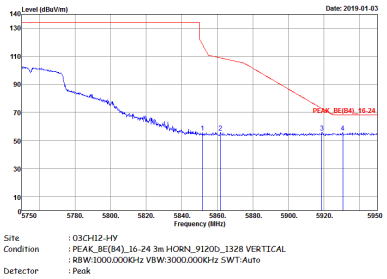
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
1	Horizontal	Fundamental
Peak		

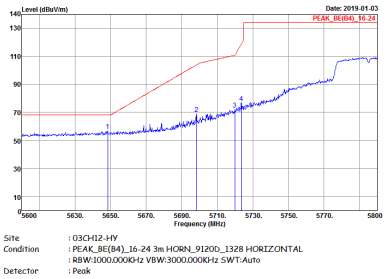
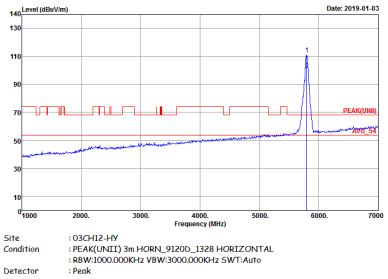
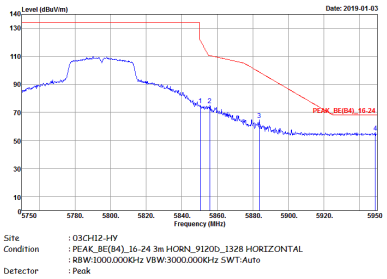
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
1	Vertical	Fundamental
Peak		

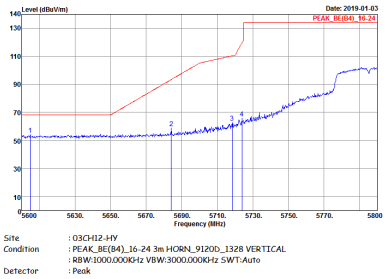
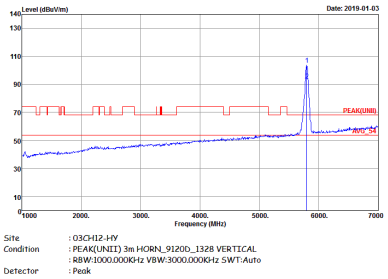
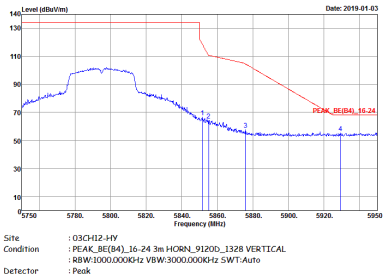
Band 4 5725~5850MHz

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

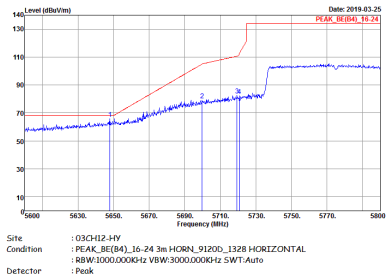
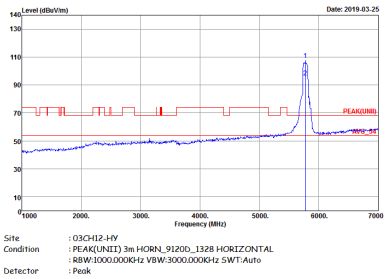
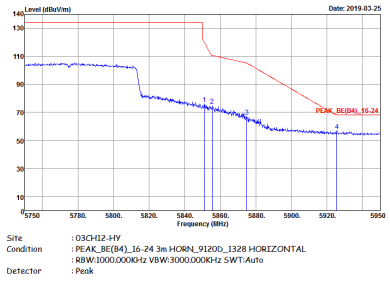
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
1	Vertical	Fundamental
Peak		
Peak		Left blank

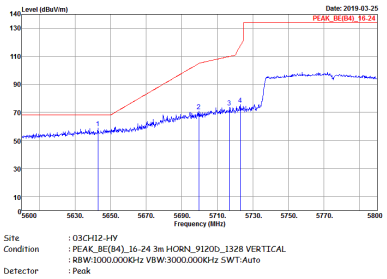
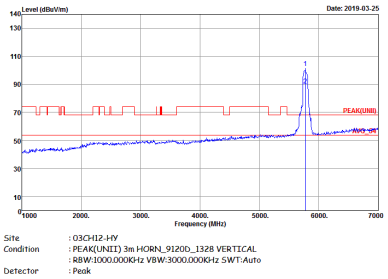
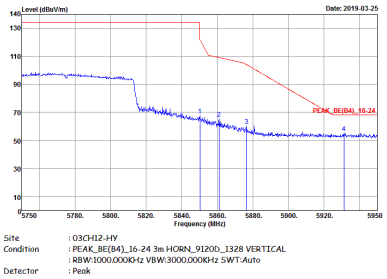
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
1	Horizontal	Fundamental
Peak		
Peak		Left blank

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

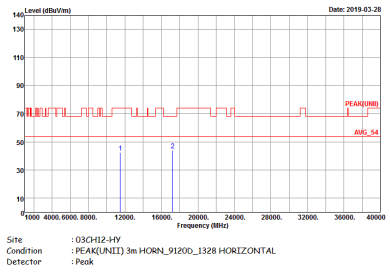
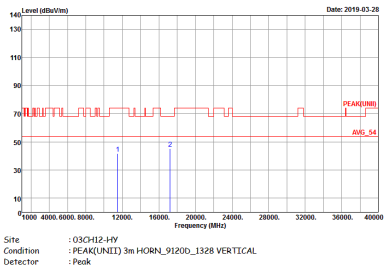
WIFI 802.11ac VHT80 (Band Edge @ 3m)

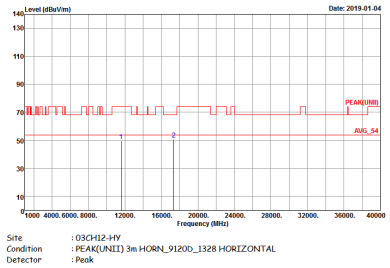
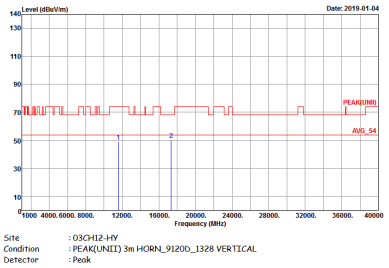
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Horizontal	Fundamental
Peak		
Peak		Left blank

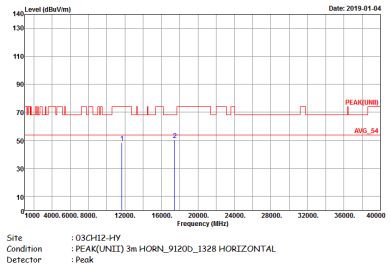
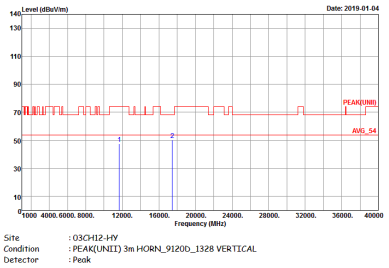
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

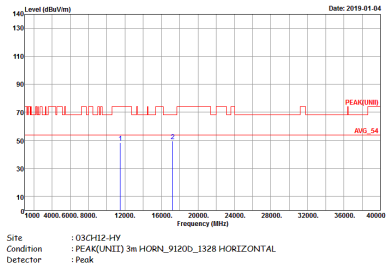
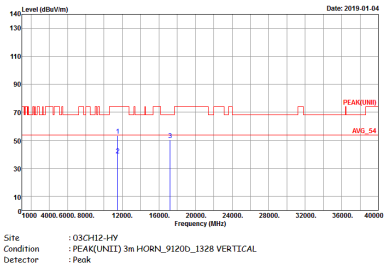
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
1	Horizontal	Vertical
Peak Avg.		

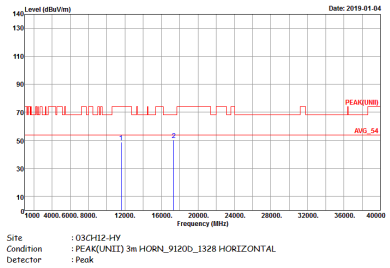
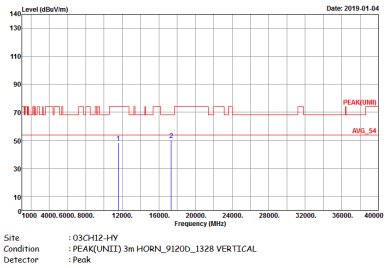
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Vertical
Peak Avg.		

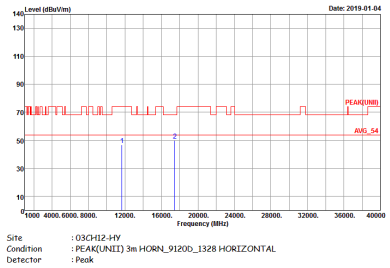
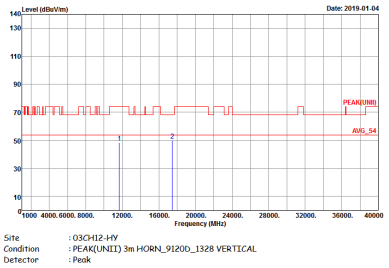
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

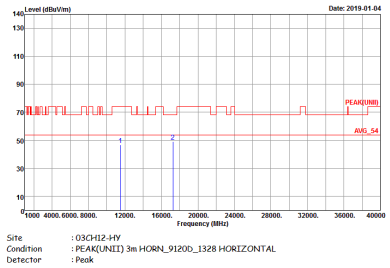
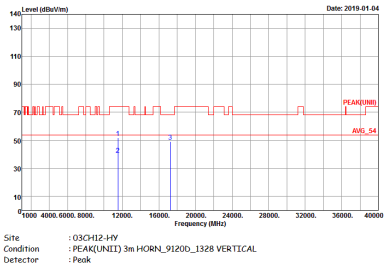
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
1	Horizontal	Vertical
Peak Avg.		

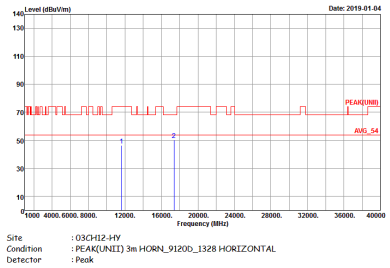
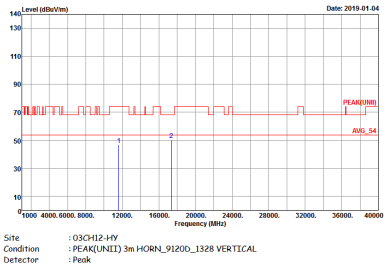
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
1	Horizontal	Vertical
Peak Avg.		

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

Band 4 5725~5850MHz

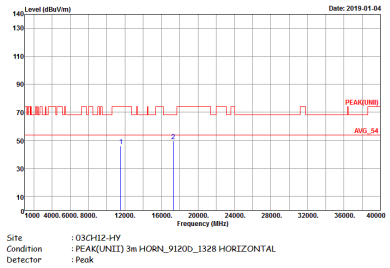
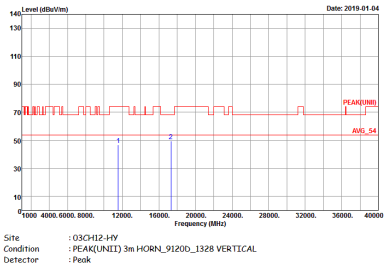
WIFI 802.11n HT40 (Harmonic @ 3m)

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.		

