



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. 06, 2019 and testing was completed on Nov. 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.

Reviewed by: Derreck Chen / Supervisor

Approved by: Eric Shih / Manager



Sporton International (ShenZhen) Inc.

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



TABLE OF CONTENTS

REVISION HISTORY.....	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1 Applicant.....	5
1.2 Manufacturer.....	5
1.3 Product Feature of Equipment Under Test.....	5
1.4 Product Specification of Equipment Under Test.....	5
1.5 Modification of EUT	5
1.6 Re-use of Measured Data	6
1.7 Testing Location	8
1.8 Test Software.....	8
1.9 Applicable Standards.....	8
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST	9
2.1 Carrier Frequency and Channel	9
2.2 Test Mode.....	10
2.3 Connection Diagram of Test System.....	11
2.4 Support Unit used in test configuration and system	12
2.5 EUT Operation Test Setup	12
3 TEST RESULT	13
3.1 Unwanted Emissions Measurement	13
3.2 AC Conducted Emission Measurement.....	18
3.3 Automatically Discontinue Transmission	20
3.4 Antenna Requirements	21
4 LIST OF MEASURING EQUIPMENT	22
5 UNCERTAINTY OF EVALUATION	23
APPENDIX A. AC CONDUCTED EMISSION TEST RESULT	
APPENDIX B. RADIATED SPURIOUS EMISSION	
APPENDIX C. DUTY CYCLE PLOTS	
APPENDIX D. SETUP PHOTOGRAPHS	
APPENDIX E. REFERENCE REPORT	



REVISION HISTORY

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

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
-	15.403(i)	6dB, 26dB and 99% Occupied Bandwidth	> 500kHz	Pass	1
-	15.407(a)	Maximum Conducted Output Power	≤ 30 dBm	Pass	1
-	15.407(a)	Power Spectral Density	≤ 30 dBm/500kHz	Pass	1
3.1	15.407(b)	Unwanted Emissions	15.407(b)(4)(i) & 15.209(a)	Pass	Under limit 10.23 dB at 30.000 MHz
3.2	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 9.92 dB at 9.350 MHz
3.3	15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.4	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass	-
Remark 1: Test items are performed on original report which can be referred to Sporton report number FR941109F.					

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

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
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 Channel Frequency Range	5745 MHz ~ 5825 MHz
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)
Antenna Type / Gain	internal Antenna with gain 1.73 dBi

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. FR941109F 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 (B4)	V5PAR6	Part15E(FR941109F)	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. Harmonic) (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 TH01-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)
5745-5825 MHz Band 4 (U-NII-3)	149	5745	157	5785
	151 [*]	5755	159 [*]	5795
	153	5765	161	5805
	155 [#]	5775	165	5825

Note:

1. The above Frequency and Channel in "^{*}" were 802.11n HT40 and 802.11ac VHT40.
2. The above Frequency and Channel in "[#]" were 802.11ac VHT80.

2.2 Test Mode

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

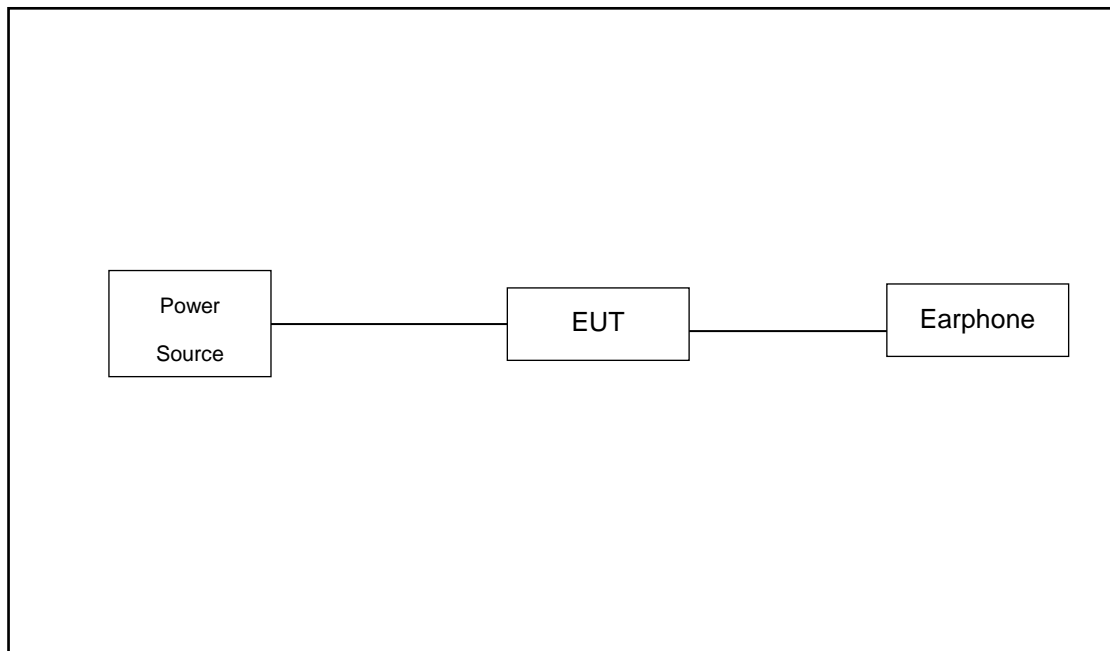
Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT80	MCS0

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

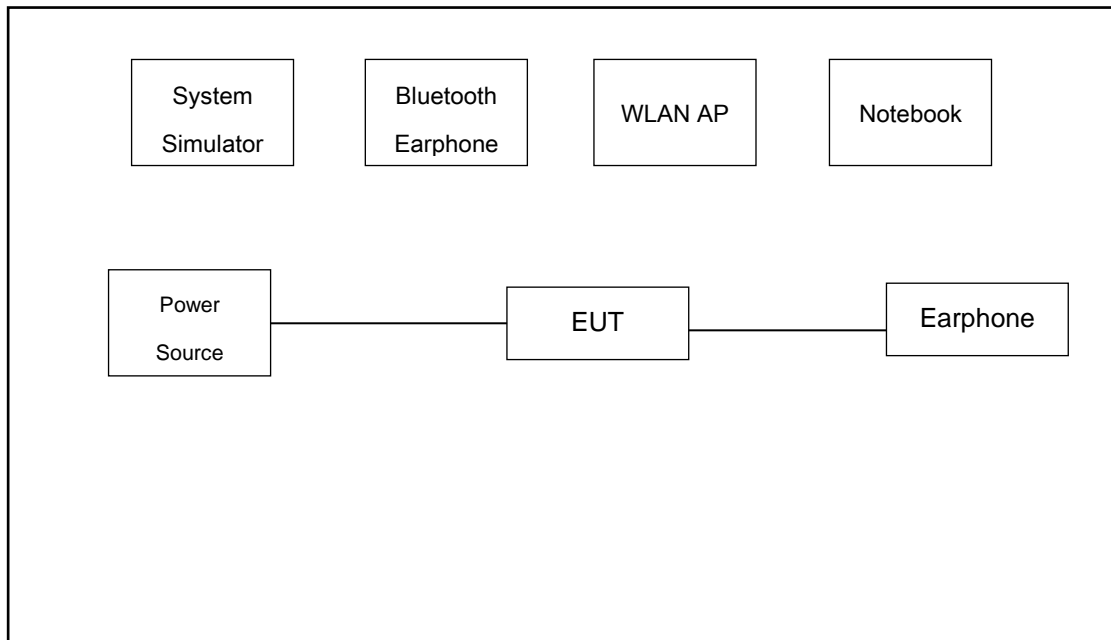
Ch. #		Band IV : 5725-5850 MHz			
		802.11a	802.11n HT20	802.11n HT40	802.11ac VHT80
L	Low	149	149	151	-
M	Middle	157	157	-	155
H	High	165	165	159	-

