



FCC RF Test Report

APPLICANT : LC Future Center Limited Taiwan Branch
EQUIPMENT : Notebook
BRAND NAME : Lenovo
MODEL NAME : TP00086B
FCC ID : 2AJN7-TP00086B
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

This is a partial report. The product was received on Oct. 25, 2017 and testing was completed on Dec. 16, 2017. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Reviewed by: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager



Testing Laboratory
1190

SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR7O2534E	Rev. 01	Initial issue of report	Dec. 20, 2017



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.407(a)	Maximum Conducted Output Power	≤ 30 dBm	Pass	-
3.2	15.407(b)	Unwanted Emissions	15.407(b)(4)(i) & 15.209(a)	Pass	Under limit 4.24 dB at 4990.000 MHz
3.3	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 18.90 dB at 0.174 MHz
3.4	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass	-



1 General Description

1.1 Applicant

LC Future Center Limited Taiwan Branch

7F., No.780, Bei'an Rd., Zhongshan Dist., Taipei City 104, Taiwan (R.O.C.)

1.2 Manufacturer

LC Future Center Limited Taiwan Branch

7F., No.780, Bei'an Rd., Zhongshan Dist., Taipei City 104, Taiwan (R.O.C.)

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Notebook
Brand Name	Lenovo
Model Name	TP00086B
FCC ID	2AJN7-TP00086B
Sample 1	EUT with Amphenol Antenna
Sample 2	EUT with Speedwire Antenna
Integrated WLAN Module	Brand Name: Intel Model Name: 8265NGW
EUT supports Radios application	WCDMA/HSPA/LTE WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE
EUT Stage	Production Unit

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. All the tests were performed for Sample 1.

Antenna Information			
Antenna 1	Manufacturer	Amphenol	
	Antenna Type	Main: PIFA Antenna	Aux: PIFA Antenna
	Part Number	LX7847-16-000-C	LX7848-16-000-C
	Peak Gain (dbi)	Main Antenna : WLAN(5GHz B4): 2.99	Aux Antenna : WLAN(5GHz B4): 1.47
Antenna 2	Manufacturer	Speedwire	
	Antenna Type	Main: PIFA Antenna	Aux: PIFA Antenna
	Part Number	F.0G.ZV-0006-003-00	F.0G.ZV-0006-004-00
	Peak Gain (dbi)	Main Antenna : WLAN(5GHz B4): 2.37	Aux Antenna : WLAN(5GHz B4): 2.35

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification										
Tx/Rx Channel Frequency Range	5745 MHz ~ 5825 MHz									
Maximum Output Power	<p><5745 MHz ~ 5825 MHz> <Chain 1> 802.11a : 13.45 dBm / 0.0221 W 802.11n HT20 : 13.35 dBm / 0.0216 W 802.11n HT40 : 13.47 dBm / 0.0222 W 802.11ac VHT20: 13.32 dBm / 0.0215 W 802.11ac VHT40: 13.46 dBm / 0.0222 W 802.11ac VHT80: 13.42 dBm / 0.0220 W <Chain 2> 802.11a : 13.24 dBm / 0.0211 W 802.11n HT20 : 13.30 dBm / 0.0214 W 802.11n HT40 : 13.42 dBm / 0.0220 W 802.11ac VHT20: 13.27 dBm / 0.0212 W 802.11ac VHT40: 13.33 dBm / 0.0215 W 802.11ac VHT80: 13.40 dBm / 0.0219 W MIMO <Chain 1 + 2> 802.11n HT20 : 13.46 dBm / 0.0222 W 802.11n HT40 : 13.33 dBm / 0.0215 W 802.11ac VHT20: 13.43 dBm / 0.0220 W 802.11ac VHT40: 13.32 dBm / 0.0215 W 802.11ac VHT80: 13.40 dBm / 0.0219 W</p>									
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)									
Antenna Function Description	<table border="1"> <thead> <tr> <th></th> <th>Chain 1</th> <th>Chain 2</th> </tr> </thead> <tbody> <tr> <td>802.11 a/n/ac</td> <td>V</td> <td>V</td> </tr> <tr> <td>802.11 n/ac MIMO</td> <td>V</td> <td>V</td> </tr> </tbody> </table>		Chain 1	Chain 2	802.11 a/n/ac	V	V	802.11 n/ac MIMO	V	V
	Chain 1	Chain 2								
802.11 a/n/ac	V	V								
802.11 n/ac MIMO	V	V								

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

1.5 Modification of EUT

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



1.6 Testing Location

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

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.	
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.)	
Test Site No.	Sporton Site No.	
	03CH12-HY	

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

1.7 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 v01r04
- ♦ 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.

Chain 1

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

MIMO <Chain 1+2>

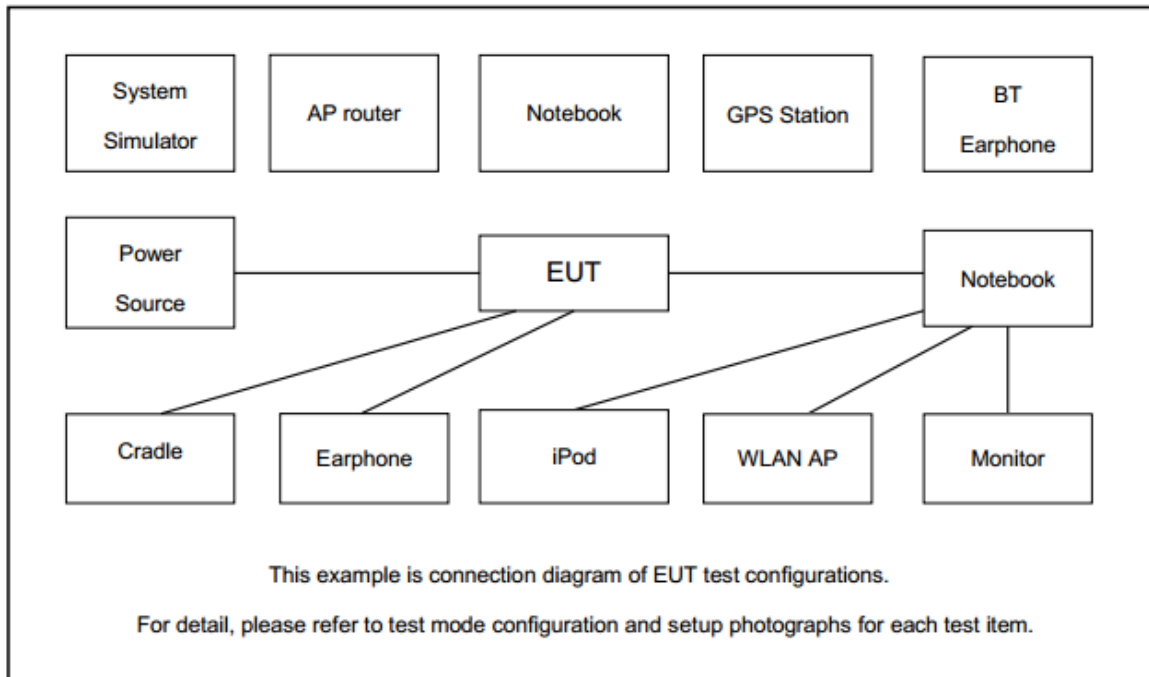
Modulation	Data Rate
802.11n HT20 (Covered by VHT20)	MCS8
802.11n HT40 (Covered by VHT40)	MCS8
802.11ac VHT80	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : WLAN (5GHz) Link + TF + TC
Remark:	
<ol style="list-style-type: none"> TC stands for Test Configuration, and consists of Earphone, USB HD, iPod, Adapter 1, and SD Card. TF stands for Test Function, and consists of MPEG4 and Camera. 	

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	-

Remark: For radiated emission, all the tests were performed with adapter 1.

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
2.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
3.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A
4.	HD USB	Lenovo	F310S	FCC DoC	Shielded, 0.5m	N/A

2.5 EUT Operation Test Setup

For WLAN function, programmed RF utility, “DRTU” installed in the EUT provides functions like channel selection and power level for continuous transmitting and receiving signals.

3 Test Result

3.1 Maximum Conducted Output Power Measurement

3.1.1 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.

3.1.2 Measuring Instruments

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

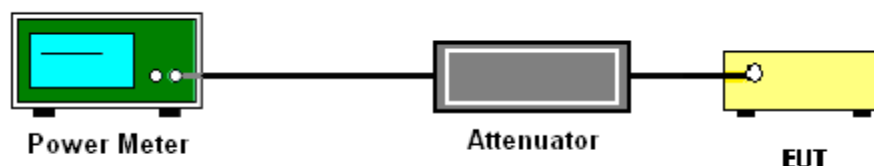
3.1.3 Test Procedures

The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04.

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

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

3.1.4 Test Setup



3.1.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.2 Unwanted Emissions Measurement

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

3.2.1 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 set forth as below table:

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

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

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



EIRP (dBm)	Field Strength at 3m (dBμV/m)
-17	78.3
- 27	68.3

(3) KDB789033 D02 v01r04 G)2)c)

- (i) Sections 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).

3.2.2 Measuring Instruments

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



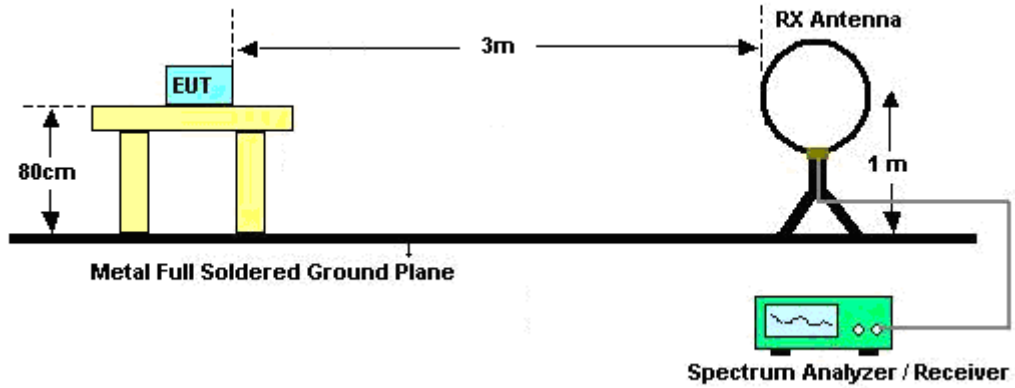
3.2.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04. Section G) Unwanted emissions measurement.
 - (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW \geq 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold
 - (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz
 - RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW \geq 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be

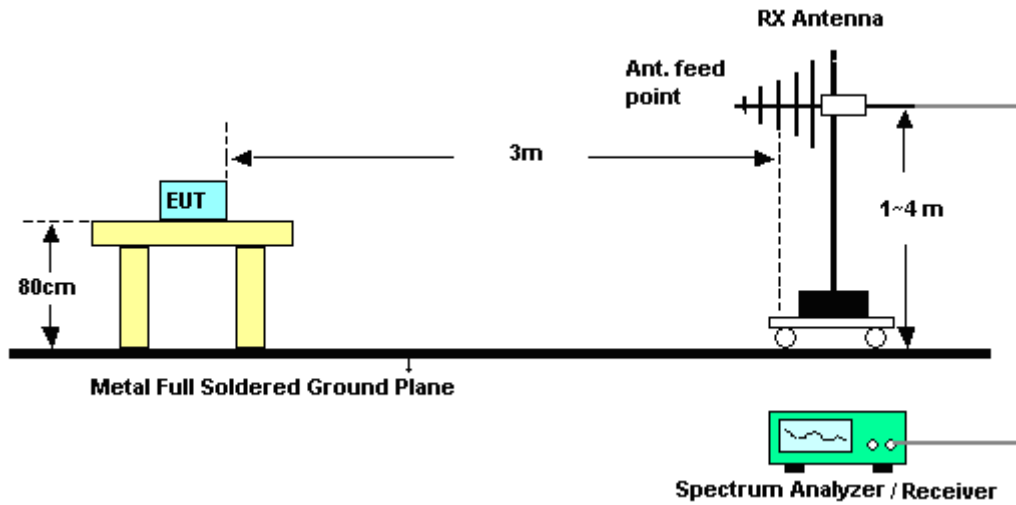
measured in average mode again and reported.

3.2.4 Test Setup

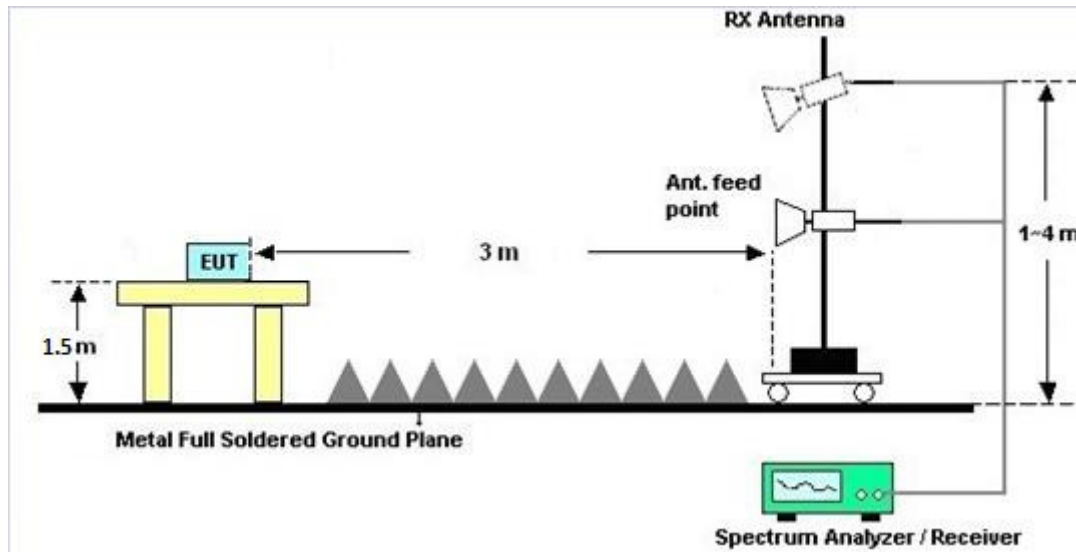
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

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

3.2.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.2.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.

