FCC RF Test Report

APPLICANT	**:**	**PAX Technology Limited**
EQUIPMENT	**:**	**Smart Tablet**
BRAND NAME	**:**	**PAX**
MODEL NAME	**:**	**Aries6**
FCC ID	**:**	**V5PAR6LITE**
STANDARD	**:**	**FCC Part 15 Subpart E §15.407**
CLASSIFICATION	**:**	**(NII) Unlicensed National Information Infrastructure**

The product was received on Nov. 01, 2019 and testing was completed on Nov. 29, 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.

Derreck Chen

Reviewed by: Derreck Chen / Supervisor

Eric Shih

Approved by: Eric Shih / Manager

ACCREDITED Cert #5145.01

Sporton International (ShenZhen) Inc.

1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR941109-01E	Rev. 01	Initial issue of report	Dec. 19, 2019

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
-	2.1049 & 15.403(i)	26dB & 99% Bandwidth	-	Pass	1
-	15.407(a)	Maximum Conducted Output Power	≤ 24 dBm	Pass	1
-	15.407(a)	Power Spectral Density	≤ 11 dBm	Pass	1
3.1	15.407(b)	Unwanted Emissions	15.407(b) & 15.209(a)	Pass	Under limit 3.68 dB at 5350.32 MHz
3.2	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 9.92 dB at 9.35 MHz
3.3	15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.4	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass	-
Note: 1. Test items are performed on original report which can be referred to Sporton report number FR941109E.					

1 General Description

1.1 Applicant

PAX Technology Limited

Room 2416, 24/F., Sun Hung Kai Centre, 30 Harbour Road, Wanchai, Hong Kong

1.2 Manufacturer

PAX Computer Technology (Shenzhen) Co., Ltd.

4/F, No.3 Building, Software Park, Second Central Science-Tech Road, High-Tech industrial Park, Shenzhen, Guangdong, P.R.C.

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Smart Tablet
Brand Name	PAX
Model Name	Aries6
FCC ID	V5PAR6LITE
EUT supports Radios application	WLAN 2.4GHz 802.11b/g/n HT20 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth BR / EDR / LE NFC
IMEI Code	Conduction/Radiation: N/A
HW Version	N/A
SW Version	N/A
EUT Stage	Production Unit

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 ~ 5720 MHz
Antenna Type / Gain	**<5180 MHz ~ 5240 MHz>** Internal Antenna with gain 1.73 dBi **<5260 MHz ~ 5320 MHz>** Internal Antenna with gain 1.73 dBi **<5500 MHz ~ 5720 MHz >** Internal Antenna with gain 1.73 dBi
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)

Note:

1. WLAN operation in 5600 MHz ~ 5650 MHz is notched.
2. For 802.11n HT20 / ac VHT20 and 802.11n HT40 / ac VHT40 mode, the whole testing have assessed only 802.11an HT20/ HT40 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 Re-use of Measured Data

1.6.1 Introduction Section

This application re-uses data collected on a similar device. The subject device of this application (Model: Aries6, FCC ID: V5PAR6LITE) is electrically identical to the reference device (Model: Aries6, FCC ID: V5PAR6) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 484596 D01.

1.6.2 Difference Section

For details concerning the similarity with respect to component placement, mechanical/electrical design etc., please refer to the Product Equality Declaration.

The re-used RF data includes the following bands provided in Appendix E (Sporton RF Report No. FR941109E for the reference device Model: Aries6, FCC ID: V5PAR6).

1.6.3 Reference detail Section:

Equipment Class	Reference FCC ID	Folder Test	Report Title/Section
NII (B1~3)	V5PAR6	Part15E(FR941109E)	All sections applicable except AC Conducted Emission and RSE
NII (DFS)	V5PAR6	Part15E(FZ941109)	All sections applicable

1.6.4 Spot Check Verification Data Section

In order to confirm hardware similarity of the subject device with the reference device, spot check measurements were performed on the subject device for the following test items, the test result were consistent with FCC ID: V5PAR6.

Assertions concerning the similarity of these devices are based on representations by the applicant. The applicant accepts full responsibility for the validity of the similarity claim, and for the determination that verification test data are sufficient to support it.

Test Item	Mode	V5PAR6 Worst Result	V5PAR6LITE Worst Result	Difference (dB)
Peak Conducted Power (dBm)	Bluetooth BR	9.90	7.77	-2.13
	Bluetooth LE	3.70	3.50	-0.20
	WLAN 802.11b	16.10	15.50	-0.60
	WLAN 802.11a	13.80	13.42	-0.38
Radiated Spurious Emission (Band Edge. Haromic) (dBuV/m)	NFC	36.99	37.13	0.14

1.7 Testing Location

Sporton International (Shenzhen) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International (Shenzhen) Inc.		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	CO01-SZ	CN1256	421272

Test Firm	Sporton International (Shenzhen) Inc.		
Test Site Location	No. 3 Bldg the third floor of south, Shahe River west, Fengzeyuan Warehouse, Nanshan Shenzhen, 518055 People's Republic of China TEL: +86-755-33202398		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH02-SZ	CN1256	421272

1.8 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH02-SZ	AUDIX	E3	6.2009-8-24a
2.	CO01-SZ	AUDIX	E3	6.120613b

1.9 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.

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. 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)
Straddle Channel	138#	5690	144	5720
	142*	5710		

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 VHT80	**MCS0**

Test Cases	
AC Conducted Emission	Mode 1 : Bluetooth Link + WLAN Link(5G) + Earphone + Battery + USB Cable(Charging from Adapter)
Remark: For Radiated Test Cases, The tests were performed with Adapter, Battery, Earphone and USB Cable.	

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
Straddle		-	-	144

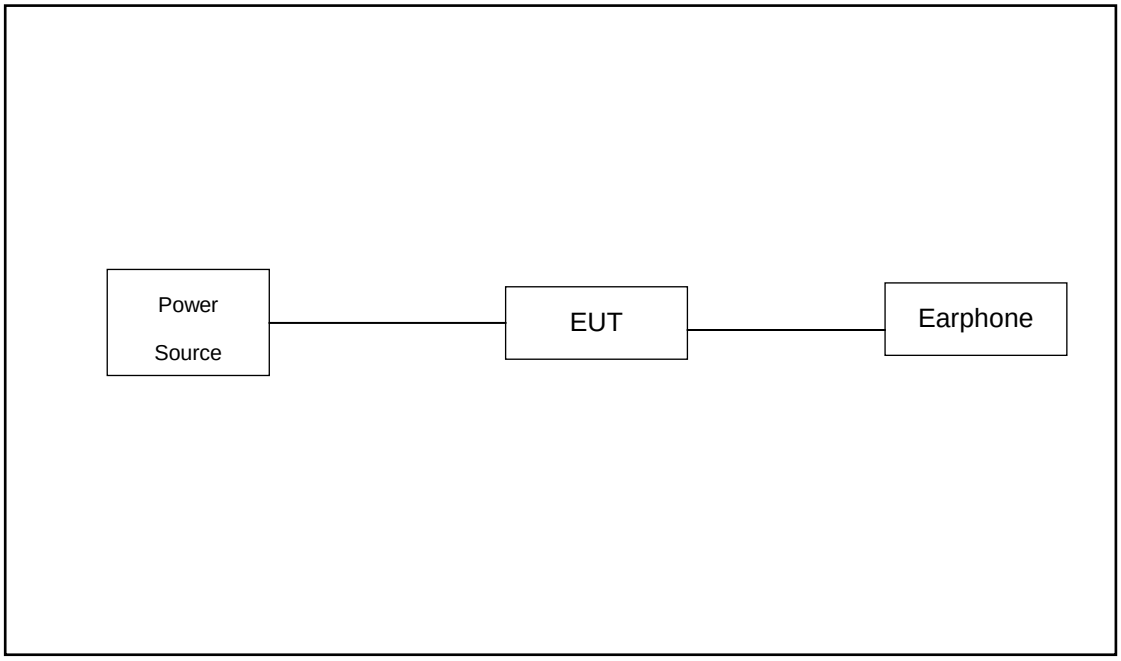
Ch. #		Band I：5180-5240 MHz	Band II：5260-5320 MHz	Band III：5500-5720MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle		-	-	144

Ch. #		Band I：5180-5240 MHz	Band II：5260-5320 MHz	Band III：5500-5720MHz
		802.11n HT40	802.11n HT40	802.11n HT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle		-	-	142

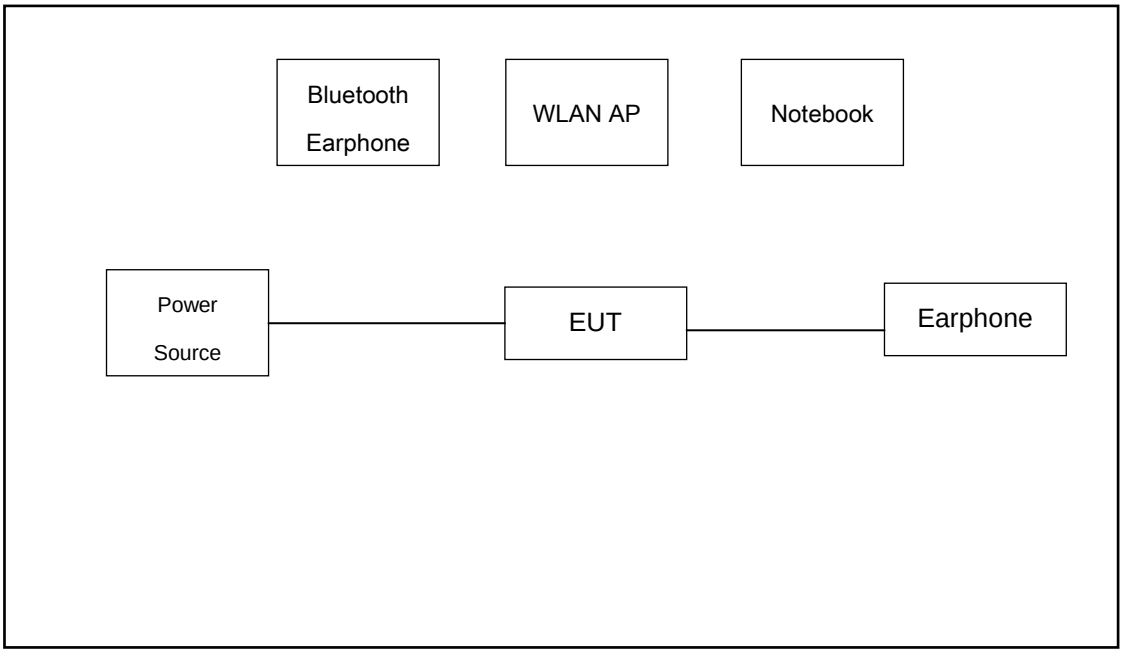
Ch. #		Band I：5180-5240 MHz	Band II：5260-5320 MHz	Band III：5500-5720MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	106
M	Middle	42	58	-
H	High	-	-	-
Straddle		-	-	138

2.3 Connection Diagram of Test System

For Radiation



For Conducted Emission



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	D-Link	DIR-820L	KA2IR820LA1	N/A	Unshielded,1.8m
2.	Notebook	Lenovo	E540	FCC DoC	N/A	AC I/P: Unshielded,1.2m DC O/P: Shielded, 1.8 m
3.	Earphone	Apple	MC690ZP/A	N/A	Shielded, 1.0m	N/A
4.	Earphone	Lenovo	SH100	N/A	Unshielded, 1.2m	N/A
5.	Bluetooth Earphone	Samsung	EO-MG900	N/A	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 continuous transmit/receive.

