



FCC RF Test Report

APPLICANT : Huawei Technologies Co., Ltd.
EQUIPMENT : Smart Phone
BRAND NAME : HUAWEI
MODEL NAME : GLK-LX1U
FCC ID : QISGLK-LX1U
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

The product was received on Mar. 28, 2019 and testing was completed on Apr. 27, 2019. We, Sporton International (Shenzhen) 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 (Shenzhen) Inc., the test report shall not be reproduced except in full.



Approved by: Eric Shih / Manager

Sporton International (Shenzhen) Inc.

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Guangdong Province 518055, China**



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR932820E	Rev. 01	Initial issue of report	Apr. 30, 2019

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	2.1049 & 15.403(i)	26dB & 99% Bandwidth	-	Pass	-
3.2	15.407(a)	Maximum Conducted Output Power	≤ 24 dBm	Pass	-
3.3	15.407(a)	Power Spectral Density	≤ 11 dBm	Pass	-
3.4	15.407(b)	Unwanted Emissions	15.407(b) & 15.209(a)	Pass	Under limit 4.14 dB at 5148.98 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 9.59 dB at 0.15 MHz
3.6	15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.7	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass	-



1 General Description

1.1 Applicant

Huawei Technologies Co., Ltd.

Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

1.2 Manufacturer

Huawei Technologies Co., Ltd.

Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Smart Phone
Brand Name	HUAWEI
Model Name	GLK-LX1U
FCC ID	QISGLK-LX1U
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/DC-HSDPA/HSPA+(16 QAM Uplink is not supported)/LTE/NFC WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE FM Receiver/GNSS
IMEI Code	Conducted: 867285040040254/867285040041500 Conduction: 867285040001637/867285040004151 Radiation: 867285040040809/867285040042052
HW Version	HL7SENEM
SW Version	9.1.0.102(C900E102R1P1)

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.



1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5700 MHz
Maximum Output Power to Antenna	<5180 MHz ~ 5240 MHz> 802.11a : 15.03 dBm / 0.0318 W 802.11n HT20 : 12.84 dBm / 0.0192 W 802.11n HT40 : 11.98 dBm / 0.0158 W 802.11ac VHT20 : 12.87 dBm / 0.0194 W 802.11ac VHT40 : 11.92 dBm / 0.0156 W 802.11ac VHT80 : 9.68 dBm / 0.0093 W <5260 MHz ~ 5320 MHz> 802.11a : 14.96 dBm / 0.0313 W 802.11n HT20 : 12.28 dBm / 0.0169 W 802.11n HT40 : 11.21 dBm / 0.0132 W 802.11ac VHT20 : 12.28 dBm / 0.0169 W 802.11ac VHT40 : 11.22 dBm / 0.0132 W 802.11ac VHT80 : 8.71 dBm / 0.0074 W <5500 MHz ~ 5700 MHz > 802.11a : 15.03 dBm / 0.0318 W 802.11n HT20 : 13.08 dBm / 0.0203 W 802.11n HT40 : 12.34 dBm / 0.0171 W 802.11ac VHT20 : 13.17 dBm / 0.0207 W 802.11ac VHT40 : 12.52 dBm / 0.0179 W 802.11ac VHT80 : 9.85 dBm / 0.0097 W
99% Occupied Bandwidth	<5180 MHz ~ 5240 MHz> 802.11a : 17.33 MHz 802.11ac VHT20 : 18.18 MHz 802.11ac VHT40 : 36.16 MHz 802.11ac VHT80 : 74.93 MHz <5260 MHz ~ 5320 MHz> 802.11a : 17.43 MHz 802.11ac VHT20 : 18.23 MHz 802.11ac VHT40 : 36.16 MHz 802.11ac VHT80 : 75.04 MHz <5500 MHz ~ 5700 MHz > 802.11a : 17.38 MHz 802.11ac VHT20 : 18.23 MHz 802.11ac VHT40 : 36.16 MHz 802.11ac VHT80 : 75.04 MHz
Antenna Type / Gain	<5180 MHz ~ 5240 MHz > Internal Antenna with gain 1.00 dBi <5260 MHz ~ 5320 MHz > Internal Antenna with gain 1.00 dBi <5500 MHz ~ 5700 MHz > Internal Antenna with gain 1.00 dBi
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)

Note: For 802.11an HT20 / ac VHT20 and 802.11an HT40 / ac VHT40 mode, the whole testing have assessed only 802.11ac VHT20/VHT40 by referring to their maximum conducted power.

1.5 Modification of EUT

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

1.6 Testing Location

Sporton International (Kunshan) Inc. is accredited to ISO 17025 by National Voluntary Laboratory Accreditation Program (NVLAP code: 600155-0).

Test Site	Sporton International (Kunshan) Inc.	
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone, Jiangsu Province 215335, China TEL : +86-512-57900158 FAX : +86-512-57900958	
Test Site No.	Sporton Site No.	FCC Test Firm Registration No.
	TH01-KS	630927

Sporton International (Shenzhen) Inc. is accredited to ISO 17025 by National Voluntary Laboratory Accreditation Program (NVLAP code: 600156-0).

Test Site	Sporton International (Shenzhen) Inc.		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen City, Guangdong Province 518055, China TEL: +86-755-8637-9589 FAX: +86-755-8637-9595		
Test Site No.	Sporton Site No.	FCC designation No.	FCC Test Firm Registration No.
	CO01-SZ	CN5018	337463

Test Site	Sporton International (Shenzhen) Inc.		
Test Site Location	No. 3 Bldg the third floor of south, Shahe River west, Fengzeyuan Warehouse, Nanshan District, Shenzhen City, Guangdong Province 518055, China TEL: +86-755- 3320-2398		
Test Site No.	Sporton Site No.	FCC designation No.	FCC Test Firm Registration No.
	03CH01-SZ	CN5019	577730



1.7 Applicable Standards

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

- ♦ 47 CFR Part 15 Subpart E
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- ♦ ANSI C63.10-2013

Remark:

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



1.8 Specification of Accessory

AC Adapter 1	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050200U02
	Power Rating	I/P: <u>100</u> - <u>240</u> Vac, <u>500</u> mA	O/P: <u>5</u> Vdc, <u>2000</u> mA	
	Manufacturer	Manufacturer: Salcomp	SN	
AC Adapter 2	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050200U02
	Power Rating	I/P: <u>100</u> - <u>240</u> Vac, <u>500</u> mA	O/P: <u>5</u> Vdc, <u>2000</u> mA	
	Manufacturer	Manufacturer: BYD	SN	
AC Adapter 3	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050200U02
	Power Rating	I/P: <u>100</u> - <u>240</u> Vac, <u>500</u> mA	O/P: <u>5</u> Vdc, <u>2000</u> mA	
	Manufacturer	Manufacturer: HUNTKEY	SN	
AC Adapter 4	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050200U02
	Power Rating	I/P: <u>100</u> - <u>240</u> Vac, <u>500</u> mA	O/P: <u>5</u> Vdc, <u>2000</u> mA	
	Manufacturer	Manufacturer: PHIHONG	SN	
AC Adapter 5	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050200E02
	Power Rating	I/P: <u>100</u> - <u>240</u> Vac, <u>500</u> mA	O/P: <u>5</u> Vdc, <u>2000</u> mA	
	Manufacturer	Manufacturer: Salcomp	SN	
AC Adapter 6	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050200E02
	Power Rating	I/P: <u>100</u> - <u>240</u> Vac, <u>500</u> mA	O/P: <u>5</u> Vdc, <u>2000</u> mA	
	Manufacturer	Manufacturer: BYD	SN	
AC Adapter 7	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050200E02
	Power Rating	I/P: <u>100</u> - <u>240</u> Vac, <u>500</u> mA	O/P: <u>5</u> Vdc, <u>2000</u> mA	
	Manufacturer	Manufacturer: HUNTKEY	SN	
AC Adapter 8	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050200E02
	Power Rating	I/P: <u>100</u> - <u>240</u> Vac, <u>500</u> mA	O/P: <u>5</u> Vdc, <u>2000</u> mA	
	Manufacturer	Manufacturer: PHIHONG	SN	
AC Adapter 9	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050200B02
	Power Rating	I/P: <u>100</u> - <u>240</u> Vac, <u>500</u> mA	O/P: <u>5</u> Vdc, <u>2000</u> mA	
	Manufacturer	Manufacturer: Salcomp	SN	
AC Adapter 10	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050200B02
	Power Rating	I/P: <u>100</u> - <u>240</u> Vac, <u>500</u> mA	O/P: <u>5</u> Vdc, <u>2000</u> mA	
	Manufacturer	Manufacturer: BYD	SN	
AC Adapter 11	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050200B02
	Power Rating	I/P: <u>100</u> - <u>240</u> Vac, <u>500</u> mA	O/P: <u>5</u> Vdc, <u>2000</u> mA	
	Manufacturer	Manufacturer: HUNTKEY	SN	
AC Adapter 12	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050200B02
	Power Rating	I/P: <u>100</u> - <u>240</u> Vac, <u>500</u> mA	O/P: <u>5</u> Vdc, <u>2000</u> mA	
	Manufacturer	Manufacturer: PHIHONG	SN	
AC Adapter 13	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050200A02
	Power Rating	I/P: <u>100</u> - <u>240</u> Vac, <u>500</u> mA	O/P: <u>5</u> Vdc, <u>2000</u> mA	
	Manufacturer	Manufacturer: Salcomp	SN	
AC Adapter 14	Brand Name	Huawei Technologies Co., Ltd.	Model Name	HW-050200A02
	Power Rating	I/P: <u>100</u> - <u>240</u> Vac, <u>500</u> mA	O/P: <u>5</u> Vdc, <u>2000</u> mA	
	Manufacturer	Manufacturer: BYD	SN	
USB Cable 1	Brand Name	Ningbo Broad Telecommunication Co., Ltd	Model Name	WA0020
	Signal Line	<u>1</u> meter, non-shielded cable, with w/o ferrite core		



USB Cable 2	Brand Name	Dongguan Mingji Electronics Technology Group Co.,Ltd	Model Name	203-1572-0
	Signal Line	<u>1</u> meter, non-shielded cable, with w/o ferrite core		
USB Cable 3	Brand Name	Freeport Resources Enterprises (Jiangxi) Co.,Ltd	Model Name	18-93C2CHO-001HF
	Signal Line	<u>1</u> meter, non-shielded cable, with w/o ferrite core		
USB Cable 4	Brand Name	HONGFUJIN PRECISION INDUSTRIAL(SHENZHEN).LTD	Model Name	CUDU01B-HC295-EH
	Signal Line	<u>1</u> meter, non-shielded cable, with w/o ferrite core		
USB Cable 5	Brand Name	LUXSHARE Precision Industry Co., Ltd.	Model Name	L99UC131-CS-H
	Signal Line	<u>1</u> meter, non-shielded cable, with w/o ferrite core		
USB Cable 6	Brand Name	HUIZHOU DEHONG TECHNOLOGY CO.,LTD.	Model Name	330-50507
	Signal Line	<u>1</u> meter, non-shielded cable, with w/o ferrite core		
Earphone 1	Brand Name	HONGFUJIN PRECISION INDUSTRIAL(SHENZHEN).LTD	Model Name	EPAB542-2WH06-DH
	Signal Line	<u>1.1</u> meter, non-shielded cable, with w/o ferrite core		
Earphone 2	Brand Name	HONGFUJIN PRECISION INDUSTRIAL(SHENZHEN).LTD	Model Name	EPAB542-2WH05-DH
	Signal Line	<u>1.1</u> meter, non-shielded cable, with w/o ferrite core		
Earphone 3	Brand Name	Boluo County Quancheng Electronic Co., Ltd.	Model Name	1293-3283-3.5MM-322
	Signal Line	<u>1.1</u> meter, non-shielded cable, with w/o ferrite core		
Earphone 4	Brand Name	Jiangxi Lianchuang Hongsheng Electronic Co., LTD.	Model Name	MEND1532B528A02
	Signal Line	<u>1.1</u> meter, non-shielded cable, with w/o ferrite core		
Earphone 5	Brand Name	Jiangxi Lianchuang Hongsheng Electronic Co., LTD.	Model Name	MEND1532B528B00
	Signal Line	<u>1.1</u> meter, non-shielded cable, with w/o ferrite core		
Battery	Brand Name	HuaweiTechnologies Co., Ltd.	Model Name	HB446486ECW
	Power Rating	<u>3.82</u> Vdc, <u>3900</u> mAh	Type	Li-ion, <u>Yes</u>

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). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z, with dock. The worst cases (X-plane) were recorded in this report.
- 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)
5180-5240 MHz Band 1 (U-NII-1)	36	5180	44	5220
	38*	5190	46*	5230
	40	5200	48	5240
	42 [#]	5210		
Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5260-5320 MHz Band 2 (U-NII-2A)	52	5260	60	5300
	54*	5270	62*	5310
	56	5280	64	5320
	58 [#]	5290		
Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5500-5720 MHz Band 3 (U-NII-2C)	100	5500	112	5560
	102*	5510	116	5580
	104	5520	132	5660
	106 [#]	5530	134*	5670
	108	5540	136	5680
	110*	5550	140	5700



Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
TDWR Channel	118*	5590	124	5620
	120	5600	126*	5630
	122 [#]	5610	128	5640

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.

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

Test Cases	
AC Conducted Emission	Mode 1 : GSM 850 Idle + Bluetooth Link + WLAN Link(5G) + Earphone1 + USB Cable 1(Charging from Adapter 1) + SIM 1
Remark: For Radiated Test Cases, The tests were performed with Adapter 5, Earphone 5, USB Cable 6	



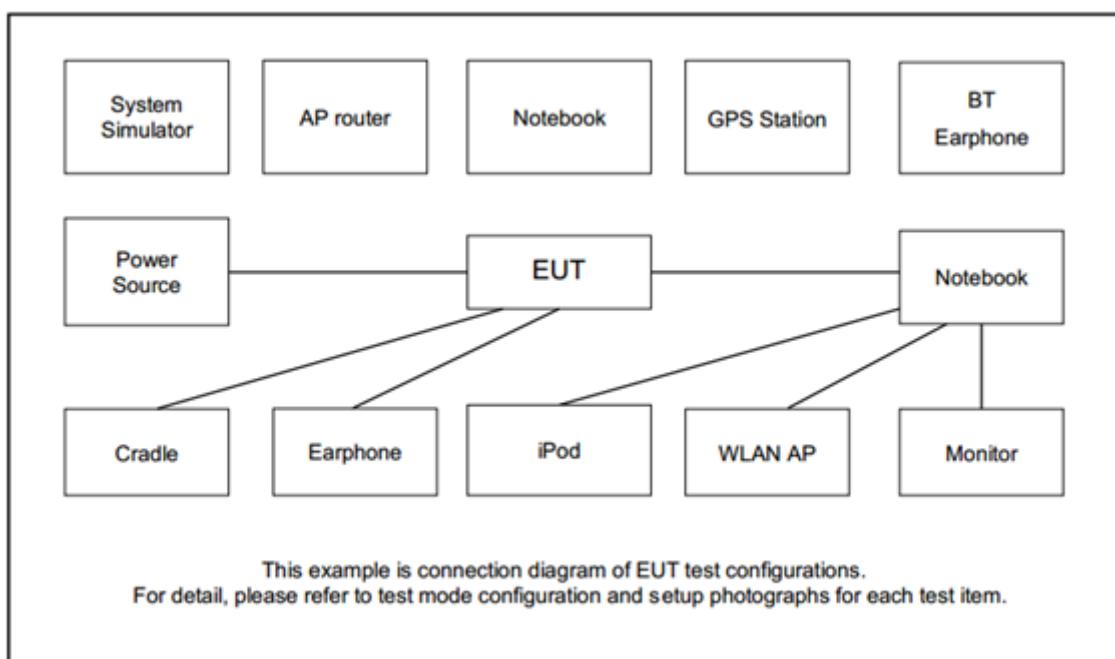
Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5720MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5720MHz
		802.11ac VHT20	802.11ac VHT20	802.11ac VHT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5720MHz
		802.11ac VHT40	802.11ac VHT40	802.11ac VHT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134

Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5720MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	106
M	Middle	42	58	-
H	High	-	-	122

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.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded,1.8m
2.	WLAN AP	Dlink	DIR-820L	KA2IR820LA1	N/A	Unshielded,1.8m
3.	Bluetooth Earphone	Samsung	EO-MG900	PYAHS-107W	N/A	N/A
4.	Notebook	Lenovo	G480	N/A	N/A	AC I/P: Unshielded, 1.8m DC O/P: Shielded, 1.8 m
5.	SD Card	N/A	MicroSD HC	FCC DoC	N/A	N/A

2.5 EUT Operation Test Setup

For WLAN RF test items, an engineering test program was provided and enabled to make EUT continuously transmit/receive.

For AC power line conducted emissions, the EUT was set to connect with the WLAN AP under large package sizes transmission.