3.3 AC Conducted Emission Measurement

3.3.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

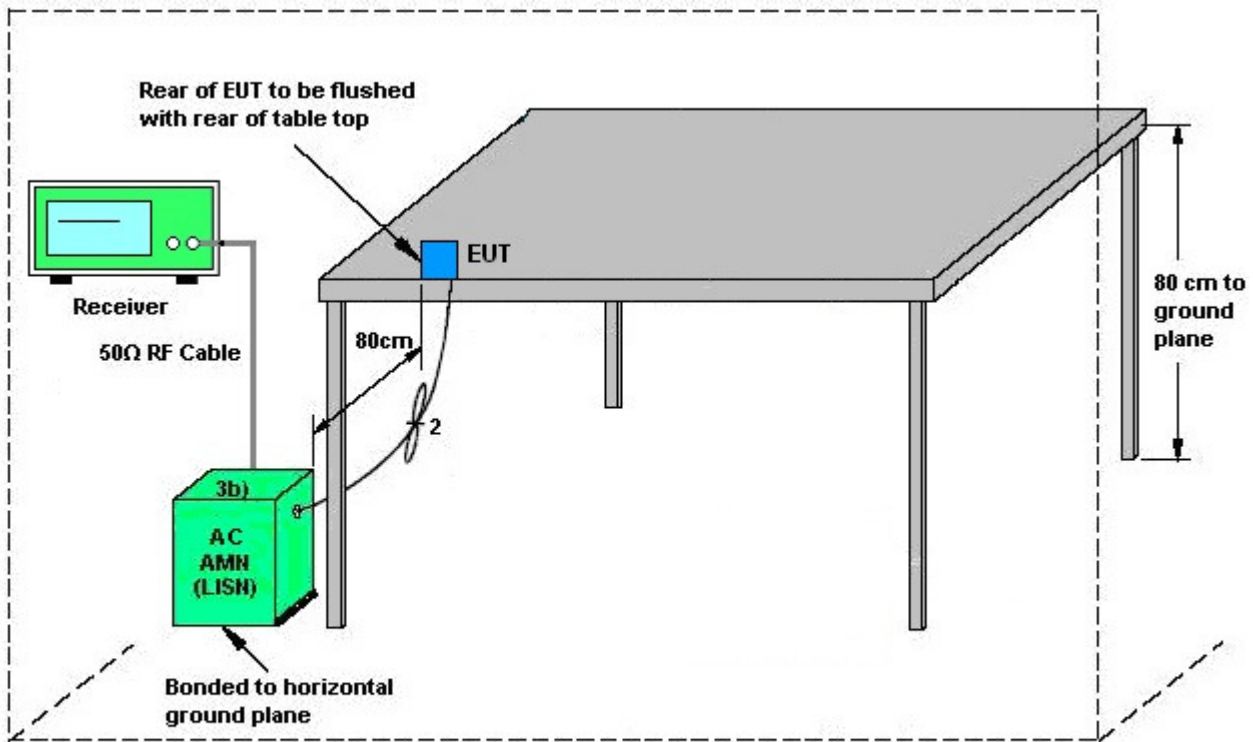
3.3.2 Measuring Instruments

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

3.3.3 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.

3.3.4 Test Setup



AMN = Artificial mains network (LISN)
AE = Associated equipment
EUT = Equipment under test
ISN = Impedance stabilization network

3.3.5 Test Result of AC Conducted Emission

Please refer to Appendix B.



3.4 Antenna Requirements

3.4.1 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.

3.4.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.4.3 Antenna Gain

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

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

The power 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 (dBi)	Power Limit Reduction (dB)
	Chain 1 (dBi)	Chain 2 (dBi)		
Band IV	2.99	1.47	2.99	0.00

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



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	0932001	N/A	Sep. 26, 2017	Oct. 27, 2017~ Dec. 16, 2017	Sep. 25, 2018	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	0846202	300MHz~40GHz	Sep. 26, 2017	Oct. 27, 2017~ Dec. 16, 2017	Sep. 25, 2018	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP30	101067	9kHz ~ 30GHz	Nov. 17, 2016	Oct. 27, 2017~ Nov. 08, 2017	Nov. 16, 2017	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP30	101067	9kHz ~ 30GHz	Nov. 16, 2017	Dec. 16, 2017	Nov. 15, 2018	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Dec. 04, 2017	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Sep. 20, 2017	Dec. 04, 2017	Sep. 19, 2018	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Dec. 06, 2016	Dec. 04, 2017	Dec. 05, 2017	Conduction (CO05-HY)
Amplifier	MITEQ	TTA1840-35-H G	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 18, 2017	Nov. 09, 2017~ Dec. 15, 2017	Jul. 17, 2018	Radiation (03CH12-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Oct. 20, 2016	Nov. 09, 2017~ Dec. 15, 2017	Oct. 19, 2018	Radiation (03CH12-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100390	20Hz~26.5GHz	Dec. 23, 2016	Nov. 09, 2017~ Dec. 15, 2017	Dec. 22, 2017	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120D	9120D-1328	1GHz ~ 18GHz	Oct. 20, 2017	Nov. 09, 2017~ Dec. 15, 2017	Oct. 19, 2018	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103	161075	10MHz~1GHz	Mar. 23, 2017	Nov. 09, 2017~ Dec. 15, 2017	Mar. 22, 2018	Radiation (03CH12-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800	2025787	1GHz~18GHz	Feb. 13, 2017	Nov. 09, 2017~ Dec. 15, 2017	Feb. 12, 2018	Radiation (03CH12-HY)
Preamplifier	Keysight	83017A	MY53270148	1GHz~26.5GHz	Jan. 12, 2017	Nov. 09, 2017~ Dec. 15, 2017	Jan. 11, 2018	Radiation (03CH12-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Mar. 23, 2017	Nov. 09, 2017~ Dec. 15, 2017	Mar. 22, 2018	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Nov. 09, 2017~ Dec. 15, 2017	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Nov. 09, 2017~ Dec. 15, 2017	N/A	Radiation (03CH12-HY)
Attenuator	Fairview Microwave	SA18S5W-10	n/a	10db	Mar. 24, 2017	Nov. 09, 2017~ Dec. 15, 2017	Mar. 23, 2018	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA917057 6	18GHz ~ 40GHz	Apr. 27, 2017	Nov. 09, 2017~ Dec. 15, 2017	Apr. 26, 2018	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	40103&04	30MHz to 1GHz	Jan. 07, 2017	Nov. 09, 2017~ Dec. 15, 2017	Jan. 06, 2018	Radiation (03CH12-HY)



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.70
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.10
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.20
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.70
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Appendix A. Test Result of Conducted Test Items

Remark: For Conducted Test Items, Ant. 1 means Chain 1 and Ant. 2 means Chain 2

Test Engineer:	AC Cherng	Temperature:	21~25	°C
Test Date:	2017/10/27~2017/12/16	Relative Humidity:	51~54	%

TEST RESULTS DATA
Average Power Table

Band IV														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	149	5745	0.25	0.25	13.45	13.24		30.00	30.00	2.99	1.47	Pass
11a	6Mbps	1	157	5785	0.25	0.25	13.40	13.20		30.00	30.00	2.99	1.47	Pass
11a	6Mbps	1	165	5825	0.25	0.25	13.30	13.17		30.00	30.00	2.99	1.47	Pass
HT20	MCS0	1	149	5745	0.20	0.00	13.35	13.30		30.00	30.00	2.99	1.47	Pass
HT20	MCS0	1	157	5785	0.20	0.00	13.30	13.25		30.00	30.00	2.99	1.47	Pass
HT20	MCS0	1	165	5825	0.20	0.00	13.23	13.22		30.00	30.00	2.99	1.47	Pass
HT40	MCS0	1	151	5755	0.52	0.52	13.47	13.42		30.00	30.00	2.99	1.47	Pass
HT40	MCS0	1	159	5795	0.52	0.52	13.43	13.37		30.00	30.00	2.99	1.47	Pass
VHT20	MCS0	1	149	5745	0.22	0.22	13.32	13.27		30.00	30.00	2.99	1.47	Pass
VHT20	MCS0	1	157	5785	0.22	0.22	13.29	13.22		30.00	30.00	2.99	1.47	Pass
VHT20	MCS0	1	165	5825	0.22	0.22	13.22	13.20		30.00	30.00	2.99	1.47	Pass
VHT40	MCS0	1	151	5755	0.52	0.48	13.46	13.33		30.00	30.00	2.99	1.47	Pass
VHT40	MCS0	1	159	5795	0.52	0.48	13.40	13.25		30.00	30.00	2.99	1.47	Pass
VHT80	MCS0	1	155	5775	0.50	0.57	13.42	13.40		30.00	30.00	2.99	1.47	Pass
HT20	MCS 8	2	149	5745	0.55	0.55	10.50	10.40	13.46	30.00		2.99		Pass
HT20	MCS 8	2	157	5785	0.55	0.55	10.40	10.49	13.45	30.00		2.99		Pass
HT20	MCS 8	2	165	5825	0.55	0.55	10.05	10.45	13.26	30.00		2.99		Pass
HT40	MCS 8	2	151	5755	0.53	0.57	10.33	10.32	13.33	30.00		2.99		Pass
HT40	MCS 8	2	159	5795	0.53	0.57	10.08	10.29	13.20	30.00		2.99		Pass
VHT20	MCS0	2	149	5745	0.50	0.50	10.48	10.37	13.43	30.00		2.99		Pass
VHT20	MCS0	2	157	5785	0.50	0.50	10.35	10.45	13.41	30.00		2.99		Pass
VHT20	MCS0	2	165	5825	0.50	0.50	10.03	10.45	13.25	30.00		2.99		Pass
VHT40	MCS0	2	151	5755	0.66	0.57	10.37	10.26	13.32	30.00		2.99		Pass
VHT40	MCS0	2	159	5795	0.66	0.57	10.11	10.20	13.16	30.00		2.99		Pass
VHT80	MCS0	2	155	5775	0.63	0.60	10.36	10.41	13.40	30.00		2.99		Pass



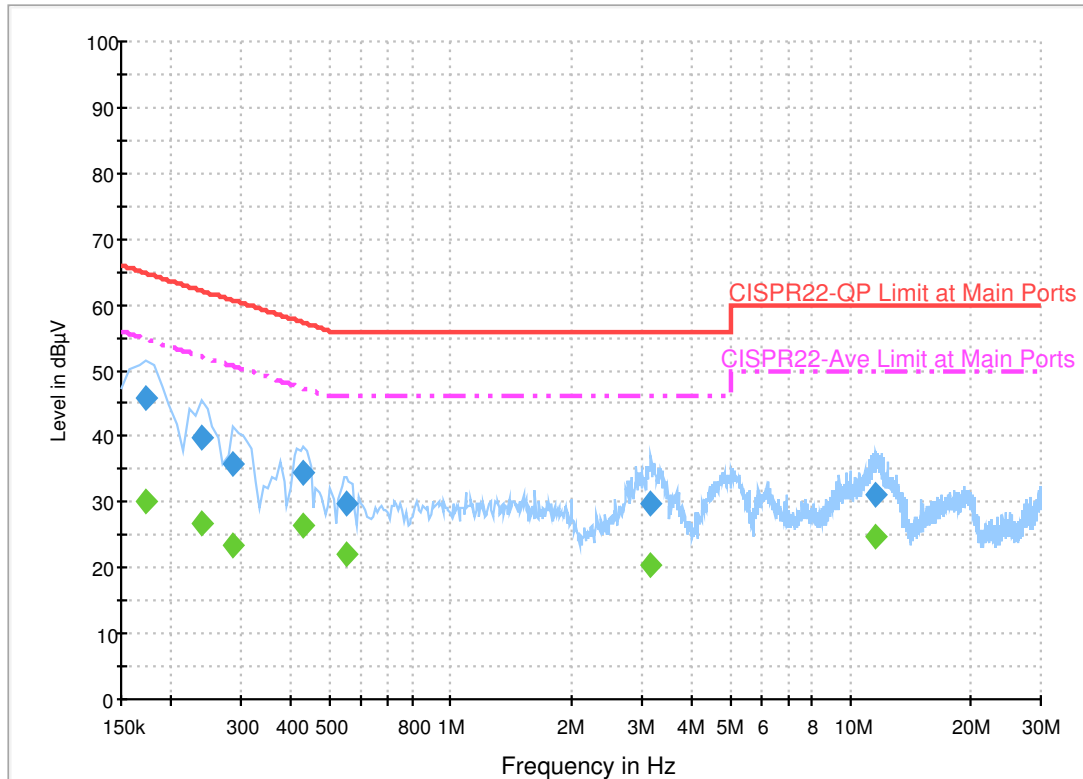
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Blue Lan	Temperature :	24~25°C
		Relative Humidity :	60~63%