2.3 Connection Diagram of Test System

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 continuously 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 5.725-5.85 GHz band:

15.407(b)(4)(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

- (2) Unwanted spurious emissions fallen in restricted bands shall comply with the general field strength limits as below table,

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

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

3.1.2 Measuring Instruments

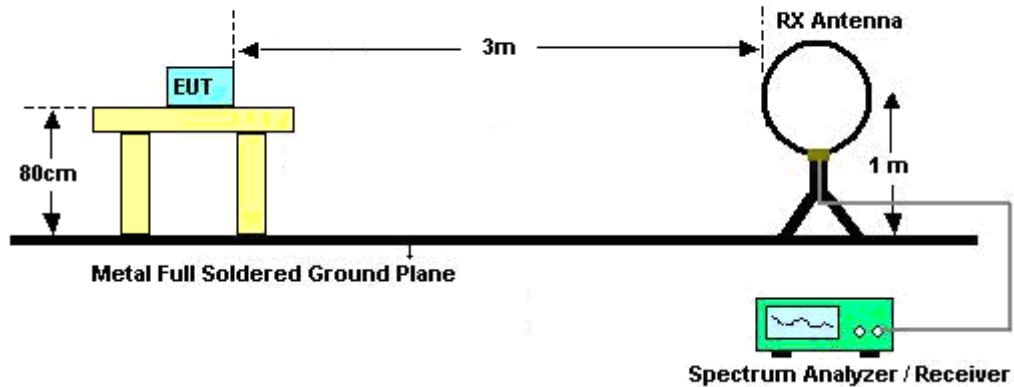
The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

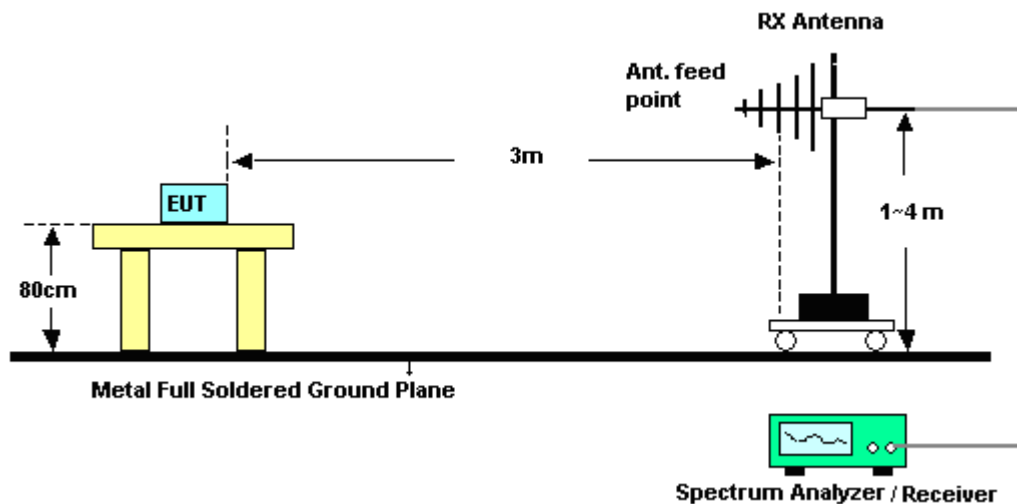
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
Section G) Unwanted emissions measurement.
 - (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW \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.

3.1.4 Test Setup

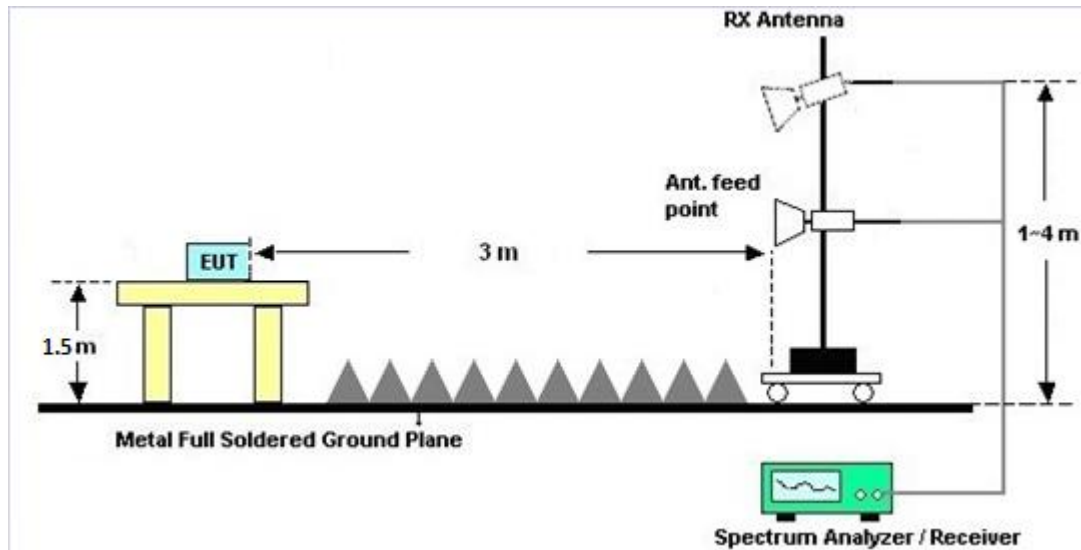
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.1.5 Test Results of Radiated 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 Band Edges

Please refer to Appendix B.

3.1.7 Duty Cycle

Please refer to Appendix C.

3.1.8 Test Result of Unwanted Radiated Emission (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 (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.

