



Radio Test Report

FCC ID:XMF-MID7030

IC:20064-MID7030

Original Grant

Report No.	:	TBR-C-202512-0001-83
Applicant	:	Lightcomm Technology Co., Ltd.
Equipment Under Test (EUT)		
EUT Name	:	7"core tablet
Model No.	:	TBBLU36020962
Series Model No.	:	Please Refer To Page 5
Brand Name	:	onn
Sample ID	:	HC-C-202512-0001-01-01&HC-C-202512-0001-01-02
Receipt Date	:	2025-12-04
Test Date	:	2025-12-04 to 2025-12-24
Issue Date	:	2025-12-24
Standards	:	FCC Part 15 Subpart C 15.247 RSS 247 Issue 4 July 2025 RSS-Gen Issue 5 April 2018+Amendment 1 (March 2019)+Amendment 2 (February 2021)
Test Method	:	ANSI C63.10: 2020+Cor.1-2023+C63.10a-2024+Errata to C63.10a -2024 KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Conclusions	:	PASS
In the configuration tested, the EUT complied with the standards specified above.		

Test By	:	Lily Zhang
Reviewed By	:	Camille Li
Approved By	:	Ivan Su



This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

Contents

CONTENTS	2
1. GENERAL INFORMATION ABOUT EUT	5
1.1 Client Information	5
1.2 General Description of EUT (Equipment Under Test)	5
1.3 Block Diagram Showing the Configuration of System Tested	7
1.4 Description of Support Units	7
1.5 Description of Test Mode	8
1.6 Description of Test Software Setting	10
1.7 Measurement Uncertainty	12
1.8 Test Facility	12
2. TEST SUMMARY	13
3. TEST SOFTWARE	13
4. TEST EQUIPMENT AND TEST SITE	14
5. CONDUCTED EMISSION TEST	16
5.1 Test Standard and Limit	16
5.2 Test Setup	16
5.3 Test Procedure	16
5.4 Deviation From Test Standard	16
5.5 EUT Operating Mode	17
5.6 Test Data	17
6. RADIATED AND CONDUCTED UNWANTED EMISSIONS	18
6.1 Test Standard and Limit	18
6.2 Test Setup	19
6.3 Test Procedure	20
6.4 Deviation From Test Standard	22
6.5 EUT Operating Mode	22
6.6 Test Data	22
7. RESTRICTED BANDS REQUIREMENT	23
7.1 Test Standard and Limit	23
7.2 Test Setup	24
7.3 Test Procedure	24
7.4 Deviation From Test Standard	25
7.5 EUT Operating Mode	25
7.6 Test Data	25
8. BANDWIDTH TEST	26
8.1 Test Standard and Limit	26
8.2 Test Setup	26
8.3 Test Procedure	26
8.4 Deviation From Test Standard	27
8.5 EUT Operating Mode	27
8.6 Test Data	27



9.	MAXIMUM CONDUCTED OUTPUT POWER.....	28
9.1	Test Standard and Limit	28
9.2	Test Setup.....	28
9.3	Test Procedure	28
9.4	Deviation From Test Standard.....	29
9.5	EUT Operating Mode	29
9.6	Test Data.....	29
10.	POWER SPECTRAL DENSITY TEST	30
10.1	Test Standard and Limit	30
10.2	Test Setup	30
10.3	Test Procedure	30
10.4	Deviation From Test Standard	31
10.5	Antenna Connected Construction.....	31
10.6	Test Data	31
11.	FREQUENCY STABILITY.....	32
11.1	Test Standard and Limit	32
11.2	Test Setup	32
11.3	Test Procedure	32
11.4	Deviation From Test Standard	33
11.5	Antenna Connected Construction.....	33
11.6	Test Data	33
12.	ANTENNA REQUIREMENT	34
12.1	Test Standard and Limit	34
12.2	Deviation From Test Standard	34
12.3	Antenna Connected Construction.....	34
12.4	Test Data	35
13.	DUTY CYCLE	37
13.1	Test Standard and Limit	37
13.2	Test Setup	37
13.3	Test Procedure	37
13.4	Deviation From Test Standard	37
13.5	Antenna Connected Construction.....	37
13.6	Test Data	37
	ATTACHMENT A-- CONDUCTED EMISSION TEST DATA.....	38
	ATTACHMENT B--UNWANTED EMISSIONS DATA.....	40
	ATTACHMENT C-- RESTRICTED BANDS REQUIREMENT TEST DATA.....	140



Revision History

Report No.	Version	Description	Issued Date
TBR-C-202512-0001-83	Rev.01	Initial issue of report	2025-12-24



1. General Information about EUT

1.1 Client Information

Applicant	:	Lightcomm Technology Co., Ltd.
Address	:	UNIT 1306 13/F ARION COMMERCIAL CENTRE, 2-12 QUEEN'S ROAD WEST, SHEUNG WAN HK
Manufacturer	:	Lightcomm Technology Co., Ltd.
Address	:	UNIT 1306 13/F ARION COMMERCIAL CENTRE, 2-12 QUEEN'S ROAD WEST, SHEUNG WAN HK

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	7"core tablet
Models No. for FCC	:	TBBLU36020962, TBSIL36020962, TBPNK36020962, TBBRN36020962, MID7030, 36020962
Models No. for IC	:	TBBLU36020962, 36020962, TBSIL36020962, TBBRN36020962
HVIN	:	TBBLU36020962, 36020962, TBSIL36020962, TBBRN36020962
Model Different	:	All these models are identical in the same PCB layout and electrical circuit, The only difference is appearance color.
Product Description	:	Operation Frequency: U-NII-1: 5180MHz~5240MHz, U-NII-2A: 5260MHz~5320MHz U-NII-2C: 5500MHz~5700MHz, U-NII-3: 5745MHz~5825MHz
	:	Antenna Gain: 2.59dBi FPC Antenna
	:	Modulation Type: 802.11a: OFDM (QPSK, BPSK, 16QAM, 64QAM) 802.11n: OFDM (QPSK, BPSK, 16QAM, 64QAM) 802.11ac: OFDM (QPSK, BPSK, 16QAM, 64QAM, 256QAM)
Power Rating	:	Input:5.0V=2A
Rechargeable Li-ion Battery	:	DC 3.85V 3200mAh, 12.32Wh
Software Version	:	alps-mp-b0.mp1-V9
Hardware Version	:	MID7030MX_MT8786_LPDDR4_MB_VER3.0
Remark: (1)The antenna gain and adapter provided by the applicant, the verified for the RF conduction test provided by TOBY test lab. (2)The above antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible. (3)For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.		