EUT Information

Report NO : 702534
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Line

ENV216 Auto Test-L



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.174000	45.9	Off	L1	19.5	18.9	64.8
0.238000	39.7	Off	L1	19.5	22.5	62.2
0.286000	35.7	Off	L1	19.5	24.9	60.6
0.430000	34.3	Off	L1	19.5	23.0	57.3
0.550000	29.6	Off	L1	19.5	26.4	56.0
3.174000	29.9	Off	L1	19.5	26.1	56.0
11.558000	31.0	Off	L1	19.7	29.0	60.0

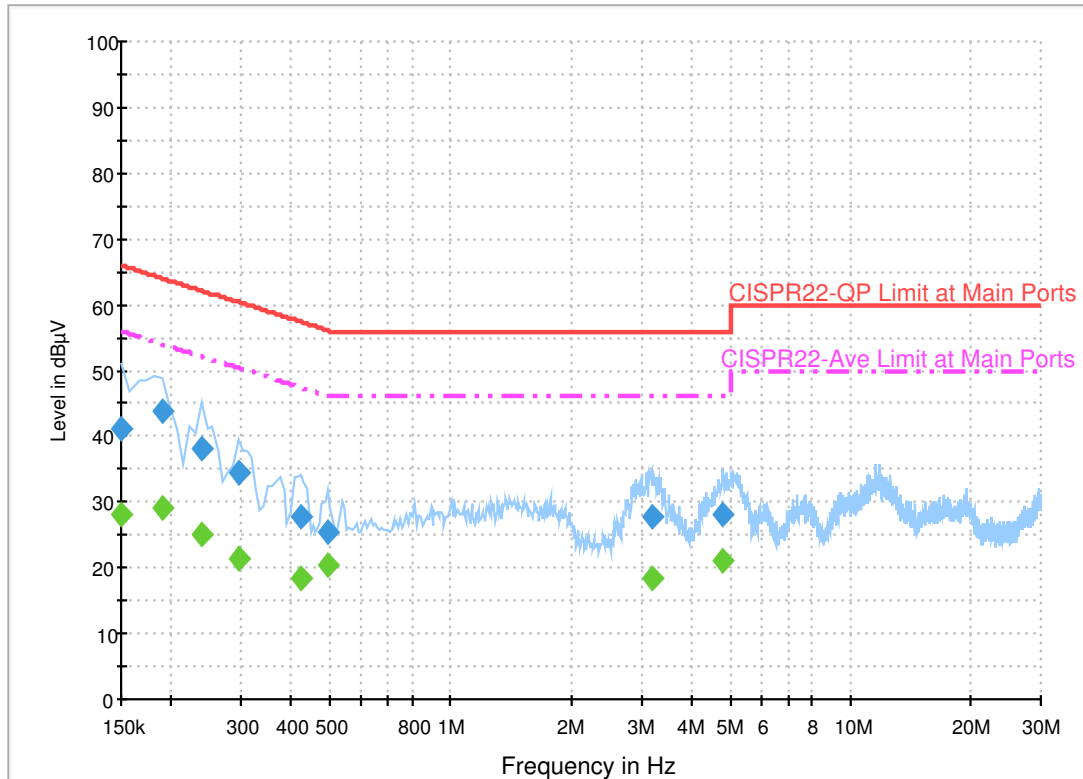
Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.174000	30.1	Off	L1	19.5	24.7	54.8
0.238000	26.6	Off	L1	19.5	25.6	52.2
0.286000	23.3	Off	L1	19.5	27.3	50.6
0.430000	26.4	Off	L1	19.5	20.9	47.3
0.550000	22.0	Off	L1	19.5	24.0	46.0
3.174000	20.3	Off	L1	19.5	25.7	46.0
11.558000	24.8	Off	L1	19.7	25.2	50.0

EUT Information

Report NO : 702534
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Neutral

ENV216 Auto Test-N



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	41.1	Off	N	19.5	24.9	66.0
0.190000	43.8	Off	N	19.5	20.2	64.0
0.238000	38.0	Off	N	19.5	24.2	62.2
0.294000	34.3	Off	N	19.5	26.1	60.4
0.422000	27.7	Off	N	19.5	29.7	57.4
0.494000	25.6	Off	N	19.5	30.5	56.1
3.182000	27.9	Off	N	19.5	28.1	56.0
4.806000	28.1	Off	N	19.6	27.9	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	28.1	Off	N	19.5	27.9	56.0
0.190000	29.0	Off	N	19.5	25.0	54.0
0.238000	25.2	Off	N	19.5	27.0	52.2
0.294000	21.6	Off	N	19.5	28.8	50.4
0.422000	18.4	Off	N	19.5	29.0	47.4
0.494000	20.5	Off	N	19.5	25.6	46.1
3.182000	18.5	Off	N	19.5	27.5	46.0
4.806000	21.2	Off	N	19.6	24.8	46.0



Appendix C. Radiated Spurious Emission

Test Engineer :	Nick Yu, Ray Chen, and Karl Hou	Temperature :	23~24°C
		Relative Humidity :	65~66%

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.	
Chain				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		5630.4	50.67	-17.53	68.2	43.15	32.17	6.35	31	398	107	P	H	
		5686.2	51.09	-43.93	95.02	43.47	32.27	6.36	31.01	398	107	P	H	
		5719.4	53.38	-57.25	110.63	45.72	32.31	6.37	31.02	398	107	P	H	
		5725	57.53	-64.67	122.2	49.87	32.31	6.37	31.02	398	107	P	H	
	*	5745	105.28	-	-	97.6	32.34	6.37	31.03	398	107	P	H	
	*	5745	94.35	-	-	86.67	32.34	6.37	31.03	398	107	A	H	
														H
														H
			5640	52.58	-15.62	68.2	45.04	32.19	6.35	31	211	187	P	V
			5694.8	53.92	-47.45	101.37	46.3	32.27	6.36	31.01	211	187	P	V
			5714.4	56.54	-52.69	109.23	48.91	32.29	6.36	31.02	211	187	P	V
			5725	58.55	-63.65	122.2	50.89	32.31	6.37	31.02	211	187	P	V
	*		5745	109.94	-	-	102.26	32.34	6.37	31.03	211	187	P	V
	*		5745	99.16	-	-	91.48	32.34	6.37	31.03	211	187	A	V
													V	
													V	



WIFI Chain	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 157 5785MHz		5620	50.1	-18.1	68.2	42.58	32.17	6.34	30.99	369	105	P	H	
		5671.2	50.63	-33.3	83.93	43.05	32.24	6.35	31.01	369	105	P	H	
		5712.2	49.83	-58.79	108.62	42.2	32.29	6.36	31.02	369	105	P	H	
		5720.8	49.26	-63.36	112.62	41.6	32.31	6.37	31.02	369	105	P	H	
	*	5785	104.27	-	-	96.55	32.39	6.38	31.05	369	105	P	H	
	*	5785	93.4	-	-	85.68	32.39	6.38	31.05	369	105	A	H	
		5851.8	50.11	-67.99	118.1	42.27	32.48	6.42	31.06	369	105	P	H	
		5860.8	50.51	-58.66	109.17	42.65	32.51	6.42	31.07	369	105	P	H	
		5914	50.99	-25.32	76.31	43.04	32.58	6.46	31.09	369	105	P	H	
		5946.2	50	-18.2	68.2	41.98	32.63	6.48	31.09	369	105	P	H	
														H
														H
			5623.8	51.59	-16.61	68.2	44.07	32.17	6.34	30.99	248	188	P	V
			5692.4	53.03	-46.57	99.6	45.41	32.27	6.36	31.01	248	188	P	V
			5711.2	53.45	-54.89	108.34	45.82	32.29	6.36	31.02	248	188	P	V
			5724	53.07	-66.85	119.92	45.41	32.31	6.37	31.02	248	188	P	V
	*		5785	109.84	-	-	102.12	32.39	6.38	31.05	248	188	P	V
	*		5785	99.02	-	-	91.3	32.39	6.38	31.05	248	188	A	V
			5853.4	52.78	-61.67	114.45	44.94	32.48	6.42	31.06	248	188	P	V
			5869.4	52.66	-54.11	106.77	44.79	32.51	6.43	31.07	248	188	P	V
			5875.6	51.97	-52.78	104.75	44.08	32.53	6.43	31.07	248	188	P	V
			5937	51.33	-16.87	68.2	43.34	32.6	6.48	31.09	248	188	P	V
													V	
													V	



WiFi Chain 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 165 5825MHz	*	5825	104.46	-	-	96.66	32.46	6.39	31.05	385	103	P	H	
	*	5825	93.66	-	-	85.86	32.46	6.39	31.05	385	103	A	H	
		5850.8	51.99	-68.39	120.38	44.15	32.48	6.42	31.06	385	103	P	H	
		5856.6	50.49	-59.86	110.35	42.62	32.51	6.42	31.06	385	103	P	H	
		5875.6	50.14	-54.61	104.75	42.25	32.53	6.43	31.07	385	103	P	H	
		5941.6	50.78	-17.42	68.2	42.76	32.63	6.48	31.09	385	103	P	H	
														H
														H
	*	5825	109.45	-	-	101.65	32.46	6.39	31.05	240	188	P	V	
	*	5825	98.82	-	-	91.02	32.46	6.39	31.05	240	188	A	V	
		5852.4	54.93	-61.8	116.73	47.09	32.48	6.42	31.06	240	188	P	V	
		5859.8	53.96	-55.49	109.45	46.1	32.51	6.42	31.07	240	188	P	V	
		5878.6	53.43	-49.1	102.53	45.54	32.53	6.43	31.07	240	188	P	V	
		5936.2	50.9	-17.3	68.2	42.91	32.6	6.48	31.09	240	188	P	V	
														V
														V
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



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

WIFI Chain 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		11490	47.64	-26.36	74	62.59	40.11	9.82	65.39	100	0	P	H
		17235	48.86	-19.34	68.2	58.86	41.54	12.09	64.27	100	0	P	H
													H
													H
		4924	54.61	-19.39	74	48.17	31.56	5.84	30.96	261	253	P	V
		4924	48.55	-5.45	54	42.11	31.56	5.84	30.96	261	253	A	V
		11490	47.36	-26.64	74	62.31	40.11	9.82	65.39	100	0	P	V
		17235	49.41	-18.79	68.2	59.41	41.54	12.09	64.27	100	0	P	V
802.11a CH 157 5785MHz		4960	52.84	-21.16	74	46.31	31.63	5.86	30.96	394	125	P	H
		4960	45.33	-8.67	54	38.8	31.63	5.86	30.96	394	125	A	H
		11570	48.39	-25.61	74	63.46	39.93	9.86	65.37	100	0	P	H
		17355	48.27	-19.93	68.2	57.6	41.96	12.19	64.11	100	0	P	H
		4960	54.98	-19.02	74	48.45	31.63	5.86	30.96	259	139	P	V
		4960	48.91	-5.09	54	42.38	31.63	5.86	30.96	259	139	A	V
		11570	49.08	-24.92	74	64.15	39.93	9.86	65.37	100	0	P	V
		17355	47.95	-20.25	68.2	57.28	41.96	12.19	64.11	100	0	P	V
802.11a CH 165 5825MHz		11650	48.58	-25.42	74	63.74	39.77	9.9	65.34	100	0	P	H
		17475	48.1	-20.1	68.2	56.76	42.38	12.29	63.95	100	0	P	H
													H
													H
		4990	55.76	-18.24	74	49.13	31.7	5.88	30.95	270	137	P	V
		4990	49.76	-4.24	54	43.13	31.7	5.88	30.95	270	137	A	V
		11650	48.55	-25.45	74	63.71	39.77	9.9	65.34	100	0	P	V
		17475	49.1	-19.1	68.2	57.76	42.38	12.29	63.95	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 Chain 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT20 CH 149 5745MHz		5629.4	50.97	-17.23	68.2	43.45	32.17	6.35	31	397	107	P	H	
		5662.8	50.75	-26.95	77.7	43.19	32.22	6.35	31.01	397	107	P	H	
		5716.2	56.28	-53.46	109.74	48.65	32.29	6.36	31.02	397	107	P	H	
		5724.2	56.33	-64.05	120.38	48.67	32.31	6.37	31.02	397	107	P	H	
	*	5745	104.68	-	-	97	32.34	6.37	31.03	397	107	P	H	
	*	5745	94.03	-	-	86.35	32.34	6.37	31.03	397	107	A	H	
														H
														H
			5635.8	51.76	-16.44	68.2	44.22	32.19	6.35	31	237	188	P	V
			5690.6	55.28	-42.99	98.27	47.66	32.27	6.36	31.01	237	188	P	V
			5711.4	57.42	-50.97	108.39	49.79	32.29	6.36	31.02	237	188	P	V
			5724.4	61.53	-59.3	120.83	53.87	32.31	6.37	31.02	237	188	P	V
	*		5745	109.45	-	-	101.77	32.34	6.37	31.03	237	188	P	V
	*		5745	98.9	-	-	91.22	32.34	6.37	31.03	237	188	A	V
														V
													V	