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 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

Offset = RF cable loss

Following shows an offset computation example with cable loss 5.2

$$\begin{aligned}\text{Offset(dB)} &= \text{RF cable loss(dB)} \\ &= 5.2 \text{ (dB)}\end{aligned}$$

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

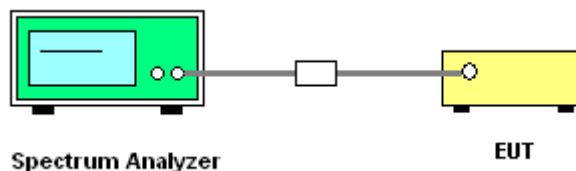
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

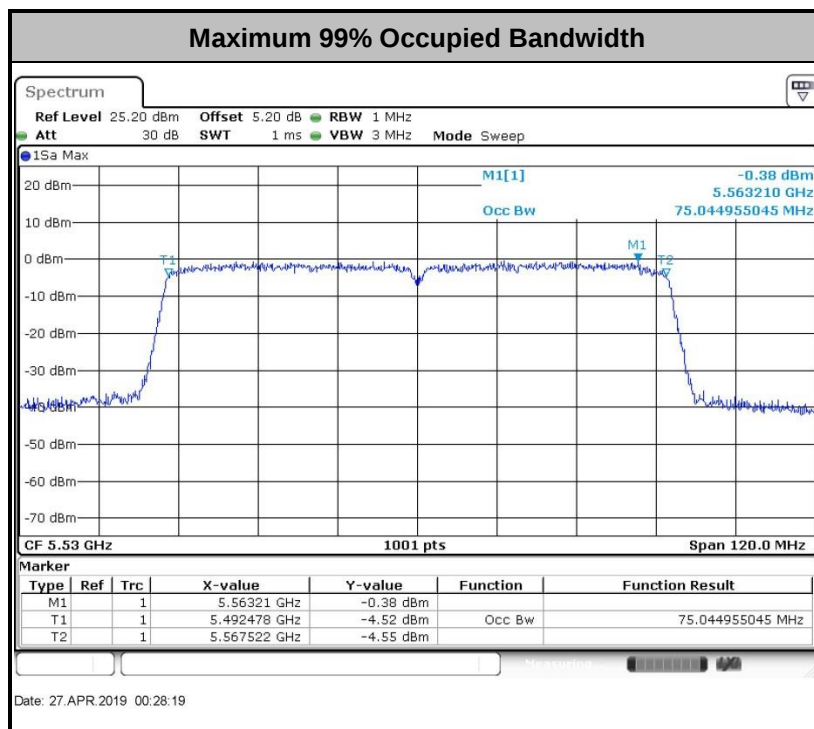
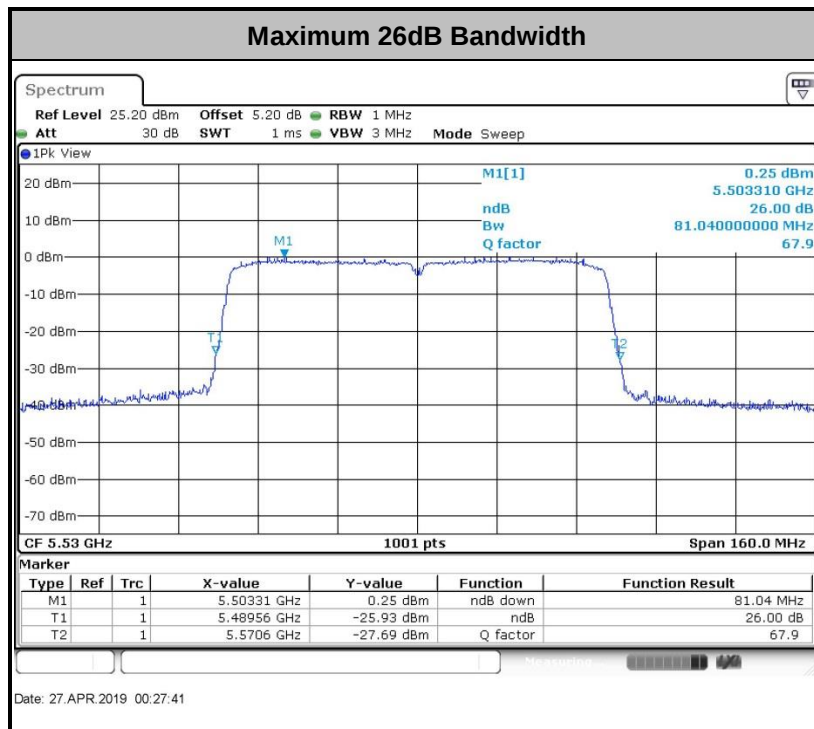
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1MHz and set the Video bandwidth (VBW) $\geq 3 * \text{RBW}$.
8. Measure and record the results in the test report.

3.1.4 Test Setup



3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.



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

<FCC 14-30 CFR 15.407>

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW.

For the 5.25–5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz.

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

3.2.2 Measuring Instruments

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

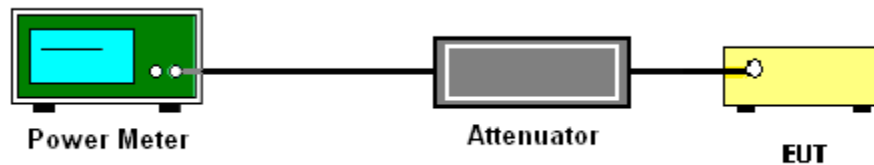
3.2.3 Test Procedures

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

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

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

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.



3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band.

For the 5.25–5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

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

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

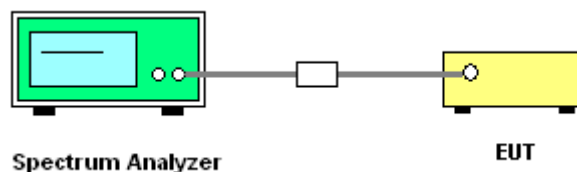
Section F) Maximum power spectral density.

Method SA-2

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

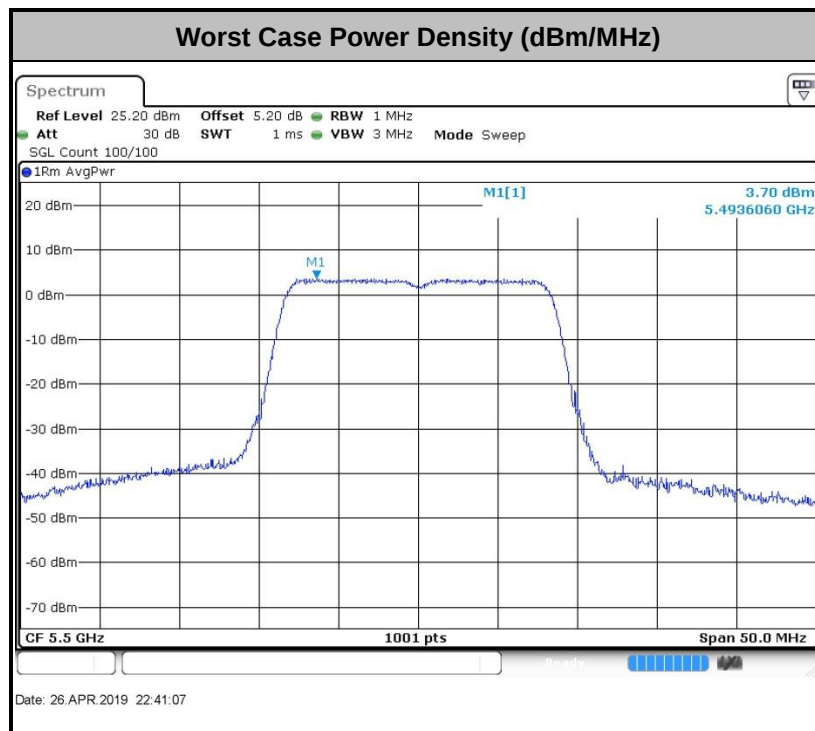
- Measure the duty cycle.
 - Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 1 MHz.
 - Set VBW $\geq$ 3 MHz.
 - Number of points in sweep $\geq$ 2 Span / RBW.
 - Sweep time = auto.
 - Detector = RMS
 - Trace average at least 100 traces in power averaging mode.
 - Add $10 \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add $10 \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.
-
1. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
 2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.



Average Power Density = conducted measure + Duty Factor

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 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27dBm/MHz.

For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

For transmitters operating in the 5470-5600 MHz and 5650-5725MHz band: all emissions outside of the 5470-5600 MHz and 5650-5725MHz band shall not exceed an EIRP of -27 dBm/MHz.

- (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



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

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

$$\text{EIRP} = E_{\text{Meas}} + 20\log(d_{\text{Meas}}) - 104.7$$

where

EIRP is the equivalent isotropically radiated power, in dBm

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

d_{Meas} is the measurement distance, in m

3.4.2 Measuring Instruments

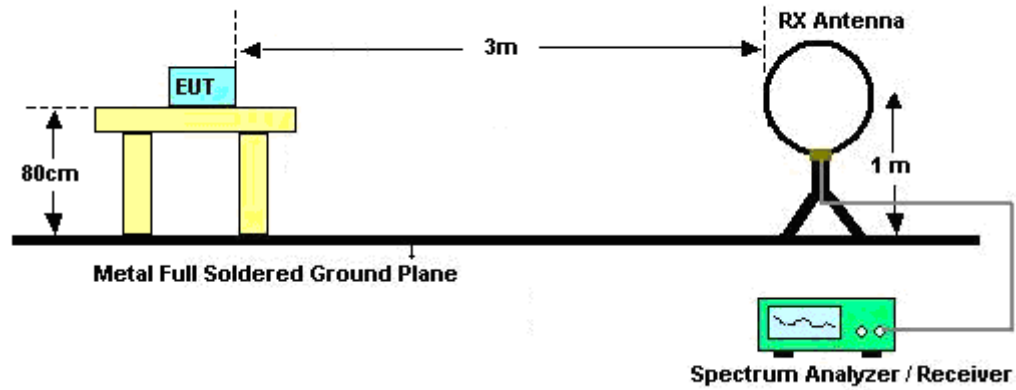
The measuring equipment is listed in the section 4 of this test report.

3.4.3 Test Procedures

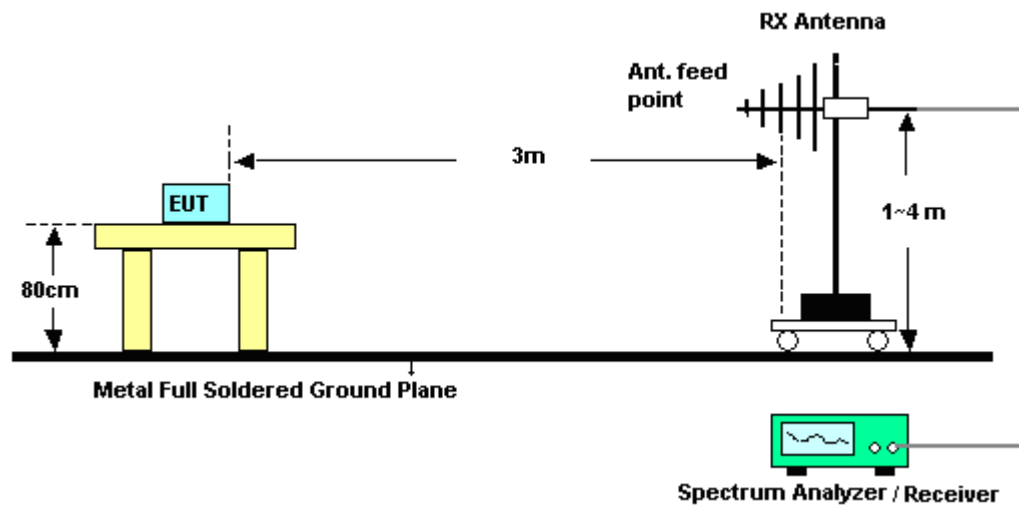
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
Section G) Unwanted emissions measurement.
 - (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW $\geq$ 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold
 - (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz
 - RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.4.4 Test Setup

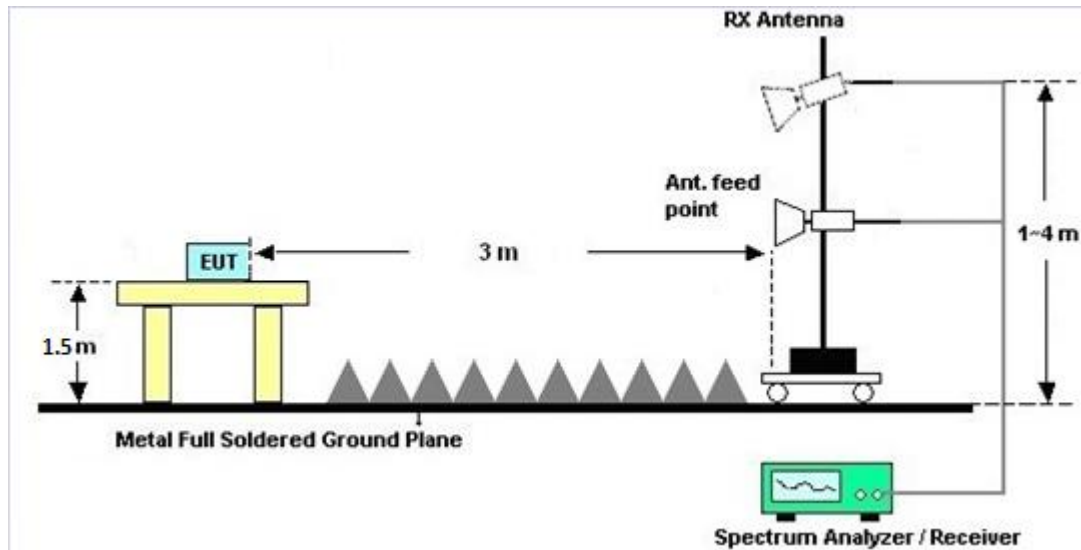
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

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

3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C.

3.4.7 Duty Cycle

Please refer to Appendix D.

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

Please refer to Appendix C.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

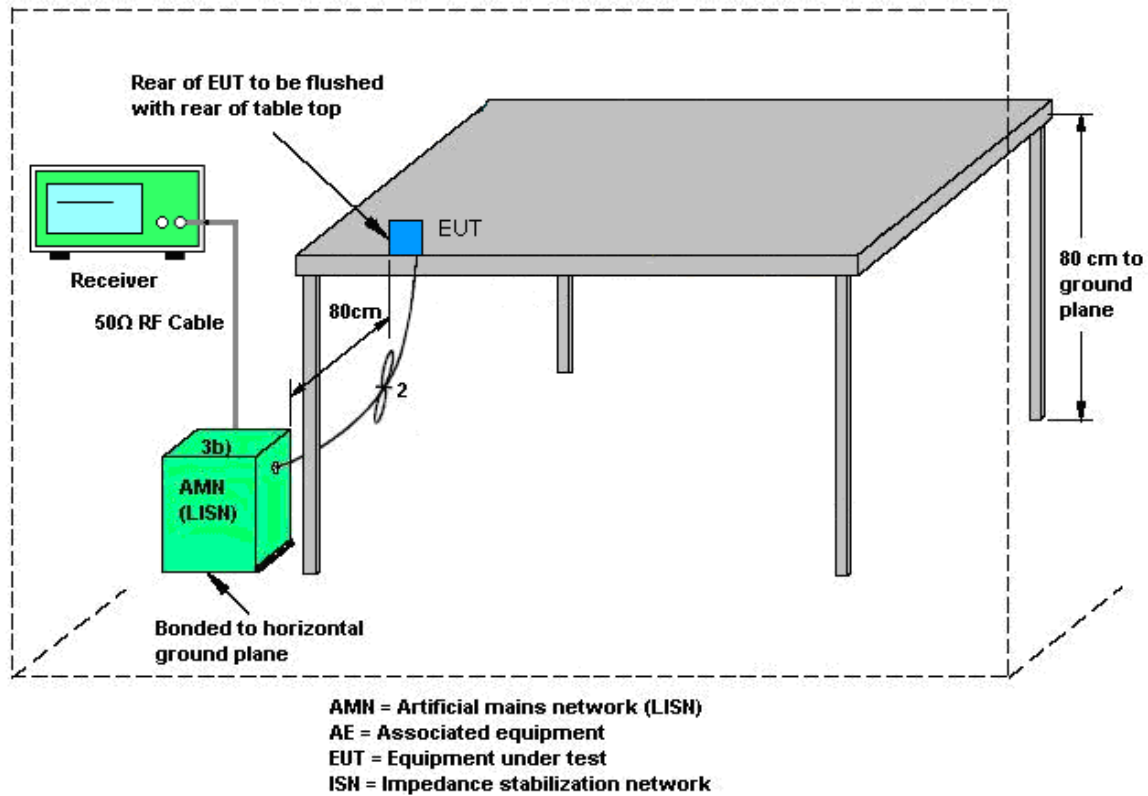
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



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

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

3.6.3 Test Result of Automatically Discontinue Transmission

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.