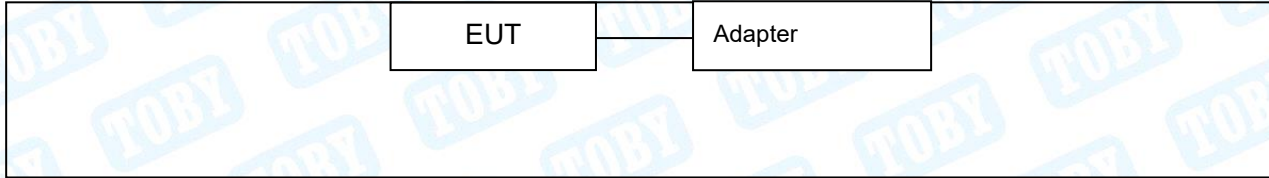
(4) Channel List:

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5180~5240MHz (U-NII-1)	36	5180 MHz	44	5220 MHz
	38	5190 MHz	46	5230 MHz
	40	5200 MHz	48	5240 MHz
	42	5210 MHz		
For 20 MHz Bandwidth, use channel 36, 40, 44, 48. For 40 MHz Bandwidth, use channel 38, 46. For 80 MHz Bandwidth, use channel 42.				
Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5260~5320 MHz (U-NII-2A)	52	5260 MHz	60	5300 MHz
	54	5270 MHz	62	5310MHz
	56	5280MHz	64	5320 MHz
	58	5290MHz		
For 20 MHz Bandwidth, use channel 52, 56, 60, 64. For 40 MHz Bandwidth, use channel 54, 62. For 80 MHz Bandwidth, use channel 58.				
Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5500~5700 MHz (U-NII-2C)	100	5500 MHz	124	5620 MHz
	102	5510 MHz	126	5630 MHz
	104	5520 MHz	128	5640 MHz
	106	5530 MHz	132	5660 MHz
	108	5540 MHz	134	5670 MHz
	110	5550 MHz	136	5680 MHz
	112	5560 MHz	140	5700 MHz
	116	5580 MHz		
	118	5590 MHz		
	120	5600 MHz		
	122	5610 MHz		
For 20 MHz Bandwidth, use channel 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140 For 40 MHz Bandwidth, use channel 102, 110, 118, 126, 134 For 80 MHz Bandwidth, use channel 106, 122				
Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5745~5825MHz (U-NII-3)	149	5745 MHz	157	5785 MHz
	151	5755 MHz	159	5795 MHz
	153	5765 MHz	161	5805 MHz
	155	5775 MHz	165	5825 MHz
For 20 MHz Bandwidth, use channel 149, 153, 157, 161, 165. For 40 MHz Bandwidth, use channel 151, 159. For 80 MHz Bandwidth, use channel 155.				

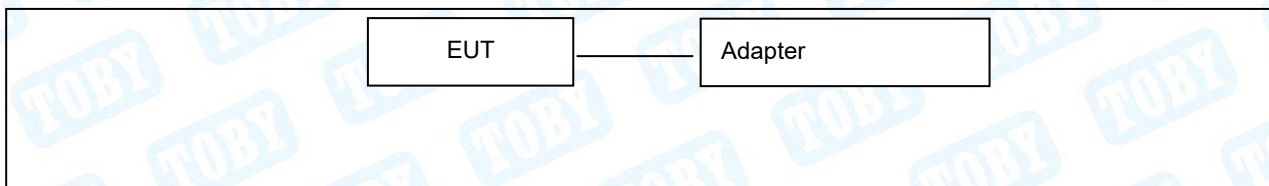


1.3 Block Diagram Showing the Configuration of System Tested

Conducted Test



Radiated Test



Conducted Measurements Test



1.4 Description of Support Units

Equipment Information				
Name	Model	S/N	Manufacturer	Used “√”
Adapter	-----	-----	UGREEN	√
USB Cable	Yes	NO	0.9M	√
Note: Adapter Provided Toby Lab. The USB Cable by the Applicant				



1.5 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

For Conducted Test(AC POWER)		
Final Test Mode		Description
Mode 1		TX a Mode(5180MHz)
For Radiated Test Below 1GHz		
Final Test Mode		Description
Mode 2		TX a Mode(5180MHz)
For Radiated Above 1GHz and RF Conducted Test		
Test Band	Final Test Mode	Description
U-NII-1	Mode 3	TX Mode 802.11a Mode Channel 36/40/48
	Mode 4	TX Mode 802.11n(HT20) Mode Channel 36/40/48
	Mode 5	TX Mode 802.11ac(VHT20) Mode Channel 36/40/48
	Mode 6	TX Mode 802.11n(HT40) Mode Channel 38/46
	Mode 7	TX Mode 802.11ac(VHT40) Mode Channel 38/46
	Mode 8	TX Mode 802.11ac(VHT80) Mode Channel 42
U-NII-2A	Mode 9	TX Mode 802.11a Mode Channel 52/56/64
	Mode 10	TX Mode 802.11n(HT20) Mode Channel 52/56/64
	Mode 11	TX Mode 802.11ac(VHT20) Mode Channel 52/56/64
	Mode 12	TX Mode 802.11n(HT40) Mode Channel 54/62
	Mode 13	TX Mode 802.11ac(VHT40) Mode Channel 54/62
	Mode 14	TX Mode 802.11ac(VHT80) Mode Channel 58
U-NII-2C	Mode 15	TX Mode 802.11a Mode Channel 100/116/140
	Mode 16	TX Mode 802.11n(HT20) Mode Channel 100/116/140
	Mode 17	TX Mode 802.11ac(VHT20) Mode Channel 100/116/140
	Mode 18	TX Mode 802.11n(HT40) Mode Channel 102/110/134
	Mode 19	TX Mode 802.11ac(VHT40) Mode Channel 102/110/134
	Mode 20	TX Mode 802.11ac(VHT80) Mode Channel 106/122
U-NII-3	Mode 21	TX Mode 802.11a Mode Channel 149/157/165
	Mode 22	TX Mode 802.11n(HT20) Mode Channel 149/157/165
	Mode 23	TX Mode 802.11ac(VHT20) Mode Channel 149/157/165
	Mode 24	TX Mode 802.11n(HT40) Mode Channel 151/159
	Mode 25	TX Mode 802.11ac(VHT40) Mode Channel 151/159
	Mode 26	TX Mode 802.11ac(VHT80) Mode Channel 155

Note:

- (1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.