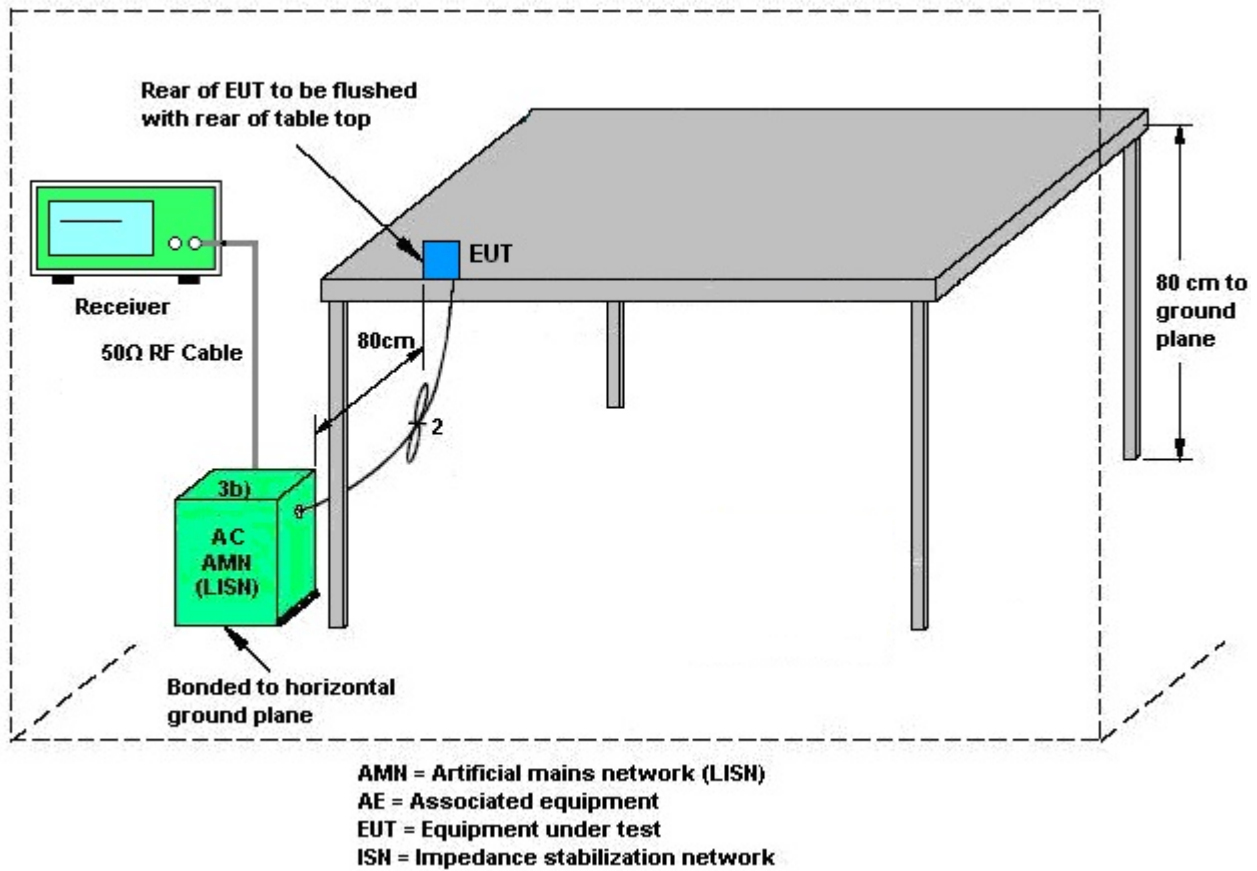
3.2.2 Measuring Instruments

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 B.



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. 25, 2019~Nov. 27, 2019	Apr. 18, 2020	Radiation (03CH02-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	May. 29, 2018	Nov. 25, 2019~Nov. 27, 2019	May. 28, 2020	Radiation (03CH02-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz~2GHz	Jul. 19, 2019	Nov. 25, 2019~Nov. 27, 2019	Jul. 18, 2020	Radiation (03CH02-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1285	1GHz~18GHz	Jan. 07, 2019	Nov. 25, 2019~Nov. 27, 2019	Jan. 06, 2020	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 22, 2019	Nov. 25, 2019~Nov. 27, 2019	Jul. 21, 2020	Radiation (03CH02-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz~40GHz	Apr.18, 2019	Nov. 25, 2019~Nov. 27, 2019	Apr. 17, 2020	Radiation (03CH02-SZ)
LF Amplifier	Burgeon	BPA-530	102211	0.01~3000Mhz	Oct. 18, 2019	Nov. 25, 2019~Nov. 27, 2019	Oct. 17, 2020	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	AMF-7D-00101800-30-10P-R	1943528	1GHz~18GHz	Oct. 18, 2019	Nov. 25, 2019~Nov. 27, 2019	Oct. 17, 2020	Radiation (03CH02-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5GHz	Oct. 18, 2019	Nov. 25, 2019~Nov. 27, 2019	Oct. 17, 2020	Radiation (03CH02-SZ)
AC Power Source	Chroma	61601	616010002470	N/A	NCR	Nov. 25, 2019~Nov. 27, 2019	NCR	Radiation (03CH02-SZ)
Turn Table	Chaintek	T-200	N/A	0~360 degree	NCR	Nov. 25, 2019~Nov. 27, 2019	NCR	Radiation (03CH02-SZ)
Antenna Mast	Chaintek	MBS-400	N/A	1 m~4 m	NCR	Nov. 25, 2019~Nov. 27, 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% ($U = 2Uc(y)$)	2.6dB
---	-------

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)