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

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Aug. 07, 2018	Apr. 26, 2019~ Apr. 27 2019	Aug. 06, 2019	Conducted (TH01-KS)
Pulse Power Sensor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 14, 2019	Apr. 26, 2019~ Apr. 27 2019	Jan. 13, 2020	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 14, 2019	Apr. 26, 2019~ Apr. 27 2019	Jan. 13, 2020	Conducted (TH01-KS)
EMI Test Receiver&SA	Agilent	N9038A	MY52260185	20Hz~26.5GHz	Aug. 30, 2018	Apr. 18 2019	Aug. 29, 2019	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	May. 29, 2018	Apr. 18 2019	May. 29, 2020	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz~2GHz	Jun. 05, 2018	Apr. 18 2019	Jun. 04, 2019	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS Lindgren	3117	119436	1GHz~18GHz	Jun. 28, 2018	Apr. 18 2019	Jun. 27, 2019	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18GHz~40GHz	Mar. 30, 2019	Apr. 18 2019	Mar. 29, 2020	Radiation (03CH01-SZ)
LF Amplifier	Burgeon	BPA-530	102209	0.01~3000Mhz	Apr. 20, 2018	Apr. 18 2019	Apr. 19, 2019	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	AMF-7D-0010 1800-30-10P-R	1707137	1GHz~18GHz	Oct. 19, 2018	Apr. 18 2019	Oct. 18, 2019	Radiation (03CH01-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270104	0.5GHz~26.5GHz	Dec. 22, 2018	Apr. 18 2019	Dec. 21, 2019	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 17, 2018	Apr. 18 2019	Jul. 16, 2019	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	Apr. 18 2019	NCR	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Apr. 18 2019	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Apr. 18 2019	NCR	Radiation (03CH01-SZ)
EMI Receiver	R&S	ESR7	101630	9kHz~7GHz;	Dec. 23, 2018	Apr. 21 2019	Dec. 22, 2019	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Oct. 18, 2018	Apr. 21 2019	Oct. 17, 2019	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Dec. 23, 2018	Apr. 21 2019	Dec. 22, 2019	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	616020000891	100Vac~250Vac	Jul. 18, 2018	Apr. 21 2019	Jul. 17, 2019	Conduction (CO01-SZ)

NCR: No Calibration Required

5 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.10-2013. All the measurement uncertainty value were shown with a coverage $K=2$ to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.6dB
---	-------

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.8 dB
---	--------

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.0 dB
---	--------

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.3 dB
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Appendix A. Conducted Test Results

Report Number : FR932820E

Test Engineer:	Aaron Shen	Temperature:	21~25	°C
Test Date:	2019/4/26 ~ 2019/4/27	Relative Humidity:	51~54	%

TEST RESULTS DATA
26dB and 99% OBW

Band I										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)	IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)		
11a	6Mbps	1	36	5180	17.28	20.68	-	22.38		
11a	6Mbps	1	44	5220	17.33	20.68	-	22.39		
11a	6Mbps	1	48	5240	17.33	20.73	-	22.39		
VHT20	MCS0	1	36	5180	18.18	21.13	-	22.60		
VHT20	MCS0	1	44	5220	18.18	21.43	-	22.60		
VHT20	MCS0	1	48	5240	18.18	21.33	-	22.60		
VHT40	MCS0	1	38	5190	36.06	40.28	-	23.01		
VHT40	MCS0	1	46	5230	36.16	40.28	-	23.01		
VHT80	MCS0	1	42	5210	74.93	80.40	-	23.01		

TEST RESULTS DATA
Average Power Table

FCC Band I										
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)		Pass/Fail
11a	6Mbps	1	36	5180	0.11	14.68	23.98	1.00		Pass
11a	6Mbps	1	44	5220	0.11	15.03	23.98	1.00		Pass
11a	6Mbps	1	48	5240	0.11	14.68	23.98	1.00		Pass
HT20	MCS0	1	36	5180	0.07	12.84	23.98	1.00		Pass
HT20	MCS0	1	44	5220	0.07	12.81	23.98	1.00		Pass
HT20	MCS0	1	48	5240	0.07	12.78	23.98	1.00		Pass
HT40	MCS0	1	38	5190	0.15	11.98	23.98	1.00		Pass
HT40	MCS0	1	46	5230	0.15	11.79	23.98	1.00		Pass
VHT20	MCS0	1	36	5180	0.07	12.87	23.98	1.00		Pass
VHT20	MCS0	1	44	5220	0.07	12.81	23.98	1.00		Pass
VHT20	MCS0	1	48	5240	0.07	12.77	23.98	1.00		Pass
VHT40	MCS0	1	38	5190	0.10	11.92	23.98	1.00		Pass
VHT40	MCS0	1	46	5230	0.10	11.79	23.98	1.00		Pass
VHT80	MCS0	1	42	5210	0.16	9.68	23.98	1.00		Pass

TEST RESULTS DATA
Power Spectral Density

FCC Band I										
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm/MHz)	DG (dBi)	-	Pass/Fail
11a	6Mbps	1	36	5180	0.11	3.75	11.00	1.00		Pass
11a	6Mbps	1	44	5220	0.11	3.49	11.00	1.00		Pass
11a	6Mbps	1	48	5240	0.11	3.53	11.00	1.00		Pass
VHT20	MCS0	1	36	5180	0.07	0.84	11.00	1.00		Pass
VHT20	MCS0	1	44	5220	0.07	0.56	11.00	1.00		Pass
VHT20	MCS0	1	48	5240	0.07	0.78	11.00	1.00		Pass
VHT40	MCS0	1	38	5190	0.10	-3.05	11.00	1.00		Pass
VHT40	MCS0	1	46	5230	0.10	-3.04	11.00	1.00		Pass
VHT80	MCS0	1	42	5210	0.16	-7.85	11.00	1.00		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band II										
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)	IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)	FCC 26dB Bandwidth Power Limit (dBm)	Note
11a	6M bps	1	52	5260	17.43	20.73	23.41	29.41	23.98	
11a	6M bps	1	60	5300	17.38	20.88	23.40	29.40	23.98	
11a	6M bps	1	64	5320	17.38	20.68	23.40	29.40	23.98	
VHT20	MCS 0	1	52	5260	18.18	21.33	23.60	29.60	23.98	
VHT20	MCS 0	1	60	5300	18.23	21.43	23.61	29.61	23.98	
VHT20	MCS 0	1	64	5320	18.18	21.48	23.60	29.60	23.98	
VHT40	MCS 0	1	54	5270	36.06	40.01	23.98	30.00	23.98	
VHT40	MCS 0	1	62	5310	36.16	40.01	23.98	30.00	23.98	
VHT80	MCS 0	1	58	5290	75.04	80.56	23.98	30.00	23.98	

TEST RESULTS DATA
Average Power Table

FCC Band II										
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)	EIRP Power Limit (dBm)	Pass/Fail
11a	6M bps	1	52	5260	0.11	14.90	23.98	1.00	26.99	Pass
11a	6M bps	1	60	5300	0.11	14.93	23.98	1.00	26.99	Pass
11a	6M bps	1	64	5320	0.11	14.96	23.98	1.00	26.99	Pass
HT20	MCS 0	1	52	5260	0.07	11.70	23.98	1.00	26.99	Pass
HT20	MCS 0	1	60	5300	0.07	12.28	23.98	1.00	26.99	Pass
HT20	MCS 0	1	64	5320	0.07	12.12	23.98	1.00	26.99	Pass
HT40	MCS 0	1	54	5270	0.15	10.88	23.98	1.00	26.99	Pass
HT40	MCS 0	1	62	5310	0.15	11.21	23.98	1.00	26.99	Pass
VHT20	MCS 0	1	52	5260	0.07	11.74	23.98	1.00	26.99	Pass
VHT20	MCS 0	1	60	5300	0.07	12.28	23.98	1.00	26.99	Pass
VHT20	MCS 0	1	64	5320	0.07	12.18	23.98	1.00	26.99	Pass
VHT40	MCS 0	1	54	5270	0.10	10.91	23.98	1.00	26.99	Pass
VHT40	MCS 0	1	62	5310	0.10	11.22	23.98	1.00	26.99	Pass
VHT80	MCS 0	1	58	5290	0.16	8.71	23.98	1.00	26.99	Pass

TEST RESULTS DATA
Power Spectral Density

Band II										
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm/MHz)	DG (dBi)		Pass/Fail
11a	6M bps	1	52	5260	0.11	3.49	11.00	1.00		Pass
11a	6M bps	1	60	5300	0.11	3.39	11.00	1.00		Pass
11a	6M bps	1	64	5320	0.11	3.46	11.00	1.00		Pass
VHT20	MCS 0	1	52	5260	0.07	-0.14	11.00	1.00		Pass
VHT20	MCS 0	1	60	5300	0.07	0.64	11.00	1.00		Pass
VHT20	MCS 0	1	64	5320	0.07	0.21	11.00	1.00		Pass
VHT40	MCS 0	1	54	5270	0.10	-3.73	11.00	1.00		Pass
VHT40	MCS 0	1	62	5310	0.10	-3.41	11.00	1.00		Pass
VHT80	MCS 0	1	58	5290	0.16	-9.00	11.00	1.00		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band III										
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)	IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)	FCC 26dB Bandwidth Power Limit (dBm)	Note
11a	6M bps	1	100	5500	17.38	20.68	23.40	29.40	23.98	
11a	6M bps	1	116	5580	17.33	20.73	23.39	29.39	23.98	
11a	6M bps	1	140	5700	17.33	20.73	23.39	29.39	23.98	
VHT20	MCS 0	1	100	5500	18.18	21.48	23.60	29.60	23.98	
VHT20	MCS 0	1	116	5580	18.18	21.28	23.60	29.60	23.98	
VHT20	MCS 0	1	140	5700	18.23	21.23	23.61	29.61	23.98	
VHT40	MCS 0	1	102	5510	36.16	40.28	23.98	30.00	23.98	
VHT40	MCS 0	1	110	5550	36.06	39.92	23.98	30.00	23.98	
VHT40	MCS 0	1	134	5670	35.96	40.10	23.98	30.00	23.98	
VHT80	MCS 0	1	106	5530	75.04	81.04	23.98	30.00	23.98	
VHT80	MCS 0	1	122	5610	75.04	80.72	23.98	30.00	23.98	

TEST RESULTS DATA
Average Power Table

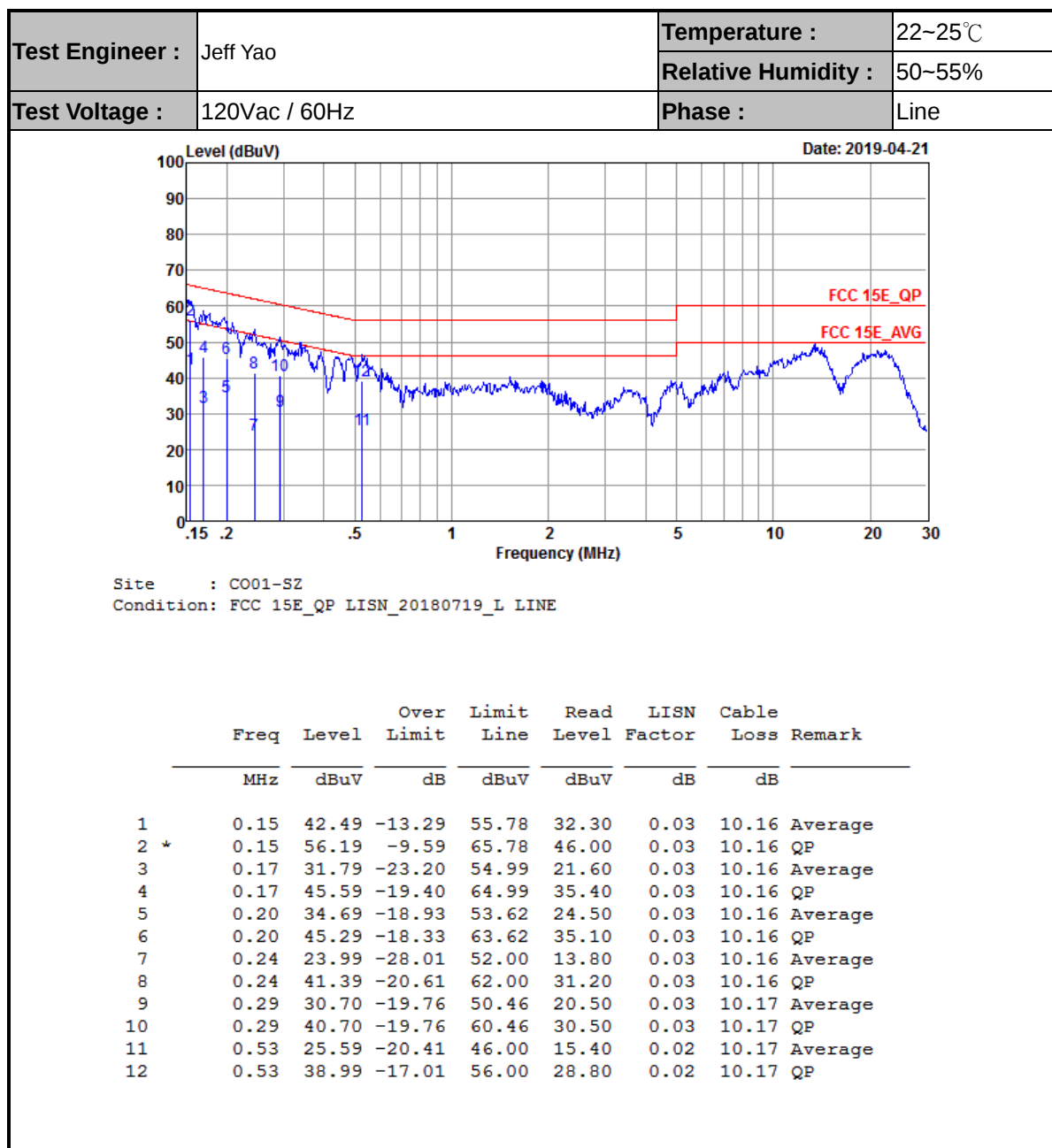
FCC Band III										
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)	EIRP Power Limit (dBm)	Pass/Fail
11a	6M bps	1	100	5500	0.11	15.02	23.98	1.00	26.99	Pass
11a	6M bps	1	116	5580	0.11	14.99	23.98	1.00	26.99	Pass
11a	6M bps	1	140	5700	0.11	15.03	23.98	1.00	26.99	Pass
HT20	MCS 0	1	100	5500	0.07	13.08	23.98	1.00	26.99	Pass
HT20	MCS 0	1	116	5580	0.07	12.98	23.98	1.00	26.99	Pass
HT20	MCS 0	1	140	5700	0.07	12.80	23.98	1.00	26.99	Pass
HT40	MCS 0	1	102	5510	0.15	12.13	23.98	1.00	26.99	Pass
HT40	MCS 0	1	110	5550	0.15	12.34	23.98	1.00	26.99	Pass
HT40	MCS 0	1	134	5670	0.15	11.81	23.98	1.00	26.99	Pass
VHT20	MCS 0	1	100	5500	0.07	13.17	23.98	1.00	26.99	Pass
VHT20	MCS 0	1	116	5580	0.07	13.03	23.98	1.00	26.99	Pass
VHT20	MCS 0	1	140	5700	0.07	12.90	23.98	1.00	26.99	Pass
VHT40	MCS 0	1	102	5510	0.10	12.15	23.98	1.00	26.99	Pass
VHT40	MCS 0	1	110	5550	0.10	12.52	23.98	1.00	26.99	Pass
VHT40	MCS 0	1	134	5670	0.10	11.78	23.98	1.00	26.99	Pass
VHT80	MCS 0	1	106	5530	0.16	9.74	23.98	1.00	26.99	Pass
VHT80	MCS 0	1	122	5610	0.16	9.85	23.98	1.00	26.99	Pass

TEST RESULTS DATA
Power Spectral Density

Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm/MHz)	DG (dBi)		Pass/Fail
11a	6M bps	1	100	5500	0.11	3.81	11.00	1.00		Pass
11a	6M bps	1	116	5580	0.11	3.30	11.00	1.00		Pass
11a	6M bps	1	140	5700	0.11	3.54	11.00	1.00		Pass
VHT20	MCS 0	1	100	5500	0.07	1.65	11.00	1.00		Pass
VHT20	MCS 0	1	116	5580	0.07	1.24	11.00	1.00		Pass
VHT20	MCS 0	1	140	5700	0.07	1.32	11.00	1.00		Pass
VHT40	MCS 0	1	102	5510	0.10	-2.35	11.00	1.00		Pass
VHT40	MCS 0	1	110	5550	0.10	-1.73	11.00	1.00		Pass
VHT40	MCS 0	1	134	5670	0.10	-3.08	11.00	1.00		Pass
VHT80	MCS 0	1	106	5530	0.16	-8.29	11.00	1.00		Pass
VHT80	MCS 0	1	122	5610	0.16	-8.40	11.00	1.00		Pass

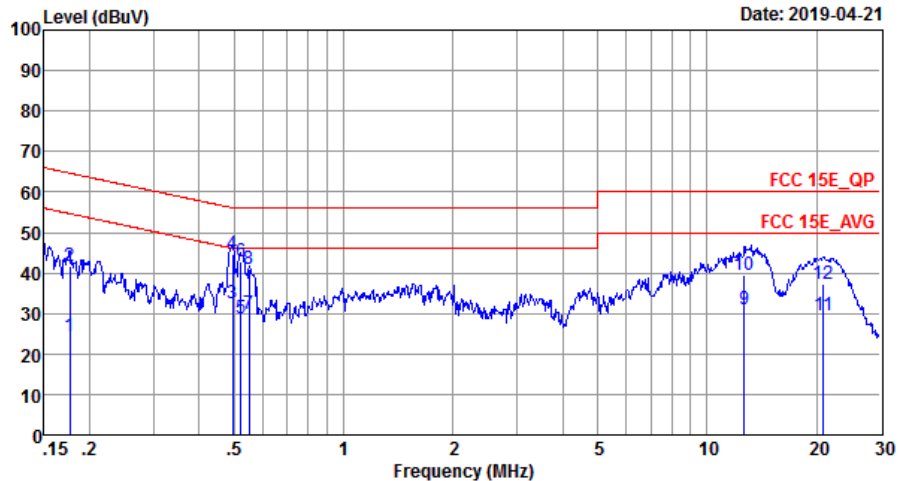


Appendix B. AC Conducted Emission Test Results





Test Engineer :	Jeff Yao	Temperature :	22~25℃
		Relative Humidity :	50~55%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral



Site : CO01-SZ
Condition: FCC 15E_QP LISN_20180719_N NEUTRAL

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.18	24.29	-30.35	54.64	14.10	0.03	10.16	Average
2	0.18	41.69	-22.95	64.64	31.50	0.03	10.16	QP
3	0.49	32.39	-13.71	46.10	22.20	0.02	10.17	Average
4 *	0.49	44.79	-11.31	56.10	34.60	0.02	10.17	QP
5	0.52	28.79	-17.21	46.00	18.60	0.02	10.17	Average
6	0.52	42.89	-13.11	56.00	32.70	0.02	10.17	QP
7	0.55	29.90	-16.10	46.00	19.70	0.02	10.18	Average
8	0.55	41.00	-15.00	56.00	30.80	0.02	10.18	QP
9	12.65	30.82	-19.18	50.00	20.29	0.26	10.27	Average
10	12.65	39.42	-20.58	60.00	28.89	0.26	10.27	QP
11	20.92	29.34	-20.66	50.00	18.40	0.67	10.27	Average
12	20.92	37.44	-22.56	60.00	26.50	0.67	10.27	QP



Appendix C. Radiated Spurious Emission

Test Engineer :	Reid Huang	Temperature :	24~25°C
		Relative Humidity :	48~49%



Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 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 36 5180MHz		5143	55.57	-18.43	74	41.12	33.87	13.68	33.1	124	135	P	H
		5149.76	48.75	-5.25	54	34.3	33.87	13.68	33.1	124	135	A	H
	*	5180	104.54	-	-	89.95	33.92	13.77	33.1	124	135	P	H
	*	5180	99.15	-	-	84.56	33.92	13.77	33.1	124	135	A	H
		5085.02	54.48	-19.52	74	40.19	33.79	13.6	33.1	379	238	P	V
		5149.5	47.59	-6.41	54	33.14	33.87	13.68	33.1	379	238	A	V
	*	5180	103.92	-	-	89.33	33.92	13.77	33.1	379	238	P	V
	*	5180	97.04	-	-	82.45	33.92	13.77	33.1	379	238	A	V
802.11a CH 44 5220MHz		5072.8	54.22	-19.78	74	40.02	33.79	13.51	33.1	124	135	P	H
		5130	44.86	-9.14	54	30.43	33.85	13.68	33.1	124	135	A	H
	*	5220	105.94	-	-	91.22	33.96	13.86	33.1	124	135	P	H
	*	5220	99.44	-	-	84.72	33.96	13.86	33.1	124	135	A	H
		5458.32	52.08	-21.92	74	36.65	34.26	14.27	33.1	124	135	P	H
		5444.88	44.32	-9.68	54	28.91	34.24	14.27	33.1	124	135	A	H
		5087.88	54.14	-19.86	74	39.85	33.79	13.6	33.1	387	209	P	V
		5112.32	44.83	-9.17	54	30.5	33.83	13.6	33.1	387	209	A	V
	*	5220	101.95	-	-	87.23	33.96	13.86	33.1	387	209	P	V
	*	5220	96.08	-	-	81.36	33.96	13.86	33.1	387	209	A	V
		5439.6	52.7	-21.3	74	37.29	34.24	14.27	33.1	387	209	P	V
		5459.28	44.08	-9.92	54	28.65	34.26	14.27	33.1	387	209	A	V



802.11a CH 48 5240MHz		5018.2	53.85	-20.15	74	39.83	33.7	13.42	33.1	124	135	P	H
		5137.28	44.89	-9.11	54	30.46	33.85	13.68	33.1	124	135	A	H
	*	5240	105.71	-	-	90.91	33.98	13.92	33.1	124	135	P	H
	*	5240	99.16	-	-	84.36	33.98	13.92	33.1	124	135	A	H
		5384.88	53.2	-20.8	74	38.02	34.18	14.1	33.1	124	135	P	H
		5452.8	44.23	-9.77	54	28.8	34.26	14.27	33.1	124	135	A	H
		5123.5	53.18	-20.82	74	38.75	33.85	13.68	33.1	387	210	P	V
		5111.28	44.83	-9.17	54	30.5	33.83	13.6	33.1	387	210	A	V
	*	5240	102.48	-	-	87.68	33.98	13.92	33.1	387	210	P	V
	*	5240	96.12	-	-	81.32	33.98	13.92	33.1	387	210	A	V
		5424.24	53.07	-20.93	74	37.79	34.22	14.16	33.1	387	210	P	V
		5430	44.47	-9.53	54	29.06	34.24	14.27	33.1	387	210	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		10360	49.19	-19.01	68.2	51.51	37.02	19.65	58.99	158	360	P	H
		15540	48.68	-25.32	74	44.48	40.78	22.35	58.93	189	238	P	H
		15540	44.72	-9.28	54	40.52	40.78	22.35	58.93	189	238	A	H
		10360	50.07	-18.13	68.2	52.39	37.02	19.65	58.99	158	360	P	V
		15540	48.39	-25.61	74	44.19	40.78	22.35	58.93	189	184	P	V
		15540	44.55	-9.45	54	40.35	40.78	22.35	58.93	189	184	A	V
802.11a CH 44 5220MHz		10440	49.63	-18.57	68.2	51.8	37.06	19.69	58.92	150	230	P	H
		15660	48.59	-25.41	74	44.16	41.07	22.42	59.06	158	0	P	H
		15660	44.8	-9.2	54	40.37	41.07	22.42	59.06	158	0	A	H
		10440	48.79	-19.41	68.2	50.96	37.06	19.69	58.92	185	230	P	V
		15660	48.99	-25.01	74	44.56	41.07	22.42	59.06	160	59	P	V
		15660	45	-9	54	40.57	41.07	22.42	59.06	160	59	A	V
802.11a CH 48 5240MHz		10480	48.65	-19.55	68.2	50.71	37.09	19.71	58.86	175	289	P	H
		15720	49.13	-24.87	74	44.56	41.24	22.45	59.12	150	291	P	H
		15720	44.18	-9.82	54	39.61	41.24	22.45	59.12	150	291	A	H
		10480	48.36	-19.84	68.2	50.42	37.09	19.71	58.86	150	289	P	V
		15720	49.13	-24.87	74	44.56	41.24	22.45	59.12	150	46	P	V
		15720	43.98	-10.02	54	39.41	41.24	22.45	59.12	150	46	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 36 5180MHz		5148.72	57.25	-16.75	74	42.8	33.87	13.68	33.1	112	140	P	H
		5148.72	46.79	-7.21	54	32.34	33.87	13.68	33.1	112	140	A	H
	*	5180	105.47	-	-	90.88	33.92	13.77	33.1	112	140	P	H
	*	5180	97.55	-	-	82.96	33.92	13.77	33.1	112	140	A	H
		5131.3	52.99	-21.01	74	38.56	33.85	13.68	33.1	100	280	P	V
		5121.68	44.98	-9.02	54	30.57	33.83	13.68	33.1	100	280	A	V
	*	5180	97.33	-	-	82.74	33.92	13.77	33.1	100	280	P	V
	*	5180	90.01	-	-	75.42	33.92	13.77	33.1	100	280	A	V
802.11n HT20 CH 44 5220MHz		5145.86	54.39	-19.61	74	39.94	33.87	13.68	33.1	110	139	P	H
		5149.5	45.21	-8.79	54	30.76	33.87	13.68	33.1	110	139	A	H
	*	5220	105.64	-	-	90.92	33.96	13.86	33.1	110	139	P	H
	*	5220	97.84	-	-	83.12	33.96	13.86	33.1	110	139	A	H
		5425	53.66	-20.34	74	38.38	34.22	14.16	33.1	110	139	P	H
		5417.72	44.82	-9.18	54	29.54	34.22	14.16	33.1	110	139	A	H
		5037.96	53.87	-20.13	74	39.72	33.74	13.51	33.1	100	278	P	V
		5140.4	44.67	-9.33	54	30.22	33.87	13.68	33.1	100	278	A	V
	*	5220	96.81	-	-	82.09	33.96	13.86	33.1	100	278	P	V
	*	5220	90.08	-	-	75.36	33.96	13.86	33.1	100	278	A	V
		5430.6	52.7	-21.3	74	37.29	34.24	14.27	33.1	100	278	P	V
		5458.88	44.26	-9.74	54	28.83	34.26	14.27	33.1	100	278	A	V



802.11n HT20 CH 48 5240MHz		5097.5	53.39	-20.61	74	39.08	33.81	13.6	33.1	115	142	P	H
		5137.54	45.22	-8.78	54	30.79	33.85	13.68	33.1	115	142	A	H
	*	5240	105.45	-	-	90.65	33.98	13.92	33.1	115	142	P	H
	*	5240	97.27	-	-	82.47	33.98	13.92	33.1	115	142	A	H
		5407.92	53.17	-20.83	74	37.91	34.2	14.16	33.1	115	142	P	H
		5435.08	44.63	-9.37	54	29.22	34.24	14.27	33.1	115	142	A	H
		5049.4	52.93	-21.07	74	38.78	33.74	13.51	33.1	100	282	P	V
		5088.14	44.74	-9.26	54	30.45	33.79	13.6	33.1	100	282	A	V
	*	5240	96.51	-	-	81.71	33.98	13.92	33.1	100	282	P	V
	*	5240	90.26	-	-	75.46	33.98	13.92	33.1	100	282	A	V
		5353.32	52.33	-21.67	74	37.2	34.13	14.1	33.1	100	282	P	V
		5459.44	44.25	-9.75	54	28.82	34.26	14.27	33.1	100	282	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 36 5180MHz		10360	49.91	-18.29	68.2	52.23	37.02	19.65	58.99	152	89	P	H
		15540	49.16	-24.84	74	44.96	40.78	22.35	58.93	189	238	P	H
		15540	44.55	-9.45	54	40.35	40.78	22.35	58.93	189	238	A	H
		10360	49.83	-18.37	68.2	52.15	37.02	19.65	58.99	241	85	P	V
		15540	50.04	-23.96	74	45.84	40.78	22.35	58.93	189	184	P	V
		15540	45.19	-8.81	54	40.99	40.78	22.35	58.93	189	184	A	V
802.11n HT20 CH 44 5220MHz		10440	50.03	-18.17	68.2	52.2	37.06	19.69	58.92	185	230	P	H
		15660	49.46	-24.54	74	45.03	41.07	22.42	59.06	160	225	P	H
		15660	44.42	-9.58	54	39.99	41.07	22.42	59.06	160	225	A	H
		10440	51.35	-16.85	68.2	53.52	37.06	19.69	58.92	150	230	P	V
		15660	49.77	-24.23	74	45.34	41.07	22.42	59.06	158	0	P	V
		15660	44.47	-9.53	54	40.04	41.07	22.42	59.06	158	0	A	V
802.11n HT20 CH 48 5240MHz		10480	49.91	-18.29	68.2	51.97	37.09	19.71	58.86	150	289	P	H
		15720	49.66	-24.34	74	45.09	41.24	22.45	59.12	150	291	P	H
		15720	44.92	-9.08	54	40.35	41.24	22.45	59.12	150	291	A	H
		10480	49.43	-18.77	68.2	51.49	37.09	19.71	58.86	175	289	P	V
		15720	50.83	-23.17	74	46.26	41.24	22.45	59.12	150	291	P	V
		15720	45.1	-8.9	54	40.53	41.24	22.45	59.12	150	291	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 38 5190MHz		5121.42	56.02	-17.98	74	41.61	33.83	13.68	33.1	100	134	P	H
		5149.24	49.57	-4.43	54	35.12	33.87	13.68	33.1	100	134	A	H
	*	5190	101.46	-	-	86.87	33.92	13.77	33.1	100	134	P	H
	*	5190	95.94	-	-	81.35	33.92	13.77	33.1	100	134	A	H
		5438.16	54.26	-19.74	74	38.85	34.24	14.27	33.1	100	134	P	H
		5454.4	44.47	-9.53	54	29.04	34.26	14.27	33.1	100	134	A	H
		5148.46	55.67	-18.33	74	41.22	33.87	13.68	33.1	394	208	P	V
		5150	46.8	-7.2	54	32.35	33.87	13.68	33.1	394	208	A	V
	*	5190	97.39	-	-	82.8	33.92	13.77	33.1	394	208	P	V
	*	5190	90.22	-	-	75.63	33.92	13.77	33.1	394	208	A	V
		5356.68	52.69	-21.31	74	37.56	34.13	14.1	33.1	394	208	P	V
		5452.16	44.42	-9.58	54	28.99	34.26	14.27	33.1	394	208	A	V
802.11n HT40 CH 46 5230MHz		5011.18	54.56	-19.44	74	40.54	33.7	13.42	33.1	110	134	P	H
		5149.5	45.11	-8.89	54	30.66	33.87	13.68	33.1	110	134	A	H
	*	5230	102.82	-	-	88.08	33.98	13.86	33.1	110	134	P	H
	*	5230	95.79	-	-	81.05	33.98	13.86	33.1	110	134	A	H
		5444.16	52.1	-21.9	74	36.69	34.24	14.27	33.1	110	134	P	H
		5448.96	44.6	-9.4	54	29.17	34.26	14.27	33.1	110	134	A	H
		5113.36	54.32	-19.68	74	39.99	33.83	13.6	33.1	394	208	P	V
		5095.94	44.9	-9.1	54	30.59	33.81	13.6	33.1	394	208	A	V
	*	5230	97.6	-	-	82.86	33.98	13.86	33.1	394	208	P	V
	*	5230	90.37	-	-	75.63	33.98	13.86	33.1	394	208	A	V
		5442	53.27	-20.73	74	37.86	34.24	14.27	33.1	394	208	P	V
		5427.84	44.37	-9.63	54	28.98	34.22	14.27	33.1	394	208	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 38 5190MHz		10380	47.72	-20.48	68.2	49.99	37.03	19.67	58.97	142	360	P	H
		15570	47.9	-26.1	74	43.63	40.87	22.37	58.97	158	326	P	H
		10380	48.27	-19.93	68.2	50.54	37.03	19.67	58.97	150	360	P	V
		15570	47.33	-26.67	74	43.06	40.87	22.37	58.97	158	0	P	V
802.11n HT40 CH 46 5230MHz		10460	49.67	-18.53	68.2	51.79	37.07	19.71	58.9	150	360	P	H
		15690	51.37	-22.63	74	46.85	41.16	22.45	59.09	150	225	P	H
		15690	44.87	-9.13	54	40.35	41.16	22.45	59.09	150	225	A	H
		10460	51	-17.2	68.2	53.12	37.07	19.71	58.9	150	360	P	V
		15690	51.9	-22.1	74	47.38	41.16	22.45	59.09	136	285	P	V
		15690	45.3	-8.7	54	40.78	41.16	22.45	59.09	136	285	A	V
Remark		1. No other spurious found. 2. All results are PASS against Peak and Average limit line.											



Band 1 5150~5250MHz
WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT20 CH 36 5180MHz		5147.16	55.89	-18.11	74	41.44	33.87	13.68	33.1	118	318	P	H
		5150	46.47	-7.53	54	32.02	33.87	13.68	33.1	118	318	A	H
	*	5180	105.94	-	-	91.35	33.92	13.77	33.1	118	318	P	H
	*	5180	99.22	-	-	84.63	33.92	13.77	33.1	118	318	A	H
		5013.26	53.49	-20.51	74	39.47	33.7	13.42	33.1	100	111	P	V
		5149.76	44.31	-9.69	54	29.86	33.87	13.68	33.1	100	111	A	V
	*	5180	97.61	-	-	83.02	33.92	13.77	33.1	100	111	P	V
	*	5180	89.75	-	-	75.16	33.92	13.77	33.1	100	111	A	V
802.11ac VHT20 CH 44 5220MHz		5125.84	53.6	-20.4	74	39.17	33.85	13.68	33.1	115	317	P	H
		5129.48	44.24	-9.76	54	29.81	33.85	13.68	33.1	115	317	A	H
	*	5220	105.8	-	-	91.08	33.96	13.86	33.1	115	317	P	H
	*	5220	98.68	-	-	83.96	33.96	13.86	33.1	115	317	A	H
		5409.88	52.02	-21.98	74	36.76	34.2	14.16	33.1	115	317	P	H
		5458.88	43.63	-10.37	54	28.2	34.26	14.27	33.1	115	317	A	H
		5144.56	53.14	-20.86	74	38.69	33.87	13.68	33.1	100	111	P	V
		5073.06	43.89	-10.11	54	29.69	33.79	13.51	33.1	100	111	A	V
	*	5220	97.33	-	-	82.61	33.96	13.86	33.1	100	111	P	V
	*	5220	89.61	-	-	74.89	33.96	13.86	33.1	100	111	A	V
		5402.88	52.63	-21.37	74	37.37	34.2	14.16	33.1	100	111	P	V
		5458.32	43.55	-10.45	54	28.12	34.26	14.27	33.1	100	111	A	V