According to ANSI C63.10 standards, the measurements are performed at the highest, middle, lowest available channels, and the worst case data rate as follows:

802.11a Mode: OFDM (6 Mbps)

802.11n (HT20) Mode: MCS 0

802.11n (HT40) Mode: MCS 0

802.11ac(VHT20) Mode: MCS 0/ Nss1

802.11ac(VHT40) Mode: MCS 0/ Nss1

802.11ac(VHT80) Mode: MCS 0/ Nss1



- (2) During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.
- (3) The EUT is considered a portable unit; in normal use it was positioned on X-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.



1.6 Description of Test Software Setting

During testing channel& Power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of RF setting.

Test Software: EngMode		
U-NII-1		
Mode	Frequency (MHz)	Parameters
802.11a	5180	16
	5200	16
	5240	16
802.11n(HT20)	5180	16
	5200	16
	5240	16
802.11ac(VHT20)	5180	16
	5200	16.5
	5240	16.5
802.11n(HT40)	5190	DEF
	5230	DEF
802.11ac(VHT40)	5190	17.5
	5230	17.5
802.11ac(VHT80)	5210	17
U-NII-2A		
Mode	Frequency (MHz)	Parameters
802.11a	5260	16
	5300	16
	5320	16
802.11n(HT20)	5260	16
	5300	16
	5320	16
802.11ac(VHT20)	5260	16.5
	5300	16.5
	5320	16.5
802.11n(HT40)	5270	17.5
	5310	17
802.11ac(VHT40)	5270	17.5
	5310	17
802.11ac(VHT80)	5290	17



U-NII-2C		
Mode	Frequency (MHz)	Parameters
802.11a	5500	16
	5580	16
	5700	19
802.11n(HT20)	5500	16
	5580	19
	5700	19
802.11ac(VHT20)	5500	16.5
	5580	19
	5700	19
802.11n(HT40)	5510	17
	5550	17
	5670	17
802.11ac(VHT40)	5510	17
	5550	17
	5670	19
802.11ac(VHT80)	5530	17
	5610	17
U-NII-3		
Mode	Frequency (MHz)	Parameters
802.11a	5745	19
	5785	20
	5825	20
802.11n(HT20)	5745	20
	5785	20
	5825	21
802.11ac(VHT20)	5745	21
	5785	21
	5825	21
802.11n(HT40)	5755	20
	5795	20.5
802.11ac(VHT40)	5755	20
	5795	20
802.11ac(VHT80)	5775	20



1.7 Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

Test Item	Parameters	Expanded Uncertainty (U_{Lab})
Conducted Emission	Level Accuracy: 9kHz~150kHz 150kHz to 30MHz	± 3.50 dB ± 3.10 dB
Radiated Emission	Level Accuracy: 9kHz to 30 MHz	± 4.60 dB
Radiated Emission	Level Accuracy: 30MHz to 1000 MHz	± 4.50 dB
Radiated Emission	Level Accuracy: Above 1000MHz	± 4.20 dB

1.8 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1/F., Building 6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an District, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

A2LA Certificate No.: 4750.01

The laboratory has been accredited by American Association for Laboratory Accreditation(A2LA) to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the technical competence in the field of Electrical Testing. And the A2LA Certificate No.: 4750.01.FCC Accredited Test Site Number: 854351. Designation Number: CN1223.

IC Registration No.: (11950A)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A. CAB identifier: CN0056.



2. Test Summary

Standard Section		Test Item	Test Sample(s)	Judgment	Remark
FCC	IC				
FCC 15.207(a)	RSS-Gen 8.8	Conducted Emission	HC-C-202512-0001-01-02	PASS	N/A
FCC 15.209 & 15.407(b)	RSS-Gen 8.9 & RSS 247 5.5	Radiated Unwanted Emissions	HC-C-202512-0001-01-02	PASS	N/A
FCC 15.203	RSS-Gen 6.8	Antenna Requirement	HC-C-202512-0001-01-01	PASS	N/A
FCC 15.407(a)	RSS 247 (7.3.1.3&7.3.2.3&7.3.3.3&7.3.4.4)	-26dB Emission Bandwidth	HC-C-202512-0001-01-01	PASS	N/A
FCC 15.407(a)	RSS-Gen 6.7	99% Occupied Bandwidth	HC-C-202512-0001-01-01	PASS	N/A
FCC 15.407(e)	RSS-247(7.3.4.2)	-6dB Min Emission Bandwidth	HC-C-202512-0001-01-01	PASS	N/A
FCC 15.407(a)	RSS-247(7.3.1.2&7.3.2.2&7.3.3.2&7.3.4.3)	Maximum Conducted Output Power	HC-C-202512-0001-01-01	PASS	N/A
FCC 15.407(a)	RSS-247(7.3.1.2&7.3.2.2&7.3.3.2&7.3.4.3)	Power Spectral Density	HC-C-202512-0001-01-01	PASS	N/A
FCC 15.407(b)&15.205	RSS-Gen 8.10&RSS 247 (7.3.1.3&7.3.2.3&7.3.3.3&7.3.4.4)	Emissions in Restricted Bands	HC-C-202512-0001-01-02	PASS	N/A
FCC 15.407(b)&15.209	RSS-Gen 8.9 & RSS 247 (7.3.1.3&7.3.2.3&7.3.3.3&7.3.4.4)	Conducted Unwanted Emissions	HC-C-202512-0001-01-01	PASS	N/A
FCC 15.407(g)	RSS-Gen 8.11	Frequency Stability	HC-C-202512-0001-01-01	PASS	N/A
/	/	On Time and Duty Cycle	HC-C-202512-0001-01-01	/	N/A

Note: N/A is an abbreviation for Not Applicable.

3. Test Software

Test Item	Test Software	Manufacturer	Version No.
Conducted Emission	EZ-EMC	EZ	CDI-03A2
Radiation Emission	EZ-EMC	EZ	Ver.FARAD-3A1.1+
Radiation Emission	EZ-EMC	EZ	Ver.FA-03A2 RE+
RF Conducted Measurement	MTS-8310	MWRFtest	V2.0.0.0
RF Test System	JS1120	Tonscend	V3.6.21



4. Test Equipment and Test Site

Test Site				
No.	Test Site	Manufacturer	Specification	Used
TB-EMCSR001	Shielding Chamber #1	YIHENG	7.5*4.0*3.0 (m)	√
TB-EMCSR002	Shielding Chamber #2	YIHENG	8.0*4.0*3.0 (m)	X
TB-EMCCA001	3m Anechoic Chamber #A	ETS	9.0*6.0*6.0 (m)	√
TB-EMCCB002	3m Anechoic Chamber #B	YIHENG	9.0*6.0*6.0 (m)	√