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

3 Test Result

3.1 Unwanted Emissions Measurement

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

3.1.1 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.

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

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

3.1.2 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 G) Unwanted emissions measurement.

   (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
   - RBW = 120 kHz
   - VBW = 300 kHz
   - Detector = Peak
   - Trace mode = max hold

   (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
   - RBW = 1 MHz
   - VBW ≥ 3 MHz
   - Detector = Peak
   - Sweep time = auto
   - Trace mode = max hold

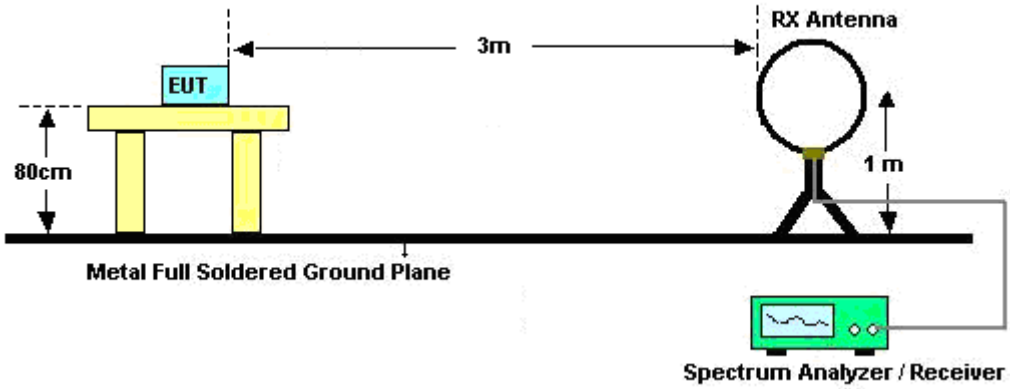
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz
   - RBW = 1 MHz
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

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

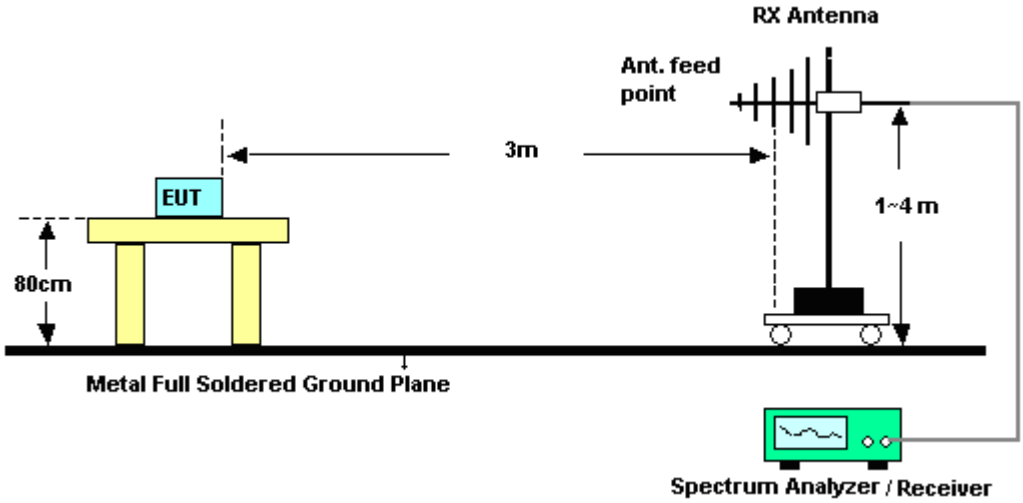
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst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

3.1.4 Test Setup

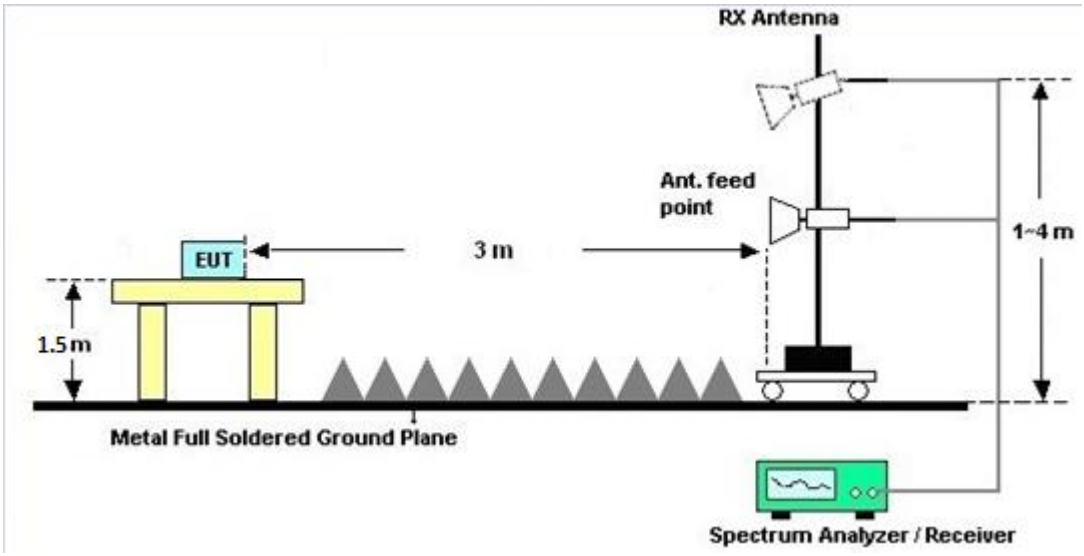
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.1.5 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.

3.1.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix B.

3.1.7 Duty Cycle

Please refer to Appendix C.

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

Please refer to Appendix B.

3.2 AC Conducted Emission Measurement

3.2.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

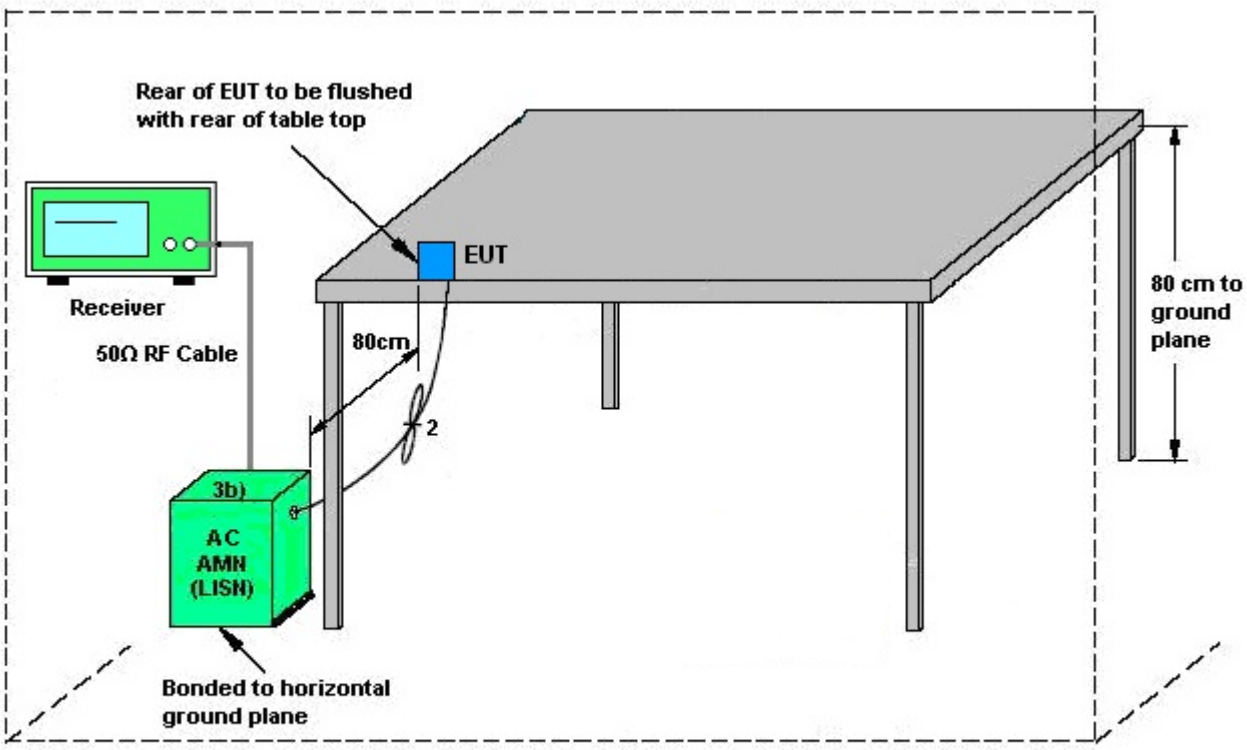
3.2.2 Measuring Instruments

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

3.2.3 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.