802.11ac VHT20 CH 48 5240MHz		5094.64	54.36	-19.64	74	40.05	33.81	13.6	33.1	107	319	P	H
		5137.8	44.16	-9.84	54	29.73	33.85	13.68	33.1	107	319	A	H
	*	5240	105	-	-	90.2	33.98	13.92	33.1	107	319	P	H
		5240	98.36	-	-	83.56	33.98	13.92	33.1	107	319	A	H
		5365.92	52.55	-21.45	74	37.4	34.15	14.1	33.1	107	319	P	H
		5459.16	43.55	-10.45	54	28.12	34.26	14.27	33.1	107	319	A	H
		5104	54.07	-19.93	74	39.76	33.81	13.6	33.1	100	112	P	V
		5070.72	43.9	-10.1	54	29.73	33.76	13.51	33.1	100	112	A	V
	*	5240	97.76	-	-	82.96	33.98	13.92	33.1	100	112	P	V
		5240	89.92	-	-	75.12	33.98	13.92	33.1	100	112	A	V
		5453.28	53.48	-20.52	74	38.05	34.26	14.27	33.1	100	112	P	V
		5458.32	43.54	-10.46	54	28.11	34.26	14.27	33.1	100	112	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT20 CH 36 5180MHz		10360	50.62	-17.58	68.2	52.94	37.02	19.65	58.99	266	163	P	H
		15540	49.43	-24.57	74	45.23	40.78	22.35	58.93	157	141	P	H
		15540	44.32	-9.68	54	40.12	40.78	22.35	58.93	157	141	A	H
		10360	49.39	-18.81	68.2	51.71	37.02	19.65	58.99	241	260	P	V
		15540	50.02	-23.98	74	45.82	40.78	22.35	58.93	189	184	P	V
		15540	44.35	-9.65	54	40.15	40.78	22.35	58.93	189	184	A	V
802.11ac VHT20 CH 44 5220MHz		10440	50.49	-17.71	68.2	52.66	37.06	19.69	58.92	150	230	P	H
		15660	49.43	-24.57	74	45	41.07	22.42	59.06	160	225	P	H
		15660	44.62	-9.38	54	40.19	41.07	22.42	59.06	160	225	A	H
		10440	49.81	-18.39	68.2	51.98	37.06	19.69	58.92	185	230	P	V
		15660	49.95	-24.05	74	45.52	41.07	22.42	59.06	160	59	P	V
		15660	44.4	-9.6	54	39.97	41.07	22.42	59.06	160	59	A	V
802.11ac VHT20 CH 48 5240MHz		10480	49.28	-18.92	68.2	51.34	37.09	19.71	58.86	150	289	P	H
		15720	48.17	-25.83	74	43.6	41.24	22.45	59.12	150	291	P	H
		15720	43.52	-10.48	54	38.95	41.24	22.45	59.12	150	291	A	H
		10480	48.59	-19.61	68.2	50.65	37.09	19.71	58.86	126	238	P	V
		15720	51.71	-22.29	74	47.14	41.24	22.45	59.12	186	329	P	V
		15720	45.19	-8.81	54	40.62	41.24	22.45	59.12	186	329	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 CH 38 5190MHz		5147.94	58.39	-15.61	74	43.94	33.87	13.68	33.1	100	315	P	H
		5148.98	49.86	-4.14	54	35.41	33.87	13.68	33.1	100	315	A	H
	*	5190	101.27	-	-	86.68	33.92	13.77	33.1	100	315	P	H
		5190	96.12	-	-	81.53	33.92	13.77	33.1	100	315	A	H
		5458.6	53.42	-20.58	74	37.99	34.26	14.27	33.1	100	315	P	H
		5447.12	44.37	-9.63	54	28.94	34.26	14.27	33.1	100	315	A	H
		5146.38	54.24	-19.76	74	39.79	33.87	13.68	33.1	321	37	P	V
		5149.76	46.87	-7.13	54	32.42	33.87	13.68	33.1	321	37	A	V
	*	5190	97.8	-	-	83.21	33.92	13.77	33.1	321	37	P	V
		5190	89.15	-	-	74.56	33.92	13.77	33.1	321	37	A	V
		5364.24	52.92	-21.08	74	37.77	34.15	14.1	33.1	321	37	P	V
		5455.52	43.88	-10.12	54	28.45	34.26	14.27	33.1	321	37	A	V
802.11ac VHT40 CH 46 5230MHz		5062.92	54.25	-19.75	74	40.08	33.76	13.51	33.1	100	315	P	H
		5145.6	45.14	-8.86	54	30.69	33.87	13.68	33.1	100	315	A	H
	*	5230	102.68	-	-	87.94	33.98	13.86	33.1	100	315	P	H
		5230	96.43	-	-	81.69	33.98	13.86	33.1	100	315	A	H
		5431.2	53.19	-20.81	74	37.78	34.24	14.27	33.1	100	315	P	H
		5427.84	44.18	-9.82	54	28.79	34.22	14.27	33.1	100	315	A	H
		5130	53.77	-20.23	74	39.34	33.85	13.68	33.1	321	37	P	V
		5077.48	44.43	-9.57	54	30.14	33.79	13.6	33.1	321	37	A	V
	*	5230	97.65	-	-	82.91	33.98	13.86	33.1	321	37	P	V
		5230	89.06	-	-	74.32	33.98	13.86	33.1	321	37	A	V
		5431.44	52.92	-21.08	74	37.51	34.24	14.27	33.1	321	37	P	V
		5442.72	43.89	-10.11	54	28.48	34.24	14.27	33.1	321	37	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 CH 38 5190MHz		10380	50.9	-17.3	68.2	53.17	37.03	19.67	58.97	150	360	P	H
		15570	50.27	-23.73	74	46	40.87	22.37	58.97	155	360	P	H
		15570	44.53	-9.47	54	40.26	40.87	22.37	58.97	155	360	A	H
		10380	50.52	-17.68	68.2	52.79	37.03	19.67	58.97	128	346	P	V
		15570	50.61	-23.39	74	46.34	40.87	22.37	58.97	139	294	P	V
		15570	45.6	-8.4	54	41.33	40.87	22.37	58.97	139	294	A	V
802.11ac VHT40 CH 46 5230MHz		10460	49.69	-18.51	68.2	51.81	37.07	19.71	58.9	150	360	P	H
		15690	50.74	-23.26	74	46.22	41.16	22.45	59.09	150	225	P	H
		15690	45.84	-8.16	54	41.32	41.16	22.45	59.09	150	225	A	H
		10460	48.57	-19.63	68.2	50.69	37.07	19.71	58.9	166	278	P	V
		15690	50.22	-23.78	74	45.7	41.16	22.45	59.09	126	337	P	V
		15690	44.19	-9.81	54	39.67	41.16	22.45	59.09	126	337	A	V
Remark		1. No other spurious found. 2. All results are PASS against Peak and Average limit line.											



Band 1 5150~5250MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 42 5210MHz		5146.9	54.75	-19.25	74	40.3	33.87	13.68	33.1	108	318	P	H
		5149.76	47.26	-6.74	54	32.81	33.87	13.68	33.1	108	318	A	H
	*	5210	96.44	-	-	81.72	33.96	13.86	33.1	108	318	P	H
		5210	87.84	-	-	73.12	33.96	13.86	33.1	108	318	A	H
		5412.72	52.44	-21.56	74	37.16	34.22	14.16	33.1	108	318	P	H
		5372.16	44.6	-9.4	54	29.45	34.15	14.1	33.1	108	318	A	H
		5140.14	54.53	-19.47	74	40.08	33.87	13.68	33.1	272	45	P	V
		5149.76	46.91	-7.09	54	32.46	33.87	13.68	33.1	272	45	A	V
	*	5210	93.8	-	-	79.08	33.96	13.86	33.1	272	45	P	V
		5210	86.08	-	-	71.36	33.96	13.86	33.1	272	45	A	V
		5442.72	53.98	-20.02	74	38.57	34.24	14.27	33.1	272	45	P	V
		5447.76	45.04	-8.96	54	29.61	34.26	14.27	33.1	272	45	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 42 5210MHz		10420	49.81	-18.39	68.2	52	37.05	19.69	58.93	150	230	P	H
		15630	50.48	-23.52	74	46.09	41.03	22.4	59.04	160	225	P	H
		15630	45.45	-8.55	54	41.06	41.03	22.4	59.04	160	225	A	H
		10420	50.75	-17.45	68.2	52.94	37.05	19.69	58.93	144	223	P	V
		15630	50.94	-23.06	74	46.55	41.03	22.4	59.04	174	269	P	V
		15630	45.08	-8.92	54	40.69	41.03	22.4	59.04	174	269	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 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 52 5260MHz		5010.66	54.15	-19.85	74	40.13	33.7	13.42	33.1	107	145	P	H
		5121.42	45.01	-8.99	54	30.6	33.83	13.68	33.1	107	145	A	H
	*	5260	105.4	-	-	90.56	34.02	13.92	33.1	107	145	P	H
		5260	98.52	-	-	83.68	34.02	13.92	33.1	107	145	A	H
		5370	52.91	-21.09	74	37.76	34.15	14.1	33.1	107	145	P	H
		5457.84	44.34	-9.66	54	28.91	34.26	14.27	33.1	107	145	A	H
		5036.14	53.35	-20.65	74	39.31	33.72	13.42	33.1	387	210	P	V
		5056.16	44.96	-9.04	54	30.79	33.76	13.51	33.1	387	210	A	V
	*	5260	101.9	-	-	87.06	34.02	13.92	33.1	387	210	P	V
		5260	94.96	-	-	80.12	34.02	13.92	33.1	387	210	A	V
		5434.8	52.36	-21.64	74	36.95	34.24	14.27	33.1	387	210	P	V
		5456.4	44.57	-9.43	54	29.14	34.26	14.27	33.1	387	210	A	V
802.11a CH 60 5300MHz		5028	54.66	-19.34	74	40.62	33.72	13.42	33.1	137	138	P	H
		5039.2	44.9	-9.1	54	30.75	33.74	13.51	33.1	137	138	A	H
	*	5300	105.41	-	-	90.46	34.07	13.98	33.1	137	138	P	H
		5300	98.64	-	-	83.69	34.07	13.98	33.1	137	138	A	H
		5438.16	53.1	-20.9	74	37.69	34.24	14.27	33.1	137	138	P	H
		5433.12	44.39	-9.61	54	28.98	34.24	14.27	33.1	137	138	A	H
		5054.6	54.45	-19.55	74	40.28	33.76	13.51	33.1	387	210	P	V
		5090.3	44.81	-9.19	54	30.5	33.81	13.6	33.1	387	210	A	V
	*	5300	101.8	-	-	86.85	34.07	13.98	33.1	387	210	P	V
		5300	92.58	-	-	77.63	34.07	13.98	33.1	387	210	A	V
		5400.24	52.62	-21.38	74	37.36	34.2	14.16	33.1	387	210	P	V
		5444.4	44.65	-9.35	54	29.24	34.24	14.27	33.1	387	210	A	V



802.11a CH 64 5320MHz	*	5320	105.11	-	-	90.08	34.09	14.04	33.1	114	138	P	H
		5320	98.08	-	-	83.05	34.09	14.04	33.1	114	138	A	H
		5441.6	54.2	-19.8	74	38.79	34.24	14.27	33.1	114	138	P	H
		5350.4	45.19	-8.81	54	30.06	34.13	14.1	33.1	114	138	A	H
	*	5320	101.58	-	-	86.55	34.09	14.04	33.1	387	210	P	V
		5320	94.26	-	-	79.23	34.09	14.04	33.1	387	210	A	V
		5361.92	53.89	-20.11	74	38.74	34.15	14.1	33.1	387	210	P	V
		5352	44.81	-9.19	54	29.68	34.13	14.1	33.1	387	210	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 52 5260MHz		10520	48.99	-19.21	68.2	50.98	37.11	19.72	58.82	150	220	P	H
		15780	50.76	-23.24	74	46.08	41.36	22.5	59.18	171	85	P	H
		15780	46.04	-7.96	54	41.36	41.36	22.5	59.18	171	85	A	H
		10520	46.56	-21.64	68.2	48.55	37.11	19.72	58.82	175	220	P	V
		15780	48.74	-25.26	74	44.06	41.36	22.5	59.18	185	345	P	V
		15780	44.67	-9.33	54	39.99	41.36	22.5	59.18	185	345	A	V
802.11a CH 60 5300MHz		10600	48.72	-25.28	74	50.53	37.16	19.76	58.73	185	215	P	H
		10600	43.56	-10.44	54	45.37	37.16	19.76	58.73	185	215	A	H
		15900	49.22	-24.78	74	44.3	41.65	22.57	59.3	196	190	P	H
		15900	45.29	-8.71	54	40.37	41.65	22.57	59.3	196	190	A	H
		10600	47.86	-26.14	74	49.67	37.16	19.76	58.73	185	58	P	V
		15900	48.92	-25.08	74	44	41.65	22.57	59.3	196	175	P	V
		15900	44.38	-9.62	54	39.46	41.65	22.57	59.3	196	175	A	V
802.11a CH 64 5320MHz		11000	47.63	-26.37	74	48.57	37.4	19.96	58.3	163	175	P	H
		16500	51.12	-17.08	68.2	43.74	43.27	22.95	58.84	178	296	P	H
		11000	49.02	-24.98	74	49.96	37.4	19.96	58.3	163	230	P	V
		11000	44.37	-9.63	54	45.31	37.4	19.96	58.3	163	230	A	V
		16500	48.69	-19.51	68.2	41.31	43.27	22.95	58.84	175	296	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 52 5260MHz		5093.45	55.45	-18.55	74	41.14	33.81	13.6	33.1	107	143	P	H
		5053.2	45.41	-8.59	54	31.26	33.74	13.51	33.1	107	143	A	H
	*	5260	103.99	-	-	89.15	34.02	13.92	33.1	107	143	P	H
		5260	96.73	-	-	81.89	34.02	13.92	33.1	107	143	A	H
		5458.56	52.95	-21.05	74	37.52	34.26	14.27	33.1	107	143	P	H
		5440.08	44.89	-9.11	54	29.48	34.24	14.27	33.1	107	143	A	H
		5130.55	54.93	-19.07	74	40.5	33.85	13.68	33.1	100	282	P	V
		5078.75	45.09	-8.91	54	30.8	33.79	13.6	33.1	100	282	A	V
	*	5260	96.28	-	-	81.44	34.02	13.92	33.1	100	282	P	V
		5260	89.64	-	-	74.8	34.02	13.92	33.1	100	282	A	V
		5389.2	52.86	-21.14	74	37.62	34.18	14.16	33.1	100	282	P	V
		5458.56	44.56	-9.44	54	29.13	34.26	14.27	33.1	100	282	A	V
802.11n HT20 CH 60 5300MHz		5130.55	54.37	-19.63	74	39.94	33.85	13.68	33.1	112	145	P	H
		5141.75	45.3	-8.7	54	30.85	33.87	13.68	33.1	112	145	A	H
	*	5300	104.65	-	-	89.7	34.07	13.98	33.1	112	145	P	H
		5300	97.58	-	-	82.63	34.07	13.98	33.1	112	145	A	H
		5373.6	52.83	-21.17	74	37.68	34.15	14.1	33.1	112	145	P	H
		5458.8	44.79	-9.21	54	29.36	34.26	14.27	33.1	112	145	A	H
		5002.45	53.21	-20.79	74	39.18	33.71	13.42	33.1	100	278	P	V
		5050.75	45.11	-8.89	54	30.96	33.74	13.51	33.1	100	278	A	V
	*	5300	95.49	-	-	80.54	34.07	13.98	33.1	100	278	P	V
		5300	88.8	-	-	73.85	34.07	13.98	33.1	100	278	A	V
		5451.6	52.07	-21.93	74	36.64	34.26	14.27	33.1	100	278	P	V
		5425.68	44.52	-9.48	54	29.24	34.22	14.16	33.1	100	278	A	V