Conducted Emission Test					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jun. 16, 2025	Jun. 15, 2026
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jun. 16, 2025	Jun. 15, 2026
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jun. 16, 2025	Jun. 15, 2026
LISN	Rohde & Schwarz	ENV216	101131	Jun. 16, 2025	Jun. 15, 2026

Radiation Emission Test(A Site)					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 16, 2025	Jun. 15, 2026
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jun. 16, 2025	Jun. 15, 2026
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Feb. 27, 2024	Feb.26, 2026
Horn Antenna	ETS-LINDGREN	3117	00143207	Feb. 27, 2024	Feb.26, 2026
Horn Antenna	SCHWARZBECK	BBHA 9170	1118	Feb. 27, 2024	Feb.26, 2026
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jun. 14, 2024	Jun. 13, 2026
Pre-amplifier	SONOMA	310N	185903	Feb. 20, 2025	Feb.19, 2026
Pre-amplifier	HP	8449B	3008A00849	Feb. 20, 2025	Feb.19, 2026
HF Amplifier	Tonscend	TAP0184050	AP21C806129	Aug. 27, 2025	Aug. 26, 2026

Radiation Emission Test(B Site)					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100060	Aug. 27, 2025	Aug. 26, 2026
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 16, 2025	Jun. 15, 2026
EMI Test Receiver	Rohde & Schwarz	ESU-8	100472/008	Feb. 20, 2025	Feb.19, 2026
Bilog Antenna	SCHWARZBECK	VULB 9168	1225	Oct. 18, 2025	Oct. 17, 2027
Horn Antenna	SCHWARZBECK	BBHA 9120 D	2463	Jun. 14, 2024	Jun. 13, 2026
Horn Antenna	SCHWARZBECK	BBHA 9170	1118	Feb. 27, 2024	Feb.26, 2026
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jun. 14, 2024	Jun. 13, 2026
HF Amplifier	Tonscend	TAP9E6343	AP21C806117	Aug. 27, 2025	Aug. 26, 2026
HF Amplifier	Tonscend	TAP051845	AP21C806141	Aug. 27, 2025	Aug. 26, 2026
HF Amplifier	Tonscend	TAP0184050	AP21C806129	Aug. 27, 2025	Aug. 26, 2026
Pre-amplifier	HP	8449B	3008A00849	Jun. 16, 2025	Jun. 15, 2026
Highpass Filter	CD	HPM-6.4/18G	---	N/A	N/A
Highpass Filter	CD	HPM-2.8/18G	---	N/A	N/A
Highpass Filter	XINBO	XBLBQ-HTA67(8-25G)	22052702-1	N/A	N/A

Antenna Conducted Emission					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 16, 2025	Jun. 15, 2026
MXA Signal Analyzer	Agilent	N9020A	MY49100060	Aug. 27, 2025	Aug. 26, 2026
Spectrum Analyzer	KEYSIGHT	N9020B	MY60110172	Aug. 27, 2025	Aug. 26, 2026



RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Aug. 27, 2025	Aug. 26, 2026
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Aug. 27, 2025	Aug. 26, 2026
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Aug. 27, 2025	Aug. 26, 2026
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Aug. 27, 2025	Aug. 26, 2026
RF Control Unit	Tonsced	JS0806-2	21F8060439	Aug. 27, 2025	Aug. 26, 2026
Temperature and Humidity Chamber	ZhengHang	ZH-QTH-225D	ZH2107290	Jun. 16, 2025	Jun. 15, 2026
Power Control Box	Tonsced	JS0806-4ADC	21C8060387	N/A	N/A
Attenuator	XQY	10dB	N/A	N/A	N/A
Attenuator	XQY	10dB	N/A	N/A	N/A
Attenuator	XQY	10dB	N/A	N/A	N/A
Attenuator	XQY	10dB	N/A	N/A	N/A



5. Conducted Emission Test

5.1 Test Standard and Limit

5.1.1 Test Standard

RSS-Gen 8.8

FCC Part 15.207

5.1.2 Test Limit

Frequency	Maximum RF Line Voltage (dB μ V)	
	Quasi-peak Level	Average Level
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *
500kHz~5MHz	56	46
5MHz~30MHz	60	50

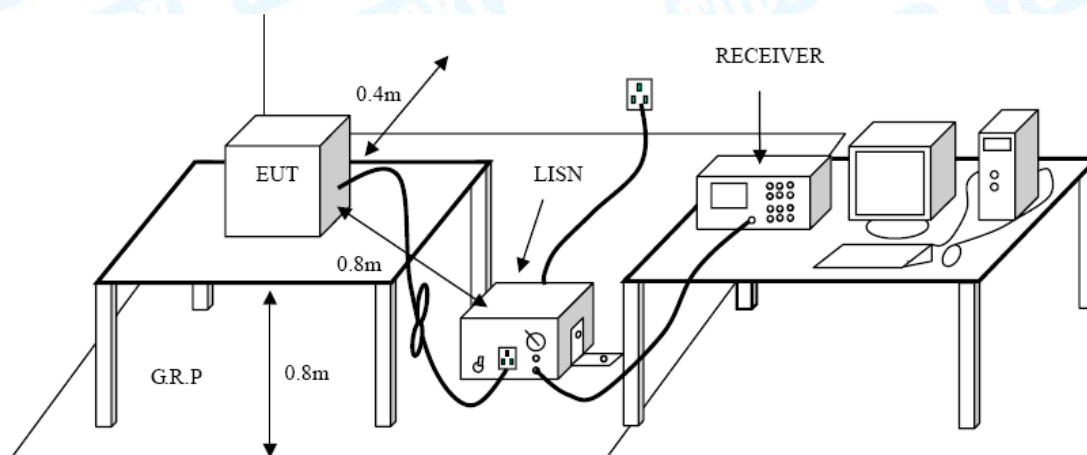
Notes:

(1) *Decreasing linearly with logarithm of the frequency.

(2) The lower limit shall apply at the transition frequencies.

(3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

5.2 Test Setup



5.3 Test Procedure

- The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- LISN at least 80 cm from nearest part of EUT chassis.
- The bandwidth of EMI test receiver is set at 9 kHz, and the test frequency band is from 0.15MHz to 30MHz.

5.4 Deviation From Test Standard

No deviation



5.5 EUT Operating Mode

Please refer to the description of test mode.

5.6 Test Data

Please refer to the Attachment A inside test report.