3.2.4 Test Setup



3.2.5 Test Result of AC Conducted Emission

Please refer to Appendix A.

3.3 Automatically Discontinue Transmission

3.3.1 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.

3.3.2 Measuring Instruments

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

3.3.3 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.

3.4 Antenna Requirements

3.4.1 Standard Applicable

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.4.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.4.3 Antenna Gain

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
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Apr. 19, 2019	Nov. 29, 2019	Apr. 18, 2020	Radiation (03CH02-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	May 29, 2018	Nov. 29, 2019	May 28, 2020	Radiation (03CH02-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Jul. 19, 2019	Nov. 29, 2019	Jul. 18, 2020	Radiation (03CH02-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1285	1GHz~18GHz	Jan. 07, 2019	Nov. 29, 2019	Jan. 06, 2020	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 22. 2019	Nov. 29, 2019	Jul. 21. 2020	Radiation (03CH02-SZ)
LF Amplifier	Burgeon	BPA-530	102211	0.01~3000Mhz	Oct. 18, 2019	Nov. 29, 2019	Oct. 17, 2020	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	AMF-7D-00101800-30-10P-R	1943528	1GHz~18GHz	Oct. 18,2019	Nov. 29, 2019	Oct. 17,2020	Radiation (03CH02-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 18, 2019	Nov. 29, 2019	Oct. 17, 2020	Radiation (03CH02-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr.18, 2019	Nov. 29, 2019	Apr. 17, 2020	Radiation (03CH02-SZ)
AC Power Source	Chroma	61601	616010002470	N/A	NCR	Nov. 29, 2019	NCR	Radiation (03CH02-SZ)
Turn Table	Chaintek	T-200	N/A	0~360 degree	NCR	Nov. 29, 2019	NCR	Radiation (03CH02-SZ)
Antenna Mast	Chaintek	MBS-400	N/A	1 m~4 m	NCR	Nov. 29, 2019	NCR	Radiation (03CH02-SZ)
EMI Receiver	R&S	ESR7	101630	9kHz~7GHz;	Dec. 23, 2018	Nov. 21, 2019	Dec. 22, 2019	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Oct. 17, 2019	Nov. 21, 2019	Oct. 16, 2020	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Dec. 23, 2018	Nov. 21, 2019	Dec. 22, 2019	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	616020000891	100Vac~250Vac	Jul. 23, 2019	Nov. 21, 2019	Jul. 22, 2020	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))	**2.6 dB**

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

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

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

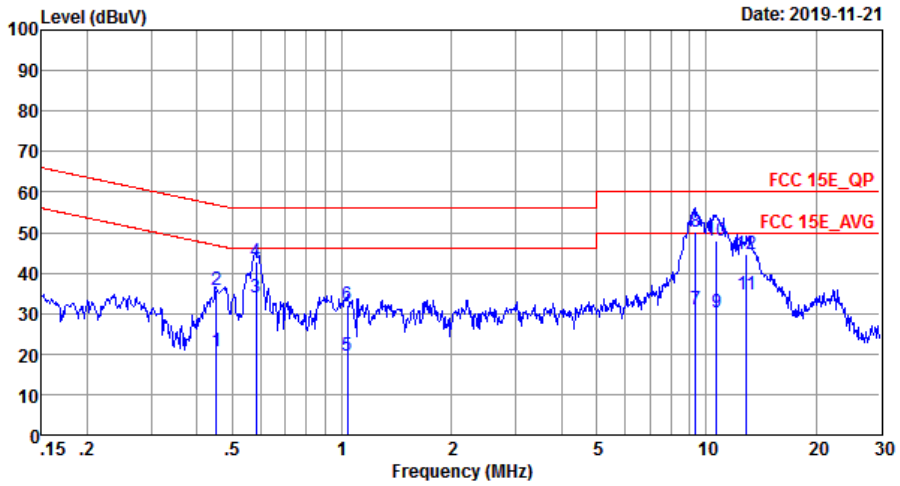
Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.0dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.4dB**

Appendix A. AC Conducted Emission Test Results

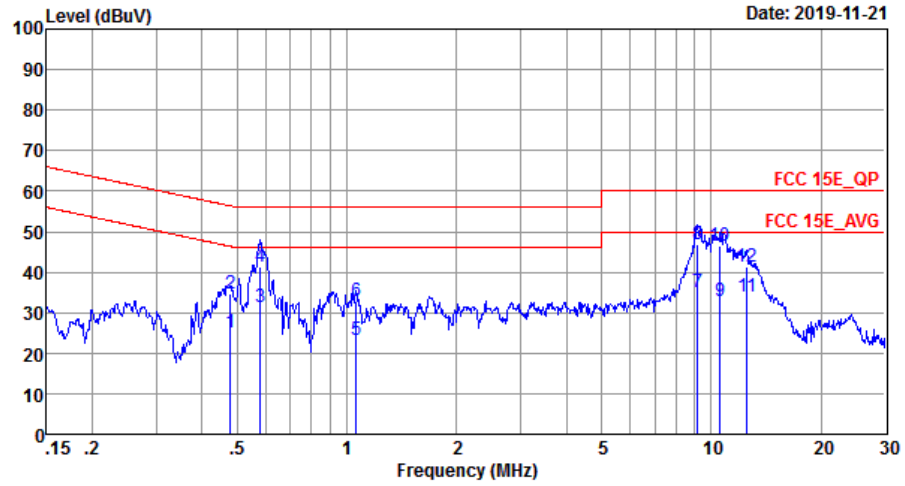
Test Engineer :	LiuDaLin	Temperature :	22~25℃
		Relative Humidity :	50~55%
Test Voltage :	120Vac / 60Hz	Phase :	Line



Site : CO01-SZ
Condition: FCC 15E_QP LISN_20190719_L LINE

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.45	20.56	-26.29	46.85	10.50	0.02	10.04	Average
2		0.45	35.86	-20.99	56.85	25.80	0.02	10.04	QP
3		0.58	33.88	-12.12	46.00	23.80	0.02	10.06	Average
4		0.58	42.68	-13.32	56.00	32.60	0.02	10.06	QP
5		1.04	19.62	-26.38	46.00	9.50	0.07	10.05	Average
6		1.04	32.12	-23.88	56.00	22.00	0.07	10.05	QP
7		9.35	30.98	-19.02	50.00	20.41	0.33	10.24	Average
8	*	9.35	50.08	-9.92	60.00	39.51	0.33	10.24	QP
9		10.68	30.14	-19.86	50.00	19.50	0.38	10.26	Average
10		10.68	47.94	-12.06	60.00	37.30	0.38	10.26	QP
11		12.92	34.73	-15.27	50.00	24.00	0.45	10.28	Average
12		12.92	44.53	-15.47	60.00	33.80	0.45	10.28	QP

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



Site : CO01-SZ
Condition: FCC 15E_QP LISN_20190719_N NEUTRAL

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.48	25.07	-21.29	46.36	15.00	0.02	10.05	Average
2		0.48	34.87	-21.49	56.36	24.80	0.02	10.05	QP
3		0.58	31.48	-14.52	46.00	21.40	0.02	10.06	Average
4		0.58	41.28	-14.72	56.00	31.20	0.02	10.06	QP
5		1.06	23.30	-22.70	46.00	13.20	0.05	10.05	Average
6		1.06	32.70	-23.30	56.00	22.60	0.05	10.05	QP
7		9.16	34.98	-15.02	50.00	24.60	0.14	10.24	Average
8	*	9.16	46.98	-13.02	60.00	36.60	0.14	10.24	QP
9		10.56	32.84	-17.16	50.00	22.40	0.18	10.26	Average
10		10.56	46.64	-13.36	60.00	36.20	0.18	10.26	QP
11		12.52	33.82	-16.18	50.00	23.30	0.25	10.27	Average
12		12.52	41.42	-18.58	60.00	30.90	0.25	10.27	QP

Appendix B. Radiated Spurious Emission

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5149.24	57.52	-16.48	74	48.73	31.9	10.06	33.17	100	66	P	H
		5149.5	47.96	-6.04	54	39.17	31.9	10.06	33.17	100	66	A	H
	*	5180	100.04	-	-	93.41	31.7	10.09	33.16	100	66	P	H
		5180	94.55	-	-	85.92	31.7	10.09	33.16	100	66	A	H
		5149.5	49.1	-24.9	74	40.31	31.9	10.06	33.17	100	96	P	V
		5149.76	42.18	-11.82	54	33.39	31.9	10.06	33.17	100	96	A	V
	*	5180	94.67	-	-	86.04	31.7	10.09	33.16	100	96	P	V
		5180	88.26	-	-	79.63	31.7	10.09	33.16	100	96	A	V
802.11a CH 44 5220MHz		5081.9	48.95	-25.05	74	40.34	31.77	10.02	33.18	100	64	P	H
		5142.48	38.84	-15.16	54	30.05	31.9	10.06	33.17	100	64	A	H
	*	5220	99.87	-	-	91.4	31.5	10.13	33.16	100	64	P	H
		5220	93.58	-	-	85.11	31.5	10.13	33.16	100	64	A	H
		5449.92	45.47	-28.53	74	36.5	31.7	10.38	33.11	100	64	P	H
		5431.72	36.97	-17.03	54	28	31.7	10.38	33.11	100	64	A	H
		5059.8	47.37	-26.63	74	38.84	31.73	9.99	33.19	100	72	P	V
		5114.92	38.32	-15.68	54	29.61	31.83	10.06	33.18	100	72	A	V
	*	5220	92.56	-	-	84.09	31.5	10.13	33.16	100	72	P	V
		5220	86.53	-	-	78.06	31.5	10.13	33.16	100	72	A	V
		5386.64	46.69	-27.31	74	37.94	31.57	10.3	33.12	100	72	P	V
		5446.56	36.94	-17.06	54	27.97	31.7	10.38	33.11	100	72	A	V