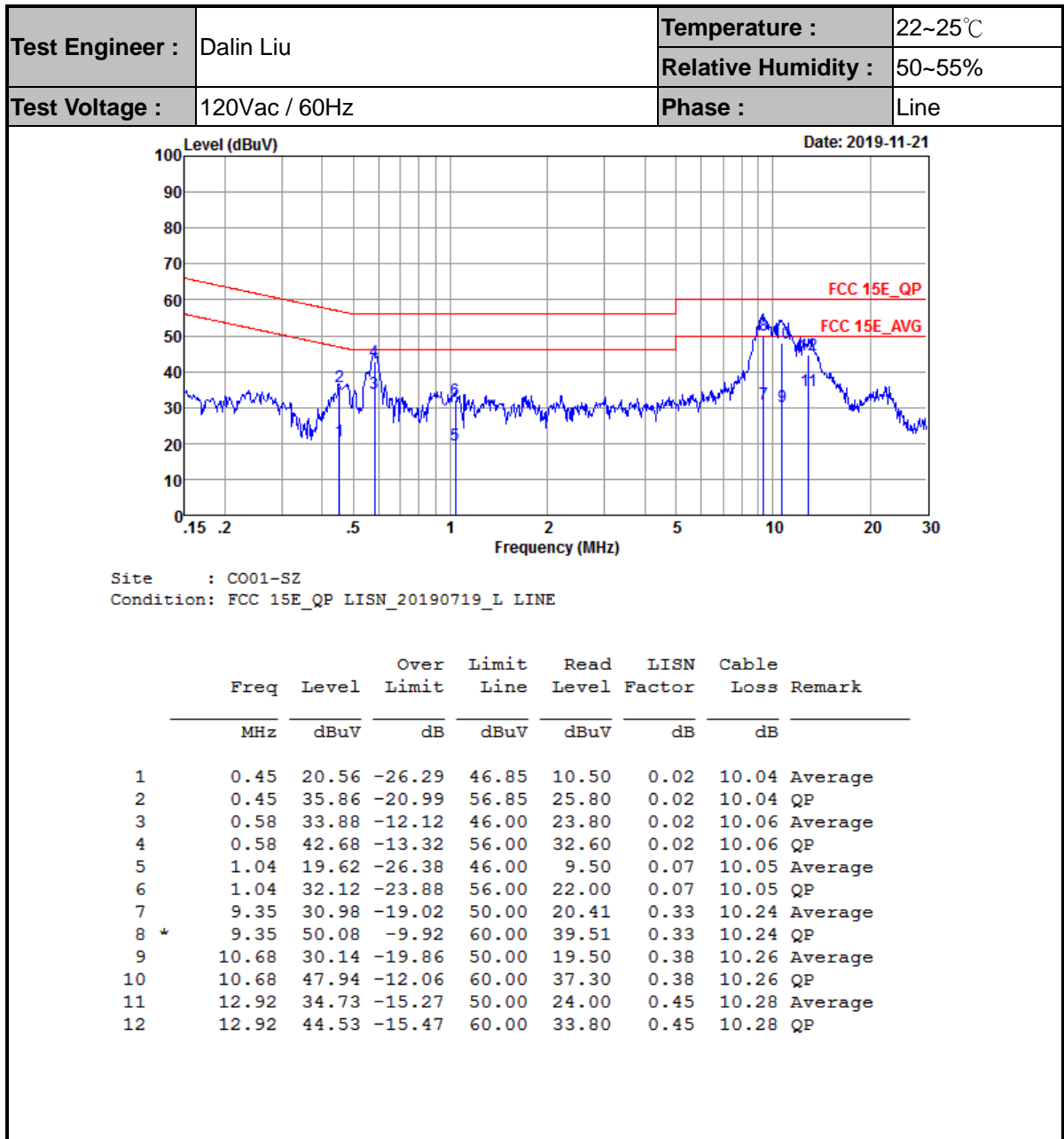
Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.0dB
---	-------

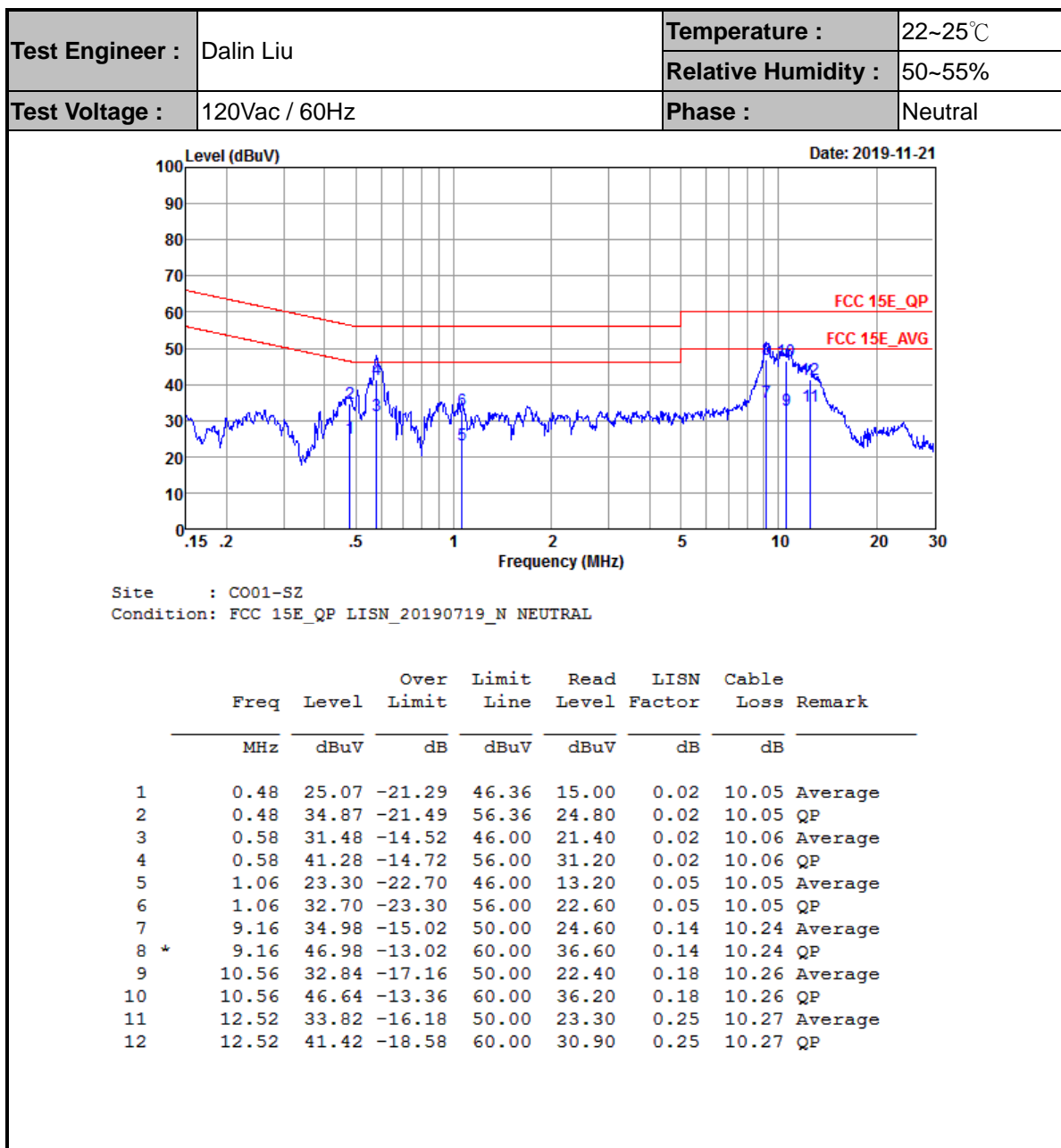
Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