6. Radiated and Conducted Unwanted Emissions

6.1 Test Standard and Limit

6.1.1 Test Standard

RSS-Gen 8.9 & RSS 247 (7.3.1.3&7.3.2.3&7.3.3.3&7.3.4.4)

FCC Part 15.209 & FCC Part 15.407(b)

6.1.2 Test Limit

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table:

General field strength limits at frequencies Below 30MHz		
Frequency (MHz)	Field Strength (microvolt/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

Note: 1, The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

General field strength limits at frequencies above 30 MHz		
Frequency (MHz)	Field strength (μV/m at 3 m)	Measurement Distance (meters)
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

General field strength limits at frequencies Above 1000MHz		
Frequency (MHz)	Distance of 3m (dBuV/m)	
	Peak	Average
Above 1000	74	54

Note:

(1) The tighter limit applies at the band edges.

(2) Emission Level(dBuV/m)=20log Emission Level(uV/m)

(3) For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

Frequency (MHz)	EIRP Limits (dBm)	Equivalent Field Strength at 3m (dBuV/m)
5150~5250	-27	68.3
5250~5350	-27	68.3
5470~5725	-27	68.3
5725~5825	-27(Note 2)	68.3
	10(Note 2)	105.3
	15.6(Note 2)	110.9
	27(Note 2)	122.3

NOTE:

1, The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:



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

2, According to FCC 16-24, 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 25MHz 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 27dBm/MHz at the band edge.

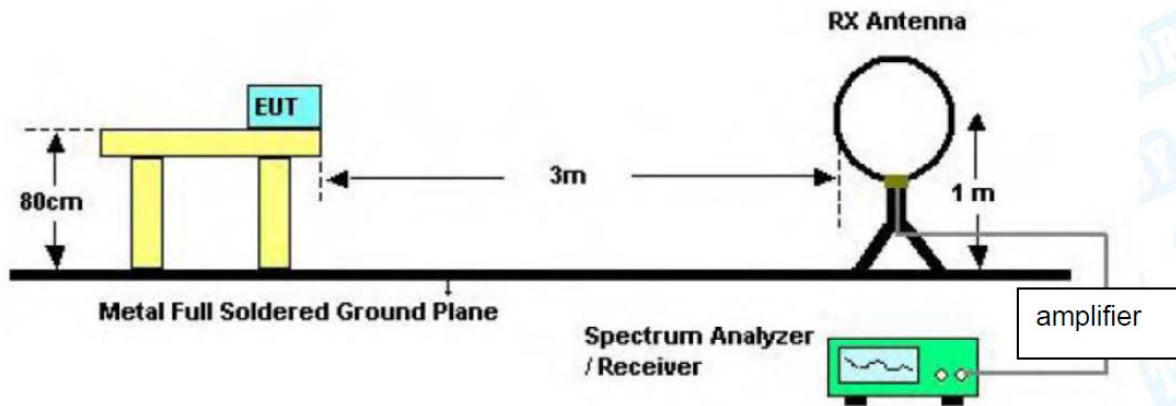
3, For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

RSS-247:

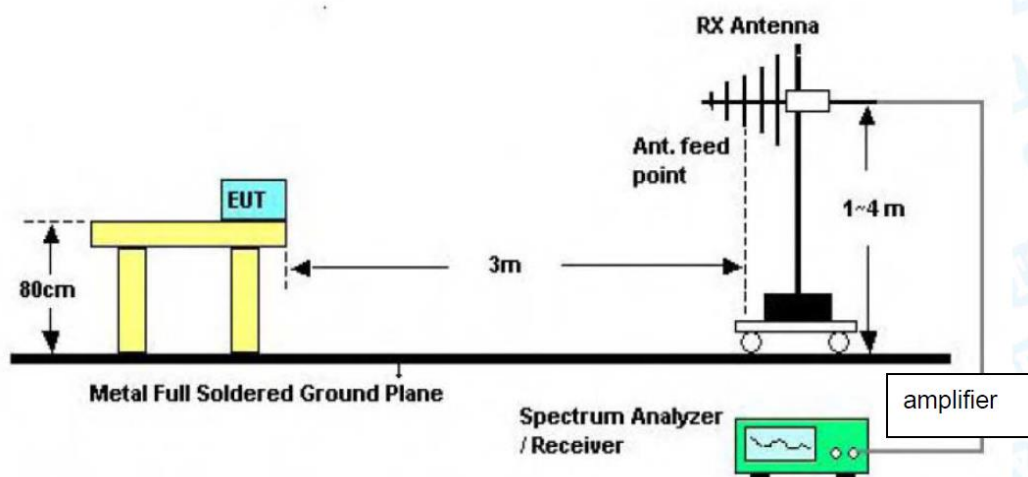
any unwanted emissions that falls between the upper edge of the 26 dB bandwidth and 5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth.