802.11a CH 48 5240MHz		5124.8	47.47	-26.53	74	38.71	31.87	10.06	33.17	100	65	P	H
		5062.14	38.53	-15.47	54	30	31.73	9.99	33.19	100	65	A	H
	*	5240	99.63	-	-	91.21	31.4	10.17	33.15	100	65	P	H
		5240	93.79	-	-	85.37	31.4	10.17	33.15	100	65	A	H
		5436.48	46.34	-27.66	74	37.37	31.7	10.38	33.11	100	65	P	H
		5447.96	37.02	-16.98	54	28.05	31.7	10.38	33.11	100	65	A	H
		5118.04	46.89	-27.11	74	38.18	31.83	10.06	33.18	102	97	P	V
		5054.6	38.34	-15.66	54	29.81	31.73	9.99	33.19	102	97	A	V
	*	5240	94.18	-	-	85.76	31.4	10.17	33.15	102	97	P	V
		5240	87.31	-	-	78.89	31.4	10.17	33.15	102	97	A	V
		5388.6	45.27	-28.73	74	36.48	31.57	10.34	33.12	102	97	P	V
		5418	37.02	-16.98	54	28.1	31.7	10.34	33.12	102	97	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 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		10360	48.65	-19.55	68.2	48.14	39.67	14.23	53.39	152	260	P	H
		15540	50.69	-23.31	74	45.24	38.5	18.86	51.91	189	238	P	H
		10360	48.19	-20.01	68.2	47.68	39.67	14.23	53.39	152	260	P	V
		15540	50.23	-23.77	74	44.78	38.5	18.86	51.91	189	238	P	V
802.11a CH 44 5220MHz		10440	48.45	-19.75	68.2	47.81	39.8	14.29	53.45	150	230	P	H
		15660	50.9	-23.1	74	45.79	38.2	18.87	51.96	160	225	P	H
		10440	47.29	-20.91	68.2	46.65	39.8	14.29	53.45	150	230	P	V
		15660	50.2	-23.8	74	45.09	38.2	18.87	51.96	160	225	P	V
802.11a CH 48 5240MHz		10480	49.22	-18.98	68.2	48.59	39.8	14.32	53.49	150	289	P	H
		15720	50.16	-23.84	74	45.3	37.98	18.87	51.99	150	291	P	H
		10480	47.96	-20.24	68.2	47.33	39.8	14.32	53.49	150	289	P	V
		15720	49.97	-24.03	74	45.11	37.98	18.87	51.99	150	291	P	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 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)
		5149.24	55.74	-18.26	74	46.95	31.9	10.06	33.17	100	68	P	H
		5149.5	45.92	-8.08	54	37.13	31.9	10.06	33.17	100	68	A	H
802.11n	*	5180	99.86	-	-	91.23	31.7	10.09	33.16	100	68	P	H
HT20		5180	93.77	-	-	85.14	31.7	10.09	33.16	100	68	A	H
CH 36		5148.46	49.31	-24.69	74	40.52	31.9	10.06	33.17	100	96	P	V
5180MHz		5145.86	40.35	-13.65	54	31.56	31.9	10.06	33.17	100	96	A	V
	*	5180	93.47	-	-	84.84	31.7	10.09	33.16	100	96	P	V
		5180	87.39	-	-	78.76	31.7	10.09	33.16	100	96	A	V
		5121.16	47.43	-26.57	74	38.71	31.83	10.06	33.17	100	67	P	H
		5149.5	38.64	-15.36	54	29.85	31.9	10.06	33.17	100	67	A	H
	*	5220	99.52	-	-	91.05	31.5	10.13	33.16	100	67	P	H
		5220	93.3	-	-	84.83	31.5	10.13	33.16	100	67	A	H
802.11n		5434.24	45.47	-28.53	74	36.5	31.7	10.38	33.11	100	67	P	H
HT20		5456.92	37.07	-16.93	54	28.1	31.7	10.38	33.11	100	67	A	H
CH 44		5115.18	46.86	-27.14	74	38.15	31.83	10.06	33.18	100	74	P	V
5220MHz		5077.22	38.32	-15.68	54	29.71	31.77	10.02	33.18	100	74	A	V
	*	5220	91.81	-	-	83.34	31.5	10.13	33.16	100	74	P	V
		5220	86.08	-	-	77.61	31.5	10.13	33.16	100	74	A	V
		5369	45.47	-28.53	74	36.87	31.43	10.3	33.13	100	74	P	V
		5428.92	36.89	-17.11	54	27.92	31.7	10.38	33.11	100	74	A	V

		5137.54	47.23	-26.77	74	38.47	31.87	10.06	33.17	100	68	P	H
		5039	38.64	-15.36	54	30.14	31.7	9.99	33.19	100	68	A	H
	*	5240	100.14	-	-	91.72	31.4	10.17	33.15	100	68	P	H
		5240	93.29	-	-	84.87	31.4	10.17	33.15	100	68	A	H
802.11n		5441.52	45.26	-28.74	74	36.29	31.7	10.38	33.11	100	68	P	H
HT20		5425.56	36.9	-17.1	54	27.97	31.7	10.34	33.11	100	68	A	H
CH 48		5053.3	48.03	-25.97	74	39.53	31.7	9.99	33.19	120	135	P	V
5240MHz		5072.8	38.32	-15.68	54	29.74	31.77	9.99	33.18	120	135	A	V
	*	5240	91.93	-	-	83.51	31.4	10.17	33.15	120	135	P	V
		5240	86.02	-	-	77.6	31.4	10.17	33.15	120	135	A	V
		5433.4	45	-29	74	36.03	31.7	10.38	33.11	120	135	P	V
		5439.84	36.88	-17.12	54	27.91	31.7	10.38	33.11	120	135	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 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)
802.11n		10360	48.35	-19.85	68.2	47.84	39.67	14.23	53.39	152	260	P	H
HT20		15540	50.89	-23.11	74	45.44	38.5	18.86	51.91	189	238	P	H
CH 36		10360	49.26	-18.94	68.2	48.75	39.67	14.23	53.39	152	260	P	V
5180MHz		15540	50.63	-23.37	74	45.18	38.5	18.86	51.91	189	238	P	V
802.11n		10440	48.21	-19.99	68.2	47.57	39.8	14.29	53.45	150	230	P	H
HT20		15660	50.62	-23.38	74	45.51	38.2	18.87	51.96	160	225	P	H
CH 44		10440	48.46	-19.74	68.2	47.82	39.8	14.29	53.45	150	230	P	V
5220MHz		15660	50.57	-23.43	74	45.46	38.2	18.87	51.96	160	225	P	V
802.11n		10480	48.1	-20.1	68.2	47.47	39.8	14.32	53.49	150	289	P	H
HT20		15720	50.82	-23.18	74	45.96	37.98	18.87	51.99	150	291	P	H
CH 48		10480	47.8	-20.4	68.2	47.17	39.8	14.32	53.49	150	289	P	V
5240MHz		15720	50.57	-23.43	74	45.71	37.98	18.87	51.99	150	291	P	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 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)
		5148.46	57.11	-16.89	74	48.32	31.9	10.06	33.17	100	66	P	H
		5149.5	49.16	-4.84	54	40.37	31.9	10.06	33.17	100	66	A	H
	*	5190	98.34	-	-	89.71	31.7	10.09	33.16	100	66	P	H
		5190	92.01	-	-	83.38	31.7	10.09	33.16	100	66	A	H
802.11n		5390.56	46.89	-27.11	74	38.1	31.57	10.34	33.12	100	66	P	H
HT40		5437.32	37.78	-16.22	54	28.81	31.7	10.38	33.11	100	66	A	H
CH 38		5149.76	50.39	-23.61	74	41.6	31.9	10.06	33.17	114	98	P	V
5190MHz		5149.5	43.3	-10.7	54	34.51	31.9	10.06	33.17	114	98	A	V
	*	5190	91.75	-	-	83.12	31.7	10.09	33.16	114	98	P	V
		5190	86.44	-	-	77.81	31.7	10.09	33.16	114	98	A	V
		5393.92	47.05	-26.95	74	38.26	31.57	10.34	33.12	114	98	P	V
		5441.8	37.85	-16.15	54	28.88	31.7	10.38	33.11	114	98	A	V
		5143.26	48.61	-25.39	74	39.82	31.9	10.06	33.17	100	66	P	H
		5144.3	40.98	-13.02	54	32.19	31.9	10.06	33.17	100	66	A	H
	*	5230	96.86	-	-	88.48	31.4	10.13	33.15	100	66	P	H
		5230	90.85	-	-	82.47	31.4	10.13	33.15	100	66	A	H
802.11n		5428.92	45.51	-28.49	74	36.54	31.7	10.38	33.11	100	66	P	H
HT40		5453.56	38.01	-15.99	54	29.04	31.7	10.38	33.11	100	66	A	H
CH 46		5125.32	46.37	-27.63	74	37.61	31.87	10.06	33.17	103	98	P	V
5230MHz		5149.76	39.4	-14.6	54	30.61	31.9	10.06	33.17	103	98	A	V
	*	5230	90.81	-	-	82.43	31.4	10.13	33.15	103	98	P	V
		5230	84.56	-	-	76.18	31.4	10.13	33.15	103	98	A	V
		5385.52	45.88	-28.12	74	37.13	31.57	10.3	33.12	103	98	P	V
		5436.2	37.42	-16.58	54	28.45	31.7	10.38	33.11	103	98	A	V

Band 1 5150~5250MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		10380	49.42	-18.78	68.2	48.84	39.73	14.26	53.41	150	360	P	H
HT40		15570	49.82	-24.18	74	44.49	38.4	18.86	51.93	155	360	P	H
CH 38		10380	48.47	-19.73	68.2	47.89	39.73	14.26	53.41	150	360	P	V
5190MHz		15570	50.4	-23.6	74	45.07	38.4	18.86	51.93	155	360	P	V
802.11n		10460	50.11	-18.09	68.2	49.45	39.8	14.32	53.46	150	360	P	H
HT40		15690	50.05	-23.95	74	45.03	38.13	18.87	51.98	150	225	P	H
CH 48		10460	48.17	-20.03	68.2	47.51	39.8	14.32	53.46	150	360	P	V
5230MHz		15690	50.31	-23.69	74	45.29	38.13	18.87	51.98	150	225	P	V

Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (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)
802.11ac VHT80 CH 42 5210MHz		5146.38	51.6	-22.4	74	42.81	31.9	10.06	33.17	100	66	P	H
		5146.64	45.99	-8.01	54	37.2	31.9	10.06	33.17	100	66	A	H
	*	5210	93.03	-	-	84.56	31.5	10.13	33.16	100	66	P	H
		5210	88.04	-	-	79.57	31.5	10.13	33.16	100	66	A	H
		5456.88	45.57	-28.43	74	36.6	31.7	10.38	33.11	100	66	P	H
		5358.96	39.4	-14.6	54	30.93	31.3	10.3	33.13	100	66	A	H
		5146.64	48.33	-25.67	74	39.54	31.9	10.06	33.17	102	246	P	V
		5142.48	41.76	-12.24	54	32.97	31.9	10.06	33.17	102	246	A	V
		5210	86.36	-	-	77.89	31.5	10.13	33.16	102	246	P	V
		5210	80.94	-	-	72.47	31.5	10.13	33.16	102	246	A	V
		5401.2	46.08	-27.92	74	37.16	31.7	10.34	33.12	102	246	P	V
		5458.32	39.05	-14.95	54	30.08	31.7	10.38	33.11	102	246	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 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		10420	48.25	-19.95	68.2	47.59	39.8	14.29	53.43	150	230	P	H
VHT80		15630	50.26	-23.74	74	45.12	38.23	18.87	51.96	160	225	P	H
CH 42		10420	48.72	-19.48	68.2	48.06	39.8	14.29	53.43	150	230	P	V
5210MHz		15630	50.92	-23.08	74	45.78	38.23	18.87	51.96	160	225	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 52 5260MHz		5139.65	47.42	-26.58	74	38.63	31.9	10.06	33.17	100	67	P	H
		5137.9	38.71	-15.29	54	29.95	31.87	10.06	33.17	100	67	A	H
	*	5260	100.08	-	-	91.76	31.3	10.17	33.15	100	67	P	H
		5260	93.49	-	-	85.17	31.3	10.17	33.15	100	67	A	H
		5386.8	45.3	-28.7	74	36.55	31.57	10.3	33.12	100	67	P	H
		5459.76	37.4	-16.6	54	28.43	31.7	10.38	33.11	100	67	A	H
		5093.1	47.01	-26.99	74	38.37	31.8	10.02	33.18	114	97	P	V
		5065.45	38.55	-15.45	54	30.02	31.73	9.99	33.19	114	97	A	V
	*	5260	93.4	-	-	85.08	31.3	10.17	33.15	114	97	P	V
		5260	86.56	-	-	78.24	31.3	10.17	33.15	114	97	A	V
		5454.72	46.13	-27.87	74	37.16	31.7	10.38	33.11	114	97	P	V
		5448.48	37.08	-16.92	54	28.11	31.7	10.38	33.11	114	97	A	V
802.11a CH 60 5300MHz		5089.6	47.56	-26.44	74	38.92	31.8	10.02	33.18	100	63	P	H
		5111.3	38.86	-15.14	54	30.19	31.83	10.02	33.18	100	63	A	H
	*	5300	99.65	-	-	91.28	31.3	10.21	33.14	100	63	P	H
		5300	93.65	-	-	85.28	31.3	10.21	33.14	100	63	A	H
		5351.28	45.58	-28.42	74	37.11	31.3	10.3	33.13	100	63	P	H
		5350.56	38.4	-15.6	54	29.93	31.3	10.3	33.13	100	63	A	H
		5058.1	47.34	-26.66	74	38.81	31.73	9.99	33.19	102	135	P	V
		5068.95	38.66	-15.34	54	30.12	31.73	9.99	33.18	102	135	A	V
	*	5300	92.35	-	-	83.98	31.3	10.21	33.14	102	135	P	V
		5300	86.33	-	-	77.96	31.3	10.21	33.14	102	135	A	V
		5445.12	45.22	-28.78	74	36.25	31.7	10.38	33.11	102	135	P	V
		5450.16	37.11	-16.89	54	28.14	31.7	10.38	33.11	102	135	A	V

802.11a CH 64 5320MHz	*	5320	99.36	-	-	90.94	31.3	10.26	33.14	100	63	P	H
		5320	93.06	-	-	84.64	31.3	10.26	33.14	100	63	A	H
		5355.04	49.42	-24.58	74	40.95	31.3	10.3	33.13	100	63	P	H
		5350.4	41.52	-12.48	54	33.05	31.3	10.3	33.13	100	63	A	H
	*	5320	91.5	-	-	83.08	31.3	10.26	33.14	100	137	P	V
		5320	85.91	-	-	77.49	31.3	10.26	33.14	100	137	A	V
		5357.92	47.39	-26.61	74	38.92	31.3	10.3	33.13	100	137	P	V
		5351.36	37.85	-16.15	54	29.38	31.3	10.3	33.13	100	137	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 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		10520	48.48	-19.72	68.2	47.81	39.8	14.35	53.48	150	220	P	H
		15780	50.04	-23.96	74	45.54	37.63	18.88	52.01	159	345	P	H
		10520	50.57	-17.63	68.2	49.9	39.8	14.35	53.48	150	220	P	V
		15780	49.66	-24.34	74	45.16	37.63	18.88	52.01	159	345	P	V
802.11a CH 60 5300MHz		10600	48.75	-25.25	74	47.92	39.8	14.41	53.38	185	215	P	H
		15900	49.88	-24.12	74	45.64	37.4	18.9	52.06	196	190	P	H
		10600	49.52	-24.48	74	48.69	39.8	14.41	53.38	185	215	P	V
		15900	49.36	-24.64	74	45.12	37.4	18.9	52.06	196	190	P	V
802.11a CH 64 5320MHz		10640	49.02	-24.98	74	48.11	39.8	14.44	53.33	152	135	P	H
		15960	48.54	-25.46	74	44.32	37.4	18.91	52.09	173	245	P	H
		10640	48.91	-25.09	74	48	39.8	14.44	53.33	152	135	P	V
		15960	50.06	-23.94	74	45.84	37.4	18.91	52.09	173	245	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 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)
		5098.35	47.64	-26.36	74	39	31.8	10.02	33.18	100	67	P	H
		5102.2	38.71	-15.29	54	30.07	31.8	10.02	33.18	100	67	A	H
	*	5260	99.81	-	-	91.49	31.3	10.17	33.15	100	67	P	H
		5260	92.91	-	-	84.59	31.3	10.17	33.15	100	67	A	H
802.11n		5406.24	45.18	-28.82	74	36.26	31.7	10.34	33.12	100	67	P	H
HT20		5446.56	37.28	-16.72	54	28.31	31.7	10.38	33.11	100	67	A	H
CH 52		5050.75	46.98	-27.02	74	38.48	31.7	9.99	33.19	100	97	P	V
5260MHz		5059.15	38.65	-15.35	54	30.12	31.73	9.99	33.19	100	97	A	V
	*	5260	91.49	-	-	83.17	31.3	10.17	33.15	100	97	P	V
		5260	85.67	-	-	77.35	31.3	10.17	33.15	100	97	A	V
		5434.56	44.88	-29.12	74	35.91	31.7	10.38	33.11	100	97	P	V
		5439.6	37.01	-16.99	54	28.04	31.7	10.38	33.11	100	97	A	V
		5052.5	48.06	-25.94	74	39.56	31.7	9.99	33.19	100	64	P	H
		5064.4	38.71	-15.29	54	30.18	31.73	9.99	33.19	100	64	A	H
	*	5300	98.85	-	-	90.48	31.3	10.21	33.14	100	64	P	H
		5300	92.7	-	-	84.33	31.3	10.21	33.14	100	64	A	H
802.11n		5356.56	45.85	-28.15	74	37.38	31.3	10.3	33.13	100	64	P	H
HT20		5351.76	37.79	-16.21	54	29.32	31.3	10.3	33.13	100	64	A	H
CH 60		5106.75	47.3	-26.7	74	38.63	31.83	10.02	33.18	101	136	P	V
5300MHz		5073.85	38.58	-15.42	54	30	31.77	9.99	33.18	101	136	A	V
	*	5300	92.09	-	-	83.72	31.3	10.21	33.14	101	136	P	V
		5300	85.28	-	-	76.91	31.3	10.21	33.14	101	136	A	V
		5448	45.79	-28.21	74	36.82	31.7	10.38	33.11	101	136	P	V
		5446.32	37.07	-16.93	54	28.1	31.7	10.38	33.11	101	136	A	V