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



Appendix A. AC Conducted Emission Test Results







Appendix B. Radiated Spurious Emission

Band 4 - 5725~5850MHz

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 149 5745MHz		5631.8	46.35	-21.85	68.2	37.1	31.77	10.58	33.1	100	63	P	H
		5682.2	47.65	-44.42	92.07	38.31	31.85	10.59	33.1	100	63	P	H
		5719.4	56.16	-54.47	110.63	46.58	32.07	10.61	33.1	100	63	P	H
		5725	62.42	-59.78	122.2	52.84	32.07	10.61	33.1	100	63	P	H
	*	5745	101.77	-	-	92.15	32.1	10.62	33.1	100	63	P	H
		5745	94.92	-	-	85.3	32.1	10.62	33.1	100	63	A	H
		5644.4	45.91	-22.29	68.2	36.7	31.73	10.58	33.1	100	36	P	V
		5673.2	45.63	-39.78	85.41	36.29	31.85	10.59	33.1	100	36	P	V
		5718.4	47.28	-63.07	110.35	37.7	32.07	10.61	33.1	100	36	P	V
		5723.8	55.18	-64.28	119.46	45.6	32.07	10.61	33.1	100	36	P	V
	*	5745	93.17	-	-	83.55	32.1	10.62	33.1	100	36	P	V
		5745	86.76	-	-	77.14	32.1	10.62	33.1	100	36	A	V



WIFI Ant.	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)
1		5627.8	47.21	-20.99	68.2	37.96	31.77	10.58	33.1	100	62	P	H
		5664.4	46.76	-32.13	78.89	37.57	31.7	10.59	33.1	100	62	P	H
		5713	47.1	-61.74	108.84	37.56	32.03	10.61	33.1	100	62	P	H
		5720.4	46.4	-65.31	111.71	36.82	32.07	10.61	33.1	100	62	P	H
	*	5785	101.92	-	-	92.21	32.17	10.64	33.1	100	62	P	H
802.11a CH 157 5785MHz		5785	95.23	-	-	85.52	32.17	10.64	33.1	100	62	A	H
		5852	49.16	-68.48	117.64	39.18	32.4	10.68	33.1	100	62	P	H
		5857.2	47.82	-62.36	110.18	37.78	32.43	10.71	33.1	100	62	P	H
		5885.2	47.87	-49.76	97.63	37.79	32.47	10.71	33.1	100	62	P	H
		5942.4	47.67	-20.53	68.2	37.29	32.7	10.78	33.1	100	62	P	H
		5606.2	45.48	-22.72	68.2	36.22	31.8	10.56	33.1	100	78	P	V
		5667.8	47.02	-34.39	81.41	37.68	31.85	10.59	33.1	100	78	P	V
		5709.2	46.27	-61.51	107.78	36.73	32.03	10.61	33.1	100	78	P	V
		5724.8	45.61	-76.13	121.74	36.03	32.07	10.61	33.1	100	78	P	V
	*	5785	94.21	-	-	84.5	32.17	10.64	33.1	100	78	P	V
		5785	88.05	-	-	78.34	32.17	10.64	33.1	100	78	A	V
		5853.6	46.32	-67.67	113.99	36.31	32.43	10.68	33.1	100	78	P	V
		5863.4	46.68	-61.77	108.45	36.64	32.43	10.71	33.1	100	78	P	V
		5905.2	49.09	-33.72	82.81	38.87	32.57	10.75	33.1	100	78	P	V
		5940.2	48.39	-19.81	68.2	38.01	32.7	10.78	33.1	100	78	P	V



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 165 5825MHz	*	5825	101.67	-	-	91.76	32.33	10.68	33.1	100	62	P	H
	*	5825	95.49	-	-	85.58	32.33	10.68	33.1	100	62	A	H
		5851.2	57.19	-62.27	119.46	47.21	32.4	10.68	33.1	100	62	P	H
		5858	53.6	-56.36	109.96	43.56	32.43	10.71	33.1	100	62	P	H
		5907.6	49.38	-31.66	81.04	39.16	32.57	10.75	33.1	100	62	P	H
		5945.4	47.22	-20.98	68.2	36.84	32.7	10.78	33.1	100	62	P	H
	*	5825	93.92	-	-	84.01	32.33	10.68	33.1	100	78	P	V
	*	5825	87.8	-	-	77.89	32.33	10.68	33.1	100	78	A	V
		5850.2	49.42	-72.32	121.74	39.44	32.4	10.68	33.1	100	78	P	V
		5858.6	49.07	-60.72	109.79	39.03	32.43	10.71	33.1	100	78	P	V
		5887.6	48.53	-47.32	95.85	38.42	32.5	10.71	33.1	100	78	P	V
		5933.6	46.79	-21.41	68.2	36.48	32.63	10.78	33.1	100	78	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												


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

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		11490	49.97	-24.03	74	47.39	40.07	15.12	52.61	160	360	P	H
		17235	50.78	-17.42	68.2	40.38	40.33	22.6	52.53	170	360	P	H
		11490	50.1	-23.9	74	47.52	40.07	15.12	52.61	160	360	P	V
		17235	50.75	-17.45	68.2	40.35	40.33	22.6	52.53	170	360	P	V
802.11a CH 157 5785MHz		11570	50.17	-23.83	74	47.72	39.9	15.18	52.63	175	198	P	H
		17355	50.85	-17.35	68.2	39.59	40.95	22.96	52.65	189	185	P	H
		11570	50.46	-23.54	74	48.01	39.9	15.18	52.63	175	198	P	V
		17355	50.91	-17.29	68.2	39.65	40.95	22.96	52.65	189	185	P	V
802.11a CH 165 5825MHz		11650	50.03	-23.97	74	47.85	39.6	15.24	52.66	156	347	P	H
		17475	50.24	-17.96	68.2	38.2	41.5	23.31	52.77	150	360	P	H
		11650	49.72	-24.28	74	47.54	39.6	15.24	52.66	156	347	P	V
		17475	50.56	-17.64	68.2	38.52	41.5	23.31	52.77	150	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 149 5745MHz		5630.4	46.27	-21.93	68.2	37.02	31.77	10.58	33.1	100	63	P	H
		5697.2	48.43	-54.71	103.14	38.94	32	10.59	33.1	100	63	P	H
		5711.8	52.16	-56.35	108.51	42.62	32.03	10.61	33.1	100	63	P	H
		5721.4	56.13	-57.86	113.99	46.55	32.07	10.61	33.1	100	63	P	H
	*	5745	100.34	-	-	90.72	32.1	10.62	33.1	100	63	P	H
		5745	93.76	-	-	84.14	32.1	10.62	33.1	100	63	A	H
		5649.6	45.65	-22.55	68.2	36.47	31.7	10.58	33.1	100	34	P	V
		5699.2	45.98	-58.63	104.61	36.49	32	10.59	33.1	100	34	P	V
		5715	47.59	-61.81	109.4	38.05	32.03	10.61	33.1	100	34	P	V
		5725	51.79	-70.41	122.2	42.21	32.07	10.61	33.1	100	34	P	V
	*	5745	91.79	-	-	82.17	32.1	10.62	33.1	100	34	P	V
		5745	85.64	-	-	76.02	32.1	10.62	33.1	100	34	A	V