WIFI Chain	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT20 CH 157 5785MHz		5632.6	50.4	-17.8	68.2	42.86	32.19	6.35	31	370	104	P	H	
		5666.8	51.13	-29.54	80.67	43.55	32.24	6.35	31.01	370	104	P	H	
		5718.4	49.12	-61.23	110.35	41.46	32.31	6.37	31.02	370	104	P	H	
		5724.4	50.13	-70.7	120.83	42.47	32.31	6.37	31.02	370	104	P	H	
	*	5785	103.65	-	-	95.93	32.39	6.38	31.05	370	104	P	H	
	*	5785	92.93	-	-	85.21	32.39	6.38	31.05	370	104	A	H	
		5854	49.44	-63.64	113.08	41.57	32.51	6.42	31.06	370	104	P	H	
		5862.8	49.48	-59.13	108.61	41.61	32.51	6.43	31.07	370	104	P	H	
		5895.8	51.99	-37.78	89.77	44.07	32.56	6.44	31.08	370	104	P	H	
		5929	49.8	-18.4	68.2	41.82	32.6	6.47	31.09	370	104	P	H	
														H
														H
			5628	51.68	-16.52	68.2	44.15	32.17	6.35	30.99	279	184	P	V
			5683.8	52.53	-40.72	93.25	44.91	32.27	6.36	31.01	279	184	P	V
			5705.8	53.19	-53.64	106.83	45.56	32.29	6.36	31.02	279	184	P	V
			5721.4	53.16	-60.83	113.99	45.5	32.31	6.37	31.02	279	184	P	V
	*		5785	109.33	-	-	101.61	32.39	6.38	31.05	279	184	P	V
	*		5785	98.48	-	-	90.76	32.39	6.38	31.05	279	184	A	V
			5854.2	51.82	-60.8	112.62	43.95	32.51	6.42	31.06	279	184	P	V
			5863.6	52.51	-55.88	108.39	44.64	32.51	6.43	31.07	279	184	P	V
		5876.8	51.87	-51.99	103.86	43.98	32.53	6.43	31.07	279	184	P	V	
		5949.4	51.72	-16.48	68.2	43.7	32.63	6.48	31.09	279	184	P	V	
													V	
													V	



WIFI Chain 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT20 CH 165 5825MHz	*	5825	104.84	-	-	97.04	32.46	6.39	31.05	400	101	P	H	
	*	5825	93.8	-	-	86	32.46	6.39	31.05	400	101	A	H	
		5852.8	56.82	-59	115.82	48.98	32.48	6.42	31.06	400	101	P	H	
		5868.8	52.41	-54.52	106.93	44.54	32.51	6.43	31.07	400	101	P	H	
		5875.6	50.66	-54.09	104.75	42.77	32.53	6.43	31.07	400	101	P	H	
		5946	50.18	-18.02	68.2	42.16	32.63	6.48	31.09	400	101	P	H	
														H
														H
	*	5825	110.32	-	-	102.52	32.46	6.39	31.05	256	187	P	V	
	*	5825	99.13	-	-	91.33	32.46	6.39	31.05	256	187	A	V	
		5850	56.92	-65.28	122.2	49.08	32.48	6.42	31.06	256	187	P	V	
		5855	56.22	-54.58	110.8	48.35	32.51	6.42	31.06	256	187	P	V	
		5892.4	53.16	-39.13	92.29	45.24	32.56	6.44	31.08	256	187	P	V	
		5930.4	50.77	-17.43	68.2	42.79	32.6	6.47	31.09	256	187	P	V	
														V
														V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



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

WIFI Chain 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 149 5745MHz		4924	52.91	-21.09	74	46.47	31.56	5.84	30.96	395	120	P	H
		4924	45.43	-8.57	54	38.99	31.56	5.84	30.96	395	120	A	H
		11490	48.28	-25.72	74	63.23	40.11	9.82	65.39	100	0	P	H
		17235	49.5	-18.7	68.2	59.5	41.54	12.09	64.27	100	0	P	H
		4924	53.94	-20.06	74	47.5	31.56	5.84	30.96	265	138	P	V
		4924	48.43	-5.57	54	41.99	31.56	5.84	30.96	265	138	A	V
		11490	46.84	-27.16	74	61.79	40.11	9.82	65.39	100	0	P	V
802.11n HT20 CH 157 5785MHz		17235	49.71	-18.49	68.2	59.71	41.54	12.09	64.27	100	0	P	V
		4960	52.4	-21.6	74	45.87	31.63	5.86	30.96	392	125	P	H
		4960	45.4	-8.6	54	38.87	31.63	5.86	30.96	392	125	A	H
		11570	48.45	-25.55	74	63.52	39.93	9.86	65.37	100	0	P	H
		17355	49.8	-18.4	68.2	59.13	41.96	12.19	64.11	100	0	P	H
		4960	55.15	-18.85	74	48.62	31.63	5.86	30.96	293	140	P	V
		4960	49.62	-4.38	54	43.09	31.63	5.86	30.96	293	140	A	V
802.11n HT20 CH 165 5825MHz		11570	48.5	-25.5	74	63.57	39.93	9.86	65.37	100	0	P	V
		17355	48.41	-19.79	68.2	57.74	41.96	12.19	64.11	100	0	P	V
		11650	48.86	-25.14	74	64.02	39.77	9.9	65.34	100	0	P	H
		17475	48.17	-20.03	68.2	56.83	42.38	12.29	63.95	100	0	P	H
													H
													H
		4990	54.89	-19.11	74	48.26	31.7	5.88	30.95	271	136	P	V
5825MHz		4990	49.45	-4.55	54	42.82	31.7	5.88	30.95	271	136	A	V
		11650	48.36	-25.64	74	63.52	39.77	9.9	65.34	100	0	P	V
		17475	48.03	-20.17	68.2	56.69	42.38	12.29	63.95	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 Chain 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5639.4	51.39	-16.81	68.2	43.85	32.19	6.35	31	398	107	P	H
		5679.8	51.48	-38.81	90.29	43.9	32.24	6.35	31.01	398	107	P	H
		5719	58.56	-51.96	110.52	50.9	32.31	6.37	31.02	398	107	P	H
		5724	59.87	-60.05	119.92	52.21	32.31	6.37	31.02	398	107	P	H
	*	5755	101.68	-	-	93.98	32.36	6.37	31.03	398	107	P	H
	*	5755	90.99	-	-	83.29	32.36	6.37	31.03	398	107	A	H
		5850.6	49.91	-70.92	120.83	42.07	32.48	6.42	31.06	398	107	P	H
		5857.8	52.15	-57.86	110.01	44.29	32.51	6.42	31.07	398	107	P	H
		5877.2	50.32	-53.25	103.57	42.43	32.53	6.43	31.07	398	107	P	H
		5928.6	49.97	-18.23	68.2	41.99	32.6	6.47	31.09	398	107	P	H
802.11n													H
HT40													H
CH 151		5646.8	52.99	-15.21	68.2	45.45	32.19	6.35	31	250	185	P	V
5755MHz		5691.4	54.65	-44.21	98.86	47.03	32.27	6.36	31.01	250	185	P	V
		5718.8	60.31	-50.15	110.46	52.65	32.31	6.37	31.02	250	185	P	V
		5723.6	61.58	-57.43	119.01	53.92	32.31	6.37	31.02	250	185	P	V
	*	5755	106.87	-	-	99.17	32.36	6.37	31.03	250	185	P	V
	*	5755	96.04	-	-	88.34	32.36	6.37	31.03	250	185	A	V
		5854.6	52.78	-58.93	111.71	44.91	32.51	6.42	31.06	250	185	P	V
		5861.4	53.47	-55.54	109.01	45.6	32.51	6.43	31.07	250	185	P	V
		5921.2	52.4	-18.6	71	44.44	32.58	6.47	31.09	250	185	P	V
		5926.6	50.58	-17.62	68.2	42.6	32.6	6.47	31.09	250	185	P	V
													V
													V



WiFi Chain	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT40 CH 159 5795MHz		5645.4	50.57	-17.63	68.2	43.03	32.19	6.35	31	367	111	P	H	
		5671.6	50.54	-33.68	84.22	42.96	32.24	6.35	31.01	367	111	P	H	
		5706.2	50.31	-56.63	106.94	42.68	32.29	6.36	31.02	367	111	P	H	
		5720.2	49.1	-62.16	111.26	41.44	32.31	6.37	31.02	367	111	P	H	
	*	5795	100.52	-	-	92.78	32.41	6.38	31.05	367	111	P	H	
	*	5795	89.73	-	-	81.99	32.41	6.38	31.05	367	111	A	H	
		5851.2	50.17	-69.29	119.46	42.33	32.48	6.42	31.06	367	111	P	H	
		5871.4	50.03	-56.18	106.21	42.14	32.53	6.43	31.07	367	111	P	H	
		5890	50.67	-43.4	94.07	42.75	32.56	6.44	31.08	367	111	P	H	
		5925.2	50.55	-17.65	68.2	42.57	32.6	6.47	31.09	367	111	P	H	
														H
														H
			5611.2	52.87	-15.33	68.2	45.38	32.14	6.34	30.99	219	188	P	V
			5678.2	53.5	-35.61	89.11	45.92	32.24	6.35	31.01	219	188	P	V
			5713.4	53.57	-55.38	108.95	45.94	32.29	6.36	31.02	219	188	P	V
			5722	52.3	-63.06	115.36	44.64	32.31	6.37	31.02	219	188	P	V
	*		5795	106.42	-	-	98.68	32.41	6.38	31.05	219	188	P	V
	*		5795	95.55	-	-	87.81	32.41	6.38	31.05	219	188	A	V
			5851.2	52.96	-66.5	119.46	45.12	32.48	6.42	31.06	219	188	P	V
			5856.6	52.93	-57.42	110.35	45.06	32.51	6.42	31.06	219	188	P	V
		5875.4	53.83	-51.07	104.9	45.94	32.53	6.43	31.07	219	188	P	V	
		5929.6	51	-17.2	68.2	43.02	32.6	6.47	31.09	219	188	P	V	
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



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

WIFI Chain 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 151 5755MHz		11510	46.79	-27.21	74	61.75	40.1	9.83	65.4	100	0	P	H
		17265	48.67	-19.53	68.2	58.49	41.66	12.11	64.23	100	0	P	H
													H
													H
		4930	54.33	-19.67	74	47.88	31.56	5.85	30.96	260	137	P	V
		4930	49.14	-4.86	54	42.69	31.56	5.85	30.96	260	137	A	V
		11510	47.25	-26.75	74	62.21	40.1	9.83	65.4	100	0	P	V
		17265	48.58	-19.62	68.2	58.4	41.66	12.11	64.23	100	0	P	V
802.11n HT40 CH 159 5795MHz		11590	47.66	-26.34	74	62.76	39.89	9.87	65.37	100	0	P	H
		17385	50.24	-17.96	68.2	59.38	42.08	12.21	64.06	100	0	P	H
													H
													H
		4966	54.87	-19.13	74	48.32	31.63	5.87	30.95	285	136	P	V
		4966	49.31	-4.69	54	42.76	31.63	5.87	30.95	285	136	A	V
		11590	47.71	-26.29	74	62.81	39.89	9.87	65.37	100	0	P	V
		17385	49.67	-18.53	68.2	58.81	42.08	12.21	64.06	100	0	P	V
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. 												



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

WIFI Chain 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
		5608.4	51.2	-17	68.2	43.71	32.14	6.34	30.99	392	106	P	H	
		5699.8	52.03	-53.02	105.05	44.41	32.27	6.36	31.01	392	106	P	H	
		5719	55.27	-55.25	110.52	47.61	32.31	6.37	31.02	392	106	P	H	
		5724.6	56.49	-64.8	121.29	48.83	32.31	6.37	31.02	392	106	P	H	
	*	5775	99.07	-	-	91.34	32.39	6.38	31.04	392	106	P	H	
	*	5775	88.23	-	-	80.5	32.39	6.38	31.04	392	106	A	H	
		5851.4	52.61	-66.4	119.01	44.77	32.48	6.42	31.06	392	106	P	H	
		5855	52.35	-58.45	110.8	44.48	32.51	6.42	31.06	392	106	P	H	
		5875.2	51.62	-53.43	105.05	43.73	32.53	6.43	31.07	392	106	P	H	
		5925.6	49.67	-18.53	68.2	41.69	32.6	6.47	31.09	392	106	P	H	
802.11ac VHT80 CH 155 5775MHz													H	
													H	
			5638.8	53.08	-15.12	68.2	45.54	32.19	6.35	31	249	187	P	V
			5698	59.69	-44.04	103.73	52.07	32.27	6.36	31.01	249	187	P	V
			5712.6	62.89	-45.84	108.73	55.26	32.29	6.36	31.02	249	187	P	V
			5725	62.85	-59.35	122.2	55.19	32.31	6.37	31.02	249	187	P	V
		*	5775	104.5	-	-	96.77	32.39	6.38	31.04	249	187	P	V
		*	5775	93.55	-	-	85.82	32.39	6.38	31.04	249	187	A	V
			5854.6	56.96	-54.75	111.71	49.09	32.51	6.42	31.06	249	187	P	V
			5858	56.78	-53.18	109.96	48.92	32.51	6.42	31.07	249	187	P	V
			5875	53.22	-51.98	105.2	45.33	32.53	6.43	31.07	249	187	P	V
			5926.2	51.31	-16.89	68.2	43.33	32.6	6.47	31.09	249	187	P	V
														V
														V
	Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Chain 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ac VHT80 CH 155 5775MHz		11550	48.61	-25.39	74	63.65	39.98	9.85	65.38	100	0	P	H	
		17325	48.84	-19.36	68.2	58.37	41.84	12.16	64.16	100	0	P	H	
													H	
													H	
			4948	54.39	-19.61	74	47.89	31.6	5.86	30.96	257	137	P	V
			4948	48.85	-5.15	54	42.35	31.6	5.86	30.96	257	137	A	V
			11550	48.47	-25.53	74	63.51	39.98	9.85	65.38	100	0	P	V
			17325	48.6	-19.6	68.2	58.13	41.84	12.16	64.16	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 VHT80 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.	
Chain				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)	
5GHz 802.11n vHT80 LF		182.82	20.85	-22.65	43.5	38.11	11.73	1.14	30.29	-	-	P	H	
		240.06	24.5	-21.5	46	39.27	14.02	1.28	30.22	-	-	P	H	
		283.8	22.48	-23.52	46	35.7	15.47	1.35	30.16	-	-	P	H	
		458.2	24.11	-21.89	46	31.99	20.2	1.73	29.87	-	-	P	H	
		778.1	27.4	-18.6	46	29.02	25.38	2.26	29.38	100	0	P	H	
		961.5	31.19	-22.81	54	28.94	28.54	2.51	29.04	-	-	P	H	
														H
														H
														H
														H
														H
														H
			34.59	29.79	-10.21	40	41.11	18.48	0.48	30.25	100	0	P	V
			112.62	22.66	-20.84	43.5	37.82	14.29	0.89	30.38	-	-	P	V
			183.09	20.17	-23.33	43.5	37.43	11.73	1.14	30.29	-	-	P	V
			458.2	28.52	-17.48	46	36.4	20.2	1.73	29.87	-	-	P	V
			610.8	31.55	-14.45	46	36.37	22.77	1.97	29.65	-	-	P	V
			968.5	31.77	-22.23	54	29.8	28.25	2.51	29.02	-	-	P	V
													V	
													V	
													V	
													V	
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against limit line.													