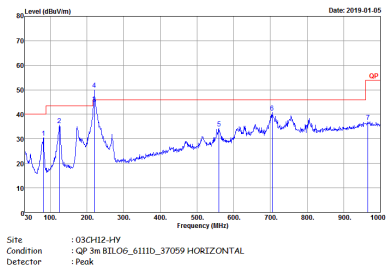
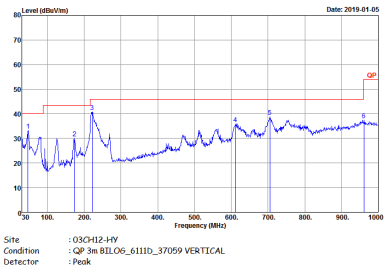
Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

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

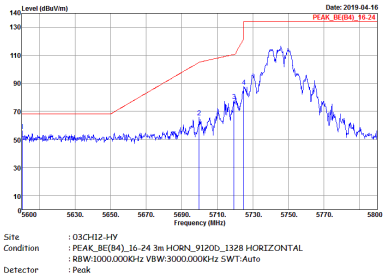
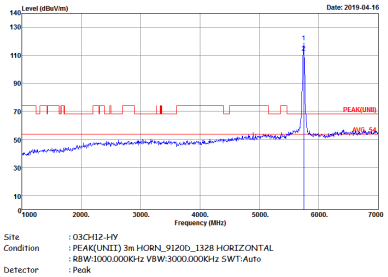
Emission below 1GHz

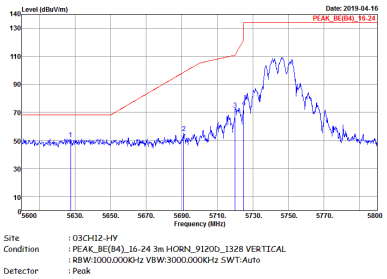
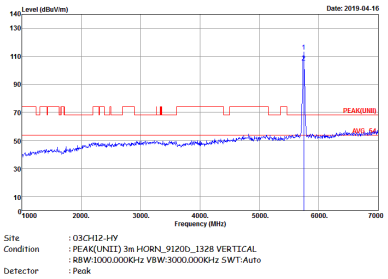
5GHz WIFI 802.11n HT40 (LF)

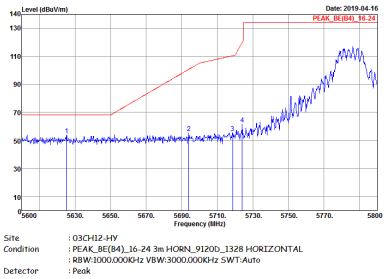
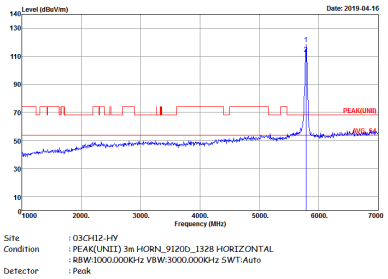
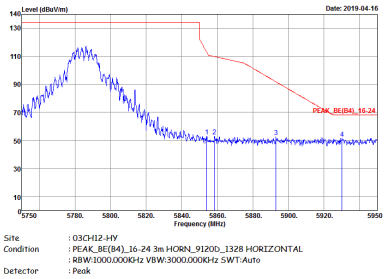
WIFI	5GHz 5725~5850MHz	
ANT	802.11n HT40 LF	
1	Horizontal	Vertical
QP / Peak		

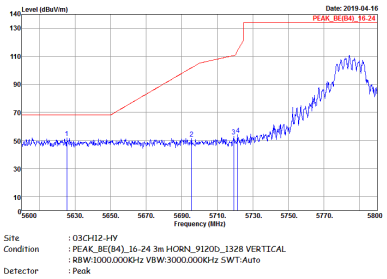
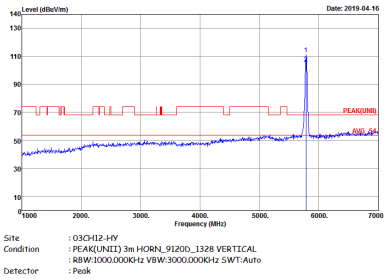
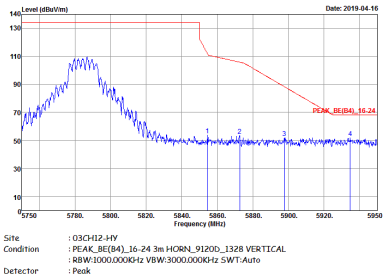
Band 4 - 5725~5850MHz

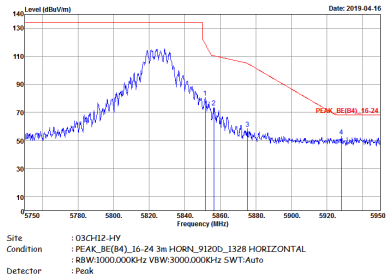
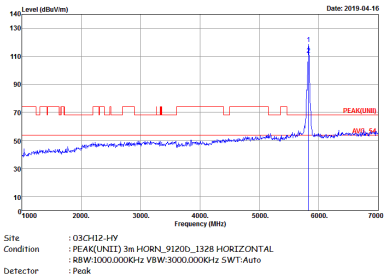
WIFI 802.11a (Band Edge @ 3m)

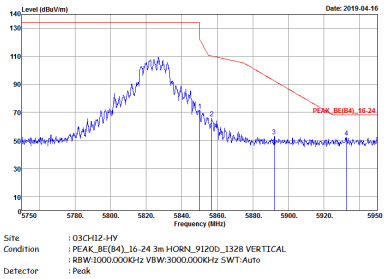
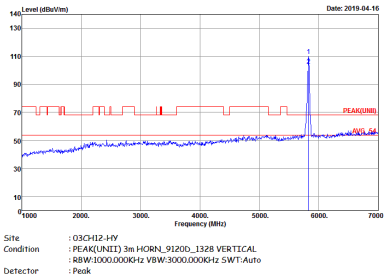
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
0+1	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
0+1	Vertical	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
0+1	Horizontal	Fundamental
Peak		
Peak		Left blank

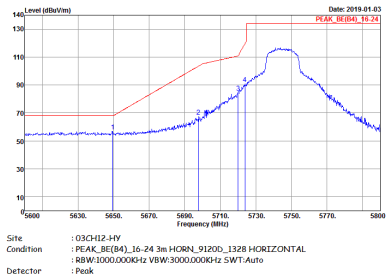
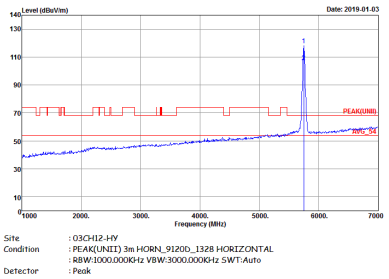
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
0+1	Vertical	Fundamental
Peak		
Peak		Left blank

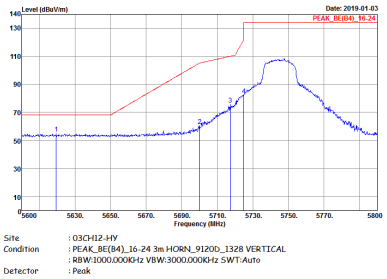
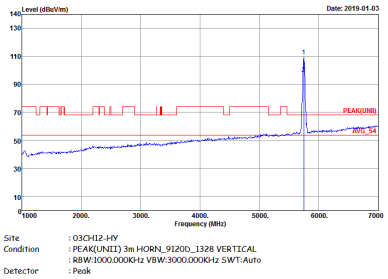
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
0+1	Horizontal	Fundamental
Peak		

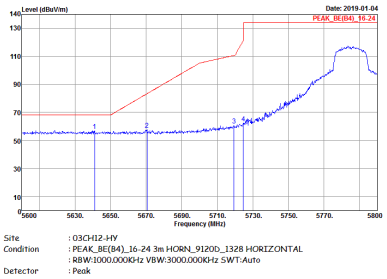
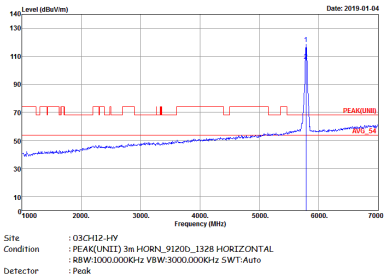
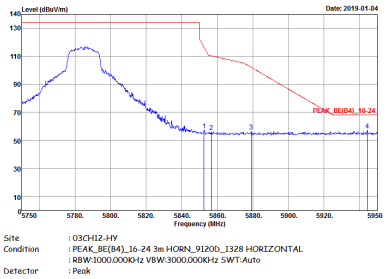
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
0+1	Vertical	Fundamental
Peak		

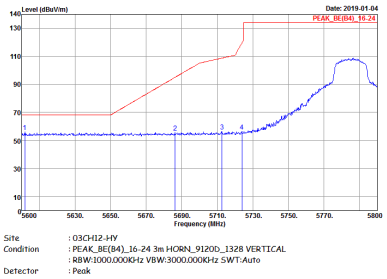
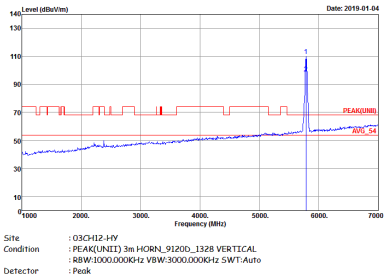
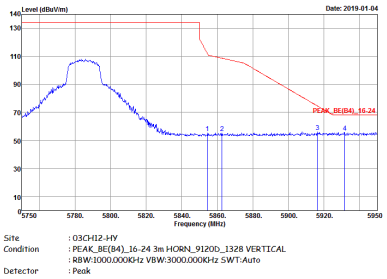
Band 4 5725~5850MHz

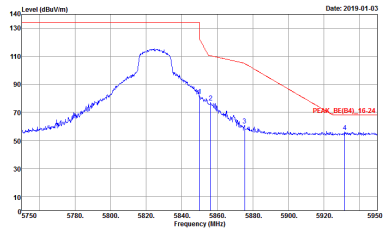
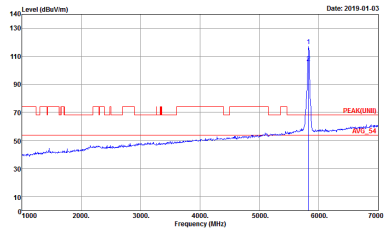
WIFI 802.11n HT20 (Band Edge @ 3m)

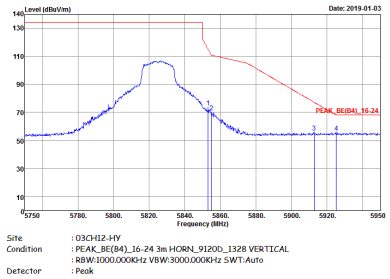
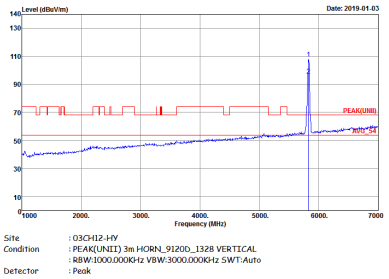
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
0+1	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
0+1	Vertical	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
0+1	Horizontal	Fundamental
Peak		
Peak		Left blank