802.11n HT20 CH 64 5320MHz	*	5320	104.69	-	-	89.66	34.09	14.04	33.1	100	143	P	H
		5320	96.7	-	-	81.67	34.09	14.04	33.1	100	143	A	H
		5353.44	53.71	-20.29	74	38.58	34.13	14.1	33.1	100	143	P	H
		5350.72	45.35	-8.65	54	30.22	34.13	14.1	33.1	100	143	A	H
	*	5320	96.3	-	-	81.27	34.09	14.04	33.1	100	279	P	V
		5320	89.89	-	-	74.86	34.09	14.04	33.1	100	279	A	V
		5431.04	53.01	-20.99	74	37.6	34.24	14.27	33.1	100	279	P	V
		5457.76	44.24	-9.76	54	28.81	34.26	14.27	33.1	100	279	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 52 5260MHz		10520	50.14	-18.06	68.2	52.13	37.11	19.72	58.82	150	220	P	H
		15780	49.24	-24.76	74	44.56	41.36	22.5	59.18	159	345	P	H
		15780	44.34	-9.66	54	39.66	41.36	22.5	59.18	159	345	A	H
		10520	48.78	-19.42	68.2	50.77	37.11	19.72	58.82	150	157	P	V
		15780	49.7	-24.3	74	45.02	41.36	22.5	59.18	185	153	P	V
		15780	45.05	-8.95	54	40.37	41.36	22.5	59.18	185	153	A	V
802.11n HT20 CH 60 5300MHz		10600	50.08	-23.92	74	51.89	37.16	19.76	58.73	185	215	P	H
		10600	43.6	-10.4	54	45.41	37.16	19.76	58.73	185	215	A	H
		15900	49.7	-24.3	74	44.78	41.65	22.57	59.3	196	190	P	H
		15900	45.04	-8.96	54	40.12	41.65	22.57	59.3	196	190	A	H
		10600	48.16	-25.84	74	49.97	37.16	19.76	58.73	185	215	P	V
		10600	43.56	-10.44	54	45.37	37.16	19.76	58.73	185	215	A	V
		15900	50	-24	74	45.08	41.65	22.57	59.3	196	178	P	V
802.11n HT20 CH 64 5320MHz		10640	47.76	-26.24	74	49.49	37.18	19.78	58.69	152	135	P	H
		15960	48.65	-25.35	74	43.58	41.82	22.62	59.37	173	49	P	H
		15960	44.5	-9.5	54	39.43	41.82	22.62	59.37	173	49	A	H
		10640	48.66	-25.34	74	50.39	37.18	19.78	58.69	152	135	P	V
		10640	43.51	-10.49	54	45.24	37.18	19.78	58.69	152	135	A	V
		15960	49.77	-24.23	74	44.7	41.82	22.62	59.37	173	245	P	V
		15960	45.39	-8.61	54	40.32	41.82	22.62	59.37	173	245	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 54 5270MHz		5059.28	54.48	-19.52	74	40.31	33.76	13.51	33.1	106	135	P	H
		5145.86	45.02	-8.98	54	30.57	33.87	13.68	33.1	106	135	A	H
	*	5270	102.17	-	-	87.33	34.02	13.92	33.1	106	135	P	H
		5270	96.16	-	-	81.32	34.02	13.92	33.1	106	135	A	H
		5436.48	52.95	-21.05	74	37.54	34.24	14.27	33.1	106	135	P	H
		5438.88	44.53	-9.47	54	29.12	34.24	14.27	33.1	106	135	A	H
		5079.82	53.69	-20.31	74	39.4	33.79	13.6	33.1	394	208	P	V
		5105.56	44.91	-9.09	54	30.58	33.83	13.6	33.1	394	208	A	V
	*	5270	97.27	-	-	82.43	34.02	13.92	33.1	394	208	P	V
		5270	89.46	-	-	74.62	34.02	13.92	33.1	394	208	A	V
		5385.84	53.17	-20.83	74	37.99	34.18	14.1	33.1	394	208	P	V
		5456.64	44.41	-9.59	54	28.98	34.26	14.27	33.1	394	208	A	V
802.11n HT40 CH 62 5310MHz		5138.95	54.18	-19.82	74	39.75	33.85	13.68	33.1	130	144	P	H
		5104.3	45.17	-8.83	54	30.86	33.81	13.6	33.1	130	144	A	H
	*	5310	102.09	-	-	87.06	34.09	14.04	33.1	130	144	P	H
		5310	94.55	-	-	79.52	34.09	14.04	33.1	130	144	A	H
		5400.72	53.51	-20.49	74	38.25	34.2	14.16	33.1	130	144	P	H
		5350.32	46.79	-7.21	54	31.66	34.13	14.1	33.1	130	144	A	H
		5089.6	53.05	-20.95	74	38.74	33.81	13.6	33.1	394	208	P	V
		5135.1	45.08	-8.92	54	30.65	33.85	13.68	33.1	394	208	A	V
	*	5310	98.36	-	-	83.33	34.09	14.04	33.1	394	208	P	V
		5310	89.15	-	-	74.12	34.09	14.04	33.1	394	208	A	V
		5397.12	52.99	-21.01	74	37.73	34.2	14.16	33.1	394	208	P	V
		5350.8	45.12	-8.88	54	29.99	34.13	14.1	33.1	394	208	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 54 5270MHz		10540	49.19	-19.01	68.2	51.13	37.12	19.74	58.8	150	220	P	H
		15810	51.27	-22.73	74	46.52	41.44	22.52	59.21	168	345	P	H
		15810	44.62	-9.38	54	39.87	41.44	22.52	59.21	168	345	A	H
		10540	52.02	-16.18	68.2	53.96	37.12	19.74	58.8	150	220	P	V
		15810	50.77	-23.23	74	46.02	41.44	22.52	59.21	179	266	P	V
		15810	45.03	-8.97	54	40.28	41.44	22.52	59.21	179	266	A	V
802.11n HT40 CH 62 5310MHz		10620	50.25	-23.75	74	52.01	37.17	19.78	58.71	150	220	P	H
		10620	45.37	-8.63	54	47.13	37.17	19.78	58.71	150	220	A	H
		15930	50.29	-23.71	74	45.29	41.73	22.6	59.33	160	100	P	H
		15930	44.69	-9.31	54	39.69	41.73	22.6	59.33	160	100	A	H
		10620	50.45	-23.55	74	52.21	37.17	19.78	58.71	122	296	P	V
		10620	45	-9	54	46.76	37.17	19.78	58.71	122	296	A	V
		15930	50.76	-23.24	74	45.76	41.73	22.6	59.33	188	154	P	V
		15930	44.74	-9.26	54	39.74	41.73	22.6	59.33	188	154	A	V
Remark	1. No other spurious found.												
	2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preampl	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT20 CH 52 5260MHz		5117.95	53.71	-20.29	74	39.3	33.83	13.68	33.1	100	318	P	H
		5133.7	45.39	-8.61	54	30.96	33.85	13.68	33.1	100	318	A	H
	*	5260	105.64	-	-	90.8	34.02	13.92	33.1	100	318	P	H
		5260	98.26	-	-	83.42	34.02	13.92	33.1	100	318	A	H
		5372.64	54.21	-19.79	74	39.06	34.15	14.1	33.1	100	318	P	H
		5458.8	44.74	-9.26	54	29.31	34.26	14.27	33.1	100	318	A	H
		5136.85	53.88	-20.12	74	39.45	33.85	13.68	33.1	101	112	P	V
		5051.1	44.04	-9.96	54	29.89	33.74	13.51	33.1	101	112	A	V
	*	5260	96.33	-	-	81.49	34.02	13.92	33.1	101	112	P	V
		5260	88.94	-	-	74.1	34.02	13.92	33.1	101	112	A	V
		5420.64	52.66	-21.34	74	37.38	34.22	14.16	33.1	101	112	P	V
		5459.28	43.54	-10.46	54	28.11	34.26	14.27	33.1	101	112	A	V
802.11ac VHT20 CH 60 5300MHz		5105	55.72	-18.28	74	41.41	33.81	13.6	33.1	103	320	P	H
		5130.55	44.1	-9.9	54	29.67	33.85	13.68	33.1	103	320	A	H
	*	5300	104.49	-	-	89.54	34.07	13.98	33.1	103	320	P	H
		5300	97.37	-	-	82.42	34.07	13.98	33.1	103	320	A	H
		5380.32	53.89	-20.11	74	38.71	34.18	14.1	33.1	103	320	P	H
		5439.84	43.65	-10.35	54	28.24	34.24	14.27	33.1	103	320	A	H
		5069.65	54.48	-19.52	74	40.31	33.76	13.51	33.1	100	111	P	V
		5050.75	44.04	-9.96	54	29.89	33.74	13.51	33.1	100	111	A	V
	*	5300	96.79	-	-	81.84	34.07	13.98	33.1	100	111	P	V
		5300	88.81	-	-	73.86	34.07	13.98	33.1	100	111	A	V
		5375.28	53.51	-20.49	74	38.36	34.15	14.1	33.1	100	111	P	V
		5458.8	43.53	-10.47	54	28.1	34.26	14.27	33.1	100	111	A	V



802.11ac VHT20 CH 64 5320MHz	*	5320	105.52	-	-	90.49	34.09	14.04	33.1	100	314	P	H
		5320	98.15	-	-	83.12	34.09	14.04	33.1	100	314	A	H
		5351.2	53.41	-20.59	74	38.28	34.13	14.1	33.1	100	314	P	H
		5350.08	45.11	-8.89	54	29.98	34.13	14.1	33.1	100	314	A	H
	*	5320	97.97	-	-	82.94	34.09	14.04	33.1	100	110	P	V
		5320	90.48	-	-	75.45	34.09	14.04	33.1	100	110	A	V
		5412.48	53.34	-20.66	74	38.06	34.22	14.16	33.1	100	110	P	V
		5460	43.56	-10.44	54	28.13	34.26	14.27	33.1	100	110	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT20 CH 52 5260MHz		10520	51.24	-16.96	68.2	53.23	37.11	19.72	58.82	150	220	P	H
		15780	50.92	-23.08	74	46.24	41.36	22.5	59.18	159	345	P	H
		15780	45.4	-8.6	54	40.72	41.36	22.5	59.18	159	345	A	H
		10520	47.28	-20.92	68.2	49.27	37.11	19.72	58.82	129	266	P	V
		15780	49.3	-24.7	74	44.62	41.36	22.5	59.18	146	275	P	V
		15780	44.46	-9.54	54	39.78	41.36	22.5	59.18	146	275	A	V
802.11ac VHT20 CH 60 5300MHz		10600	48.13	-25.87	74	49.94	37.16	19.76	58.73	185	215	P	H
		10600	43.83	-10.17	54	45.64	37.16	19.76	58.73	185	215	A	H
		15900	50.5	-23.5	74	45.58	41.65	22.57	59.3	196	190	P	H
		15900	45.16	-8.84	54	40.24	41.65	22.57	59.3	196	190	A	H
		10600	49.93	-24.07	74	51.74	37.16	19.76	58.73	189	235	P	V
		10600	44.67	-9.33	54	46.48	37.16	19.76	58.73	189	235	A	V
		15900	49.21	-24.79	74	44.29	41.65	22.57	59.3	136	145	P	V
		15900	44.39	-9.61	54	39.47	41.65	22.57	59.3	136	145	A	V
802.11ac VHT20 CH 64 5320MHz		10640	49.92	-24.08	74	51.65	37.18	19.78	58.69	152	135	P	H
		10640	45.41	-8.59	54	47.14	37.18	19.78	58.69	152	135	A	H
		15960	49.04	-24.96	74	43.97	41.82	22.62	59.37	173	245	P	H
		15960	43.82	-10.18	54	38.75	41.82	22.62	59.37	173	245	A	H
		10640	48.13	-25.87	74	49.86	37.18	19.78	58.69	196	153	P	V
		10640	44.06	-9.94	54	45.79	37.18	19.78	58.69	196	153	A	V
		15960	50.32	-23.68	74	45.25	41.82	22.62	59.37	157	269	P	V
		15960	44.86	-9.14	54	39.79	41.82	22.62	59.37	157	269	A	V
Remark	1. No other spurious found.												
	2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 CH 54 5270MHz		5138.32	53.85	-20.15	74	39.42	33.85	13.68	33.1	103	315	P	H
		5080.6	44.59	-9.41	54	30.3	33.79	13.6	33.1	103	315	A	H
	*	5270	102.24	-	-	87.4	34.02	13.92	33.1	103	315	P	H
		5270	96.36	-	-	81.52	34.02	13.92	33.1	103	315	A	H
		5376.48	53.14	-20.86	74	37.99	34.15	14.1	33.1	103	315	P	H
		5440.32	44.06	-9.94	54	28.65	34.24	14.27	33.1	103	315	A	H
		5039	52.48	-21.52	74	38.33	33.74	13.51	33.1	321	37	P	V
		5031.2	44.58	-9.42	54	30.54	33.72	13.42	33.1	321	37	A	V
	*	5270	97.2	-	-	82.36	34.02	13.92	33.1	321	37	P	V
		5270	88.49	-	-	73.65	34.02	13.92	33.1	321	37	A	V
		5451.36	52.36	-21.64	74	36.93	34.26	14.27	33.1	321	37	P	V
		5453.28	44.09	-9.91	54	28.66	34.26	14.27	33.1	321	37	A	V
802.11ac VHT40 CH 62 5310MHz		5124.95	54.1	-19.9	74	39.67	33.85	13.68	33.1	103	315	P	H
		5038.15	44.78	-9.22	54	30.63	33.74	13.51	33.1	103	315	A	H
	*	5310	102.25	-	-	87.22	34.09	14.04	33.1	103	315	P	H
		5310	96.28	-	-	81.25	34.09	14.04	33.1	103	315	A	H
		5422.08	53.26	-20.74	74	37.98	34.22	14.16	33.1	103	315	P	H
		5350.56	47.19	-6.81	54	32.06	34.13	14.1	33.1	103	315	A	H
		5045.5	53.06	-20.94	74	38.91	33.74	13.51	33.1	321	37	P	V
		5116.2	44.74	-9.26	54	30.33	33.83	13.68	33.1	321	37	A	V
	*	5310	97.98	-	-	82.95	34.09	14.04	33.1	321	37	P	V
		5310	90.04	-	-	75.01	34.09	14.04	33.1	321	37	A	V
		5350.56	54.67	-19.33	74	39.54	34.13	14.1	33.1	321	37	P	V
		5350.08	45.19	-8.81	54	30.06	34.13	14.1	33.1	321	37	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 CH 54 5270MHz		10540	49.13	-19.07	68.2	51.07	37.12	19.74	58.8	150	220	P	H
		15810	50.09	-23.91	74	45.34	41.44	22.52	59.21	168	345	P	H
		15810	44.5	-9.5	54	39.75	41.44	22.52	59.21	168	345	A	H
		10540	51.72	-16.48	68.2	53.66	37.12	19.74	58.8	139	242	P	V
		15810	51.37	-22.63	74	46.62	41.44	22.52	59.21	152	296	P	V
		15810	45.55	-8.45	54	40.8	41.44	22.52	59.21	152	296	A	V
802.11ac VHT40 CH 62 5310MHz		10620	49.33	-24.67	74	51.09	37.17	19.78	58.71	150	220	P	H
		10620	44.57	-9.43	54	46.33	37.17	19.78	58.71	150	220	A	H
		15930	48.99	-25.01	74	43.99	41.73	22.6	59.33	160	100	P	H
		15930	44.46	-9.54	54	39.46	41.73	22.6	59.33	160	100	A	H
		10620	49.05	-24.95	74	50.81	37.17	19.78	58.71	148	269	P	V
		10620	44.49	-9.51	54	46.25	37.17	19.78	58.71	148	269	A	V
		15930	50.16	-23.84	74	45.16	41.73	22.6	59.33	187	241	P	V
		15930	45.19	-8.81	54	40.19	41.73	22.6	59.33	187	241	A	V
Remark	1. No other spurious found.												
	2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 58 5290MHz		5106.08	52.74	-21.26	74	38.41	33.83	13.6	33.1	108	319	P	H
		5062.66	45.27	-8.73	54	31.1	33.76	13.51	33.1	108	319	A	H
	*	5290	96.07	-	-	81.14	34.05	13.98	33.1	108	319	P	H
		5290	86.56	-	-	71.63	34.05	13.98	33.1	108	319	A	H
		5363.76	54.85	-19.15	74	39.7	34.15	14.1	33.1	108	319	P	H
		5350.32	46.16	-7.84	54	31.03	34.13	14.1	33.1	108	319	A	H
		5045.5	54.02	-19.98	74	39.87	33.74	13.51	33.1	272	45	P	V
		5079.3	45.48	-8.52	54	31.19	33.79	13.6	33.1	272	45	A	V
	*	5290	93.37	-	-	78.44	34.05	13.98	33.1	272	45	P	V
		5290	86.62	-	-	71.69	34.05	13.98	33.1	272	45	A	V
		5358.72	52.46	-21.54	74	37.33	34.13	14.1	33.1	272	45	P	V
		5350.08	45.12	-8.88	54	29.99	34.13	14.1	33.1	272	45	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 58 5290MHz		10580	49.14	-19.06	68.2	50.98	37.15	19.76	58.75	150	220	P	H
		15870	50.12	-23.88	74	45.24	41.61	22.55	59.28	168	345	P	H
		15870	45.58	-8.42	54	40.7	41.61	22.55	59.28	168	345	A	H
		10580	52.37	-15.83	68.2	54.21	37.15	19.76	58.75	215	196	P	V
		15870	50.43	-23.57	74	45.55	41.61	22.55	59.28	148	315	P	V
		15870	45.51	-8.49	54	40.63	41.61	22.55	59.28	148	315	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 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 100 5500MHz		5443.12	52.92	-21.08	74	37.51	34.24	14.27	33.1	104	131	P	H
		5463.92	53.56	-14.64	68.2	38.11	34.28	14.27	33.1	104	131	P	H
		5456.88	44.81	-9.19	54	29.38	34.26	14.27	33.1	104	131	A	H
	*	5500	104.53	-	-	88.93	34.33	14.37	33.1	104	131	P	H
		5500	98.45	-	-	82.85	34.33	14.37	33.1	104	131	A	H
		5415.92	53.2	-20.8	74	37.92	34.22	14.16	33.1	387	208	P	V
		5460.4	53.11	-15.09	68.2	37.68	34.26	14.27	33.1	387	208	P	V
		5459.28	44.8	-9.2	54	29.37	34.26	14.27	33.1	387	208	A	V
	*	5500	100.76	-	-	85.16	34.33	14.37	33.1	387	208	P	V
		5500	92.81	-	-	77.21	34.33	14.37	33.1	387	208	A	V
802.11a CH 116 5580MHz		5455.12	52.46	-21.54	74	37.03	34.26	14.27	33.1	100	135	P	H
		5462.56	52.59	-15.61	68.2	37.14	34.28	14.27	33.1	100	135	P	H
		5458.48	44.3	-9.7	54	28.87	34.26	14.27	33.1	100	135	A	H
	*	5580	103.58	-	-	87.69	34.41	14.58	33.1	100	135	P	H
		5580	96.35	-	-	80.46	34.41	14.58	33.1	100	135	A	H
		5762.17	53.98	-14.22	68.2	37.57	34.45	15.06	33.1	100	135	P	H
		5367.28	53.06	-20.94	74	37.91	34.15	14.1	33.1	387	210	P	V
		5469.76	52.87	-15.33	68.2	37.32	34.28	14.37	33.1	387	210	P	V
		5433.76	44.15	-9.85	54	28.74	34.24	14.27	33.1	387	210	A	V
	*	5580	99.58	-	-	83.69	34.41	14.58	33.1	387	210	P	V
		5580	92.03	-	-	76.14	34.41	14.58	33.1	387	210	A	V
		5735.08	53.83	-14.37	68.2	37.51	34.45	14.97	33.1	387	210	P	V