802.11n HT20 CH 64 5320MHz	*	5320	99.25	-	-	90.83	31.3	10.26	33.14	100	239	P	H
		5320	93.6	-	-	85.18	31.3	10.26	33.14	100	239	A	H
		5355.52	48.34	-25.66	74	39.87	31.3	10.3	33.13	100	239	P	H
		5350.08	41.21	-12.79	54	32.74	31.3	10.3	33.13	100	239	A	H
	*	5320	91.99	-	-	83.57	31.3	10.26	33.14	100	66	P	V
		5320	86.21	-	-	77.79	31.3	10.26	33.14	100	66	A	V
		5456.8	46.9	-27.1	74	37.93	31.7	10.38	33.11	100	66	P	V
		5350.24	37.18	-16.82	54	28.71	31.3	10.3	33.13	100	66	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 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)
802.11n		10520	48.37	-19.83	68.2	47.7	39.8	14.35	53.48	150	220	P	H
HT20		15780	49.97	-24.03	74	45.47	37.63	18.88	52.01	159	345	P	H
CH 52		10520	48.16	-20.04	68.2	47.49	39.8	14.35	53.48	150	220	P	V
5260MHz		15780	50.63	-23.37	74	46.13	37.63	18.88	52.01	159	345	P	V
802.11n		10600	48.54	-25.46	74	47.71	39.8	14.41	53.38	185	215	P	H
HT20		15900	50.66	-23.34	74	46.42	37.4	18.9	52.06	196	190	P	H
CH 60		10600	48.53	-25.47	74	47.7	39.8	14.41	53.38	185	215	P	V
5300MHz		15900	49.4	-24.6	74	45.16	37.4	18.9	52.06	196	190	P	V
802.11n		10640	48.81	-25.19	74	47.9	39.8	14.44	53.33	152	135	P	H
HT20		15960	50.51	-23.49	74	46.29	37.4	18.91	52.09	173	245	P	H
CH 64		10640	49.13	-24.87	74	48.22	39.8	14.44	53.33	152	135	P	V
5320MHz		15960	48.83	-25.17	74	44.61	37.4	18.91	52.09	173	245	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 HT40 (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)
802.11n HT40 CH 54 5270MHz		5072.8	46.8	-27.2	74	38.22	31.77	9.99	33.18	100	65	P	H
		5128.45	39.54	-14.46	54	30.78	31.87	10.06	33.17	100	65	A	H
	*	5270	96.22	-	-	87.9	31.3	10.17	33.15	100	65	P	H
		5270	90.44	-	-	82.12	31.3	10.17	33.15	100	65	A	H
		5453.04	46.42	-27.58	74	37.45	31.7	10.38	33.11	100	65	P	H
		5353.68	38.92	-15.08	54	30.45	31.3	10.3	33.13	100	65	A	H
		5028.7	46.74	-27.26	74	38.35	31.63	9.95	33.19	111	98	P	V
		5073.85	39.39	-14.61	54	30.81	31.77	9.99	33.18	111	98	A	V
	*	5270	90.5	-	-	82.18	31.3	10.17	33.15	111	98	P	V
		5270	84.14	-	-	75.82	31.3	10.17	33.15	111	98	A	V
		5437.92	44.96	-29.04	74	35.99	31.7	10.38	33.11	111	98	P	V
		5436.48	37.82	-16.18	54	28.85	31.7	10.38	33.11	111	98	A	V
802.11n HT40 CH 62 5310MHz		5087.85	46.58	-27.42	74	37.97	31.77	10.02	33.18	100	66	P	H
		5102.9	39.61	-14.39	54	30.97	31.8	10.02	33.18	100	66	A	H
	*	5310	96.65	-	-	88.23	31.3	10.26	33.14	100	66	P	H
		5310	90.39	-	-	81.97	31.3	10.26	33.14	100	66	A	H
		5357.04	56.59	-17.41	74	48.12	31.3	10.3	33.13	100	66	P	H
		5350.32	50.32	-3.68	54	41.85	31.3	10.3	33.13	100	66	A	H
		5033.6	47.34	-26.66	74	38.95	31.63	9.95	33.19	105	98	P	V
		5072.8	39.31	-14.69	54	30.73	31.77	9.99	33.18	105	98	A	V
	*	5310	89.8	-	-	81.38	31.3	10.26	33.14	105	98	P	V
		5310	83.59	-	-	75.17	31.3	10.26	33.14	105	98	A	V
		5350.8	50.19	-23.81	74	41.72	31.3	10.3	33.13	105	98	P	V
		5350.8	43.63	-10.37	54	35.16	31.3	10.3	33.13	105	98	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 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)
802.11n		10540	49.19	-19.01	68.2	48.47	39.8	14.38	53.46	150	220	P	H
HT40		15810	49.51	-24.49	74	45.24	37.4	18.89	52.02	168	345	P	H
CH 54		10540	48.4	-19.8	68.2	47.68	39.8	14.38	53.46	150	220	P	V
5270MHz		15810	49.23	-24.77	74	44.96	37.4	18.89	52.02	168	345	P	V
802.11n		10620	49.07	-24.93	74	48.19	39.8	14.44	53.36	150	220	P	H
HT40		15930	48.48	-25.52	74	44.25	37.4	18.9	52.07	160	100	P	H
CH 62		10620	49.48	-24.52	74	48.6	39.8	14.44	53.36	150	220	P	V
5310MHz		15930	48.74	-25.26	74	44.51	37.4	18.9	52.07	160	100	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (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)
802.11ac VHT80 CH 58 5290MHz		5144.55	49.14	-24.86	74	40.35	31.9	10.06	33.17	100	65	P	H
		5143.15	41.97	-12.03	54	33.18	31.9	10.06	33.17	100	65	A	H
	*	5290	92.49	-	-	84.12	31.3	10.21	33.14	100	65	P	H
		5290	88.42	-	-	80.05	31.3	10.21	33.14	100	65	A	H
		5356.08	52.56	-21.44	74	44.09	31.3	10.3	33.13	100	65	P	H
		5351.76	49.32	-24.68	74	40.85	31.3	10.3	33.13	100	65	A	H
		5052.85	46.71	-27.29	74	38.21	31.7	9.99	33.19	101	245	P	V
		5119	41	-13	54	32.28	31.83	10.06	33.17	101	245	A	V
	*	5290	85.54	-	-	77.17	31.3	10.21	33.14	101	245	P	V
		5290	80.34	-	-	71.97	31.3	10.21	33.14	101	245	A	V
		5360.64	47.37	-26.63	74	38.77	31.43	10.3	33.13	101	245	P	V
		5353.2	42.26	-31.74	74	33.79	31.3	10.3	33.13	101	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 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac		10580	47.84	-20.36	68.2	47.03	39.8	14.41	53.4	150	276	P	H
VHT80		15870	49.12	-24.88	74	44.88	37.4	18.89	52.05	150	241	P	H
CH 58		10580	48.18	-20.02	68.2	47.37	39.8	14.41	53.4	150	276	P	V
5290MHz		15870	49.3	-24.7	74	45.06	37.4	18.89	52.05	150	241	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 (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)
802.11a CH 100 5500MHz		5457.52	47.69	-26.31	74	38.72	31.7	10.38	33.11	100	58	P	H
		5467.12	48.84	-19.36	68.2	39.75	31.77	10.43	33.11	100	58	A	H
		5459.12	39.92	-14.08	54	30.95	31.7	10.38	33.11	100	58	P	H
	*	5500	99.84	-	-	90.61	31.9	10.43	33.1	100	58	A	H
		5500	93.65	-	-	84.42	31.9	10.43	33.1	100	58	P	H
		5433.04	45.52	-28.48	74	36.55	31.7	10.38	33.11	103	330	P	V
		5463.76	46.57	-21.63	68.2	37.53	31.77	10.38	33.11	103	330	A	V
		5457.52	37.64	-16.36	54	28.67	31.7	10.38	33.11	103	330	P	V
	*	5500	92.14	-	-	82.91	31.9	10.43	33.1	103	330	A	V
		5500	85.93	-	-	76.7	31.9	10.43	33.1	103	330	P	V
802.11a CH 116 5580MHz		5350	45.84	-22.36	68.2	37.37	31.3	10.3	33.13	100	60	A	H
		5467.36	45.07	-23.13	68.2	35.98	31.77	10.43	33.11	100	60	P	H
		5446.72	37.17	-16.83	54	28.2	31.7	10.38	33.11	100	60	A	H
	*	5580	99.4	-	-	90.25	31.73	10.52	33.1	100	60	P	H
		5580	93.39	-	-	84.24	31.73	10.52	33.1	100	60	A	H
		5762.48	46.88	-21.32	68.2	37.23	32.13	10.62	33.1	100	60	P	H
		5452.48	44.34	-29.66	74	35.37	31.7	10.38	33.11	100	336	A	V
		5469.52	45.73	-22.47	68.2	36.64	31.77	10.43	33.11	100	336	P	V
		5457.28	37	-17	54	28.03	31.7	10.38	33.11	100	336	A	V
	*	5580	92.58	-	-	83.43	31.73	10.52	33.1	100	336	P	V
		5580	86.32	-	-	77.17	31.73	10.52	33.1	100	336	A	V
		5753.345	46.57	-21.63	68.2	36.92	32.13	10.62	33.1	100	336	P	V

802.11a CH 140 5700MHz	*	5700	99.96	-	-	90.45	32	10.61	33.1	100	60	P	H
		5700	93.83	-	-	84.32	32	10.61	33.1	100	60	A	H
		5725.72	55.37	-12.83	68.2	45.79	32.07	10.61	33.1	100	60	P	H
	*	5700	91.94	-	-	82.43	32	10.61	33.1	107	350	P	V
		5700	85.87	-	-	76.36	32	10.61	33.1	107	350	A	V
		5726.2	50.1	-18.1	68.2	40.52	32.07	10.61	33.1	107	350	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 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		11000	49.49	-24.51	74	47.57	40.1	14.72	52.9	163	230	P	H
		16500	50.38	-17.82	68.2	43.24	38.5	20.34	51.7	178	296	P	H
		11000	49.26	-24.74	74	47.34	40.1	14.72	52.9	163	230	P	V
		16500	50.84	-17.36	68.2	43.7	38.5	20.34	51.7	178	296	P	V
802.11a CH 116 5580MHz		11160	49.2	-24.8	74	47.46	39.67	14.87	52.8	170	200	P	H
		16740	50.46	-17.74	68.2	41.38	39.9	21.17	51.99	156	350	P	H
		11160	49.39	-24.61	74	47.65	39.67	14.87	52.8	170	200	P	V
		16740	50.73	-17.47	68.2	41.65	39.9	21.17	51.99	156	350	P	V
802.11a CH 140 5700MHz		11400	49.38	-24.62	74	47.08	39.9	15.06	52.66	157	285	P	H
		17100	50.4	-17.8	68.2	40.36	40.2	22.24	52.4	165	246	P	H
		11400	49.56	-24.44	74	47.26	39.9	15.06	52.66	157	285	P	V
		17100	50.58	-17.62	68.2	40.54	40.2	22.24	52.4	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 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)
		5460.08	46.68	-21.52	68.2	37.71	31.7	10.38	33.11	100	239	P	H
		5469.52	50.92	-17.28	68.2	41.83	31.77	10.43	33.11	100	239	P	H
		5459.44	40.32	-13.68	54	31.35	31.7	10.38	33.11	100	239	A	H
802.11n	*	5500	99.76	-	-	90.53	31.9	10.43	33.1	100	239	P	H
HT20		5500	94.27	-	-	85.04	31.9	10.43	33.1	100	239	A	H
CH 100		5379.44	45.73	-28.27	74	36.98	31.57	10.3	33.12	100	156	P	V
5500MHz		5470	46.8	-21.4	68.2	37.71	31.77	10.43	33.11	100	156	P	V
		5458.64	37.16	-16.84	54	28.19	31.7	10.38	33.11	100	156	A	V
	*	5500	91.73	-	-	82.5	31.9	10.43	33.1	100	156	P	V
		5500	85.47	-	-	76.24	31.9	10.43	33.1	100	156	A	V
		5392.72	46.51	-27.49	74	37.72	31.57	10.34	33.12	100	241	P	H
		5468.8	45.93	-22.27	68.2	36.84	31.77	10.43	33.11	100	241	P	H
		5454.16	37.07	-16.93	54	28.1	31.7	10.38	33.11	100	241	A	H
	*	5580	99.64	-	-	90.49	31.73	10.52	33.1	100	241	P	H
802.11n		5580	93.75	-	-	84.6	31.73	10.52	33.1	100	241	A	H
HT20		5750.195	46.7	-21.5	68.2	37.08	32.1	10.62	33.1	100	241	P	H
CH 116		5434.72	45.75	-28.25	74	36.78	31.7	10.38	33.11	100	158	P	V
5580MHz		5470	44.18	-24.02	68.2	35.09	31.77	10.43	33.11	100	158	P	V
		5457.04	36.97	-17.03	54	28	31.7	10.38	33.11	100	158	A	V
	*	5580	91.66	-	-	82.51	31.73	10.52	33.1	100	158	P	V
		5580	85.71	-	-	76.56	31.73	10.52	33.1	100	158	A	V
		5732.24	47.43	-20.77	68.2	37.85	32.07	10.61	33.1	100	158	P	V