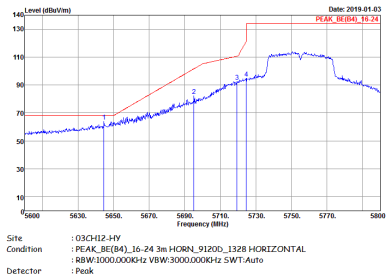
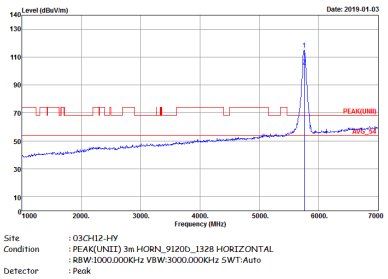
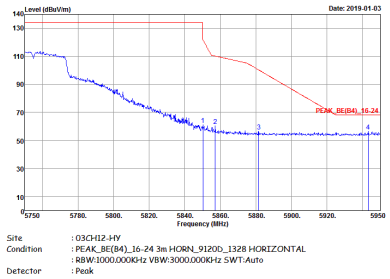
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
0+1	Vertical	Fundamental
Peak		
Peak		Left blank

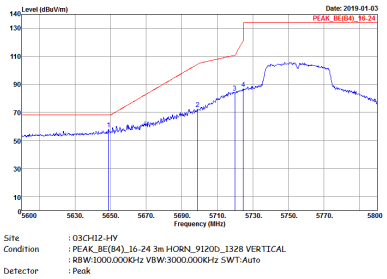
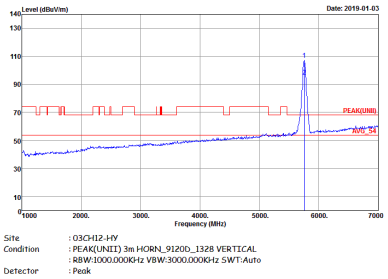
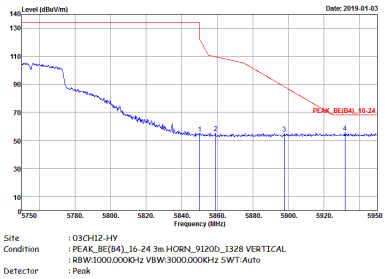
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak	 Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak

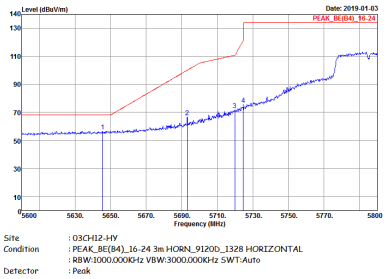
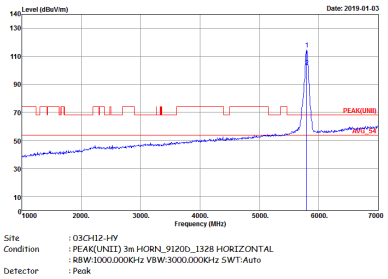
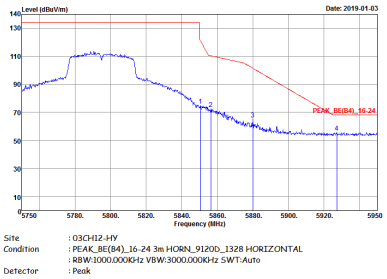
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
0+1	Vertical	Fundamental
Peak		

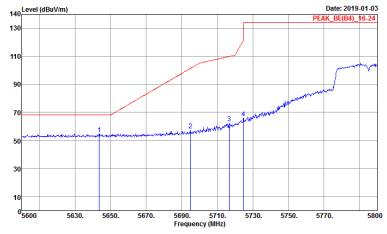
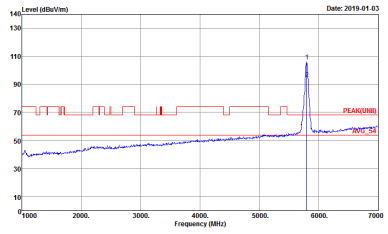
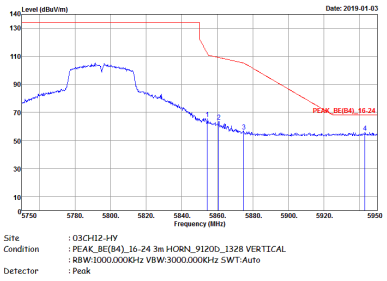
Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
0+1	Horizontal	Fundamental
Peak		
Peak		Left blank

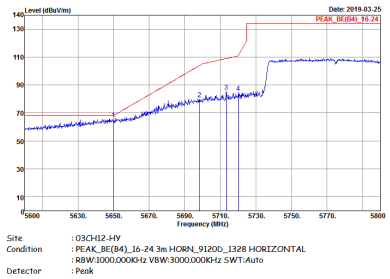
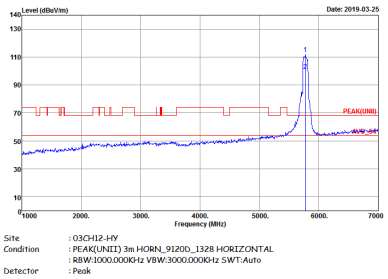
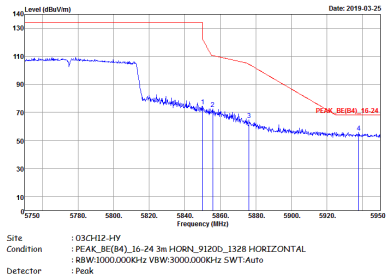
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
0+1	Vertical	Fundamental
Peak		
Peak		Left blank

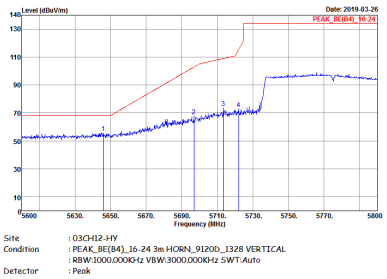
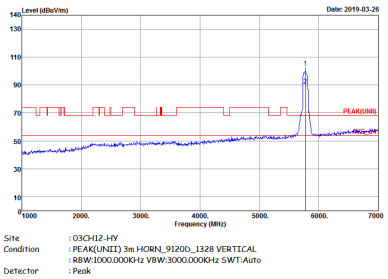
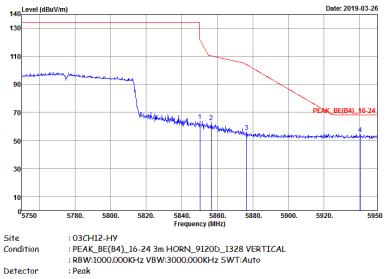
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
0+1	Horizontal	Fundamental
Peak		
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
0+1	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 5725~5850MHz

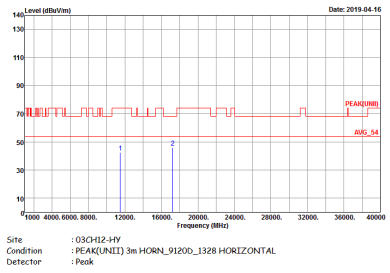
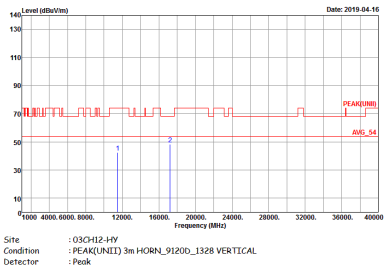
WIFI 802.11ac VHT80 (Band Edge @ 3m)

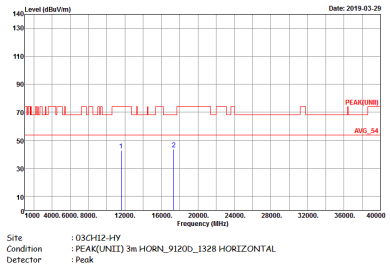
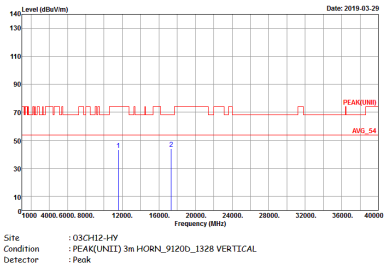
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0+1	Horizontal	Fundamental
Peak		
Peak		Left blank

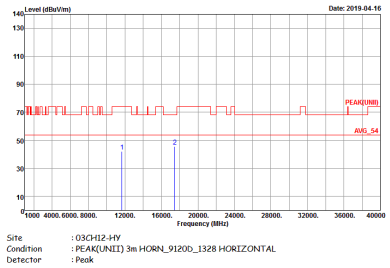
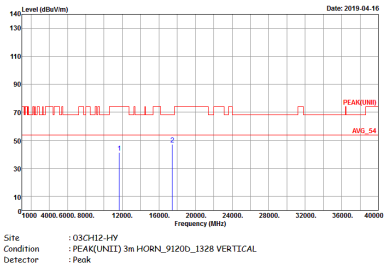
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0+1	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

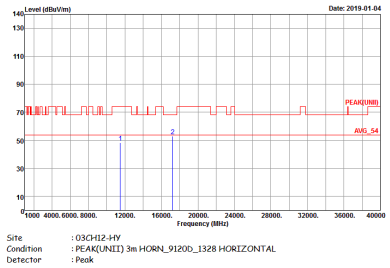
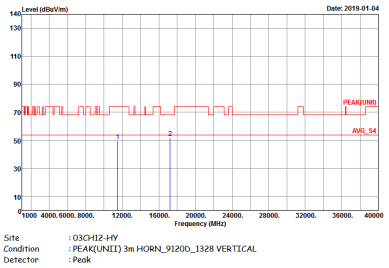
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
0+1	Horizontal	Vertical
Peak Avg.		

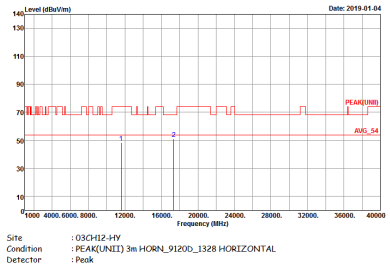
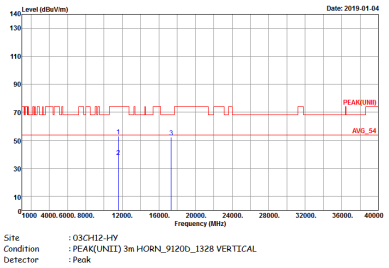
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
0+1	Horizontal	Vertical
Peak Avg.		