6.2 Test Setup

Radiated measurement

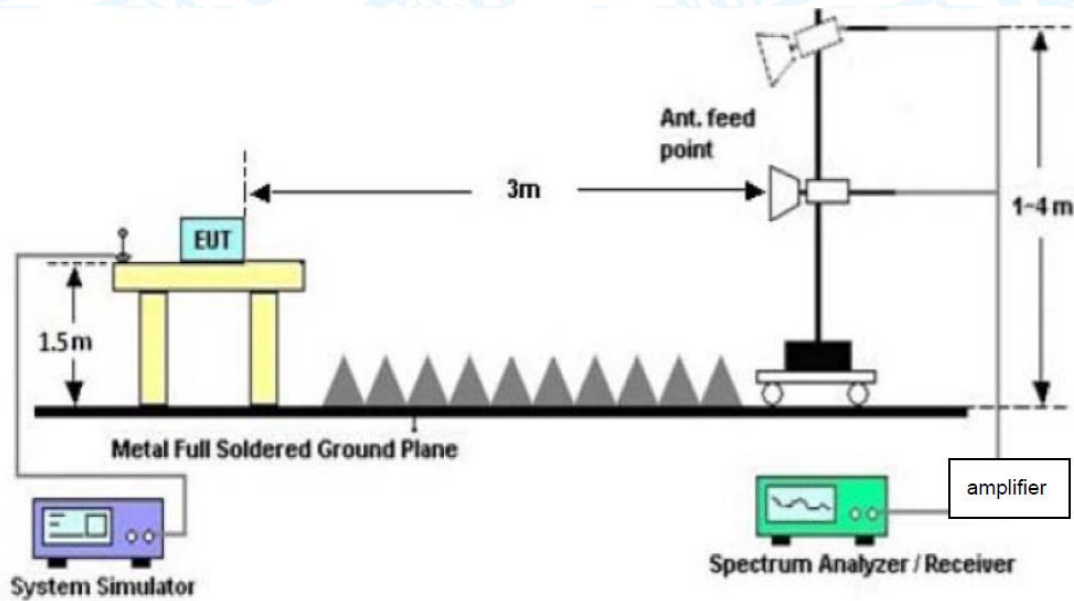


Below 30MHz Test Setup

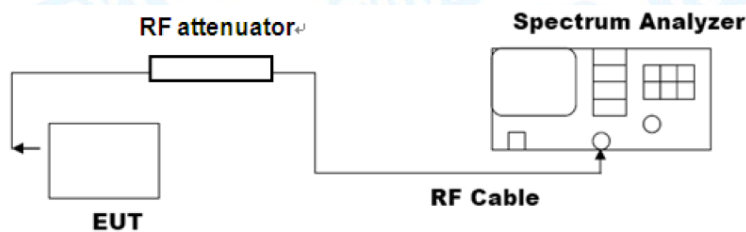


Below 1000MHz Test Setup





**Above 1GHz Test Setup
Conducted measurement**



6.3 Test Procedure

Procedures for unwanted emissions measurements below 1000 MHz

The procedure for unwanted emissions measurements below 1000 MHz is as follows:

- Follow the requirements in 12.7.4.
- Compliance shall be determined using CISPR quasi-peak detection; however, peak detection is permitted as an alternative to quasi-peak detection.

Procedure for peak unwanted emissions measurements above 1000 MHz

The procedure for peak unwanted emissions measurements above 1000 MHz is as follows:

- Follow the requirements in 12.7.4.
- Peak emission levels are measured by setting the instrument as follows:
 - RBW= 1 MHz.
 - $VBW \geq [3 \times RBW]$
 - Detector = peak.
 - Sweep time = No faster than coupled (auto) time.
 - Trace mode = max-hold.
- Allow sweeps to continue until the trace stabilizes. Note that if the transmission is not continuous, then the time required for the trace to stabilize will increase by a factor of approximately $1/D$, where D is the duty cycle. For example, at 50% duty cycle, the measurement time will increase by a factor of two, relative to measurement time for continuous transmission.



Procedures for average unwanted emissions measurements above 1000 MHz

The procedure for method AD is as follows:

- a) RBW= 1 MHz
- b) VBW $\geq$ [3 $\times$ RBW].
- c) Detector = Power averaging (rms), if [span / (# of points in sweep)] $\leq$ RBW / 2. Satisfying this condition can require increasing the number of points in the sweep or reducing the span. If the condition is not satisfied, then the detector mode shall be set to peak.
- d) Averaging typepower (i.e., rms) (As an alternative, the detector and averaging type may be set for linear voltage averaging. Some instruments require linear display mode to use linear voltage averaging. Log or dB averaging shall not be used.)
- e) Sweep time = auto.
- f) Perform a trace average of at least 100 traces if the transmission is continuous. If the transmission is not continuous, then the number of traces shall be increased by a factor of 1/D, where D is the duty cycle. For example, with 50% duty cycle, at least 200 traces shall be averaged. (If a specific emission is demonstrated to be continuous-i.e., 100% duty cycle-then rather than turning on and OFF with the transmit cycle, at least 100 traces shall be averaged.)
- g) If tests are performed with the EUT transmitting at a duty cycle less than 98%, then a correction factor shall be added to the measurement results prior to comparing with the emission limit, to compute the emission level that would have been measured had the test been performed at 100% duty cycle. The correction factor is computed as follows:
 - 1) If power averaging (rms) mode was used in the preceding step e), then the correction factor is [10 log (1 / D)], where D is the duty cycle. For example, if the transmit duty cycle was 50%, then 3 dB shall be added to the measured emission levels.
 - 2) If linear voltage averaging mode was used in the preceding step e), then the correction factor is [20 log (1 / D)], where D is the duty cycle. For example, if the transmit duty cycle was 50%, then 6 dB shall be added to the measured emission levels. If a specific emission is demonstrated to be continuous (100% duty cycle) rather than turning on and OFF with the transmit cycle, then no duty cycle correction is required for that emission.

Method VB-A is averaging using reduced video bandwidth. The procedure for this method is as follows:

- a) RBW=1 MHz. b) Video bandwidth:
 - 1) If the EUT is configured to transmit with D $\geq$ 98%, then set VBW $\leq$ RBW/100 (i.e., 10 kHz), but not less than 10Hz.
 - 2) If the EUT D is < 98%, then set VBW $\geq$ 1/T, where T is defined in item a) of 12.2.

Video bandwidth mode or display mode:

- 1) The instrument shall be set with video filtering applied in the power domain. Typically, this requires setting the detector mode to Power averaging (rms) and setting the average-VBW type to power (rms).
- 2) As an alternative, the instrument may be set to linear detector mode. Video filtering shall



be applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode to accomplish this. Others have a setting for average-VBW type, which can be set to “voltage” regardless of the display mode.

d) Detector = peak.

e) Sweep time = No faster than coupled (auto) time.

f) Trace mode = max-hold.

Allow max-hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98% duty cycle. For lower duty cycles, increase the minimum number of traces by a factor of $1/x$, where D is the duty cycle. For example, use at least 200 traces if the duty cycle is 25%. (If a specific emission is demonstrated to be continuous—i.e., 100% duty cycle—then rather than turning ON and OFF with the transmit cycle, at least 50 traces should be averaged.)

6.4 Deviation From Test Standard

No deviation

6.5 EUT Operating Mode

Please refer to the description of test mode.

6.6 Test Data

Radiated measurement please refer to the Attachment B inside test report.

Conducted measurement please refer to the external appendix report of 5G Wi-Fi.



7. Restricted Bands Requirement

7.1 Test Standard and Limit

7.1.1 Test Standard

RSS-Gen 8.10 & RSS 247 (7.3.1.3&7.3.2.3&7.3.3.3&7.3.4.4)

FCC Part 15.205 & FCC Part 15.407(b)

7.1.2 Test Limit

Frequency (MHz)	EIRP Limits (dBm)	Equivalent Field Strength at 3m (dBuV/m)
5150~5250	-27	68.3
5250~5350	-27	68.3
5470~5725	-27	68.3
5725~5825	-27(Note 2)	68.3
	10(Note 2)	105.3
	15.6(Note 2)	110.9
	27(Note 2)	122.3

NOTE:

1, The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

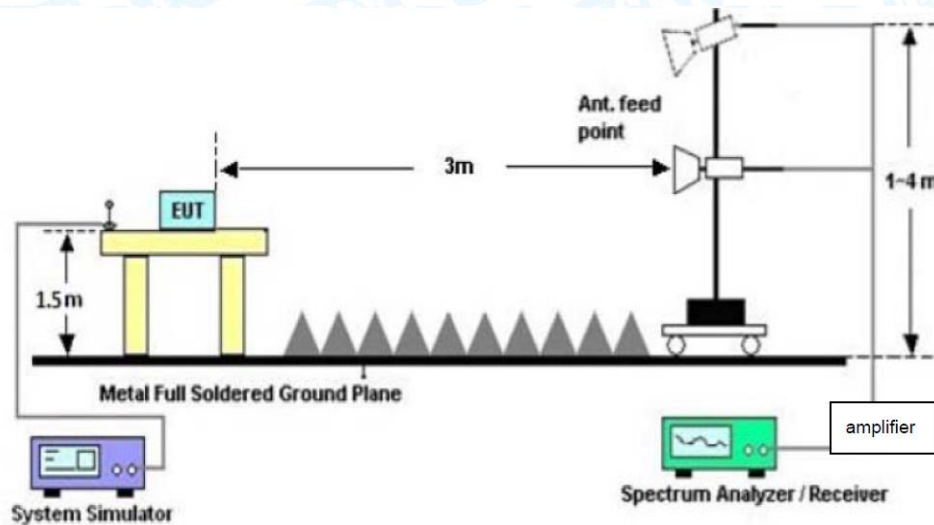
2, According to FCC 16-24, All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.

Note: According the ANSI C63.10 11.12.2 antenna-port conducted measurements may also be used as an alternative to radiated measurements for determining compliance in the restricted frequency bands requirements. If conducted measurements are performed, then proper impedance matching must be ensured and an additional radiated test for cabinet/case emissions is required.

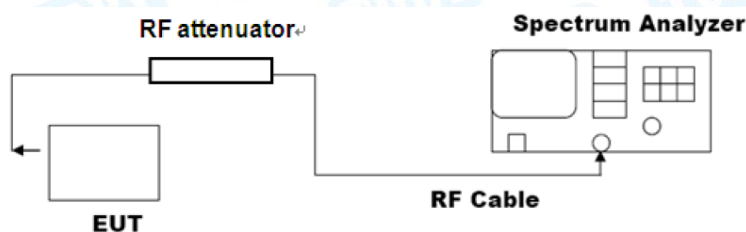


7.2 Test Setup

Radiated measurement



Conducted measurement



7.3 Test Procedure

---Radiated measurement

- Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- The Peak Value and average value both need to comply with applicable limit above 1 GHz.
- Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=3MHz with Peak Detector for Average Values.
- For the actual test configuration, please see the test setup photo.



--- Conducted measurement

- a) Measure the conducted output power (in dBm) using the detector specified by the appropriate regulatory agency (see 11.12.2.3 through 11.12.2.5 for guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).
- b) Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP (see 11.12.2.6 for guidance on determining the applicable antenna gain).
- c) Add the appropriate maximum ground reflection factor to the EIRP (6 dB for frequencies ≤ 30 MHz; 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive; and 0 dB for frequencies > 1000 MHz).
- d) For MIMO devices, measure the power of each chain and sum the EIRP of all chains in linear terms (i.e., watts and mW).
- e) Convert the resultant EIRP to an equivalent electric field strength using the following relationship:

$$E = \text{EIRP} - 20 \log d + 104.8$$

where

E is the electric field strength in dBuV/m

EIRP is the equivalent isotropically radiated power in dBm

d is the specified measurement distance in m

- f) Compare the resultant electric field strength level with the applicable regulatory limit.

- g) Perform the radiated spurious emission test.

7.4 Deviation From Test Standard

No deviation

7.5 EUT Operating Mode

Please refer to the description of test mode.

7.6 Test Data

Please refer to the Attachment C inside test report.



8. Bandwidth Test

8.1 Test Standard and Limit

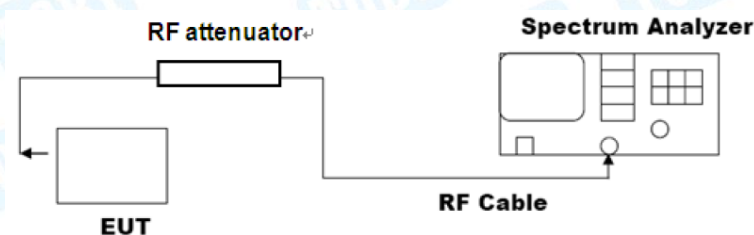
8.1.1 Test Standard

**RSS Gen 6.7&RSS 247 (7.3.1.3&7.3.2.3&7.3.3.3&7.3.4.4)& RSS 247 (7.3.4.2)
FCC Part 15.407(a) & FCC Part 15.407(e)**

8.1.2 Test Limit

Test Item	Limit	Frequency Range (MHz)
26 Bandwidth	N/A	5150~5250
		5250~5350
		5500~5725
6 dB Bandwidth	>500kHz	5725~5850
99% Bandwidth	N/A	5150~5250
		5250~5350
		5500~5725
		5725~5850

8.2 Test Setup



8.3 Test Procedure

---Emission bandwidth

● The procedure for this method is as follows:

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the peak of the emission.

Compare this with the RBW setting of the instrument. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

NOTE—The automatic bandwidth measurement capability of a spectrum analyzer or an

EMI receiver may be employed if it implements the functionality described in the preceding items.

--- Emission bandwidth



● The steps for the first option are as follows:

- a) Set RBW = 100 kHz.
- b) Set the VBW $\geq [3 \cdot \text{RBW}]$.
- c) Detector = peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

---occupied bandwidth

● The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (\text{OBW}/\text{RBW})]$ below the reference level. Specific guidance is given in 4.1.5.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

8.4 Deviation From Test Standard

No deviation

8.5 EUT Operating Mode

Please refer to the description of test mode.

8.6 Test Data

Please refer to the external appendix report of 5G Wi-Fi.