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.	
Chain		(MHz)	(dBμV/m)	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	(H/V)	
1+2				(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)		
802.11n HT20 CH 149 5745MHz		5638.8	49.87	-18.33	68.2	42.33	32.19	6.35	31	377	256	P	H	
		5699	50.6	-53.86	104.46	42.98	32.27	6.36	31.01	377	256	P	H	
		5713.2	52.36	-56.54	108.9	44.73	32.29	6.36	31.02	377	256	P	H	
		5723.8	53.95	-65.51	119.46	46.29	32.31	6.37	31.02	377	256	P	H	
	*	5745	103.75	-	-	96.07	32.34	6.37	31.03	377	256	P	H	
	*	5745	93.52	-	-	85.84	32.34	6.37	31.03	377	256	A	H	
														H
														H
			5631.8	50.26	-17.94	68.2	42.74	32.17	6.35	31	103	347	P	V
			5686.6	51.74	-43.58	95.32	44.12	32.27	6.36	31.01	103	347	P	V
			5714.8	56.54	-52.81	109.35	48.91	32.29	6.36	31.02	103	347	P	V
			5724.8	57.78	-63.96	121.74	50.12	32.31	6.37	31.02	103	347	P	V
	*		5745	108.75	-	-	101.07	32.34	6.37	31.03	103	347	P	V
	*		5745	98.53	-	-	90.85	32.34	6.37	31.03	103	347	A	V
														V
													V	



WIFI Chain 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT20 CH 157 5785MHz		5647.4	50.31	-17.89	68.2	42.77	32.19	6.35	31	353	114	P	H	
		5687.6	50.34	-45.71	96.05	42.72	32.27	6.36	31.01	353	114	P	H	
		5719.8	49.97	-60.77	110.74	42.31	32.31	6.37	31.02	353	114	P	H	
		5723.6	50.08	-68.93	119.01	42.42	32.31	6.37	31.02	353	114	P	H	
	*	5785	104.86	-	-	97.14	32.39	6.38	31.05	353	114	P	H	
	*	5785	94.03	-	-	86.31	32.39	6.38	31.05	353	114	A	H	
		5850.4	49.19	-72.1	121.29	41.35	32.48	6.42	31.06	353	114	P	H	
		5855.2	49.6	-61.14	110.74	41.73	32.51	6.42	31.06	353	114	P	H	
		5915	50.51	-25.06	75.57	42.56	32.58	6.46	31.09	353	114	P	H	
		5941.2	50.52	-17.68	68.2	42.5	32.63	6.48	31.09	353	114	P	H	
														H
														H
			5620.8	50.07	-18.13	68.2	42.55	32.17	6.34	30.99	145	6	P	V
			5667.4	51.15	-29.96	81.11	43.57	32.24	6.35	31.01	145	6	P	V
			5718.6	50.93	-59.48	110.41	43.27	32.31	6.37	31.02	145	6	P	V
			5723.6	50.86	-68.15	119.01	43.2	32.31	6.37	31.02	145	6	P	V
	*		5785	108.06	-	-	100.34	32.39	6.38	31.05	145	6	P	V
	*		5785	97.69	-	-	89.97	32.39	6.38	31.05	145	6	A	V
			5851	50.64	-69.28	119.92	42.8	32.48	6.42	31.06	145	6	P	V
			5865.8	51.29	-56.48	107.77	43.42	32.51	6.43	31.07	145	6	P	V
		5881.4	50.72	-49.73	100.45	42.82	32.53	6.44	31.07	145	6	P	V	
		5950	50.77	-17.43	68.2	42.75	32.63	6.48	31.09	145	6	P	V	
													V	
													V	



WIFI Chain 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT20 CH 165 5825MHz	*	5825	105.86	-	-	98.06	32.46	6.39	31.05	387	104	P	H	
	*	5825	95.65	-	-	87.85	32.46	6.39	31.05	387	104	A	H	
		5852.4	52.49	-64.24	116.73	44.65	32.48	6.42	31.06	387	104	P	H	
		5857.2	51.3	-58.88	110.18	43.43	32.51	6.42	31.06	387	104	P	H	
		5879.6	50.03	-51.75	101.78	42.13	32.53	6.44	31.07	387	104	P	H	
		5927.8	50.73	-17.47	68.2	42.75	32.6	6.47	31.09	387	104	P	H	
														H
														H
	*	5825	109.03	-	-	101.23	32.46	6.39	31.05	132	7	P	V	
	*	5825	98.82	-	-	91.02	32.46	6.39	31.05	132	7	A	V	
		5853.8	55.44	-58.1	113.54	47.57	32.51	6.42	31.06	132	7	P	V	
		5858.4	57.06	-52.79	109.85	49.2	32.51	6.42	31.07	132	7	P	V	
		5876.6	51.59	-52.42	104.01	43.7	32.53	6.43	31.07	132	7	P	V	
		5925	50.6	-17.6	68.2	42.62	32.6	6.47	31.09	132	7	P	V	
														V
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



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

WIFI Chain 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 149 5745MHz		4924	52.87	-21.13	74	46.43	31.56	5.84	30.96	392	114	P	H
		4924	47.02	-6.98	54	40.58	31.56	5.84	30.96	392	114	A	H
		11490	47.22	-26.78	74	62.17	40.11	9.82	65.39	100	0	P	H
		17235	49.18	-19.02	68.2	59.18	41.54	12.09	64.27	100	0	P	H
		4924	53.99	-20.01	74	47.55	31.56	5.84	30.96	108	343	P	V
		4924	48.7	-5.3	54	42.26	31.56	5.84	30.96	108	343	A	V
		11490	48.22	-25.78	74	63.17	40.11	9.82	65.39	100	0	P	V
802.11n HT20 CH 157 5785MHz		11570	49.09	-24.91	74	64.16	39.93	9.86	65.37	100	0	P	H
		17355	48.53	-19.67	68.2	57.86	41.96	12.19	64.11	100	0	P	H
													H
													H
		4958	53.62	-20.38	74	47.09	31.63	5.86	30.96	100	13	P	V
		4958	49.16	-4.84	54	42.63	31.63	5.86	30.96	100	13	A	V
		11570	48.14	-25.86	74	63.21	39.93	9.86	65.37	100	0	P	V
802.11n HT20 CH 165 5825MHz		17355	48.61	-19.59	68.2	57.94	41.96	12.19	64.11	100	0	P	V
		11650	47.96	-26.04	74	63.12	39.77	9.9	65.34	100	0	P	H
		17475	48.18	-20.02	68.2	56.84	42.38	12.29	63.95	100	0	P	H
													H
													H
		4994	53.98	-20.02	74	47.35	31.7	5.88	30.95	105	11	P	V
		4994	49.36	-4.64	54	42.73	31.7	5.88	30.95	105	11	A	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 Chain 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5622	49.22	-18.98	68.2	41.7	32.17	6.34	30.99	100	275	P	H
		5680	49.9	-40.54	90.44	42.32	32.24	6.35	31.01	100	275	P	H
		5718.2	50.44	-59.86	110.3	42.78	32.31	6.37	31.02	100	275	P	H
		5724.2	50.6	-69.78	120.38	42.94	32.31	6.37	31.02	100	275	P	H
	*	5755	95.54	-	-	87.84	32.36	6.37	31.03	100	275	P	H
	*	5755	84.71	-	-	77.01	32.36	6.37	31.03	100	275	A	H
		5852.8	48.55	-67.27	115.82	40.71	32.48	6.42	31.06	100	275	P	H
		5860.4	49.14	-60.15	109.29	41.28	32.51	6.42	31.07	100	275	P	H
		5898.4	49.9	-37.95	87.85	41.96	32.56	6.46	31.08	100	275	P	H
		5944.2	50.64	-17.56	68.2	42.62	32.63	6.48	31.09	100	275	P	H
802.11n													H
HT40													H
CH 151		5649.8	50.93	-17.27	68.2	43.36	32.22	6.35	31	116	348	P	V
5755MHz		5672.4	52.28	-32.54	84.82	44.7	32.24	6.35	31.01	116	348	P	V
		5718.6	57.21	-53.2	110.41	49.55	32.31	6.37	31.02	116	348	P	V
		5724.6	59.16	-62.13	121.29	51.5	32.31	6.37	31.02	116	348	P	V
	*	5755	106.26	-	-	98.56	32.36	6.37	31.03	116	348	P	V
	*	5755	95.39	-	-	87.69	32.36	6.37	31.03	116	348	A	V
		5853.4	51.74	-62.71	114.45	43.9	32.48	6.42	31.06	116	348	P	V
		5873.2	51.6	-54.1	105.7	43.71	32.53	6.43	31.07	116	348	P	V
		5919.4	51.38	-20.95	72.33	43.42	32.58	6.47	31.09	116	348	P	V
		5938.2	50.93	-17.27	68.2	42.94	32.6	6.48	31.09	116	348	P	V
													V
													V



WiFi Chain 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT40 CH 159 5795MHz		5644.4	49.99	-18.21	68.2	42.45	32.19	6.35	31	388	247	P	H	
		5693.8	50.25	-50.38	100.63	42.63	32.27	6.36	31.01	388	247	P	H	
		5704.4	50.31	-56.12	106.43	42.67	32.29	6.36	31.01	388	247	P	H	
		5722	50.4	-64.96	115.36	42.74	32.31	6.37	31.02	388	247	P	H	
	*	5795	98.04	-	-	90.3	32.41	6.38	31.05	388	247	P	H	
	*	5795	87.3	-	-	79.56	32.41	6.38	31.05	388	247	A	H	
		5853	49.27	-66.09	115.36	41.43	32.48	6.42	31.06	388	247	P	H	
		5866.6	50.08	-57.47	107.55	42.21	32.51	6.43	31.07	388	247	P	H	
		5894.8	49.73	-40.78	90.51	41.81	32.56	6.44	31.08	388	247	P	H	
		5926	49.51	-18.69	68.2	41.53	32.6	6.47	31.09	388	247	P	H	
														H
														H
			5638.8	50.59	-17.61	68.2	43.05	32.19	6.35	31	126	348	P	V
			5679.6	50.64	-39.5	90.14	43.06	32.24	6.35	31.01	126	348	P	V
			5713.4	52.34	-56.61	108.95	44.71	32.29	6.36	31.02	126	348	P	V
			5720.8	50.76	-61.86	112.62	43.1	32.31	6.37	31.02	126	348	P	V
	*		5795	106.29	-	-	98.55	32.41	6.38	31.05	126	348	P	V
	*		5795	95.14	-	-	87.4	32.41	6.38	31.05	126	348	A	V
			5853.2	51.54	-63.36	114.9	43.7	32.48	6.42	31.06	126	348	P	V
			5871.6	51.56	-54.59	106.15	43.67	32.53	6.43	31.07	126	348	P	V
		5902.6	51.61	-33.13	84.74	43.67	32.56	6.46	31.08	126	348	P	V	
		5939	50.57	-17.63	68.2	42.55	32.63	6.48	31.09	126	348	P	V	
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



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

Table with 14 columns: WIFI Chain 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Cable Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include data for 802.11n HT40 CH 151 (5755MHz) and CH 159 (5795MHz).