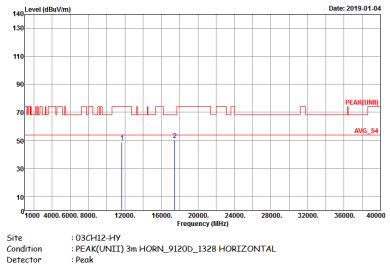
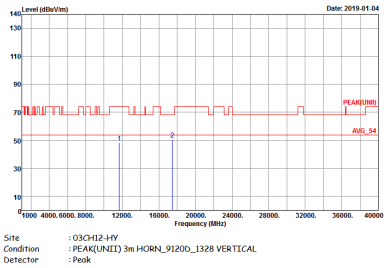
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
0+1	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

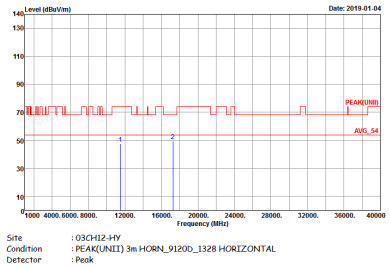
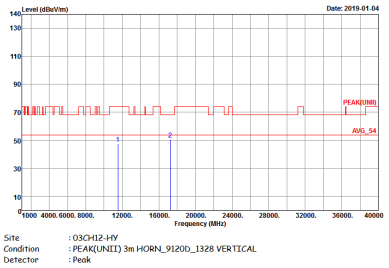
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
0+1	Horizontal	Vertical
Peak Avg.		

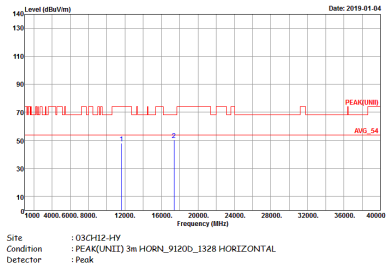
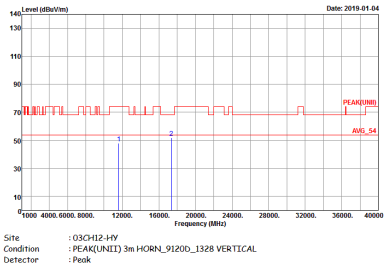
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
0+1	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
0+1	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz

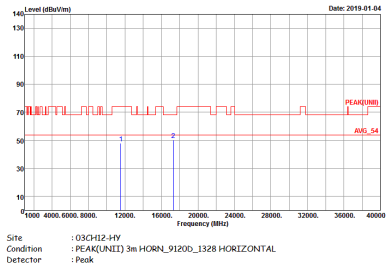
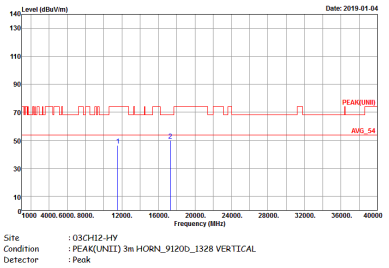
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
0+1	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
0+1	Horizontal	Vertical
Peak Avg.		

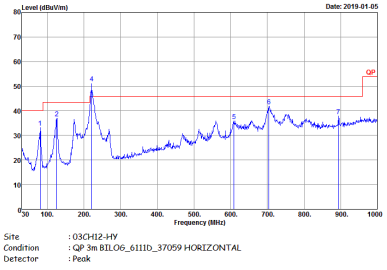
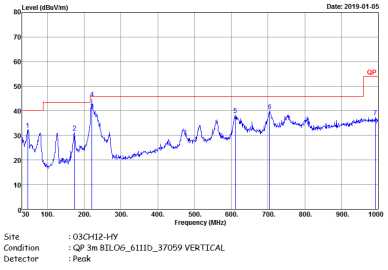
Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0+1	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

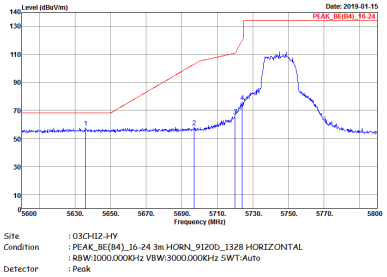
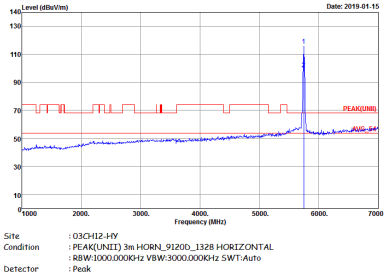
5GHz WIFI 802.11ac VHT80 (LF)

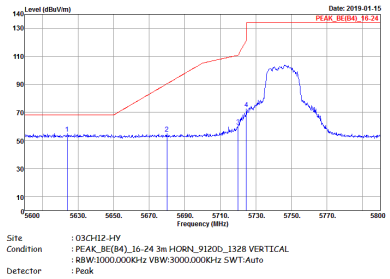
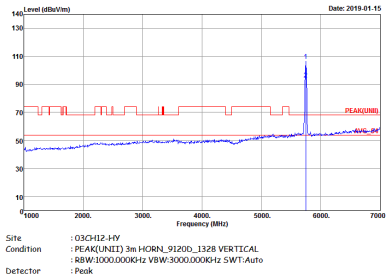
WIFI	5GHz 5725~5850MHz	
ANT	802.11ac VHT80 LF	
0+1	Horizontal	Vertical
QP / Peak		

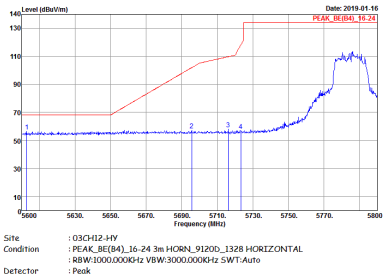
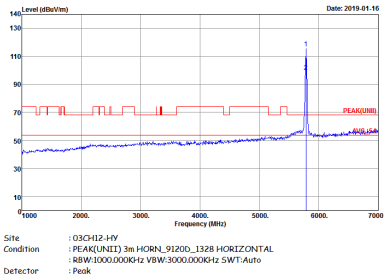
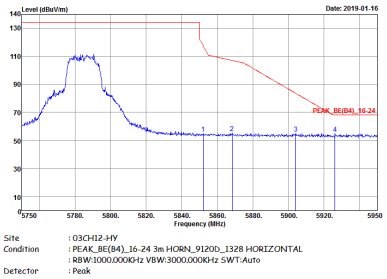
<TXBF Mode>

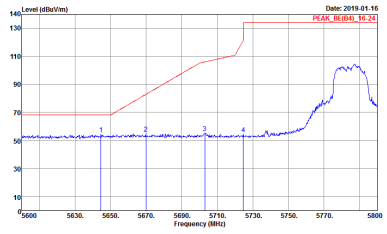
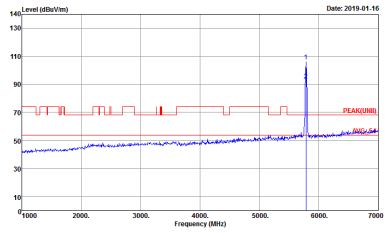
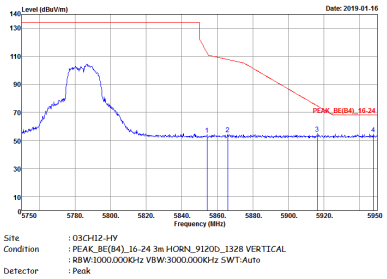
Band 4 - 5725~5850MHz

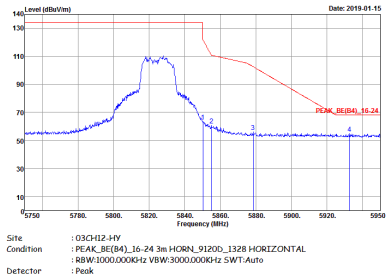
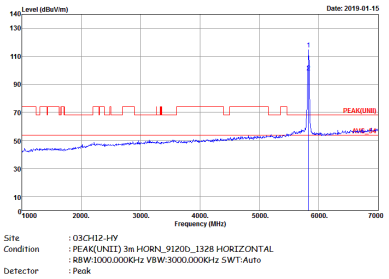
WIFI 802.11ac VHT20 (Band Edge @ 3m)

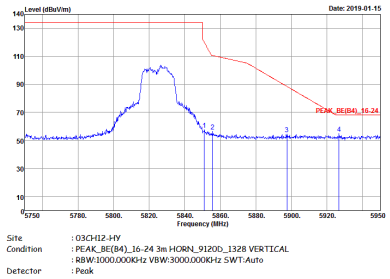
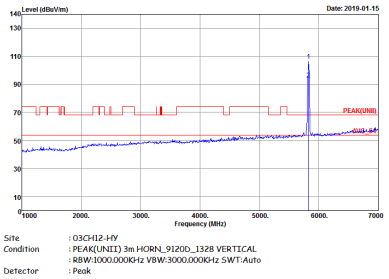
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
0+1	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
0+1	Vertical	Fundamental
Peak Avg.		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
0+1	Horizontal	Fundamental
Peak		
Peak		Left blank

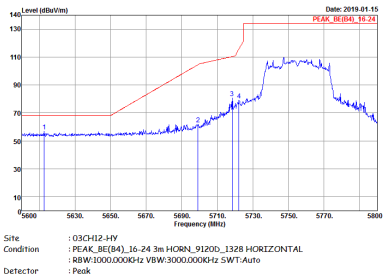
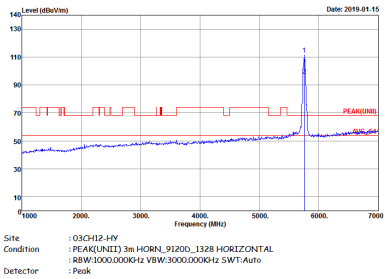
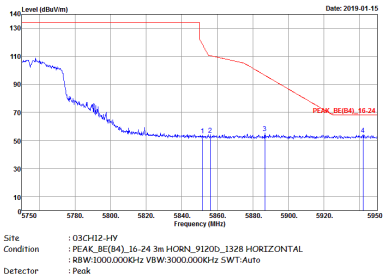
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
0+1	Vertical	Fundamental
Peak		
Peak		Left blank

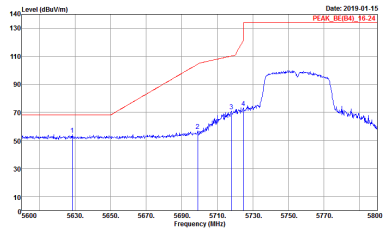
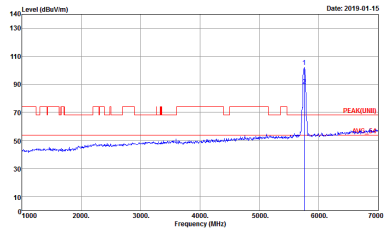
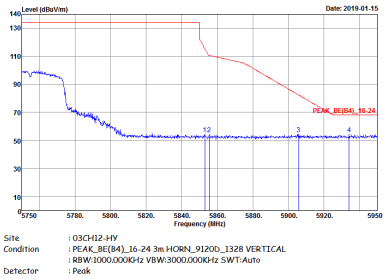
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
0+1	Horizontal	Fundamental
Peak		

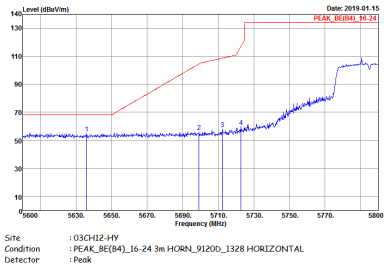
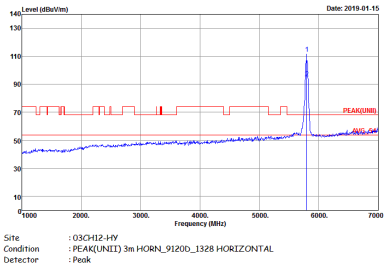
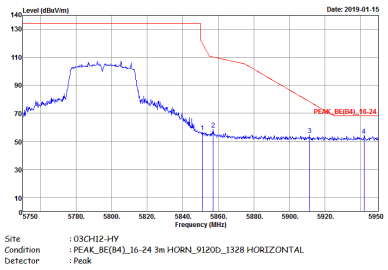
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
0+1	Vertical	Fundamental
Peak Avg.		