802.11n HT20 CH 140 5700MHz	*	5700	99.89	-	-	90.38	32	10.61	33.1	100	240	P	H
		5700	95.18	-	-	85.67	32	10.61	33.1	100	240	A	H
		5725.72	54.44	-13.76	68.2	44.86	32.07	10.61	33.1	100	240	P	H
	*	5700	91.56	-	-	82.05	32	10.61	33.1	100	157	P	V
		5700	85.93	-	-	76.42	32	10.61	33.1	100	157	A	V
		5725.4	47.1	-21.1	68.2	37.52	32.07	10.61	33.1	100	157	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 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)
802.11n		11000	49.54	-24.46	74	47.62	40.1	14.72	52.9	163	230	P	H
HT20		16500	50.82	-17.38	68.2	43.68	38.5	20.34	51.7	178	296	P	H
CH 100		11000	49.11	-24.89	74	47.19	40.1	14.72	52.9	163	230	P	V
5500MHz		16500	50.15	-18.05	68.2	43.01	38.5	20.34	51.7	178	296	P	V
802.11n		11160	49.4	-24.6	74	47.66	39.67	14.87	52.8	170	200	P	H
HT20		16740	50.38	-17.82	68.2	41.3	39.9	21.17	51.99	156	350	P	H
CH 116		11160	49.2	-24.8	74	47.46	39.67	14.87	52.8	170	200	P	V
5580MHz		16740	50.77	-17.43	68.2	41.69	39.9	21.17	51.99	156	350	P	V
802.11n		11400	49.65	-24.35	74	47.35	39.9	15.06	52.66	157	285	P	H
HT20		17100	50.8	-17.4	68.2	40.76	40.2	22.24	52.4	165	246	P	H
CH 140		11400	49.93	-24.07	74	47.63	39.9	15.06	52.66	157	285	P	V
5700MHz		17100	50.99	-17.21	68.2	40.95	40.2	22.24	52.4	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 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)
		5456.08	49.77	-24.23	74	40.8	31.7	10.38	33.11	101	60	P	H
		5469.52	54.59	-13.61	68.2	45.5	31.77	10.43	33.11	101	60	P	H
		5459.92	43.52	-10.48	54	34.55	31.7	10.38	33.11	101	60	A	H
	*	5510	96.64	-	-	87.37	31.9	10.47	33.1	101	60	P	H
802.11n		5510	90.99	-	-	81.72	31.9	10.47	33.1	101	60	A	H
HT40		5730.665	47.9	-20.3	68.2	38.32	32.07	10.61	33.1	101	60	P	H
CH 102		5459.2	46.82	-27.18	74	37.85	31.7	10.38	33.11	112	133	P	V
5510MHz		5468.56	47.67	-20.53	68.2	38.58	31.77	10.43	33.11	112	133	P	V
		5459.2	38.96	-15.04	54	29.99	31.7	10.38	33.11	112	133	A	V
	*	5510	88.93	-	-	79.66	31.9	10.47	33.1	112	133	P	V
		5510	83.09	-	-	73.82	31.9	10.47	33.1	112	133	A	V
		5752.085	47.65	-20.55	68.2	38	32.13	10.62	33.1	112	133	P	V
		5414.8	45.89	-28.11	74	36.97	31.7	10.34	33.12	100	60	P	H
		5469.04	45.7	-22.5	68.2	36.61	31.77	10.43	33.11	100	60	P	H
		5454.88	38.78	-15.22	54	29.81	31.7	10.38	33.11	100	60	A	H
	*	5550	97.3	-	-	88.18	31.7	10.52	33.1	100	60	P	H
802.11n		5550	91.1	-	-	81.98	31.7	10.52	33.1	100	60	A	H
HT40		5728.145	47.23	-20.97	68.2	37.65	32.07	10.61	33.1	100	60	P	H
CH 110		5365.6	45.11	-28.89	74	36.51	31.43	10.3	33.13	101	99	P	V
5550MHz		5464.72	44.27	-23.93	68.2	35.23	31.77	10.38	33.11	101	99	P	V
		5422.24	37.74	-16.26	54	28.82	31.7	10.34	33.12	101	99	A	V
	*	5550	87.91	-	-	78.79	31.7	10.52	33.1	101	99	P	V
		5550	81.47	-	-	72.35	31.7	10.52	33.1	101	99	A	V
		5738.54	46.75	-21.45	68.2	37.13	32.1	10.62	33.1	101	99	P	V

		5448.7	45.97	-28.03	74	37	31.7	10.38	33.11	100	62	P	H
		5466.9	45.54	-22.66	68.2	36.45	31.77	10.43	33.11	100	62	P	H
		5455.35	37.65	-16.35	54	28.68	31.7	10.38	33.11	100	62	P	H
	*	5670	97.33	-	-	87.99	31.85	10.59	33.1	100	62	P	H
802.11n		5670	91.18	-	-	81.84	31.85	10.59	33.1	100	62	A	H
HT40		5731.4	49.68	-18.52	68.2	40.1	32.07	10.61	33.1	100	62	P	H
CH 134		5376.95	45.33	-28.67	74	36.72	31.43	10.3	33.12	100	74	P	V
5670MHz		5461.65	43.78	-24.42	68.2	34.81	31.7	10.38	33.11	100	74	P	V
		5457.8	37.76	-16.24	54	28.79	31.7	10.38	33.11	100	74	A	V
	*	5670	89.12	-	-	79.78	31.85	10.59	33.1	100	74	P	V
		5670	83.19	-	-	73.85	31.85	10.59	33.1	100	74	A	V
		5733.15	47.2	-21	68.2	37.62	32.07	10.61	33.1	100	74	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 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)
802.11n		11020	49.27	-24.73	74	47.36	40.05	14.75	52.89	170	230	P	H
HT40		16530	50.3	-17.9	68.2	42.91	38.67	20.46	51.74	160	300	P	H
CH 102		11020	49.55	-24.45	74	47.64	40.05	14.75	52.89	170	230	P	V
5510MHz		16530	50.46	-17.74	68.2	43.07	38.67	20.46	51.74	160	300	P	V
802.11n		11100	49.53	-24.47	74	47.76	39.8	14.81	52.84	150	200	P	H
HT40		16650	50.78	-17.42	68.2	42.41	39.45	20.81	51.89	180	350	P	H
CH 110		11100	50.18	-23.82	74	48.41	39.8	14.81	52.84	150	200	P	V
5550MHz		16650	50.02	-18.18	68.2	41.65	39.45	20.81	51.89	180	350	P	V
802.11n		11340	49.35	-24.65	74	47.22	39.83	15	52.7	200	360	P	H
HT40		17010	50.77	-17.43	68.2	40.56	40.53	22	52.32	200	360	P	H
CH 134		11340	49.79	-24.21	74	47.66	39.83	15	52.7	200	360	P	V
5670MHz		17010	50.05	-18.15	68.2	39.84	40.53	22	52.32	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 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 VHT80 CH 106 5530MHz		5446	53.66	-20.34	74	44.69	31.7	10.38	33.11	100	20	P	H
		5463.76	54.79	-13.41	68.2	45.75	31.77	10.38	33.11	100	20	P	H
		5454.88	47.62	-6.38	54	38.65	31.7	10.38	33.11	100	20	A	H
	*	5530	93.19	-	-	83.99	31.83	10.47	33.1	100	20	P	H
		5530	87.54	-	-	78.34	31.83	10.47	33.1	100	20	A	H
		5735.39	47.58	-20.62	68.2	37.97	32.1	10.61	33.1	100	20	P	H
		5452.48	48.25	-25.75	74	39.28	31.7	10.38	33.11	100	336	P	V
		5464.72	49.54	-18.66	68.2	40.5	31.77	10.38	33.11	100	336	P	V
		5457.28	42.34	-11.66	54	33.37	31.7	10.38	33.11	100	336	A	V
	*	5530	86.5	-	-	77.3	31.83	10.47	33.1	100	336	P	V
		5530	80.94	-	-	71.74	31.83	10.47	33.1	100	336	A	V
		5762.795	46.68	-21.52	68.2	37.03	32.13	10.62	33.1	100	336	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 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		11060	50.82	-23.18	74	49	39.9	14.78	52.86	150	200	P	H
VHT80		16590	50.12	-18.08	68.2	42.3	38.92	20.7	51.8	180	350	P	H
CH 106		11060	50.21	-23.79	74	48.39	39.9	14.78	52.86	150	200	P	V
5530MHz		16590	50.12	-18.08	68.2	42.3	38.92	20.7	51.8	180	350	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