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

WIFI Chain 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ac VHT80 CH 155 5775MHz		5629.8	49.78	-18.42	68.2	42.26	32.17	6.35	31	396	115	P	H	
		5700	52.05	-53.15	105.2	44.43	32.27	6.36	31.01	396	115	P	H	
		5716.2	54.27	-55.47	109.74	46.64	32.29	6.36	31.02	396	115	P	H	
		5722.6	55.22	-61.51	116.73	47.56	32.31	6.37	31.02	396	115	P	H	
	*	5775	98.01	-	-	90.28	32.39	6.38	31.04	396	115	P	H	
	*	5775	87.23	-	-	79.5	32.39	6.38	31.04	396	115	A	H	
		5850.4	51.37	-69.92	121.29	43.53	32.48	6.42	31.06	396	115	P	H	
		5855.8	51.5	-59.08	110.58	43.63	32.51	6.42	31.06	396	115	P	H	
		5893.8	49.93	-41.32	91.25	42.01	32.56	6.44	31.08	396	115	P	H	
		5946.6	49.46	-18.74	68.2	41.44	32.63	6.48	31.09	396	115	P	H	
														H
														H
			5621.4	49.98	-18.22	68.2	42.46	32.17	6.34	30.99	105	359	P	V
			5694.6	56.15	-45.07	101.22	48.53	32.27	6.36	31.01	105	359	P	V
			5719.4	58.6	-52.03	110.63	50.94	32.31	6.37	31.02	105	359	P	V
			5725	59.12	-63.08	122.2	51.46	32.31	6.37	31.02	105	359	P	V
	*		5775	102.41	-	-	94.68	32.39	6.38	31.04	105	359	P	V
	*		5775	91.4	-	-	83.67	32.39	6.38	31.04	105	359	A	V
			5850.4	56.79	-64.5	121.29	48.95	32.48	6.42	31.06	105	359	P	V
			5855	53.62	-57.18	110.8	45.75	32.51	6.42	31.06	105	359	P	V
		5876.6	52	-52.01	104.01	44.11	32.53	6.43	31.07	105	359	P	V	
		5944.8	50.77	-17.43	68.2	42.75	32.63	6.48	31.09	105	359	P	V	
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Chain 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ac VHT80 CH 155 5775MHz		11550	48.56	-25.44	74	63.6	39.98	9.85	65.38	100	0	P	H	
		17325	48.72	-19.48	68.2	58.25	41.84	12.16	64.16	100	0	P	H	
													H	
													H	
			4950	53.5	-20.5	74	47	31.6	5.86	30.96	112	4	P	V
			4950	48.5	-5.5	54	42	31.6	5.86	30.96	112	4	A	V
			11550	48.32	-25.68	74	63.36	39.98	9.85	65.38	100	0	P	V
			17325	49.32	-18.88	68.2	58.85	41.84	12.16	64.16	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Emission below 1GHz

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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.	
Chain				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.		
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)	
5GHz 802.11n HT20 LF		34.32	21.6	-18.4	40	32.09	19.31	0.48	30.25	100	0	P	H	
		182.01	23.31	-20.19	43.5	40.57	11.77	1.09	30.29	-	-	P	H	
		240.06	23.88	-22.12	46	38.65	14.02	1.28	30.22	-	-	P	H	
		636	25	-21	46	29.1	23.38	2.02	29.61	-	-	P	H	
		745.2	26.84	-19.16	46	29.01	24.96	2.21	29.44	-	-	P	H	
		960.1	32.02	-21.98	54	29.73	28.58	2.51	29.04	-	-	P	H	
														H
														H
														H
														H
														H
														H
														H
			34.59	29.69	-10.31	40	41.01	18.48	0.48	30.25	-	-	P	V
			134.22	19.29	-24.21	43.5	34.87	13.77	0.95	30.36	-	-	P	V
			182.55	23.99	-19.51	43.5	41.25	11.77	1.09	30.29	-	-	P	V
			610.8	30.2	-15.8	46	35.02	22.77	1.97	29.65	-	-	P	V
			747.3	37.02	-8.98	46	39.16	24.99	2.21	29.44	100	0	P	V
			958	31.61	-14.39	46	29.44	28.46	2.51	29.04	-	-	P	V
														V
													V	
													V	
													V	
													V	
													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	Peak or Average
H/V	Horizontal or Vertical



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Chain				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)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

- Level(dBμV/m) =
Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
- Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

- Level(dBμV/m)
= Antenna Factor(dB/m) + Cable 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)
- Over Limit(dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 55.45(dBμV/m) – 74(dBμV/m)
= -18.55(dB)

For Average Limit @ 2390MHz:

- Level(dBμV/m)
= Antenna Factor(dB/m) + Cable 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)
- 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 :	Nick Yu, Ray Chen, and Karl Hou	Temperature :	23~24°C
		Relative Humidity :	65~66%

Note symbol

-L	Low channel location
-R	High channel location

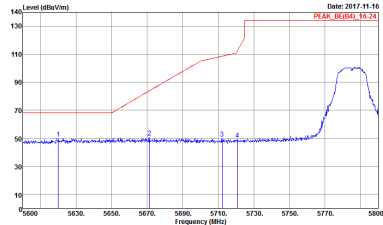
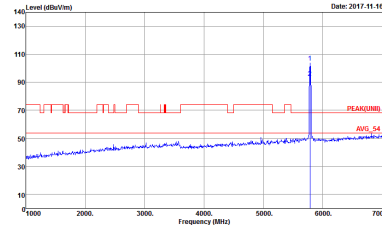
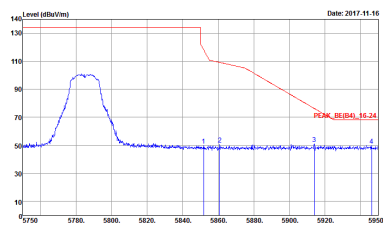
Band 4 - 5725~5850MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11a CH149 5745MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH12-14Y Condition : PEAK_BE(B4)_16-24 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 60</p>	<p>Site : 03CH12-14Y Condition : PEAK(UNL) 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 60</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11a CH149 5745MHz	
1	Vertical	Fundamental
<p>Peak</p>		



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11a CH157 5785MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL RBW:3000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 7O2534 Mode : 61</p>	 <p>Site : 03CH12-HY Condition : PEAK(UNITE) 3m HORN_9120D_1328 HORIZONTAL RBW:3000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 7O2534 Mode : 61</p>
Peak	 <p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL RBW:3000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 7O2534 Mode : 61</p>	Left blank

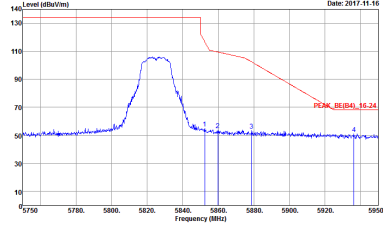
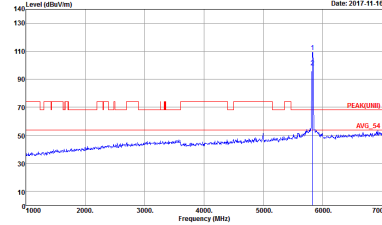


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11a CH157 5785MHz	
1	Vertical	Fundamental
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 01</p>	<p>Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 01</p>
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 01</p>	Left blank



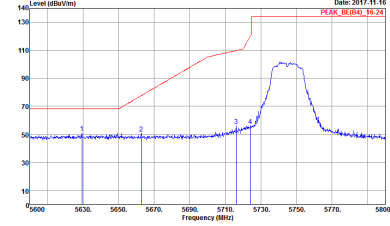
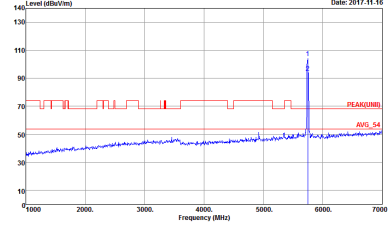
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11a CH165 5825MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH12-11Y Condition : PEAK_BE(B4)_16-24 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 702534 Mode : 62</p>	<p>Site : 03CH12-11Y Condition : PEAK(FUNDE) 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 702534 Mode : 62</p>



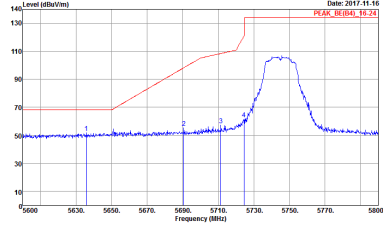
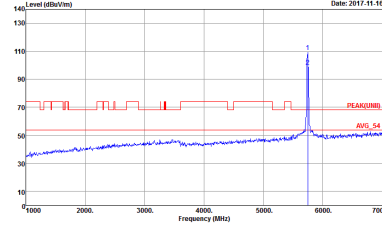
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11a CH165 5825MHz	
1	Vertical	Fundamental
<p>Peak</p>	 <p>Site : 03CH12-HY Condition : PEAK_8E(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 702534 Mode : 62</p>	 <p>Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 702534 Mode : 62</p>



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

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT20 CH149 5745MHz	
1	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL RBW:3000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 7O2534 Mode : 63</p>	 <p>Site : 03CH12-HY Condition : PEAK(UN11) 3m HORN_9120D_1328 HORIZONTAL RBW:3000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 7O2534 Mode : 63</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT20 CH149 5745MHz	
1	Vertical	Fundamental
<p>Peak</p>	 <p>Site : 03CH12-HY Condition : PEAK_RE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 702534 Mode : 63</p>	 <p>Site : 03CH12-HY Condition : PEAK(UNID)_3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 702534 Mode : 63</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT20 CH157 5785MHz	
1	Horizontal	Fundamental
<p>Peak</p>	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 64</p>	<p>Site : 03CH12-HY Condition : PEAK(FUNDE) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 64</p>
<p>Peak</p>	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 64</p>	<p>Left blank</p>

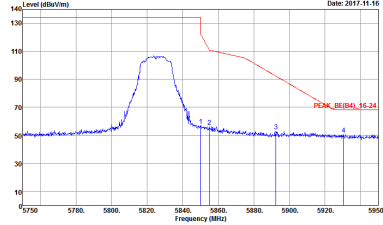
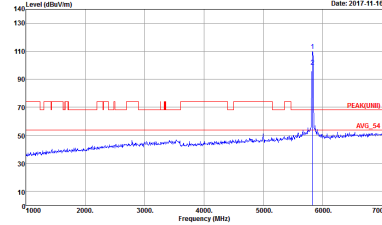


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT20 CH157 5785MHz	
1	Vertical	Fundamental
<p>Peak</p>	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 64</p>	<p>Site : 03CH12-HY Condition : PEAK(FUNDE) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 64</p>
<p>Peak</p>	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 64</p>	<p>Left blank</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT20 CH165 5825MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH12-1HY Condition : PEAK_BE(B4)_16-24 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 702534 Mode : 65</p>	<p>Site : 03CH12-1HY Condition : PEAK(FUNB)_16-24 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 702534 Mode : 65</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT20 CH165 5825MHz	
1	Vertical	Fundamental
<p>Peak</p>	 <p>Site : 03CH12-HY Condition : PEAK_16(165)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 702534 Mode : 65</p>	 <p>Site : 03CH12-HY Condition : PEAK(165)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 702534 Mode : 65</p>



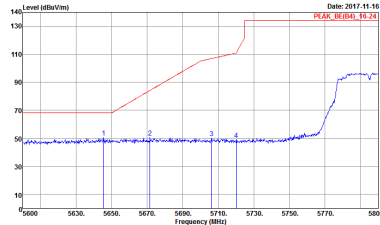
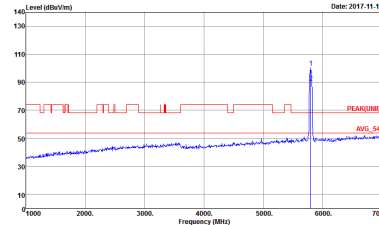
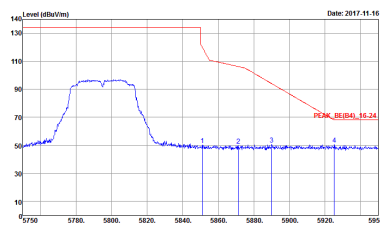
**Band 4 5725~5850MHz
WIFI 802.11n HT40 (Band Edge @ 3m)**

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT40 CH151 5755MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 702534 Mode : 66</p>	<p>Site : 03CH12-HY Condition : PEAK(UN11) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 702534 Mode : 66</p>
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 702534 Mode : 66</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT40 CH151 5755MHz	
1	Vertical	Fundamental
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 66</p>	<p>Site : 03CH12-HY Condition : PEAK(FUNDE) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 66</p>
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 66</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT40 CH159 5795MHz	
1	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 67</p>	 <p>Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 67</p>
<p>Peak</p>	 <p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 67</p>	<p>Left blank</p>



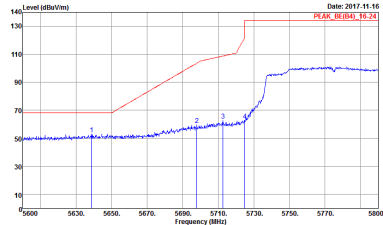
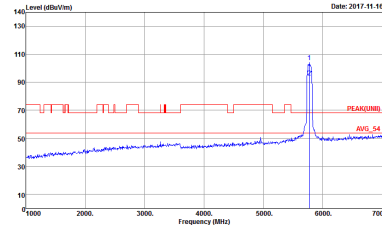
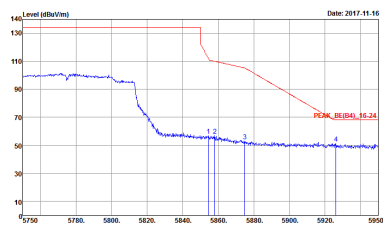
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT40 CH159 5795MHz	
1	Vertical	Fundamental
<p>Peak</p>	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 67</p>	<p>Site : 03CH12-HY Condition : PEAK(FUN1) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 67</p>
<p>Peak</p>	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 67</p>	<p>Left blank</p>