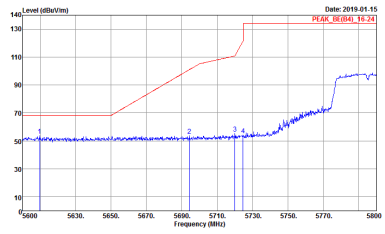
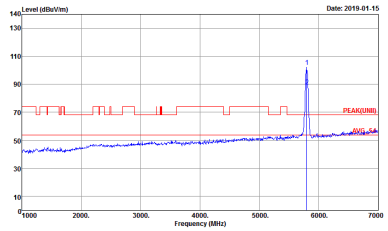
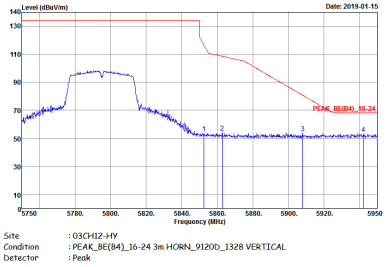
Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
0+1	Horizontal	Fundamental
Peak		
Peak		Left blank

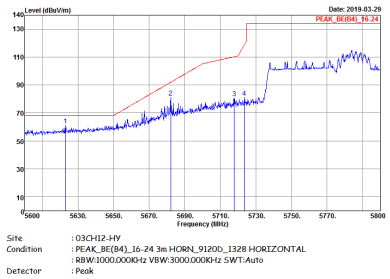
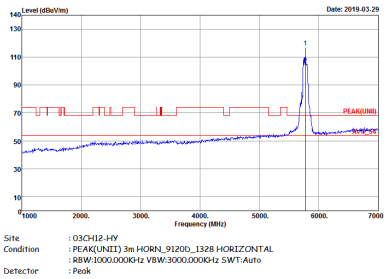
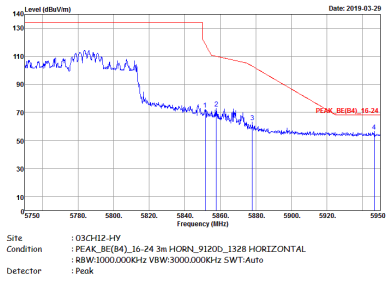
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
0+1	Vertical	Fundamental
Peak		
Peak		Left blank

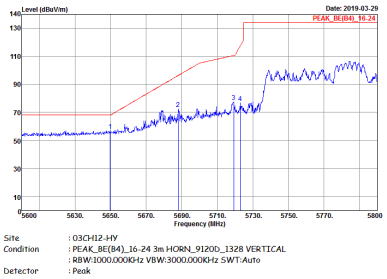
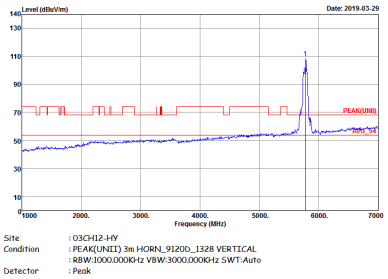
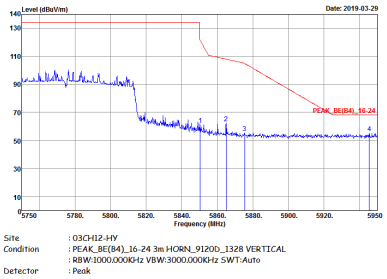
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
0+1	Horizontal	Fundamental
Peak		
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
0+1	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 5725~5850MHz

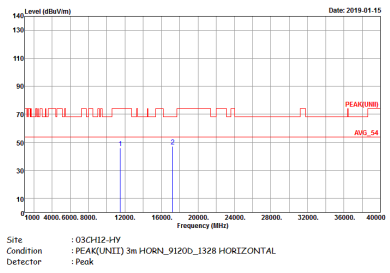
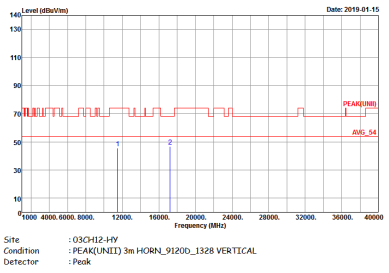
WIFI 802.11ac VHT80 (Band Edge @ 3m)

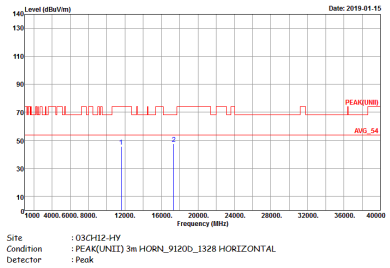
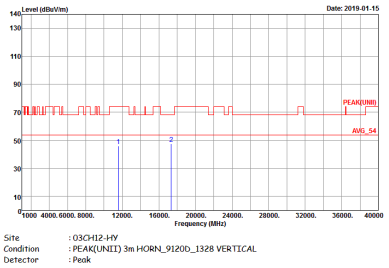
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0+1	Horizontal	Fundamental
Peak		
Peak		Left blank

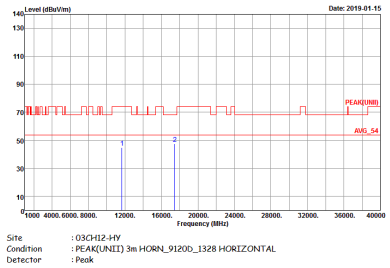
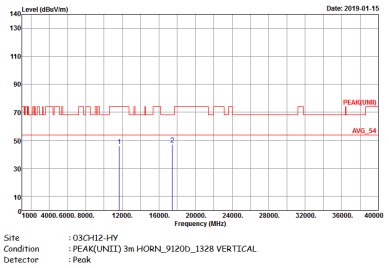
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0+1	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 - 5725~5850MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

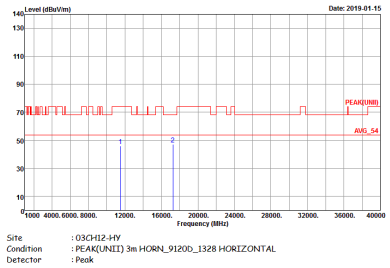
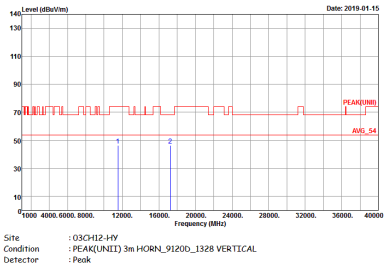
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
0+1	Horizontal	Vertical
Peak Avg.		

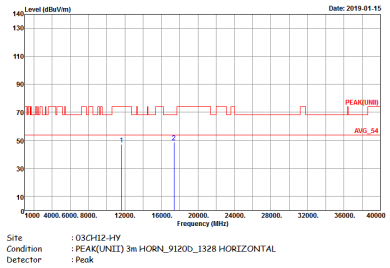
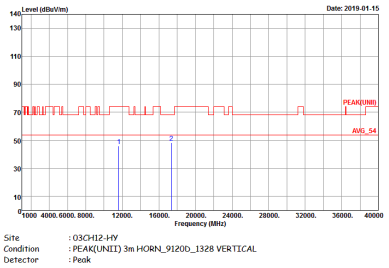
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
0+1	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
0+1	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz

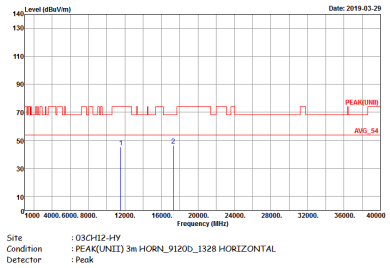
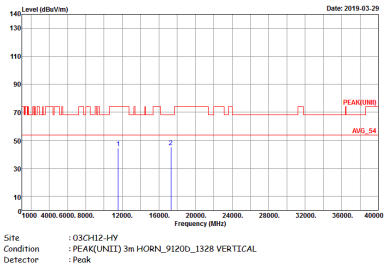
WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
0+1	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
0+1	Horizontal	Vertical
Peak Avg.		

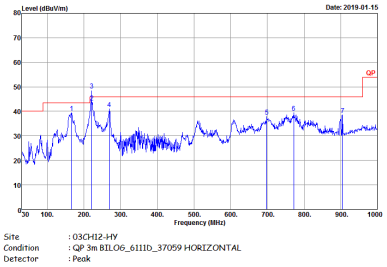
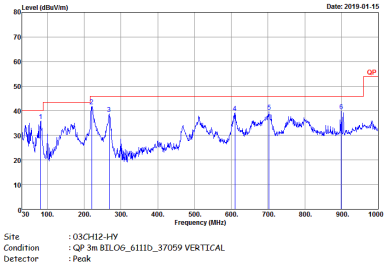
Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0+1	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

5GHz WIFI 802.11ac VHT80 (LF)

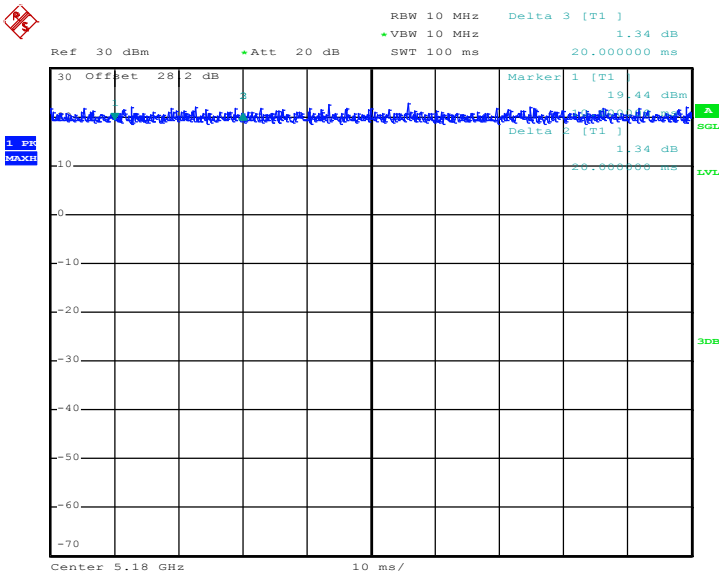
WIFI	5GHz 5725~5850MHz	
ANT	802.11ac VHT80 LF	
0+1	Horizontal	Vertical
QP / Peak		

Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
0	802.11a	100.00	-	-	10Hz	0.00
1	802.11a	100.00	-	-	10Hz	0.00
0+1	802.11a for Ant. 0	100.00	-	-	10Hz	0.00
0+1	802.11a for Ant. 1	100.00	-	-	10Hz	0.00
0	5GHz 802.11n HT20	100.00	-	-	10Hz	0.00
1	5GHz 802.11n HT20	100.00	-	-	10Hz	0.00
0+1	5GHz 802.11n HT20 for Ant. 0	100.00	-	-	10Hz	0.00
0+1	5GHz 802.11n HT20 for Ant. 1	100.00	-	-	10Hz	0.00
0	5GHz 802.11n HT40	100.00	-	-	10Hz	0.00
1	5GHz 802.11n HT40	100.00	-	-	10Hz	0.00
0+1	5GHz 802.11n HT40 for Ant. 0	100.00	-	-	10Hz	0.00
0+1	5GHz 802.11n HT40 for Ant. 1	100.00	-	-	10Hz	0.00
0	5GHz 802.11ac VHT20	100.00	-	-	10Hz	0.00
1	5GHz 802.11ac VHT20	100.00	-	-	10Hz	0.00
0+1	5GHz 802.11ac VHT20 for Ant. 0	100.00	-	-	10Hz	0.00
0+1	5GHz 802.11ac VHT20 for Ant. 1	100.00	-	-	10Hz	0.00
0	5GHz 802.11ac VHT40	100.00	-	-	10Hz	0.00
1	5GHz 802.11ac VHT40	100.00	-	-	10Hz	0.00
0+1	5GHz 802.11ac VHT40 for Ant. 0	100.00	-	-	10Hz	0.00
0+1	5GHz 802.11ac VHT40 for Ant. 1	100.00	-	-	10Hz	0.00
0	5GHz 802.11ac VHT80	100.00	-	-	10Hz	0.00
1	5GHz 802.11ac VHT80	100.00	-	-	10Hz	0.00
0+1	5GHz 802.11ac VHT80 for Ant. 0	100.00	-	-	10Hz	0.00
0+1	5GHz 802.11ac VHT80 for Ant. 1	100.00	-	-	10Hz	0.00

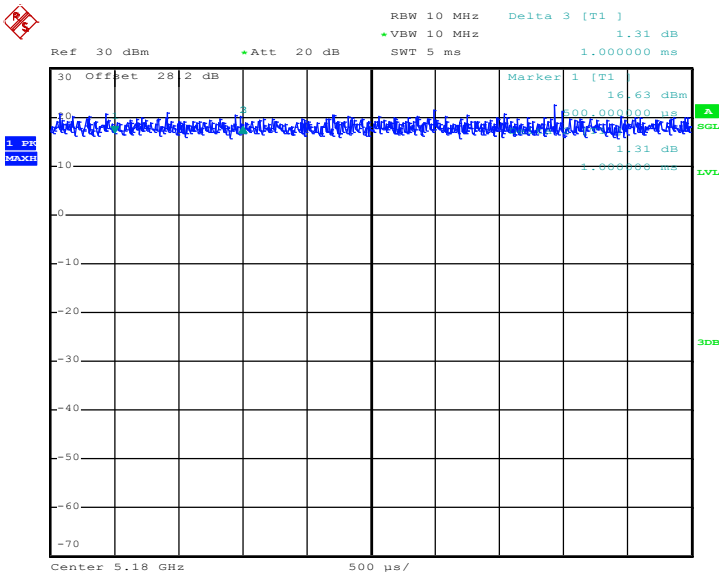
<Ant. 0>

802.11a



Date: 28.DEC.2018 00:02:01

802.11n HT20



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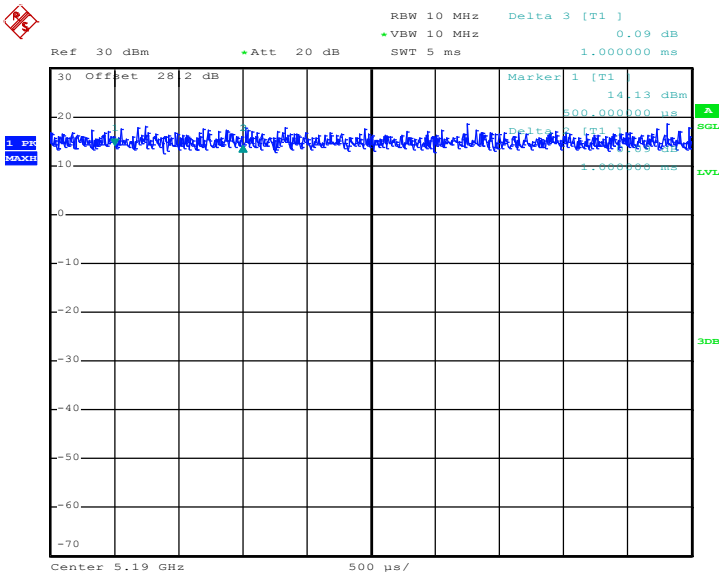
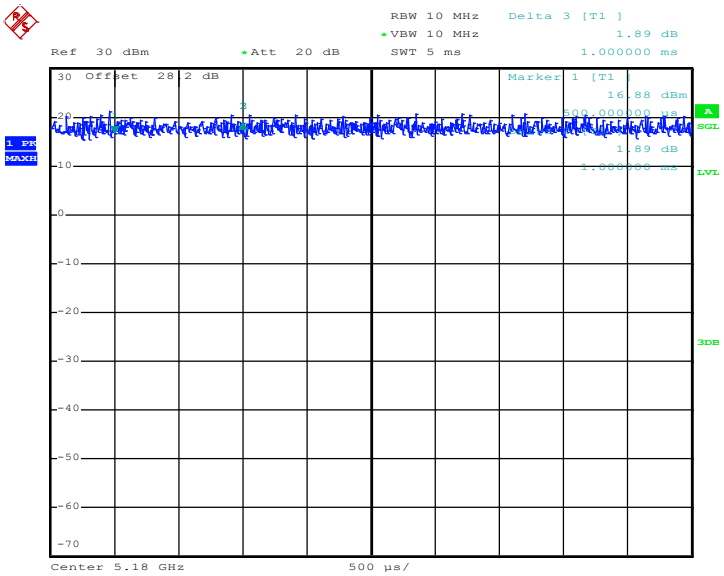
802.11n HT40



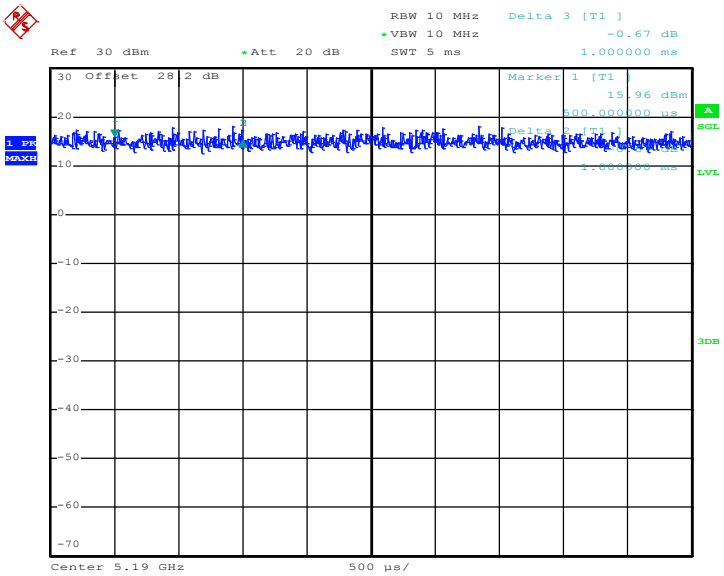
Date: 28.DEC.2018 00:53:16

802.11ac VHT20



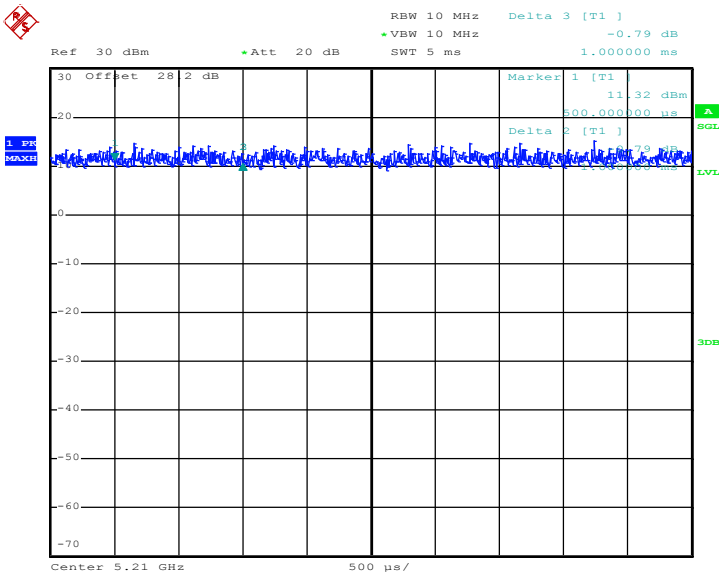
Date: 28.DEC.2018 00:49:57

802.11ac VHT40



Date: 28.DEC.2018 00:57:56

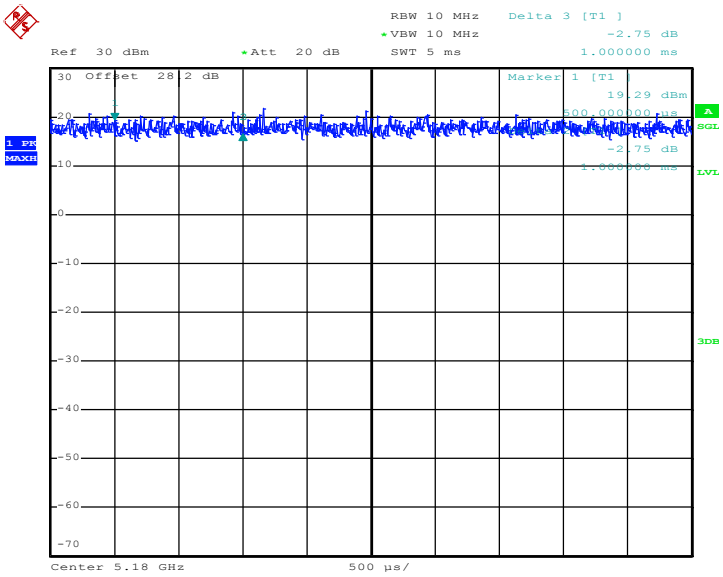
802.11ac VHT80



Date: 28.DEC.2018 01:01:55

<Ant. 1>

802.11a



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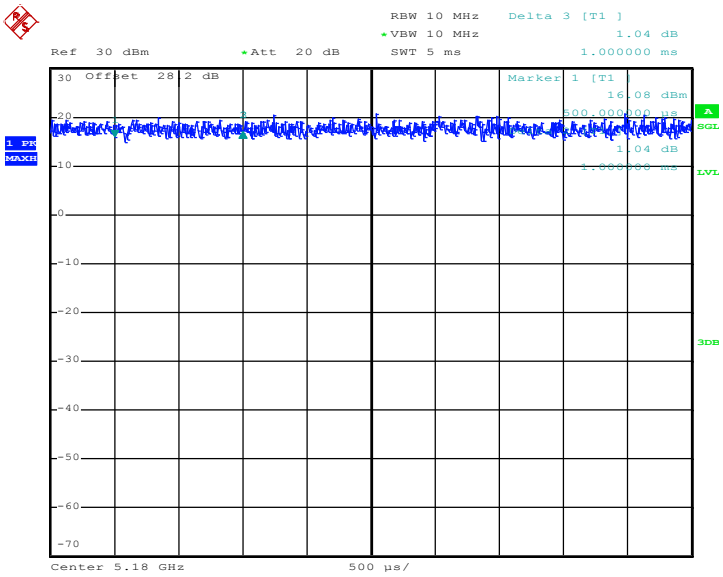
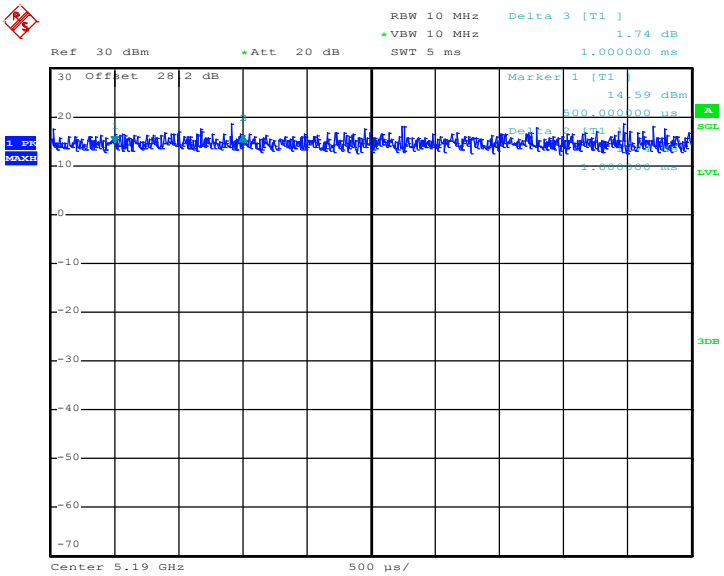
802.11n HT20