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 HT20 CH 157 5785MHz		5639.6	46.71	-21.49	68.2	37.5	31.73	10.58	33.1	100	61	P	H
		5680.6	46.99	-43.89	90.88	37.65	31.85	10.59	33.1	100	61	P	H
		5713	46.51	-62.33	108.84	36.97	32.03	10.61	33.1	100	61	P	H
		5722.4	47.07	-69.2	116.27	37.49	32.07	10.61	33.1	100	61	P	H
	*	5785	101.4	-	-	91.69	32.17	10.64	33.1	100	61	P	H
		5785	94.46	-	-	84.75	32.17	10.64	33.1	100	61	A	H
		5851	47.74	-72.18	119.92	37.76	32.4	10.68	33.1	100	61	P	H
		5860.6	48.47	-60.76	109.23	38.43	32.43	10.71	33.1	100	61	P	H
		5910.2	48.02	-31.1	79.12	37.8	32.57	10.75	33.1	100	61	P	H
		5948	46.96	-21.24	68.2	36.58	32.7	10.78	33.1	100	61	P	H
		5619.6	46.18	-22.02	68.2	36.95	31.77	10.56	33.1	100	78	P	V
		5686.6	46.4	-48.92	95.32	36.91	32	10.59	33.1	100	78	P	V
		5702	45.19	-60.57	105.76	35.65	32.03	10.61	33.1	100	78	P	V
		5723.8	43.81	-75.65	119.46	34.23	32.07	10.61	33.1	100	78	P	V
	*	5785	93.74	-	-	84.03	32.17	10.64	33.1	100	78	P	V
		5785	86.74	-	-	77.03	32.17	10.64	33.1	100	78	A	V
		5852.4	46.56	-70.17	116.73	36.58	32.4	10.68	33.1	100	78	P	V
		5867.4	46.7	-60.63	107.33	36.66	32.43	10.71	33.1	100	78	P	V
		5886.2	47.84	-49.04	96.88	37.76	32.47	10.71	33.1	100	78	P	V
		5929.4	47.26	-20.94	68.2	36.98	32.63	10.75	33.1	100	78	P	V



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 HT20 CH 165 5825MHz	*	5825	101.23	-	-	91.32	32.33	10.68	33.1	100	62	P	H
	*	5825	94.69	-	-	84.78	32.33	10.68	33.1	100	62	A	H
		5854.2	51.58	-61.04	112.62	41.57	32.43	10.68	33.1	100	62	P	H
		5859.8	50.2	-59.25	109.45	40.16	32.43	10.71	33.1	100	62	P	H
		5883.6	48.6	-50.21	98.81	38.52	32.47	10.71	33.1	100	62	P	H
		5936.4	46.74	-21.46	68.2	36.43	32.63	10.78	33.1	100	62	P	H
	*	5825	93.15	-	-	83.24	32.33	10.68	33.1	101	78	P	V
	*	5825	86.79	-	-	76.88	32.33	10.68	33.1	101	78	A	V
		5850	47.1	-75.1	122.2	37.12	32.4	10.68	33.1	101	78	P	V
		5861.6	48.03	-60.92	108.95	37.99	32.43	10.71	33.1	101	78	P	V
		5910	47.35	-31.92	79.27	37.13	32.57	10.75	33.1	101	78	P	V
		5949.8	48.27	-19.93	68.2	37.89	32.7	10.78	33.1	101	78	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		11490	50.3	-23.7	74	47.72	40.07	15.12	52.61	160	360	P	H
HT20		17235	50.93	-17.27	68.2	40.53	40.33	22.6	52.53	170	360	P	H
CH 149		11490	50.91	-23.09	74	48.33	40.07	15.12	52.61	160	360	P	V
5745MHz		17235	50.16	-18.04	68.2	39.76	40.33	22.6	52.53	170	360	P	V
802.11n		11570	50.51	-23.49	74	48.06	39.9	15.18	52.63	175	198	P	H
HT20		17355	50.24	-17.96	68.2	38.98	40.95	22.96	52.65	189	185	P	H
CH 157		11570	50.85	-23.15	74	48.4	39.9	15.18	52.63	175	198	P	V
5785MHz		17355	50.13	-18.07	68.2	38.87	40.95	22.96	52.65	189	185	P	V
802.11n		11650	50.23	-23.77	74	48.05	39.6	15.24	52.66	156	347	P	H
HT20		17475	50.83	-17.37	68.2	38.79	41.5	23.31	52.77	150	360	P	H
CH 165		11650	49.56	-24.44	74	47.38	39.6	15.24	52.66	156	347	P	V
5825MHz		17475	50.23	-17.97	68.2	38.19	41.5	23.31	52.77	150	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 151 5755MHz		5609.2	46.46	-21.74	68.2	37.2	31.8	10.56	33.1	100	64	P	H
		5689.2	48.77	-48.47	97.24	39.28	32	10.59	33.1	100	64	P	H
		5718.2	59.7	-50.6	110.3	50.12	32.07	10.61	33.1	100	64	P	H
		5722.6	60.38	-56.35	116.73	50.8	32.07	10.61	33.1	100	64	P	H
	*	5755	98.98	-	-	89.33	32.13	10.62	33.1	100	64	P	H
		5755	91.51	-	-	81.86	32.13	10.62	33.1	100	64	A	H
		5854.4	48.09	-64.08	112.17	38.08	32.43	10.68	33.1	100	64	P	H
		5861	48.12	-61	109.12	38.08	32.43	10.71	33.1	100	64	P	H
		5916.8	48.7	-25.55	74.25	38.48	32.57	10.75	33.1	100	64	P	H
		5936.8	47.22	-20.98	68.2	36.91	32.63	10.78	33.1	100	64	P	H
		5625.8	46.77	-21.43	68.2	37.52	31.77	10.58	33.1	103	79	P	V
		5699.6	46.83	-58.08	104.91	37.32	32	10.61	33.1	103	79	P	V
		5717.6	50.93	-59.2	110.13	41.35	32.07	10.61	33.1	103	79	P	V
		5723	50.95	-66.69	117.64	41.37	32.07	10.61	33.1	103	79	P	V
	*	5755	89.84	-	-	80.19	32.13	10.62	33.1	103	79	P	V
		5755	83.77	-	-	74.12	32.13	10.62	33.1	103	79	A	V
		5854.2	45.54	-67.08	112.62	35.53	32.43	10.68	33.1	103	79	P	V
		5869.4	48.06	-58.71	106.77	38.02	32.43	10.71	33.1	103	79	P	V
		5901.6	47.42	-38.06	85.48	37.27	32.5	10.75	33.1	103	79	P	V
		5948.6	46.52	-21.68	68.2	36.14	32.7	10.78	33.1	103	79	P	V