802.11a CH 140 5700MHz	*	5700	103.59	-	-	87.24	34.48	14.97	33.1	102	137	P	H
		5700	96.96	-	-	80.61	34.48	14.97	33.1	102	137	A	H
		5725.88	61.39	-6.81	68.2	45.06	34.46	14.97	33.1	102	137	P	H
	*	5700	100.41	-	-	84.06	34.48	14.97	33.1	387	209	P	V
		5700	93.16	-	-	76.81	34.48	14.97	33.1	387	209	A	V
		5726.76	58.64	-9.56	68.2	42.31	34.46	14.97	33.1	387	209	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 100 5500MHz		11000	47.63	-26.37	74	48.57	37.4	19.96	58.3	163	175	P	H
		16500	51.12	-17.08	68.2	43.74	43.27	22.95	58.84	178	296	P	H
		11000	49.02	-24.98	74	49.96	37.4	19.96	58.3	163	230	P	V
		11000	44.37	-9.63	54	45.31	37.4	19.96	58.3	163	230	A	V
		16500	48.69	-19.51	68.2	41.31	43.27	22.95	58.84	175	296	P	V
802.11a CH 116 5580MHz		11160	46.92	-27.08	74	47.47	37.5	20.06	58.11	170	85	P	H
		16740	49.92	-18.28	68.2	41.47	43.91	23.12	58.58	156	350	P	H
		11160	49.96	-24.04	74	50.51	37.5	20.06	58.11	170	200	P	V
		11160	44.58	-9.42	54	45.13	37.5	20.06	58.11	170	200	A	V
		16740	50.54	-17.66	68.2	42.09	43.91	23.12	58.58	156	350	P	V
802.11a CH 140 5700MHz		11400	48.39	-25.61	74	48.42	37.64	20.18	57.85	157	79	P	H
		11400	43.49	-10.51	54	43.52	37.64	20.18	57.85	157	79	A	H
		17100	52.15	-16.05	68.2	42.68	44.29	23.34	58.16	165	246	P	H
		11400	47.43	-26.57	74	47.46	37.64	20.18	57.85	157	285	P	V
		17100	48.23	-19.97	68.2	38.76	44.29	23.34	58.16	165	246	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 100 5500MHz		5367.6	53.42	-20.58	74	38.27	34.15	14.1	33.1	120	148	P	H
		5465.04	53.73	-14.47	68.2	38.28	34.28	14.27	33.1	120	148	P	H
		5459.92	45.01	-8.99	54	29.58	34.26	14.27	33.1	120	148	A	H
	*	5500	103.71	-	-	88.11	34.33	14.37	33.1	120	148	P	H
		5500	96.34	-	-	80.74	34.33	14.37	33.1	120	148	A	H
		5442.96	54.21	-19.79	74	38.8	34.24	14.27	33.1	100	278	P	V
		5462.32	53.05	-15.15	68.2	37.62	34.26	14.27	33.1	100	278	P	V
		5458.16	44.56	-9.44	54	29.13	34.26	14.27	33.1	100	278	A	V
	*	5500	94.31	-	-	78.71	34.33	14.37	33.1	100	278	P	V
		5500	86.99	-	-	71.39	34.33	14.37	33.1	100	278	A	V
802.11n HT20 CH 116 5580MHz		5418.88	53.1	-20.9	74	37.82	34.22	14.16	33.1	102	142	P	H
		5461.12	52.49	-15.71	68.2	37.06	34.26	14.27	33.1	102	142	P	H
		5439.76	44.86	-9.14	54	29.45	34.24	14.27	33.1	102	142	A	H
	*	5580	103.37	-	-	87.48	34.41	14.58	33.1	102	142	P	H
		5580	94.46	-	-	78.57	34.41	14.58	33.1	102	142	A	H
		5762.8	55.06	-13.14	68.2	38.65	34.45	15.06	33.1	102	142	P	H
		5440.72	53.17	-20.83	74	37.76	34.24	14.27	33.1	102	280	P	V
		5464.48	51.7	-16.5	68.2	36.25	34.28	14.27	33.1	102	280	P	V
		5455.84	44.33	-9.67	54	28.9	34.26	14.27	33.1	102	280	A	V
	*	5580	95.49	-	-	79.6	34.41	14.58	33.1	102	280	P	V
		5580	88.76	-	-	72.87	34.41	14.58	33.1	102	280	A	V
		5736.97	54.75	-13.45	68.2	38.43	34.45	14.97	33.1	102	280	P	V



802.11n HT20 CH 140 5700MHz	*	5700	103.43	-	-	87.08	34.48	14.97	33.1	100	134	P	H
		5700	96.57	-	-	80.22	34.48	14.97	33.1	100	134	A	H
		5739.4	56.13	-12.07	68.2	39.72	34.45	15.06	33.1	100	134	P	H
	*	5700	96.66	-	-	80.31	34.48	14.97	33.1	100	282	P	V
		5700	89.19	-	-	72.84	34.48	14.97	33.1	100	282	A	V
		5748.52	55.61	-12.59	68.2	39.2	34.45	15.06	33.1	100	282	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 100 5500MHz		11000	48.21	-25.79	74	49.15	37.4	19.96	58.3	185	36	P	H
		11000	44.16	-9.84	54	45.1	37.4	19.96	58.3	185	36	A	H
		16500	49.48	-18.72	68.2	42.1	43.27	22.95	58.84	178	296	P	H
		11000	48.04	-25.96	74	48.98	37.4	19.96	58.3	163	230	P	V
		11000	43.16	-10.84	54	44.1	37.4	19.96	58.3	163	230	A	V
		16500	50.34	-17.86	68.2	42.96	43.27	22.95	58.84	178	162	P	V
802.11n HT20 CH 116 5580MHz		11160	47.86	-26.14	74	48.41	37.5	20.06	58.11	170	89	P	H
		16740	50.61	-17.59	68.2	42.16	43.91	23.12	58.58	85	350	P	H
		11160	50.43	-23.57	74	50.98	37.5	20.06	58.11	185	163	P	V
		11160	44.65	-9.35	54	45.2	37.5	20.06	58.11	185	163	A	V
		16740	51.55	-16.65	68.2	43.1	43.91	23.12	58.58	175	350	P	V
802.11n HT20 CH 140 5700MHz		11400	48.54	-25.46	74	48.57	37.64	20.18	57.85	186	152	P	H
		11400	44.32	-9.68	54	44.35	37.64	20.18	57.85	186	152	A	H
		17100	51.87	-16.33	68.2	42.4	44.29	23.34	58.16	165	246	P	H
		11400	50.19	-23.81	74	50.22	37.64	20.18	57.85	157	285	P	V
		11400	45.27	-8.73	54	45.3	37.64	20.18	57.85	157	285	A	V
		17100	50.52	-17.68	68.2	41.05	44.29	23.34	58.16	165	246	P	V
Remark		1. No other spurious found. 2. All results are PASS against Peak and Average limit line.											



Band 3 - 5470~5725MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 102 5510MHz		5409.28	52.86	-21.14	74	37.6	34.2	14.16	33.1	104	148	P	H
		5469.28	54.37	-13.83	68.2	38.82	34.28	14.37	33.1	104	148	P	H
		5459.92	45.21	-8.79	54	29.78	34.26	14.27	33.1	104	148	A	H
	*	5510	98.78	-	-	83.07	34.33	14.48	33.1	104	148	P	H
		5510	91.03	-	-	75.32	34.33	14.48	33.1	104	148	A	H
		5732.56	53.87	-14.33	68.2	37.54	34.46	14.97	33.1	104	148	P	H
		5445.28	52.27	-21.73	74	36.86	34.24	14.27	33.1	394	208	P	V
		5469.52	53.04	-15.16	68.2	37.49	34.28	14.37	33.1	394	208	P	V
		5458.48	44.9	-9.1	54	29.47	34.26	14.27	33.1	394	208	A	V
	*	5510	94.54	-	-	78.83	34.33	14.48	33.1	394	208	P	V
		5510	85.83	-	-	70.12	34.33	14.48	33.1	394	208	A	V
		5757.44	54.54	-13.66	68.2	38.13	34.45	15.06	33.1	394	208	P	V
802.11n HT40 CH 110 5550MHz		5420.8	52.92	-21.08	74	37.64	34.22	14.16	33.1	104	148	P	H
		5468.32	52.21	-15.99	68.2	36.66	34.28	14.37	33.1	104	148	P	H
		5440	44.83	-9.17	54	29.42	34.24	14.27	33.1	104	148	A	H
	*	5550	97.77	-	-	81.9	34.39	14.58	33.1	104	148	P	H
		5550	91.27	-	-	75.4	34.39	14.58	33.1	104	148	A	H
		5729.72	55.31	-12.89	68.2	38.98	34.46	14.97	33.1	104	148	P	H
		5362.48	52.18	-21.82	74	37.03	34.15	14.1	33.1	394	208	P	V
		5460.16	51.2	-17	68.2	35.77	34.26	14.27	33.1	394	208	P	V
		5422.96	44.49	-9.51	54	29.21	34.22	14.16	33.1	394	208	A	V
	*	5550	95.15	-	-	79.28	34.39	14.58	33.1	394	208	P	V
		5550	87.24	-	-	71.37	34.39	14.58	33.1	394	208	A	V
		5750.51	54.99	-13.21	68.2	38.58	34.45	15.06	33.1	394	208	P	V



802.11n HT40 CH 134 5670MHz		5434.7	53.81	-20.19	74	38.4	34.24	14.27	33.1	104	148	P	H
		5468.65	53.11	-15.09	68.2	37.56	34.28	14.37	33.1	104	148	P	H
		5457.45	44.61	-9.39	54	29.18	34.26	14.27	33.1	104	148	A	H
	*	5670	98.19	-	-	81.94	34.48	14.87	33.1	104	148	P	H
		5670	91.88	-	-	75.63	34.48	14.87	33.1	104	148	A	H
		5724.93	54.73	-13.47	68.2	38.4	34.46	14.97	33.1	104	148	P	H
		5419.3	52.32	-21.68	74	37.04	34.22	14.16	33.1	394	208	P	V
		5462	51.66	-16.54	68.2	36.23	34.26	14.27	33.1	394	208	P	V
		5449.4	44.56	-9.44	54	29.13	34.26	14.27	33.1	394	208	A	V
	*	5670	94.6	-	-	78.35	34.48	14.87	33.1	394	208	P	V
		5670	86.62	-	-	70.37	34.48	14.87	33.1	394	208	A	V
		5758.18	53.67	-14.53	68.2	37.26	34.45	15.06	33.1	394	208	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 102 5510MHz		11020	49.74	-24.26	74	50.63	37.41	19.98	58.28	170	230	P	H
		11020	44.27	-9.73	54	45.16	37.41	19.98	58.28	170	230	A	H
		16530	51.18	-17.02	68.2	43.65	43.36	22.97	58.8	160	300	P	H
		11020	50.74	-23.26	74	51.63	37.41	19.98	58.28	188	245	P	V
		11020	45.07	-8.93	54	45.96	37.41	19.98	58.28	188	245	A	V
		16530	51.44	-16.76	68.2	43.91	43.36	22.97	58.8	174	284	P	V
802.11n HT40 CH 110 5550MHz		11100	49.24	-24.76	74	49.95	37.46	20.02	58.19	162	285	P	H
		11100	44.45	-9.55	54	45.16	37.46	20.02	58.19	162	285	A	H
		16650	51.27	-16.93	68.2	43.21	43.68	23.05	58.67	180	350	P	H
		11100	49.01	-24.99	74	49.72	37.46	20.02	58.19	158	288	P	V
		11100	44.99	-9.01	54	45.7	37.46	20.02	58.19	158	288	A	V
		16650	51.53	-16.67	68.2	43.47	43.68	23.05	58.67	230	184	P	V
802.11n HT40 CH 134 5670MHz		11340	49.22	-24.78	74	49.41	37.6	20.14	57.93	169	136	P	H
		11340	44.56	-9.44	54	44.75	37.6	20.14	57.93	169	136	A	H
		17010	51.45	-16.75	68.2	41.89	44.55	23.29	58.28	200	360	P	H
		11340	52.55	-21.45	74	52.74	37.6	20.14	57.93	200	360	P	V
		11340	44.67	-9.33	54	44.86	37.6	20.14	57.93	200	360	A	V
		17010	53.74	-14.46	68.2	44.18	44.55	23.29	58.28	200	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT20 CH 100 5500MHz		5390.8	53.16	-20.84	74	37.92	34.18	14.16	33.1	107	314	P	H
		5469.04	54.07	-14.13	68.2	38.52	34.28	14.37	33.1	107	314	P	H
		5440.24	44.74	-9.26	54	29.33	34.24	14.27	33.1	100	316	P	H
	*	5500	104.46	-	-	88.86	34.33	14.37	33.1	107	314	P	H
		5500	97.42	-	-	81.82	34.33	14.37	33.1	107	314	A	H
		5440.08	52.68	-21.32	74	37.27	34.24	14.27	33.1	100	109	P	V
		5469.68	53.24	-14.96	68.2	37.69	34.28	14.37	33.1	100	109	P	V
		5454.8	44.47	-9.53	54	29.04	34.26	14.27	33.1	100	109	A	V
	*	5500	96.21	-	-	80.61	34.33	14.37	33.1	100	109	P	V
		5500	88.46	-	-	72.86	34.33	14.37	33.1	100	109	A	V
802.11ac VHT20 CH 116 5580MHz		5430.16	53.62	-20.38	74	38.21	34.24	14.27	33.1	108	317	P	H
		5467.6	52.55	-15.65	68.2	37	34.28	14.37	33.1	108	317	P	H
		5440	44.72	-9.28	54	29.31	34.24	14.27	33.1	108	317	A	H
	*	5580	104.12	-	-	88.23	34.41	14.58	33.1	108	317	P	H
		5580	97.37	-	-	81.48	34.41	14.58	33.1	108	317	A	H
		5738.54	55.73	-12.47	68.2	39.32	34.45	15.06	33.1	108	317	P	H
		5421.52	53.75	-20.25	74	38.47	34.22	14.16	33.1	100	106	P	V
		5464.48	51.84	-16.36	68.2	36.39	34.28	14.27	33.1	100	106	P	V
		5457.76	43.66	-10.34	54	28.23	34.26	14.27	33.1	100	106	A	V
	*	5580	97.22	-	-	81.33	34.41	14.58	33.1	100	106	P	V
		5580	90.06	-	-	74.17	34.41	14.58	33.1	100	106	A	V
		5734.76	55.38	-12.82	68.2	39.06	34.45	14.97	33.1	100	106	P	V



802.11ac VHT20 CH 140 5700MHz	*	5704	104.39	-	-	88.05	34.47	14.97	33.1	108	313	P	H
		5730.04	60.39	-7.81	68.2	44.06	34.46	14.97	33.1	108	313	P	H
	*	5700	97.87	-	-	81.52	34.48	14.97	33.1	100	105	P	V
		5700	90.43	-	-	74.08	34.48	14.97	33.1	100	105	A	V
		5759.56	55.6	-12.6	68.2	39.19	34.45	15.06	33.1	100	105	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT20 CH 100 5500MHz		11000	46.74	-27.26	74	47.68	37.4	19.96	58.3	163	230	P	H
		16500	51.35	-16.85	68.2	43.97	43.27	22.95	58.84	178	296	P	H
		11000	49.8	-24.2	74	50.74	37.4	19.96	58.3	148	219	P	V
		11000	45.78	-8.22	54	46.72	37.4	19.96	58.3	148	219	A	V
		16500	49.69	-18.51	68.2	42.31	43.27	22.95	58.84	148	232	P	V
802.11ac VHT20 CH 116 5580MHz		11160	47.36	-26.64	74	47.91	37.5	20.06	58.11	170	200	P	H
		16740	51.01	-17.19	68.2	42.56	43.91	23.12	58.58	156	350	P	H
		11160	50	-24	74	50.55	37.5	20.06	58.11	148	232	P	V
		11160	45.07	-8.93	54	45.62	37.5	20.06	58.11	148	232	A	V
		16740	51.08	-17.12	68.2	42.63	43.91	23.12	58.58	136	342	P	V
802.11ac VHT20 CH 140 5700MHz		11400	49.08	-24.92	74	49.11	37.64	20.18	57.85	157	285	P	H
		11400	45.12	-8.88	54	45.15	37.64	20.18	57.85	157	285	A	H
		17100	51.68	-16.52	68.2	42.21	44.29	23.34	58.16	165	246	P	H
		11400	49.53	-24.47	74	49.56	37.64	20.18	57.85	136	246	P	V
		11400	44.71	-9.29	54	44.74	37.64	20.18	57.85	136	246	A	V
		17100	52.17	-16.03	68.2	42.7	44.29	23.34	58.16	155	196	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 CH 102 5510MHz		5405.92	53.07	-20.93	74	37.81	34.2	14.16	33.1	103	315	P	H
		5468.56	53.66	-14.54	68.2	38.11	34.28	14.37	33.1	103	315	P	H
		5439.76	44.46	-9.54	54	29.05	34.24	14.27	33.1	103	315	A	H
	*	5510	99.49	-	-	83.78	34.33	14.48	33.1	103	315	P	H
		5510	92.02	-	-	76.31	34.33	14.48	33.1	103	315	A	H
		5729.09	54.15	-14.05	68.2	37.82	34.46	14.97	33.1	103	315	P	H
		5448.88	54.14	-19.86	74	38.71	34.26	14.27	33.1	392	22	P	V
		5467.6	53.88	-14.32	68.2	38.33	34.28	14.37	33.1	392	22	P	V
		5445.52	43.97	-10.03	54	28.54	34.26	14.27	33.1	392	22	A	V
	*	5510	95.66	-	-	79.95	34.33	14.48	33.1	392	22	P	V
		5510	87.23	-	-	71.52	34.33	14.48	33.1	392	22	A	V
		5761.54	54.01	-14.19	68.2	37.6	34.45	15.06	33.1	392	22	P	V
802.11ac VHT40 CH 110 5550MHz		5457.76	54.01	-19.99	74	38.58	34.26	14.27	33.1	116	313	P	H
		5467.6	52.27	-15.93	68.2	36.72	34.28	14.37	33.1	116	313	P	H
		5439.76	44.64	-9.36	54	29.23	34.24	14.27	33.1	116	313	A	H
	*	5550	98.82	-	-	82.95	34.39	14.58	33.1	116	313	P	H
		5550	90.5	-	-	74.63	34.39	14.58	33.1	116	313	A	H
		5726.26	54.31	-13.89	68.2	37.98	34.46	14.97	33.1	116	313	P	H
		5442.88	52.21	-21.79	74	36.8	34.24	14.27	33.1	392	22	P	V
		5463.52	51.34	-16.86	68.2	35.89	34.28	14.27	33.1	392	22	P	V
		5459.68	43.92	-10.08	54	28.49	34.26	14.27	33.1	392	22	A	V
	*	5550	96.16	-	-	80.29	34.39	14.58	33.1	392	22	P	V
		5550	88.03	-	-	72.16	34.39	14.58	33.1	392	22	A	V
		5749.57	53.02	-15.18	68.2	36.61	34.45	15.06	33.1	392	22	P	V