Date: 28.DEC.2018 00:45:07

802.11n HT40



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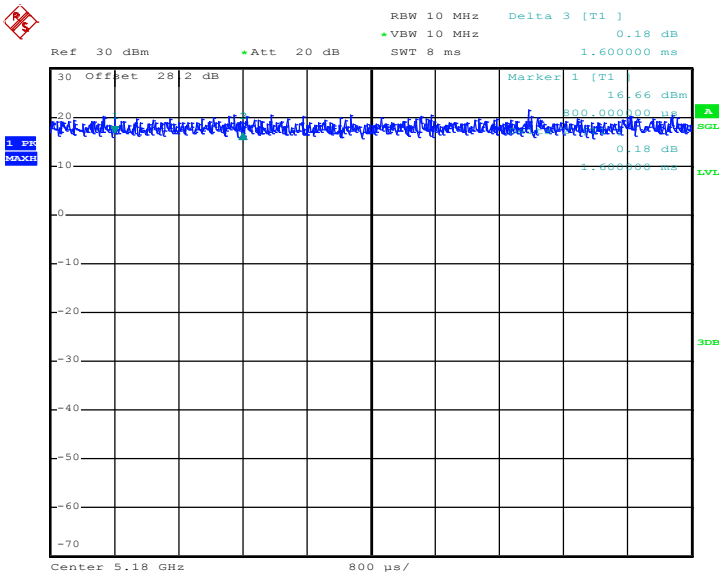
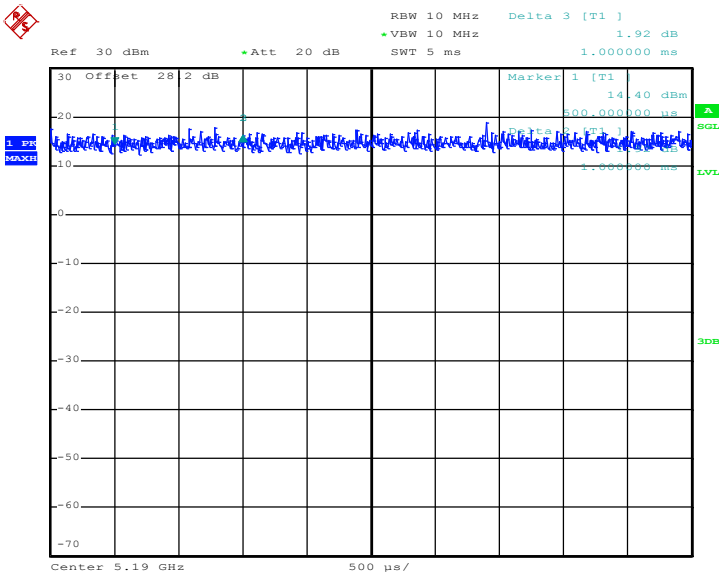
802.11ac VHT20



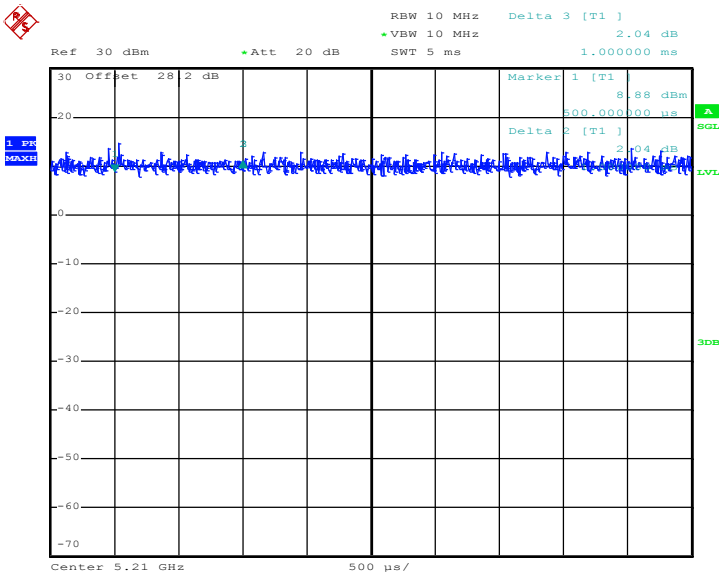
Date: 28.DEC.2018 00:50:38

802.11ac VHT40



Date: 28.DEC.2018 00:58:55

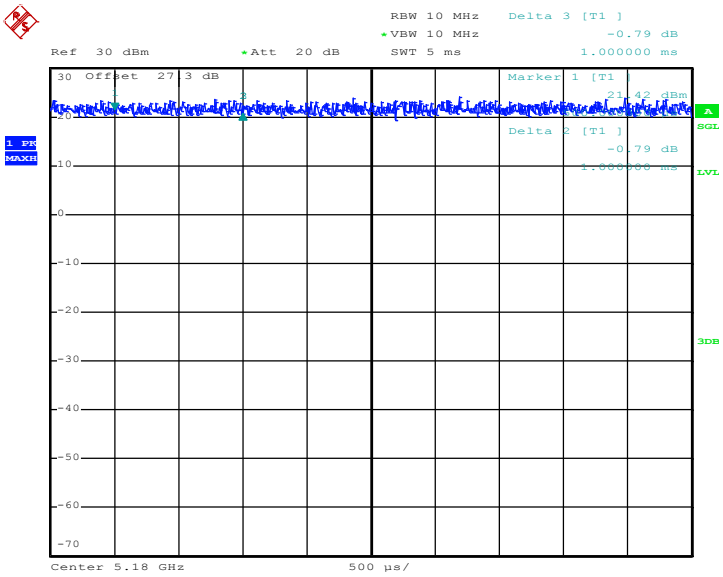
802.11ac VHT80



Date: 28.DEC.2018 01:02:39

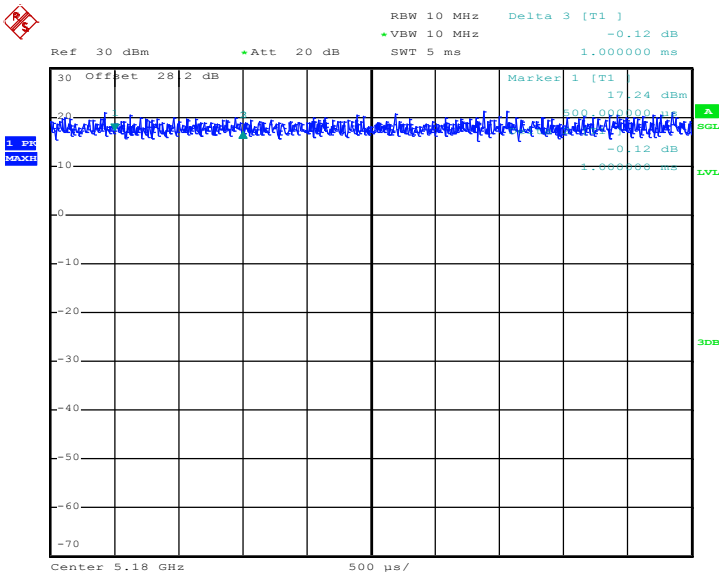
<MIMO Ant. 0>

802.11a



Date: 15.MAR.2019 06:57:20

802.11n HT20



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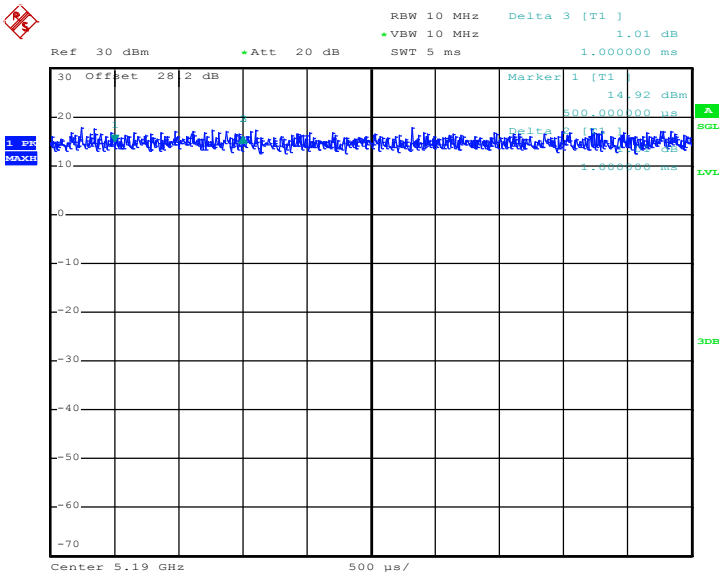
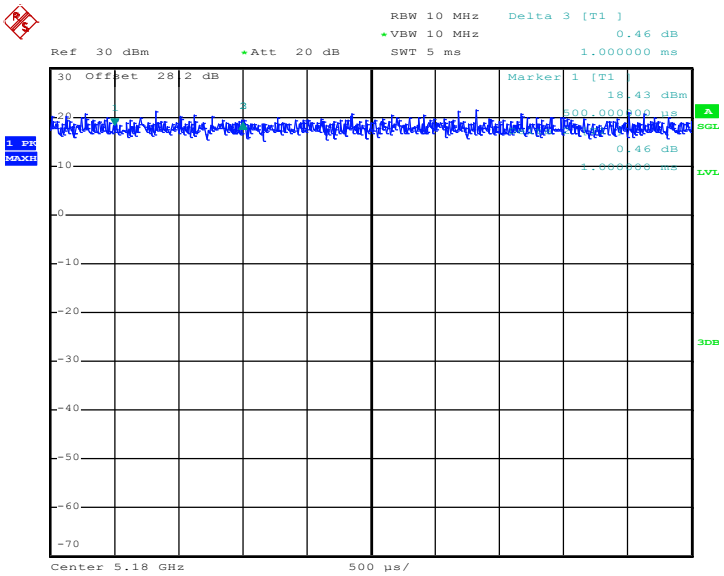