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 159 5795MHz		5636.2	47.71	-20.49	68.2	38.5	31.73	10.58	33.1	100	61	P	H
		5685	47.94	-46.19	94.13	38.45	32	10.59	33.1	100	61	P	H
		5705	47.93	-58.67	106.6	38.39	32.03	10.61	33.1	100	61	P	H
		5722.4	46.95	-69.32	116.27	37.37	32.07	10.61	33.1	100	61	P	H
	*	5795	97.43	-	-	87.69	32.2	10.64	33.1	100	61	P	H
		5795	91.36	-	-	81.62	32.2	10.64	33.1	100	61	A	H
		5853.4	48.2	-66.25	114.45	38.22	32.4	10.68	33.1	100	61	P	H
		5858.2	49.16	-60.74	109.9	39.12	32.43	10.71	33.1	100	61	P	H
		5882.8	49.56	-49.85	99.41	39.48	32.47	10.71	33.1	100	61	P	H
		5936.8	48.15	-20.05	68.2	37.84	32.63	10.78	33.1	100	61	P	H
		5601.6	46.01	-22.19	68.2	36.75	31.8	10.56	33.1	100	80	P	V
		5689.8	45.78	-51.9	97.68	36.29	32	10.59	33.1	100	80	P	V
		5718.8	46.95	-63.51	110.46	37.37	32.07	10.61	33.1	100	80	P	V
		5721	46.53	-66.55	113.08	36.95	32.07	10.61	33.1	100	80	P	V
	*	5795	90.09	-	-	80.35	32.2	10.64	33.1	100	80	P	V
		5795	83.85	-	-	74.11	32.2	10.64	33.1	100	80	A	V
		5851.2	47.16	-72.3	119.46	37.18	32.4	10.68	33.1	100	80	P	V
		5870.2	47.03	-59.51	106.54	36.99	32.43	10.71	33.1	100	80	P	V
		5919.2	48.02	-24.46	72.48	37.8	32.57	10.75	33.1	100	80	P	V
		5935	46.52	-21.68	68.2	36.21	32.63	10.78	33.1	100	80	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 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		11510	50.05	-23.95	74	47.43	40.1	15.12	52.6	160	360	P	H
HT40		17265	50.29	-17.91	68.2	39.67	40.47	22.72	52.57	170	360	P	H
CH 151		11510	50.83	-23.17	74	48.21	40.1	15.12	52.6	160	360	P	V
5755MHz		17265	50.49	-17.71	68.2	39.87	40.47	22.72	52.57	170	360	P	V
802.11n		11590	50.31	-23.69	74	47.88	39.85	15.21	52.63	170	300	P	H
HT40		17385	50.56	-17.64	68.2	38.98	41.18	23.08	52.68	150	200	P	H
CH 159		11590	50.39	-23.61	74	47.96	39.85	15.21	52.63	170	300	P	V
5795MHz		17385	50.03	-18.17	68.2	38.45	41.18	23.08	52.68	150	200	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 155 5775MHz		5622.6	47.21	-20.99	68.2	37.96	31.77	10.58	33.1	100	29	P	H
		5687.6	54.33	-41.72	96.05	44.84	32	10.59	33.1	100	29	P	H
		5719.6	58.14	-52.55	110.69	48.56	32.07	10.61	33.1	100	29	P	H
		5722.2	57.65	-58.17	115.82	48.07	32.07	10.61	33.1	100	29	P	H
	*	5775	93.77	-	-	84.08	32.17	10.62	33.1	100	29	P	H
		5775	89.05	-	-	79.36	32.17	10.62	33.1	100	29	A	H
		5850	51.89	-70.31	122.2	41.91	32.4	10.68	33.1	100	29	P	H
		5867.2	51.69	-55.69	107.38	41.65	32.43	10.71	33.1	100	29	P	H
		5893.2	49.92	-41.78	91.7	39.81	32.5	10.71	33.1	100	29	P	H
		5942	48.3	-19.9	68.2	37.92	32.7	10.78	33.1	100	29	P	H
		5646.4	45.65	-22.55	68.2	36.44	31.73	10.58	33.1	100	78	P	V
		5690.4	51.86	-46.26	98.12	42.37	32	10.59	33.1	100	78	P	V
		5707.6	52.14	-55.19	107.33	42.6	32.03	10.61	33.1	100	78	P	V
		5722.6	51.69	-65.04	116.73	42.11	32.07	10.61	33.1	100	78	P	V
	*	5775	89.01	-	-	79.32	32.17	10.62	33.1	100	78	P	V
		5775	84.06	-	-	74.37	32.17	10.62	33.1	100	78	A	V
		5850.6	50.16	-70.67	120.83	40.18	32.4	10.68	33.1	100	78	P	V
		5867.8	48.02	-59.19	107.21	37.98	32.43	10.71	33.1	100	78	P	V
		5914.6	48.2	-27.67	75.87	37.98	32.57	10.75	33.1	100	78	P	V
		5930.6	47.9	-20.3	68.2	37.62	32.63	10.75	33.1	100	78	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

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

WIFI Ant. 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		11550	50.37	-23.63	74	47.86	39.95	15.18	52.62	160	360	P	H
VHT80		17325	50.28	-17.92	68.2	39.22	40.72	22.96	52.62	170	360	P	H
CH 155		11550	50.61	-23.39	74	48.1	39.95	15.18	52.62	160	360	P	V
5775MHz		17325	50.96	-17.24	68.2	39.9	40.72	22.96	52.62	170	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

Emission below 1GHz

5GHz WIFI 802. 11ac VHT80 (LF @ 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)
5GHz 802. 11ac VHT80 LF		30.97	25.54	-14.46	40	31.94	24.33	0.57	31.3	100	320	P	H
		80.44	20.82	-19.18	40	38.09	13.4	0.93	31.6	-	-	P	H
		133.79	23.81	-19.69	43.5	36.6	17.47	1.2	31.46	-	-	P	H
		240.49	24.45	-21.55	46	36.82	17.64	1.62	31.63	-	-	P	H
		544.1	27.02	-18.98	46	31.06	24.73	2.52	31.29	-	-	P	H
		901.06	29.94	-16.06	46	29.1	29.02	3.32	31.5	-	-	P	H
		30	29.77	-10.23	40	35.71	24.8	0.56	31.3	100	22	P	V
		81.41	21.78	-18.22	40	38.9	13.54	0.94	31.6	-	-	P	V
		129.91	26.91	-16.59	43.5	39.76	17.45	1.18	31.48	-	-	P	V
		256.01	25.74	-20.26	46	35.87	19.85	1.68	31.66	-	-	P	V
		522.76	27.11	-18.89	46	31.58	24.32	2.46	31.25	-	-	P	V
		946.65	29.39	-16.61	46	27.56	29.75	3.39	31.31	-	-	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	Horizontal or Vertical



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
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		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)