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

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11ac VHT80 CH155 5775MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL RBW:3000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 702534 Mode : 68</p>	<p>Site : 03CH12-HY Condition : PEAK(UIN1) 3m HORN_9120D_1328 HORIZONTAL RBW:3000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 702534 Mode : 68</p>
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL RBW:3000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 702534 Mode : 68</p>	Left blank



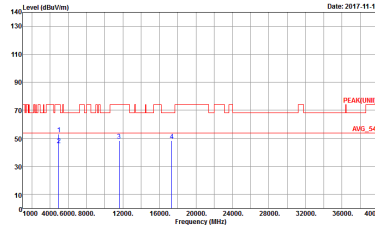
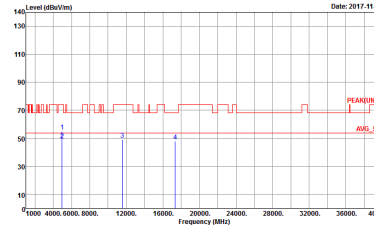
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11ac VHT80 CH155 5775MHz	
1	Vertical	Fundamental
<p>Peak</p>	 <p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 68</p>	 <p>Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 68</p>
<p>Peak</p>	 <p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 68</p>	<p>Left blank</p>



Band 4 - 5725~5850MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
CHAIN	802.11a CH149 5745MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH12-HY Condition : PEAK(LINE) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 60</p>	<p>Site : 03CH12-HY Condition : PEAK(LINE) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 60</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
CHAIN	802.11a CH157 5785MHz	
1	Horizontal	Vertical
<p>Peak</p> <p>Avg.</p>	 <p>Site : 03CH12-11Y Condition : PEAK(LINE1) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : -61</p>	 <p>Site : 03CH12-11Y Condition : PEAK(LINE1) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : -61</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
CHAIN	802.11a CH165 5825MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH12-11Y Condition : PEAK(LINE1) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : -62</p>	<p>Site : 03CH12-11Y Condition : PEAK(LINE1) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : -62</p>



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

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
CHAIN	802.11n HT20 CH149 5745MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 63</p>	<p>Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 63</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
CHAIN	802.11n HT20 CH157 5785MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH12-4Y Condition : PEAK(LINE1) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : -64</p>	<p>Site : 03CH12-4Y Condition : PEAK(LINE1) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : -64</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
CHAIN	802.11n HT20 CH165 5825MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH12-11Y Condition : PEAK(LINE1) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : GS</p>	<p>Site : 03CH12-11Y Condition : PEAK(LINE1) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : GS</p>



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

Table with 3 columns: WIFI, CHAIN, and 1. It contains two spectral plots: Horizontal and Vertical. Each plot shows Level (dBuV/m) vs Frequency (MHz) with a peak at 5755 MHz. Metadata includes Site: 03CH12-HY, Condition: PEAK(UNII) 3m HORN_9120D_1328, Detector: Peak, Project: 7O2534, and Mode: 66.



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
CHAIN	802.11n HT40 CH159 5795MHz	
1	Horizontal	Vertical
<p>Peak</p> <p>Avg.</p>	<p>Site : 09CH12-11Y Condition : PEAK(LINE1) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : -67</p>	<p>Site : 09CH12-11Y Condition : PEAK(LINE1) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : -67</p>



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

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
CHAIN	802.11ac VHT80 CH155 5775MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 68</p>	<p>Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 68</p>



Emission below 1GHz
5GHz WIFI 802.11ac VHT80 (LF)

WIFI	5GHz 5725~5850MHz	
CHAIN	802.11ac VHT80 LF	
1	Horizontal	Vertical
QP / Peak	<p>Site : 03CH12-HY Condition : QP 3m BTL06_6111D_37059 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 69</p>	<p>Site : 03CH12-HY Condition : QP 3m BTL06_6111D_37059 VERTICAL Detector : Peak Project : 7O2534 Mode : 69</p>



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

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT20 CH149 5745MHz	
1+2	Horizontal	Fundamental
Peak	<p> Site : 03CH12-HY Condition : PEAK_BED@_16-24 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 702534 Mode : 70 </p>	<p> Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 702534 Mode : 70 </p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT20 CH149 5745MHz	
1+2	Vertical	Fundamental
Peak	<p>Site : 03CH12-HY Condition : PEAK(RE(B4)_16-24 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 702534 Mode : 70</p>	<p>Site : 03CH12-HY Condition : PEAK(FUNTE) 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 702534 Mode : 70</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT20 CH157 5785MHz	
1+2	Horizontal	Fundamental
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 71</p>	<p>Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 71</p>
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 71</p>	Left blank

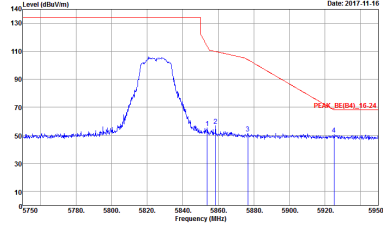
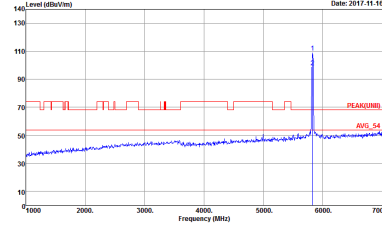


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT20 CH157 5785MHz	
1+2	Vertical	Fundamental
<p>Peak</p>	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 71</p>	<p>Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 71</p>
<p>Peak</p>	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 71</p>	<p>Left blank</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT20 CH165 5825MHz	
1+2	Horizontal	Fundamental
Peak	<p>Site : 03CH12-11Y Condition : PEAK_BE(B4)_16-24 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 702534 Mode : 72</p>	<p>Site : 03CH12-11Y Condition : PEAK(UNT) 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 702534 Mode : 72</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT20 CH165 5825MHz	
1+2	Vertical	Fundamental
Peak	 <p>Site : 03CH12-HY Condition : PEAK_16(165)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 702534 Mode : 72</p>	 <p>Site : 03CH12-HY Condition : PEAK(165)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 702534 Mode : 72</p>



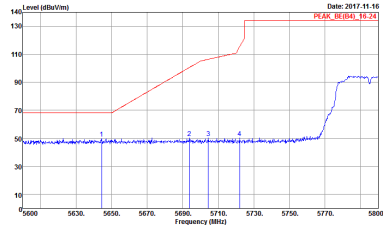
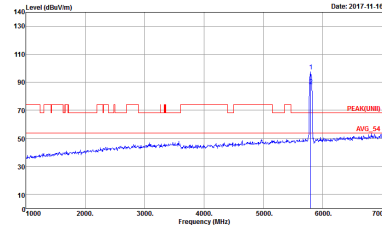
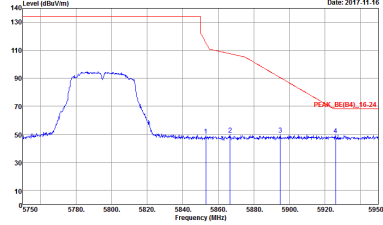
**Band 4 5725~5850MHz
WIFI 802.11n HT40 (Band Edge @ 3m)**

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT40 CH151 5755MHz	
1+2	Horizontal	Fundamental
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 702534 Mode : 73</p>	<p>Site : 03CH12-HY Condition : PEAK(UN1) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 702534 Mode : 73</p>
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 702534 Mode : 73</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT40 CH151 5755MHz	
1+2	Vertical	Fundamental
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 73</p>	<p>Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 73</p>
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 73</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT40 CH159 5795MHz	
1+2	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL RBW:3000.0000kHz VBW:3000.0000kHz SWT:Auto Detector : Peak Project : 7O2534 Mode : 74</p>	 <p>Site : 03CH12-HY Condition : PEAK(FUNDE) 3m HORN_9120D_1328 HORIZONTAL RBW:3000.0000kHz VBW:3000.0000kHz SWT:Auto Detector : Peak Project : 7O2534 Mode : 74</p>
<p>Peak</p>	 <p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL RBW:3000.0000kHz VBW:3000.0000kHz SWT:Auto Detector : Peak Project : 7O2534 Mode : 74</p>	<p>Left blank</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11n HT40 CH159 5795MHz	
1+2	Vertical	Fundamental
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 74</p>	<p>Site : 03CH12-HY Condition : PEAK(FUN1) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 74</p>
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 74</p>	Left blank



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

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11ac VHT80 CH155 5775MHz	
1+2	Horizontal	Fundamental
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL RBW:3000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 702534 Mode : 75</p>	<p>Site : 03CH12-HY Condition : PEAK(UIN1) 3m HORN_9120D_1328 HORIZONTAL RBW:3000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 702534 Mode : 75</p>
Peak	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL RBW:3000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 702534 Mode : 75</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
CHAIN	802.11ac VHT80 CH155 5775MHz	
1+2	Vertical	Fundamental
<p>Peak</p>	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 75</p>	<p>Site : 03CH12-HY Condition : PEAK(FUN1) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 75</p>
<p>Peak</p>	<p>Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 75</p>	<p>Left blank</p>



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

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
CHAIN	802.11n HT20 CH149 5745MHz	
1+2	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH12-HY Condition : PEAK(LINE) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 70</p>	<p>Site : 03CH12-HY Condition : PEAK(LINE) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 70</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
CHAIN	802.11n HT20 CH157 5785MHz	
1+2	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH12-4Y Condition : PEAK(LINE1) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 71</p>	<p>Site : 03CH12-4Y Condition : PEAK(LINE1) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 71</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
CHAIN	802.11n HT20 CH165 5825MHz	
1+2	Horizontal	Vertical
Peak Avg.	<p>Site : 09CH12-4Y Condition : PEARLINE1) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 7E</p>	<p>Site : 09CH12-4Y Condition : PEARLINE1) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 7E</p>



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

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
CHAIN	802.11n HT40 CH151 5755MHz	
1+2	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 73</p>	<p>Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 73</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
CHAIN	802.11n HT40 CH159 5795MHz	
1+2	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH12-4Y Condition : PEAK(LINE1) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 74</p>	<p>Site : 03CH12-4Y Condition : PEAK(LINE1) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 7O2534 Mode : 74</p>

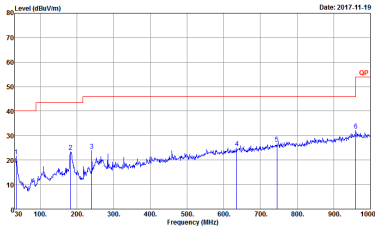
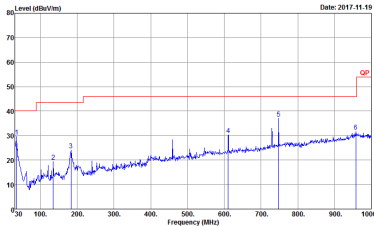


Band 4 5725~5850MHz
WIFI 802.11ac VHT80 (Harmonic @ 3m)

Table with 3 columns: WIFI, CHAIN, 1+2. It contains two spectral plots: Horizontal and Vertical. Each plot shows Level (dBuV/m) vs Frequency (MHz) with a peak at 5775 MHz. Metadata includes Site: 03CH12-HY, Condition: PEAK(UNII) 3m HORN_9120D_1328, Detector: Peak, Project: 7O2534, Mode: 75.