802.11ac VHT40 CH 134 5670MHz		5443.45	52.94	-21.06	74	37.53	34.24	14.27	33.1	116	314	P	H
		5465.15	52.21	-15.99	68.2	36.76	34.28	14.27	33.1	116	314	P	H
		5459.9	44.17	-9.83	54	28.74	34.26	14.27	33.1	116	314	A	H
	*	5670	99.13	-	-	82.88	34.48	14.87	33.1	116	314	P	H
		5670	91.38	-	-	75.13	34.48	14.87	33.1	116	314	A	H
		5750.48	53.95	-14.25	68.2	37.54	34.45	15.06	33.1	116	314	P	H
		5413.35	53.44	-20.56	74	38.16	34.22	14.16	33.1	392	22	P	V
		5470.05	51.33	-16.87	68.2	35.78	34.28	14.37	33.1	392	22	P	V
		5454.3	44.01	-9.99	54	28.58	34.26	14.27	33.1	392	22	A	V
	*	5670	95.61	-	-	79.36	34.48	14.87	33.1	392	22	P	V
		5670	86.88	-	-	70.63	34.48	14.87	33.1	392	22	A	V
		5755.55	53.38	-14.82	68.2	36.97	34.45	15.06	33.1	392	22	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 CH 102 5510MHz		11020	49.08	-24.92	74	49.97	37.41	19.98	58.28	170	230	P	H
		11020	44.74	-9.26	54	45.63	37.41	19.98	58.28	170	230	A	H
		16530	50.77	-17.43	68.2	43.24	43.36	22.97	58.8	160	300	P	H
		11020	50.24	-23.76	74	51.13	37.41	19.98	58.28	158	256	P	V
		11020	45.36	-8.64	54	46.25	37.41	19.98	58.28	158	256	A	V
		16530	51.53	-16.67	68.2	44	43.36	22.97	58.8	112	353	P	V
802.11ac VHT40 CH 110 5550MHz		11100	49.64	-24.36	74	50.35	37.46	20.02	58.19	150	200	P	H
		11100	45.04	-8.96	54	45.75	37.46	20.02	58.19	150	200	A	H
		16650	50.99	-17.21	68.2	42.93	43.68	23.05	58.67	180	350	P	H
		11100	49.33	-24.67	74	50.04	37.46	20.02	58.19	125	246	P	V
		11100	45.42	-8.58	54	46.13	37.46	20.02	58.19	125	246	A	V
		16650	52.41	-15.79	68.2	44.35	43.68	23.05	58.67	138	347	P	V
802.11ac VHT40 CH 134 5670MHz		11340	49.59	-24.41	74	49.78	37.6	20.14	57.93	125	327	P	H
		11340	44.44	-9.56	54	44.63	37.6	20.14	57.93	125	327	A	H
		17010	52.13	-16.07	68.2	42.57	44.55	23.29	58.28	248	316	P	H
		11340	50.71	-23.29	74	50.9	37.6	20.14	57.93	200	360	P	V
		11340	45.6	-8.4	54	45.79	37.6	20.14	57.93	200	360	A	V
		17010	52.07	-16.13	68.2	42.51	44.55	23.29	58.28	200	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 106 5530MHz		5457.76	53.44	-20.56	74	38.01	34.26	14.27	33.1	108	316	P	H
		5465.2	53.12	-15.08	68.2	37.67	34.28	14.27	33.1	108	316	P	H
		5459.2	46.4	-7.6	54	30.97	34.26	14.27	33.1	108	316	A	H
	*	5530	95.12	-	-	79.39	34.35	14.48	33.1	108	316	P	H
		5530	86.93	-	-	71.2	34.35	14.48	33.1	108	316	A	H
		5738.855	54.18	-14.02	68.2	37.77	34.45	15.06	33.1	108	316	P	H
		5439.76	52.73	-21.27	74	37.32	34.24	14.27	33.1	272	45	P	V
		5469.76	52.77	-15.43	68.2	37.22	34.28	14.37	33.1	272	45	P	V
		5459.92	45.88	-8.12	54	30.45	34.26	14.27	33.1	272	45	A	V
	*	5506	92.56	-	-	76.85	34.33	14.48	33.1	272	45	P	V
		5750.195	53.85	-14.35	68.2	37.44	34.45	15.06	33.1	272	45	P	V
802.11ac VHT80 CH 122 5610MHz		5423.2	53.01	-20.99	74	37.73	34.22	14.16	33.1	108	316	P	H
		5462.56	51.98	-16.22	68.2	36.53	34.28	14.27	33.1	108	316	P	H
		5454.4	45.33	-8.67	54	29.9	34.26	14.27	33.1	108	316	A	H
	*	5610	95.19	-	-	79.14	34.46	14.69	33.1	108	316	P	H
		5610	87.42	-	-	71.37	34.46	14.69	33.1	108	316	A	H
		5760.275	55.18	-13.02	68.2	38.77	34.45	15.06	33.1	108	316	P	H
		5459.44	53.12	-20.88	74	37.69	34.26	14.27	33.1	272	45	P	V
		5460.16	53.96	-14.24	68.2	38.53	34.26	14.27	33.1	272	45	P	V
		5445.28	45.23	-8.77	54	29.82	34.24	14.27	33.1	272	45	A	V
	*	5610	91.66	-	-	75.61	34.46	14.69	33.1	272	45	P	V
		5610	83.3	-	-	67.25	34.46	14.69	33.1	272	45	A	V
		5752.225	54.24	-13.96	68.2	37.83	34.45	15.06	33.1	272	45	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 106 5530MHz		11060	50	-24	74	50.79	37.44	20	58.23	125	263	P	H
		11060	45.76	-8.24	54	46.55	37.44	20	58.23	125	263	A	H
		16590	52.81	-15.39	68.2	45.04	43.5	23.02	58.75	174	328	P	H
		11060	50.29	-23.71	74	51.08	37.44	20	58.23	150	200	P	V
		11060	44.84	-9.16	54	45.63	37.44	20	58.23	150	200	A	V
		16590	52.13	-16.07	68.2	44.36	43.5	23.02	58.75	180	350	P	V
802.11ac VHT80 CH 122 5610MHz		11220	50.23	-23.77	74	50.68	37.53	20.08	58.06	200	360	P	H
		11220	44.94	-9.06	54	45.39	37.53	20.08	58.06	200	360	A	H
		16830	51.49	-16.71	68.2	42.67	44.14	23.17	58.49	200	360	P	H
		11220	51.06	-22.94	74	51.51	37.53	20.08	58.06	125	278	P	V
		11220	45.86	-8.14	54	46.31	37.53	20.08	58.06	125	278	A	V
		16830	52.75	-15.45	68.2	43.93	44.14	23.17	58.49	162	278	P	V
Remark	1. No other spurious found.												
	2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

WIFI 802.11ac VHT 40 (LF @ 3m)

WIFI Ant. 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 VHT40 LF		30.97	24.64	-15.36	40	31.15	23.82	0.97	31.3	-	-	P	H
		53.28	26.42	-13.58	40	43.1	13.62	1.3	31.6	100	83	P	H
		96.93	25.96	-17.54	43.5	39.7	16.1	1.76	31.6	-	-	P	H
		124.09	26.96	-16.54	43.5	38.6	17.88	1.98	31.5	-	-	P	H
		262.8	26.85	-19.15	46	35.92	19.67	2.89	31.63	-	-	P	H
		411.21	30.92	-15.08	46	36.92	21.81	3.61	31.42	-	-	P	H
		35.82	32.2	-7.8	40	41.76	20.92	1.02	31.5	100	49	P	V
		96.93	27.76	-15.74	43.5	41.5	16.1	1.76	31.6	-	-	P	V
		139.61	33.76	-9.74	43.5	45.69	17.4	2.11	31.44	-	-	P	V
		418	30.29	-15.71	46	36.16	21.93	3.64	31.44	-	-	P	V
		627.52	29.56	-16.44	46	31.98	24.61	4.46	31.49	-	-	P	V
		782.72	30.52	-15.48	46	30.79	25.97	4.99	31.23	-	-	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	Peak or Average
H/V	H orizontal or V ertical



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

WIFI Ant. 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)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01 2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Level(dBμV/m) =

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

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

For Peak Limit @ 2390MHz:

1. 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)

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) + 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)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

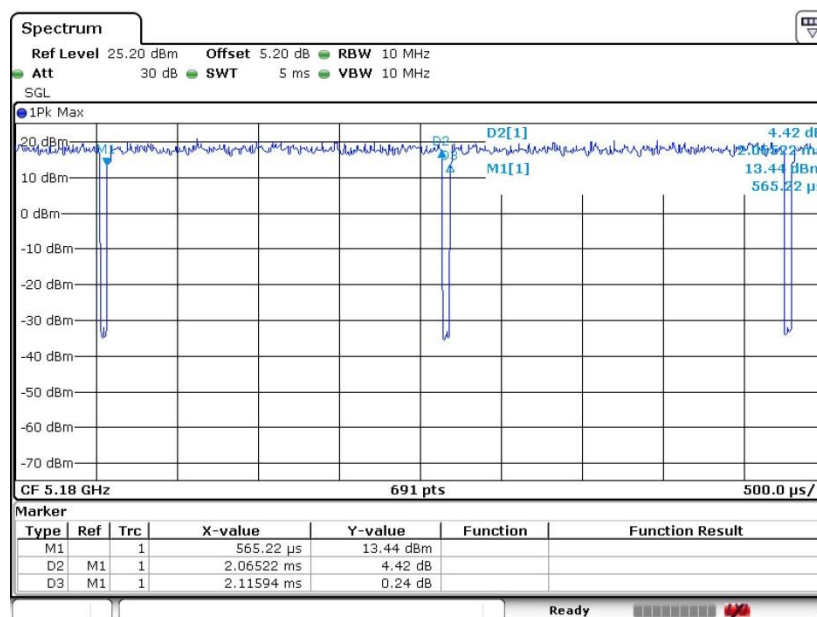
= -10.46(dB)

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

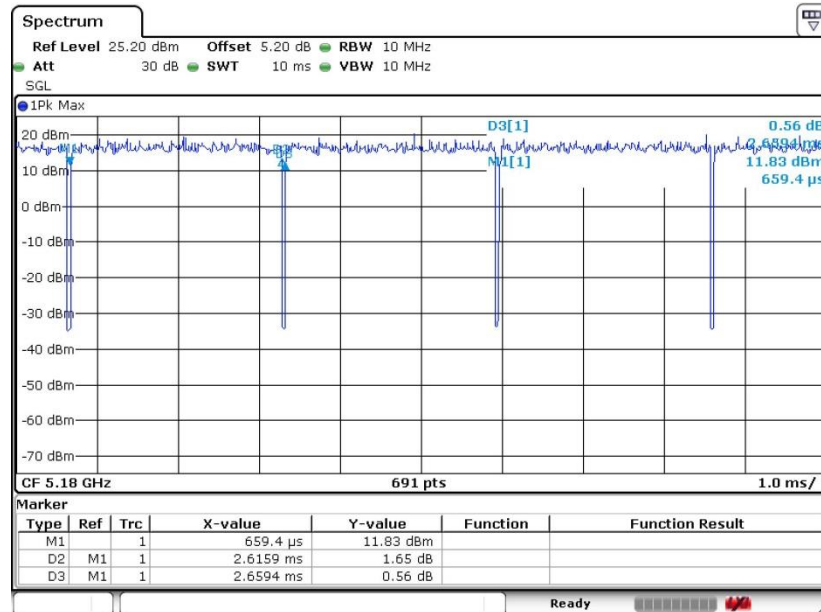
Appendix D. Duty Cycle Plots

Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11a	97.60	2.065	0.484	1KHz
802.11an HT 20	98.36	-	-	1KHz
802.11an HT 40	96.69	1.268	0.789	1KHz
802.11ac VHT 20	98.36	-	-	10Hz
802.11ac VHT 40	97.68	2.442	0.410	1KHz
802.11ac VHT80	96.34	1.145	0.873	3KHz

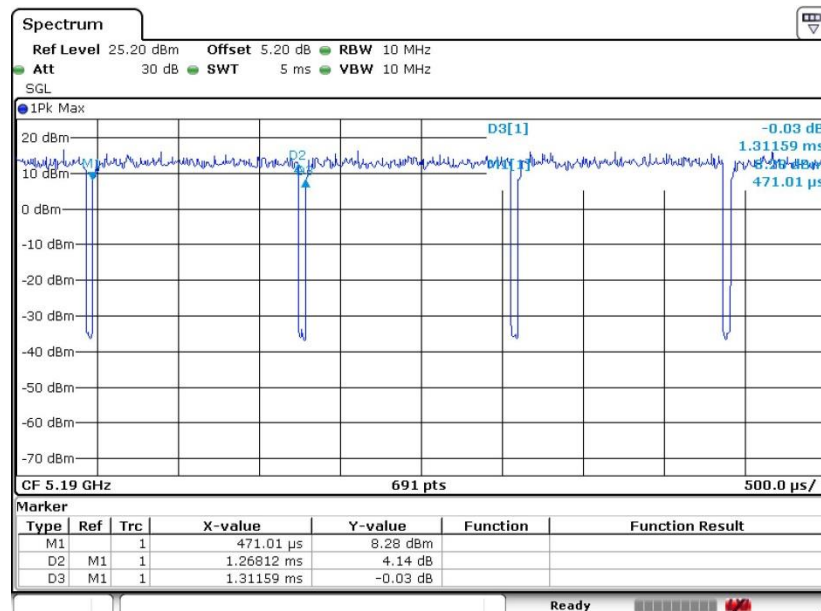
802.11a



802.11an HT20

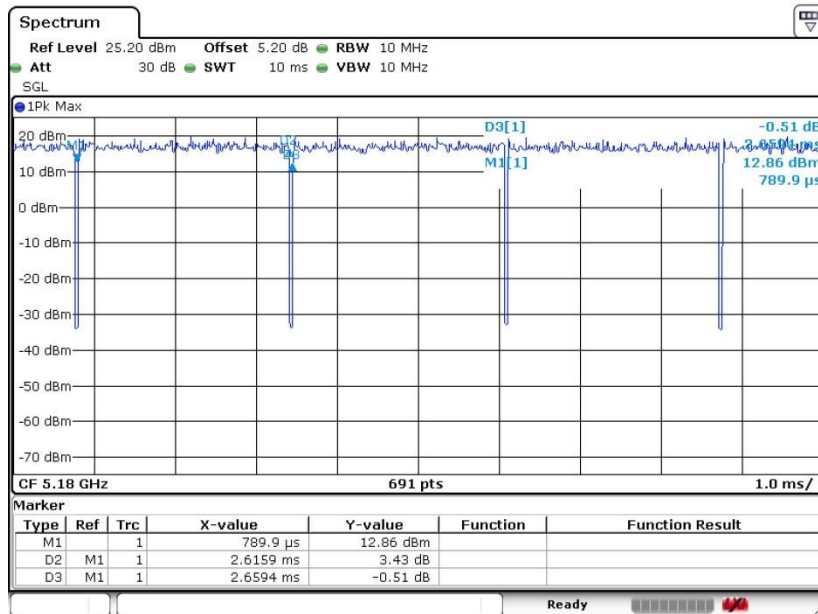


802.11an HT40

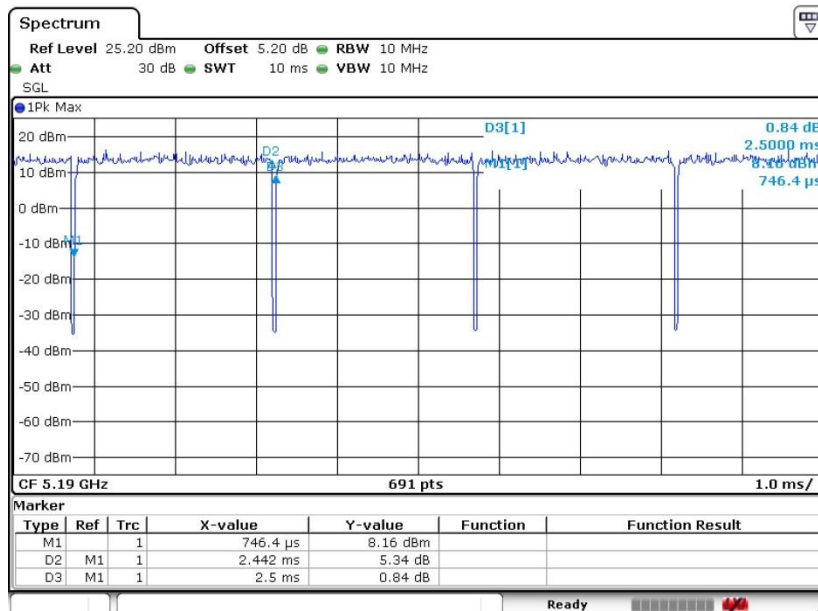




802.11ac VHT20



802.11ac VHT40



802.11ac VHT80