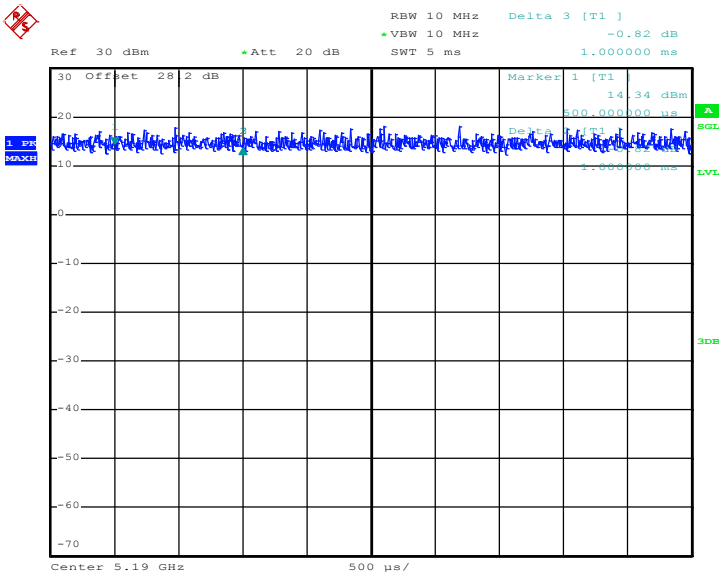
Date: 28.DEC.2018 00:55:25

802.11ac VHT20



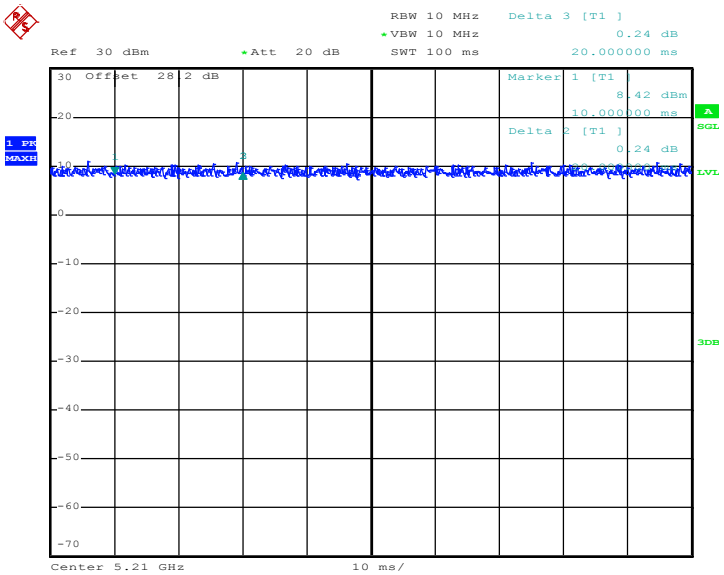
Date: 28.DEC.2018 00:51:39

802.11ac VHT40



Date: 28.DEC.2018 00:59:53

802.11ac VHT80



Date: 9.JAN.2019 20:48:52

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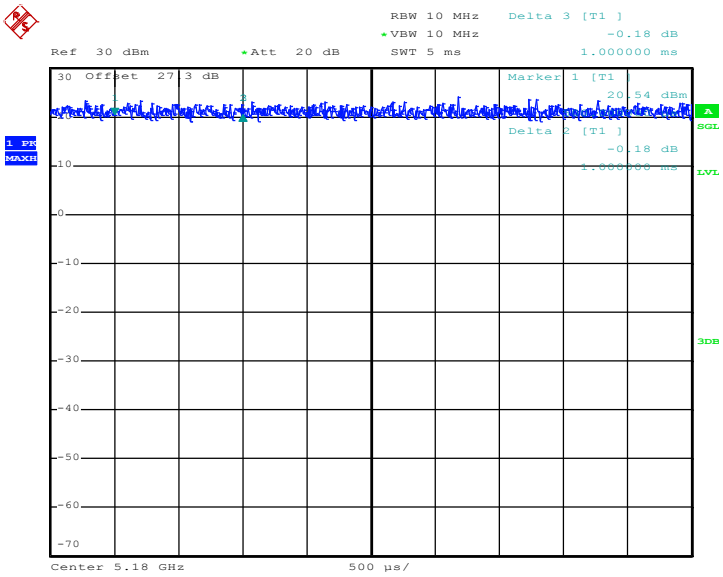
802.11a



Date: 15.MAR.2019 06:58:14

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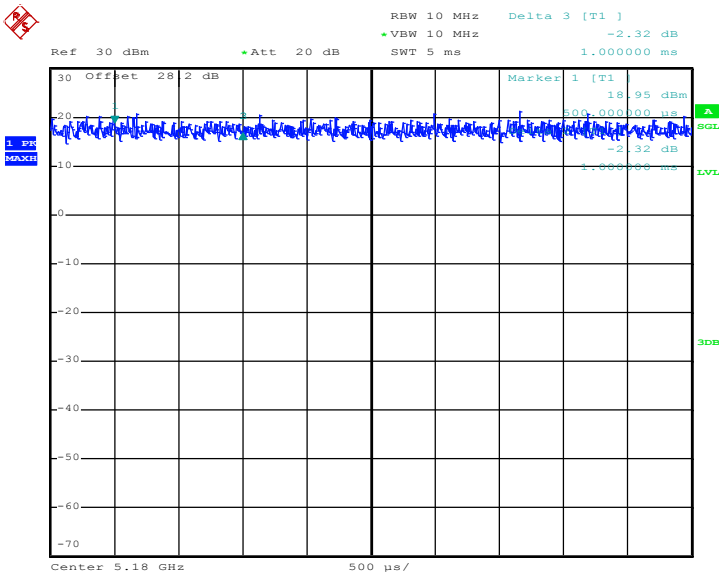

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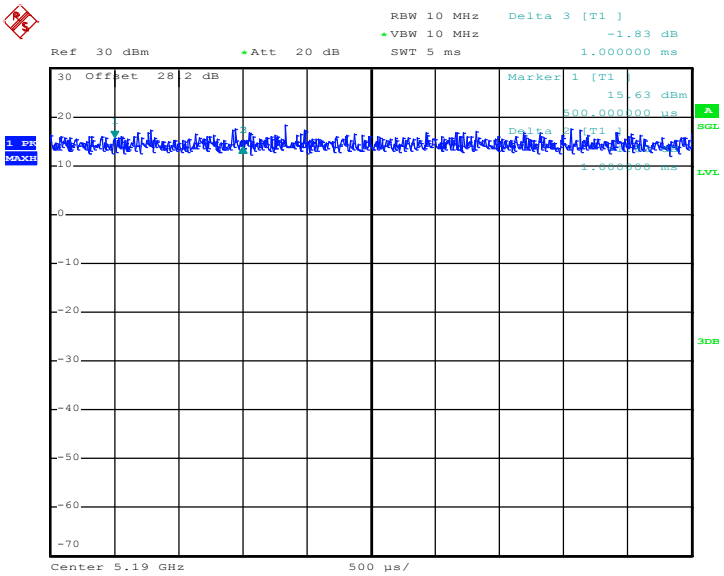
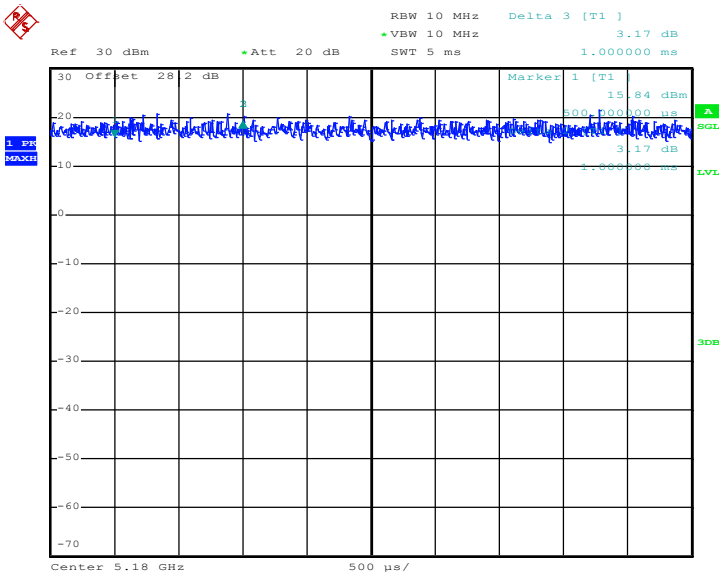


Date: 28.DEC.2018 00:55:55

802.11ac VHT20



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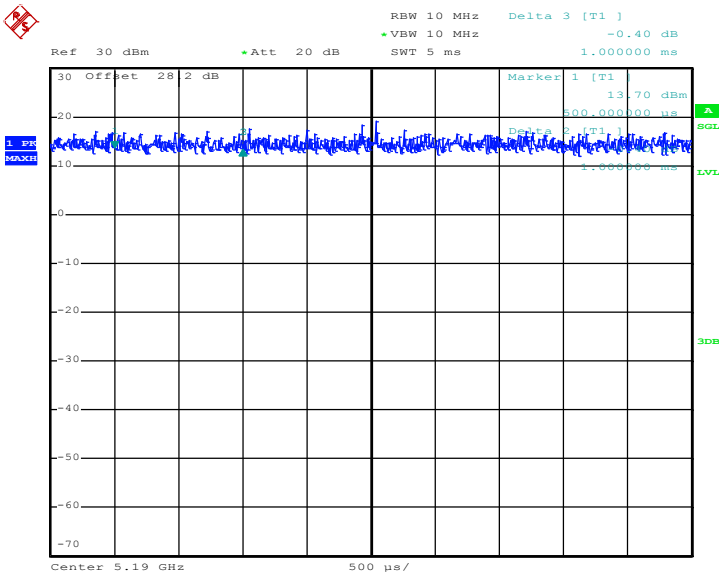

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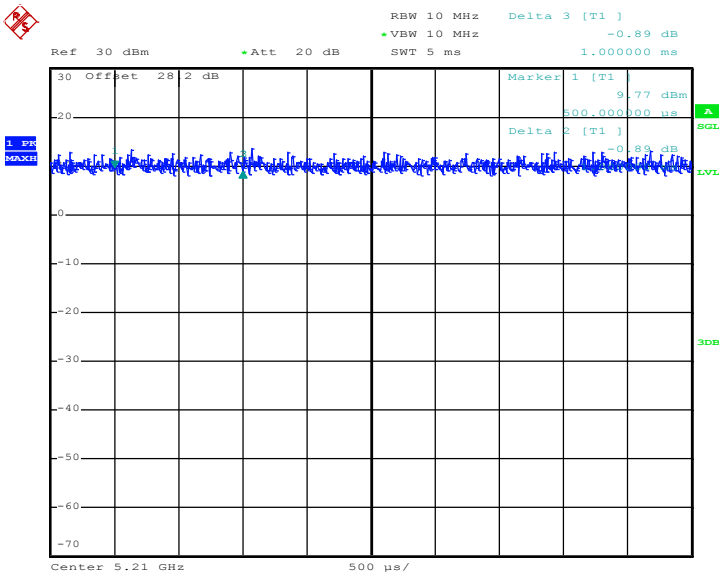
802.11ac VHT80



Date: 28.DEC.2018 01:03:51

THE END