Emission below 1GHz
5GHz WIFI 802.11n HT20 (LF)

WIFI	5GHz 5725~5850MHz	
CHAIN	802.11n HT20 LF	
1+2	Horizontal	Vertical
<p>QP / Peak</p>	 <p>Site : 03GH12-HY Condition : QP 3m BTL06_6111D_37059 HORIZONTAL Detector : Peak Project : 7O2534 Mode : 76</p>	 <p>Site : 03GH12-HY Condition : QP 3m BTL06_6111D_37059 VERTICAL Detector : Peak Project : 7O2534 Mode : 76</p>

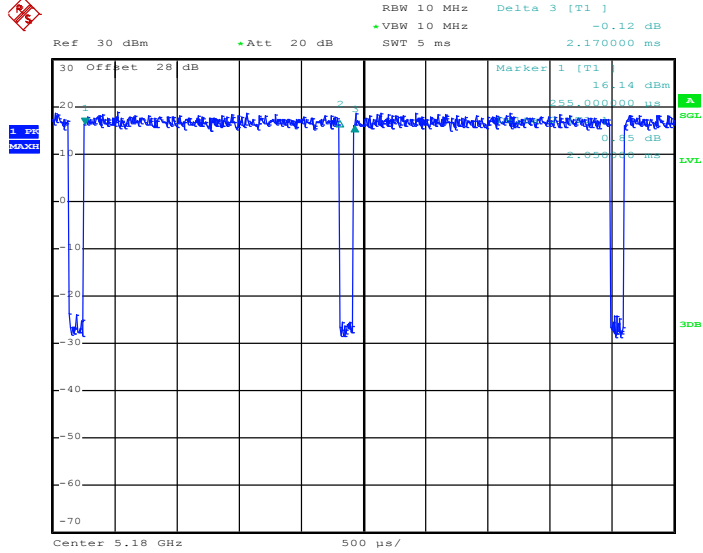
Appendix E. Duty Cycle Plots

Chain	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
1	802.11a	94.47	2050.00	0.49	1kHz
1	5GHz 802.11n HT20	95.52	1920.00	0.52	1kHz
1+2	5GHz 802.11n HT20 for Chain 1	88.18	970.00	1.03	3kHz
1+2	5GHz 802.11n HT20 for Chain 2	88.18	970.00	1.03	3kHz
1	5GHz 802.11n HT40	88.68	940.00	1.06	3kHz
1+2	5GHz 802.11n HT40 for Chain 1	88.49	492.00	2.03	3kHz
1+2	5GHz 802.11n HT40 for Chain 2	87.77	488.00	2.05	3kHz
1	5GHz 802.11ac VHT80	89.15	460.00	2.17	3kHz
1+2	5GHz 802.11ac VHT80 for Chain 1	86.49	256.00	3.88	10kHz
1+2	5GHz 802.11ac VHT80 for Chain 2	87.08	256.00	3.90	10kHz



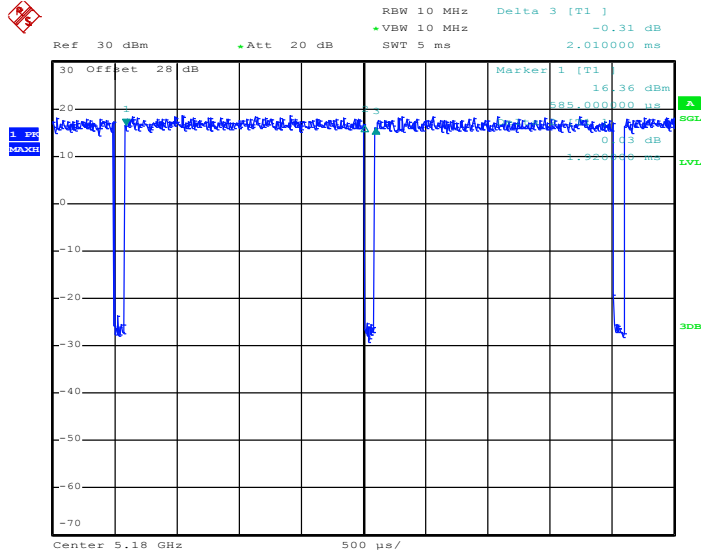
<Chain 1>

802.11a



Date: 27.OCT.2017 12:20:59

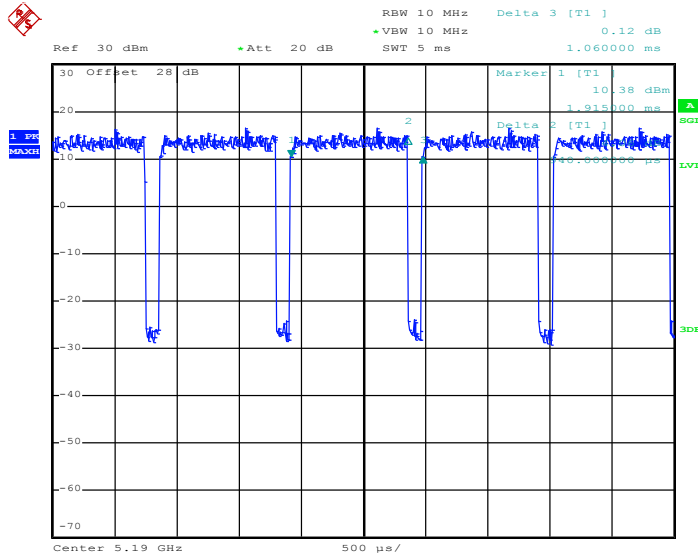
802.11n HT20



Date: 27.OCT.2017 12:24:46

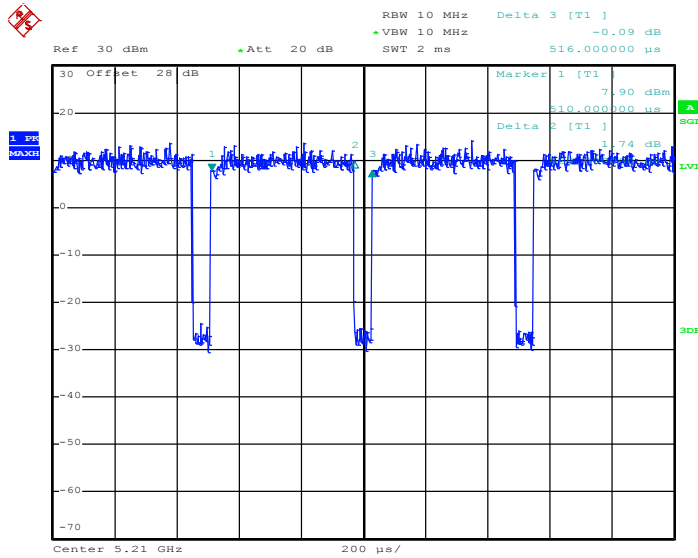


802.11n HT40



Date: 27.OCT.2017 12:32:01

802.11ac VHT80

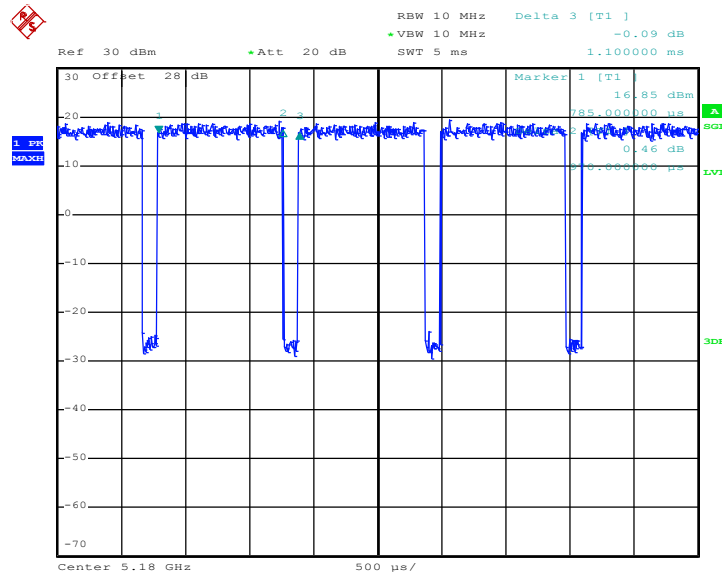


Date: 27.OCT.2017 14:25:16



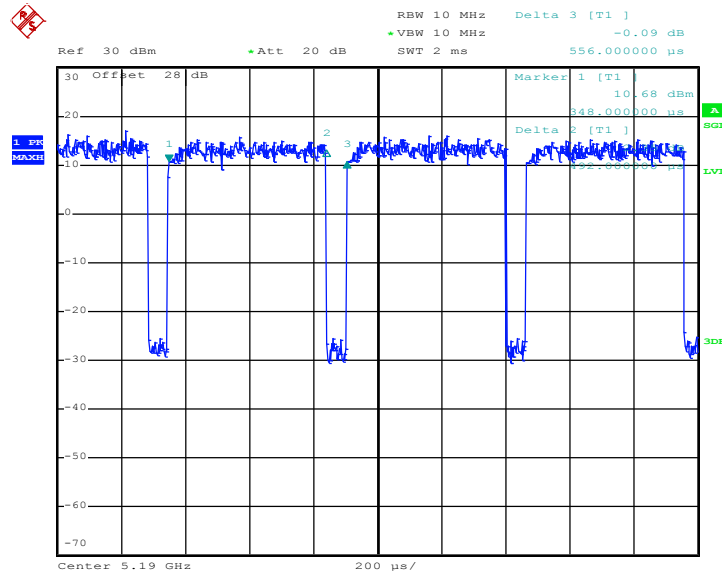
MIMO <Chain 1+2(1)>

802.11n HT20



Date: 27.OCT.2017 12:27:39

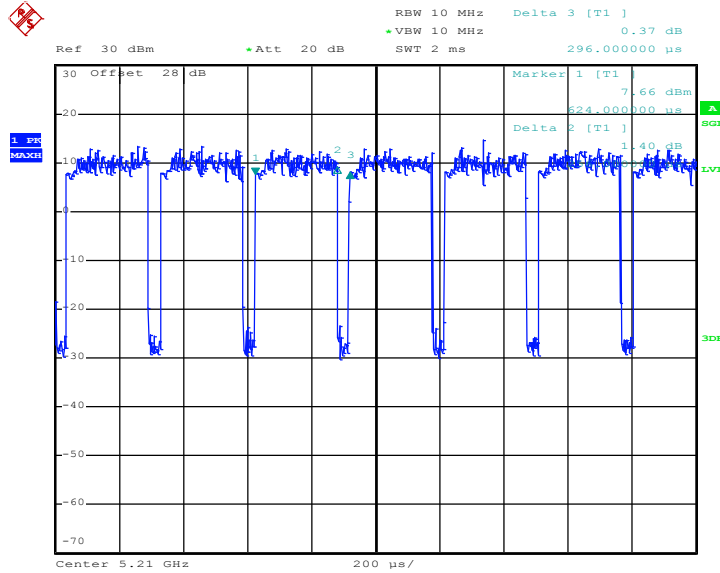
802.11n HT40



Date: 27.OCT.2017 14:10:20



802.11ac VHT80

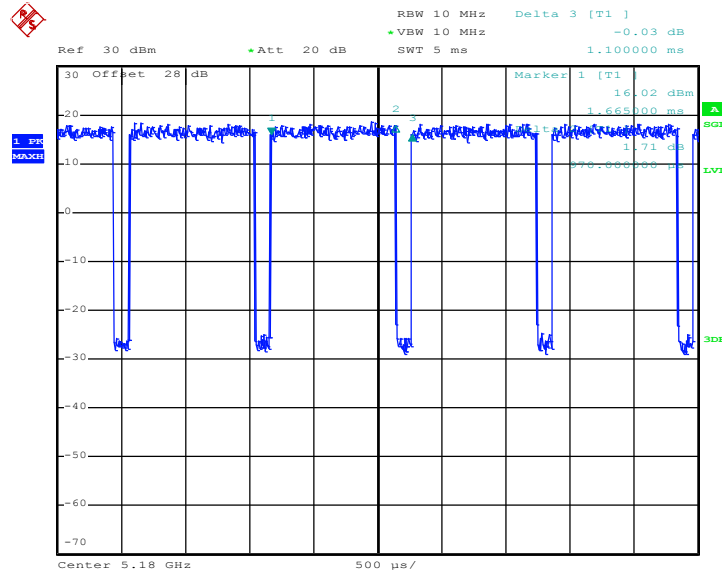


Date: 27.OCT.2017 14:27:51



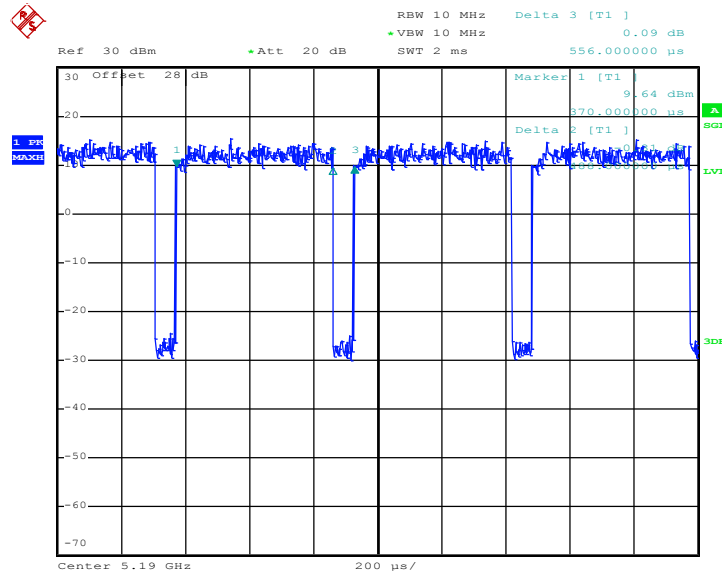
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802.11n HT20



Date: 27.OCT.2017 12:28:44

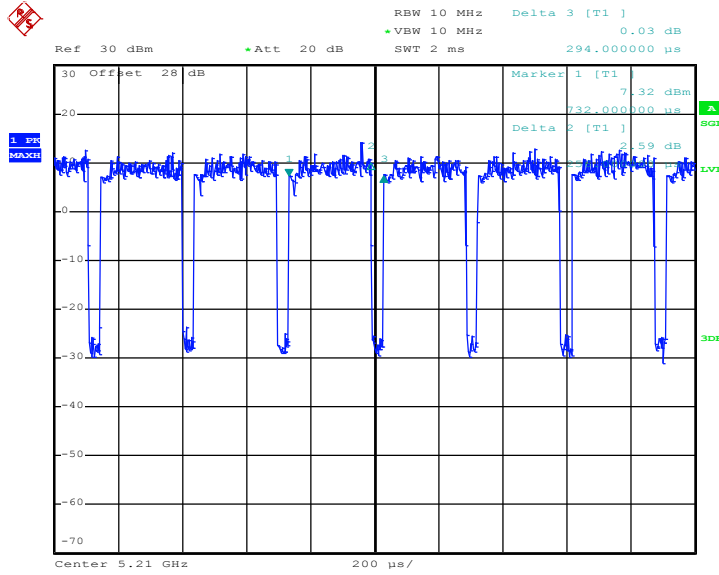
802.11n HT40



Date: 27.OCT.2017 14:11:21



802.11ac VHT80



Date: 27.OCT.2017 14:28:55