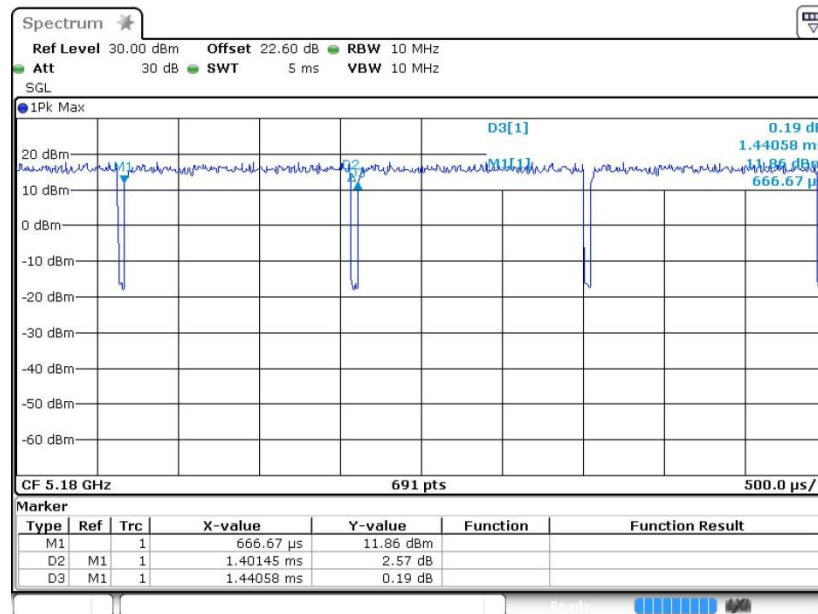
= -10.46(dB)

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

Appendix C. Duty Cycle Plots

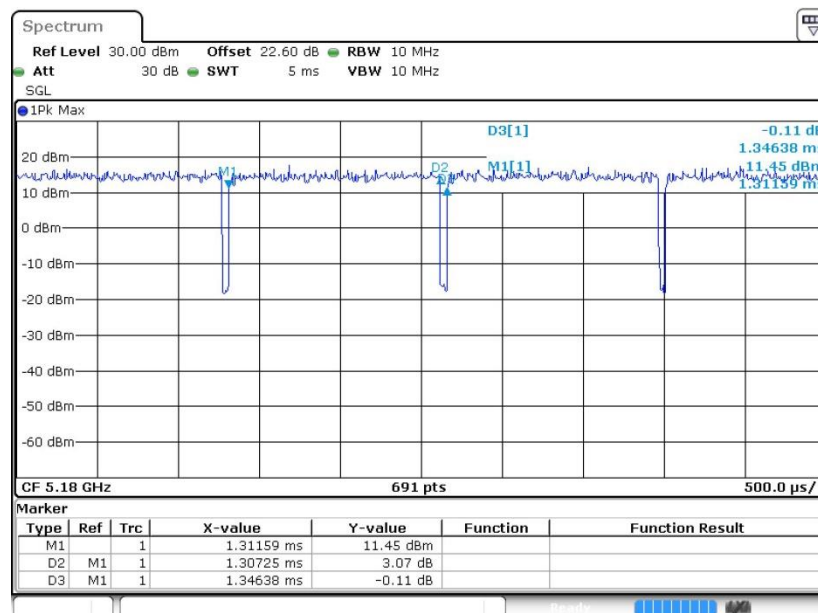
Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11a	97.28	1.402	0.714	1KHz
802.11n HT20	97.096	1.307	0.765	1KHz
802.11n HT40	94.12	0.649	1.540	3KHz
802.11ac VHT80	88.49	0.323	3.094	10KHZ

802.11a



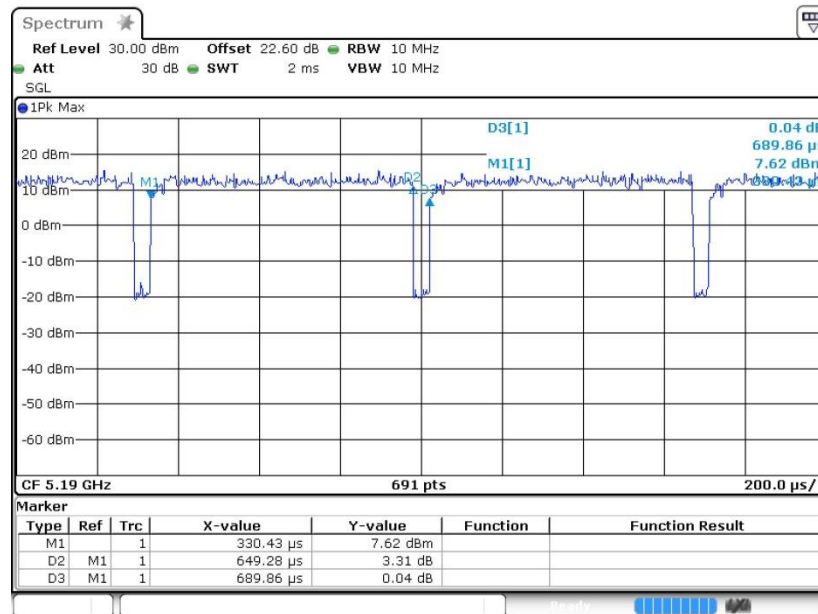
Date: 18.NOV.2019 16:26:12

802.11n HT20



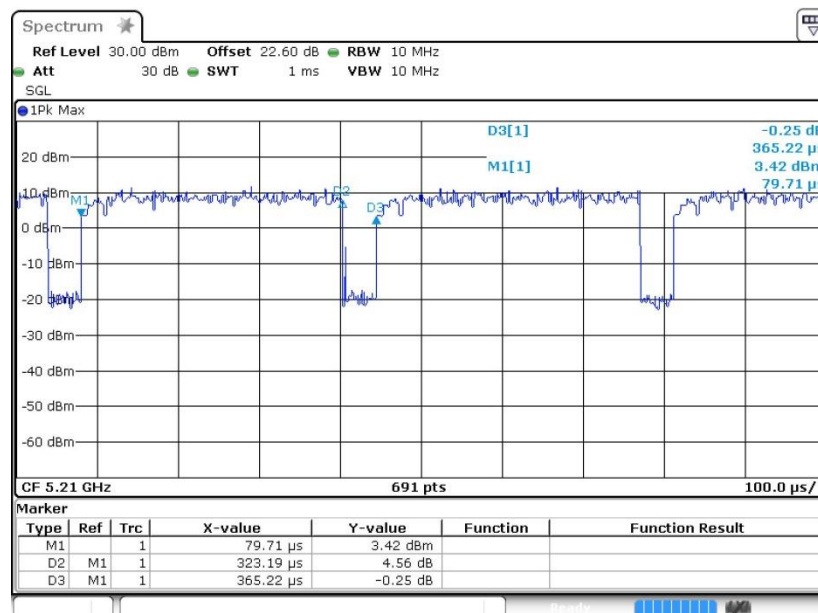
Date: 18.NOV.2019 16:27:54

802.11n HT40



Date: 18.NOV.2019 17:26:15

802.11ac VHT80



Date: 18.NOV.2019 17:29:56



Appendix E. Reference Report

Please refer to Sporton report number FR941109F which is issued separately.