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 144 5720MHz		11440	50.75	-23.25	74	48.33	39.97	15.09	52.64	157	285	P	H
		17160	50.11	-18.09	68.2	40.02	40.2	22.36	52.47	165	246	P	H
		11440	49.25	-24.75	74	46.83	39.97	15.09	52.64	157	285	P	V
		17160	50.81	-17.39	68.2	40.72	40.2	22.36	52.47	165	246	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT20 (*Harmonic* @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		11440	50.63	-23.37	74	48.21	39.97	15.09	52.64	157	285	P	H
HT20		17160	50.54	-17.66	68.2	40.45	40.2	22.36	52.47	165	246	P	H
CH 144		11440	50.43	-23.57	74	48.01	39.97	15.09	52.64	157	285	P	V
5720MHz		17160	50.34	-17.86	68.2	40.25	40.2	22.36	52.47	165	246	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT40 (*Harmonic* @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		11420	50.42	-23.58	74	48.08	39.93	15.06	52.65	157	285	P	H
HT40		17130	50.32	-17.88	68.2	40.19	40.2	22.36	52.43	165	246	P	H
CH 142		11420	50.65	-23.35	74	48.31	39.93	15.06	52.65	157	285	P	V
5710MHz		17130	50.99	-17.21	68.2	40.86	40.2	22.36	52.43	165	246	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11ac VHT80 (*Harmonic* @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac		11380	50.37	-23.63	74	48.13	39.88	15.03	52.67	157	285	P	H
VHT80		17070	50.71	-17.49	68.2	40.63	40.33	22.12	52.37	165	246	P	H
CH 138		11380	50.18	-23.82	74	47.94	39.88	15.03	52.67	157	285	P	V
5690MHz		17070	50.49	-17.71	68.2	40.41	40.33	22.12	52.37	165	246	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11n HT40 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 LF		30	25.93	-14.07	40	31.87	24.8	0.56	31.3	100	0	P	H
		80.44	20.97	-19.03	40	38.24	13.4	0.93	31.6	-	-	P	H
		131.85	23.67	-19.83	43.5	36.5	17.46	1.19	31.48	-	-	P	H
		231.76	23.61	-22.39	46	36.96	16.62	1.59	31.56	-	-	P	H
		331.67	23.52	-22.48	46	32.77	20.17	1.92	31.34	-	-	P	H
		882.63	29.15	-16.85	46	28.42	28.91	3.28	31.46	-	-	P	H
		30	29.55	-10.45	40	35.49	24.8	0.56	31.3	100	42	P	V
		81.41	22.58	-17.42	40	39.7	13.54	0.94	31.6	-	-	P	V
		130.88	26.88	-16.62	43.5	39.72	17.45	1.19	31.48	-	-	P	V
		240.49	24.51	-21.49	46	36.88	17.64	1.62	31.63	-	-	P	V
		566.41	26.83	-19.17	46	30.5	25.15	2.59	31.41	-	-	P	V
		912.7	29.86	-16.14	46	28.77	29.2	3.34	31.45	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Note symbol

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

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

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

1. 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)

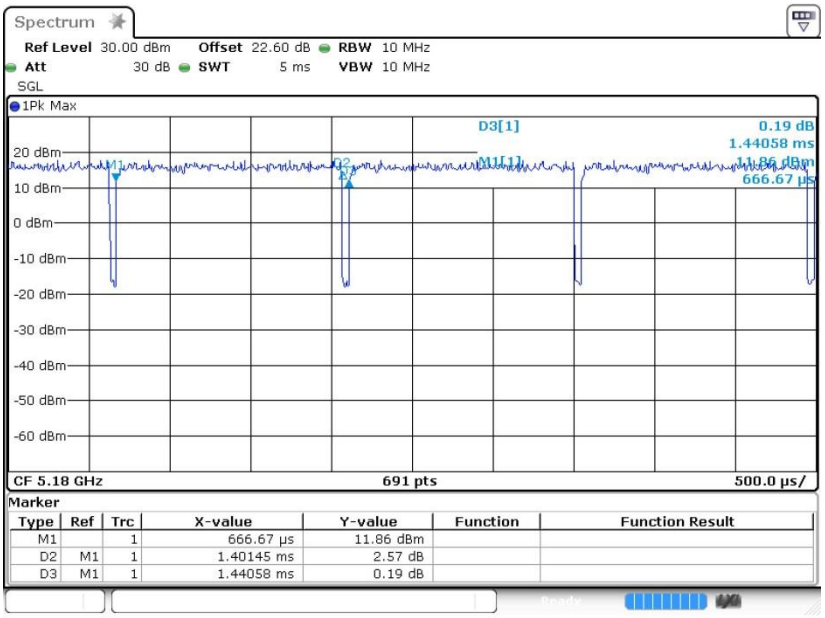
= -10.46(dB)

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

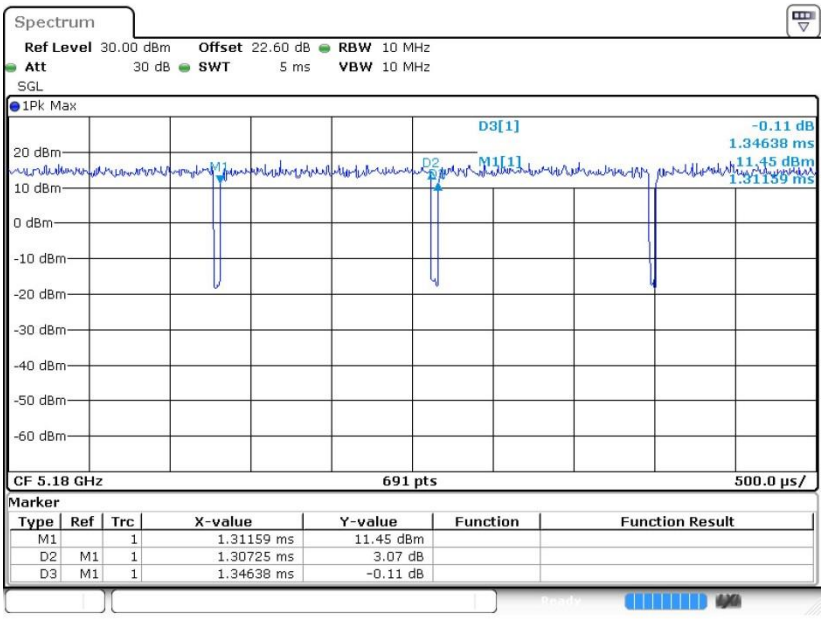
Appendix C. Duty Cycle Plots

Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11a	97.28	1.4015	0.7135	1kHz
802.11n HT20	97.09	1.3073	0.7650	1kHz
802.11n HT40	94.12	0.6493	1.5402	3kHz
802.11ac VHT80	88.49	0.3232	3.0942	10kHz

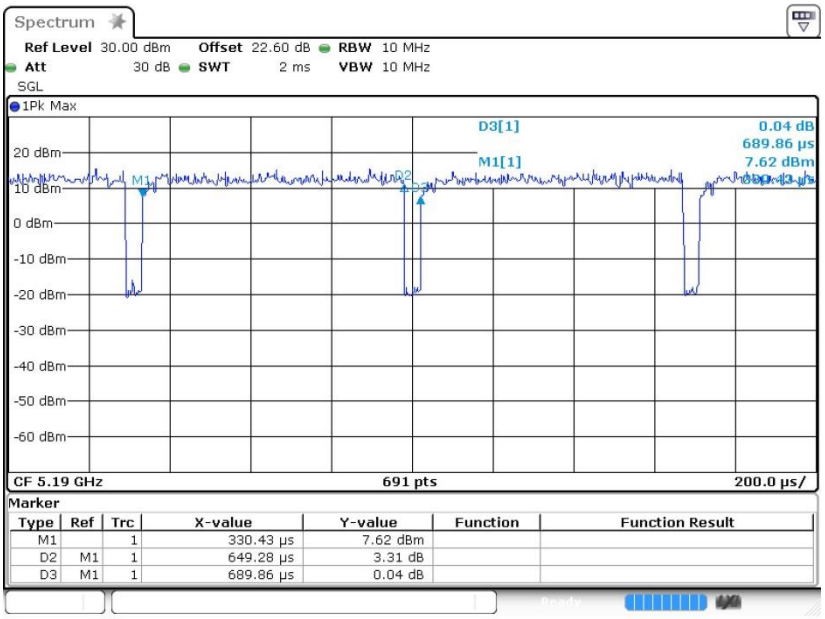
802.11a



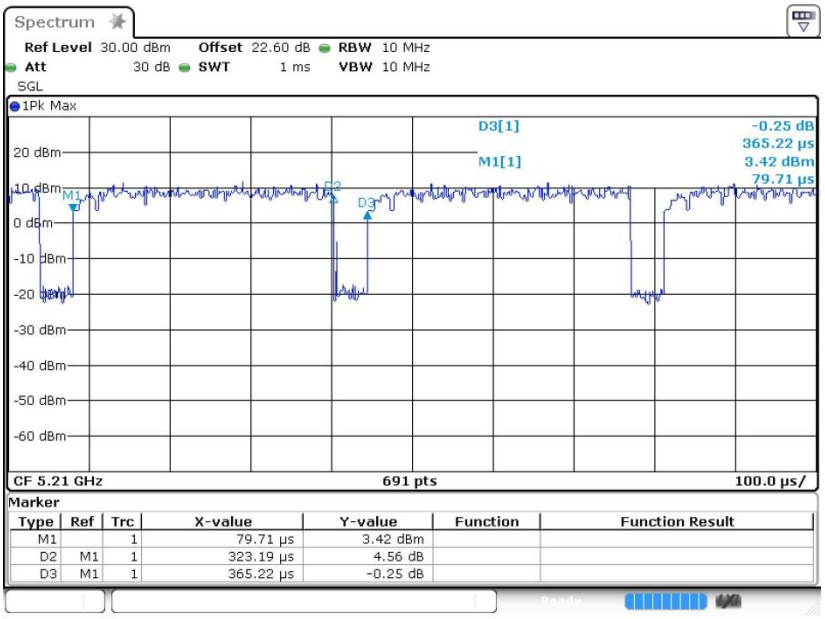
802.11n HT20



802.11n HT40



802.11ac VHT80



Appendix E. Reference Report

Please refer to Sporton report number FR941109E and FZ941109 which are issued separately.