9. Maximum Conducted Output Power

9.1 Test Standard and Limit

9.1.1 Test Standard

RSS 247 (6.2.11&6.2.2.1&6.2.3.1&6.2.4.1)

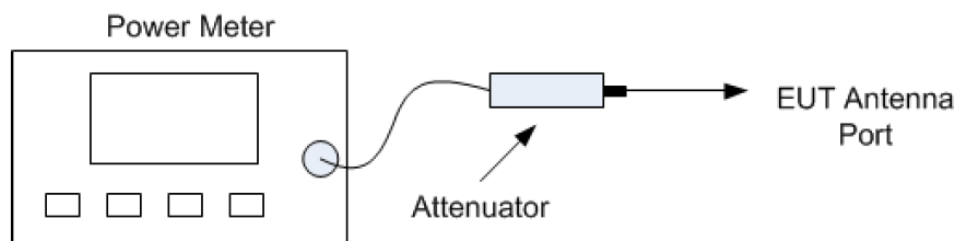
FCC Part 15.407(a)

9.1.2 Test Limit

RSS-247				
Limit	Frequency Range(MHz)			
	5150~5250	5250~5350	5500~5725	5725~5850
Max Conducted TX Power	N/A	The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm		1 Watt (30dBm)
Max E.I.R.P	For other devices, the maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.	The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10} B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.		/
TPC	NO	YES, if Max_EIRP $\geq$ 500 mW (27 dBm) and able to lower EIRP below 24dBm NO, if Max_EIRP < 500mW (27dBm)		NO

FCC Part 15 Subpart E(15.407)				
Limit	Frequency Range(MHz)			
	5150~5250	5250~5350	5500~5725	5725~5850
Max Conducted TX Power	Master Device: 1 Watt(30dBm) Client Device: 250mW(24dBm)	24dBm (250 mW) or $11 \text{ dBm} + 10 \log B$, whichever is lower (B= 26-dB emission BW)		1 Watt (30dBm)
TPC	NO	YES, if Max_EIRP $\geq$ 500 mW (27 dBm) and able to lower EIRP below 24dBm NO, if Max_EIRP < 500mW (27dBm)		NO

9.2 Test Setup



9.3 Test Procedure

● The EUT was connected to RF power meter via a broadband power sensor as show the block above. The power sensor video bandwidth is greater than or equal to the DTS bandwidth of the equipment. For straddle channels power test with spectrum analyser.



9.4 Deviation From Test Standard

No deviation

9.5 EUT Operating Mode

Please refer to the description of test mode.

9.6 Test Data

Please refer to the external appendix report of 5G Wi-Fi.



10. Power Spectral Density Test

10.1 Test Standard and Limit

10.1.1 Test Standard

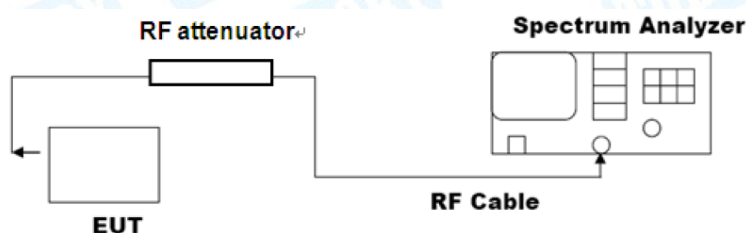
RSS-247(7.3.1.2&7.3.2.2&7.3.3.2&7.3.4.3)

FCC Part 15.407(a)

10.1.2 Test Limit

Test Item	Limit		Frequency Range(MHz)
Power Spectral Density	FCC	Master Device: 17dBm/MHz Client Device: 11dBm/MHz	5150~5250
	IC	10dBm/MHz E.I.R.P. PSD	
		11dBm/MHz	5250~5350
		11dBm/MHz	5500~5725
		30dBm/500kHz	5725~5850

10.2 Test Setup



10.3 Test Procedure

● Notwithstanding that some regulatory requirements refer to peak power spectral density

(PPSD), in some cases the intent is to measure the maximum value of the time average of the power spectral density during a period of continuous transmission. The procedure for this method is as follows:

- Create an average power spectrum for the EUT operating mode being tested by following the instructions in 12.3.2 for measuring maximum conducted output power using a spectrum analyzer or EMI receiver; that is, select the appropriate test method (SA-1, SA-2, SA-3, or their respective alternatives) and apply it up to, but not including, the step labeled, "Compute power...". (This procedure is required even if the maximum conducted output power measurement was performed using the power meter method PM.)
- Use the peak search function on the instrument to find the peak of the spectrum.
- Make the following adjustments to the peak value of the spectrum, if applicable:
 - If method SA-2 or SA-2A was used, then add $[10 \log (1 / D)]$, where D is the duty cycle, to the peak of the spectrum.
 - If method SA-3A was used and the linear mode was used in step h) of 12.3.2.7, add



1 dB to the final result to compensate for the difference between linear averaging and power averaging.

d) The result is the PPSD.

e) The procedure in item a) through item c) requires the use of 1 MHz resolution bandwidth to satisfy the 1 MHz measurement bandwidth specified by some regulatory authorities.⁹⁵ This requirement also permits use of resolution bandwidths less than 1 MHz "provided that the measured power is integrated to show the total power over the measurement bandwidth" (i.e., 1 MHz). If measurements are performed using a reduced resolution bandwidth and integrated over 1 MHz bandwidth, the following adjustments to the procedures apply:

1) Set $RBW \geq 1 / T$, where T is defined in 12.2 a).

2) Set $VBW \geq [3 \cdot RBW]$.

3) Care shall be taken such that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

10.4 Deviation From Test Standard

No deviation

10.5 Antenna Connected Construction

Please refer to the description of test mode.

10.6 Test Data

Please refer to the external appendix report of 5G Wi-Fi.



11. Frequency Stability

11.1 Test Standard and Limit

11.1.1 Test Standard

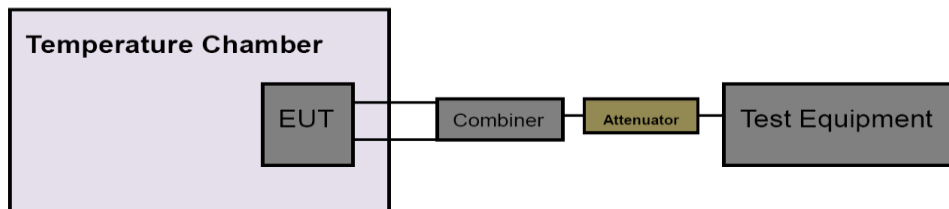
RSS-Gen 8.11

FCC Part 15.407(g)

11.1.2 Test Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

11.2 Test Setup



11.3 Test Procedure

Frequency stability with respect to ambient temperature

a) Supply the EUT with a nominal ac voltage or install a new or fully charged battery in the EUT. If possible, a dummy load shall be connected to the EUT because an antenna near the metallic walls of an environmental test chamber could affect the output frequency of the EUT. If the EUT is equipped with a permanently attached, adjustable-length antenna, then the EUT shall be placed in the center of the chamber with the antenna adjusted to the shortest length possible. Turn ON the EUT and tune it to one of the number of frequencies shown in 5.6.

b) Couple the unlicensed wireless device output to the measuring instrument by connecting an antenna to the measuring instrument with a suitable length of coaxial cable and placing the measuring antenna near the EUT (e.g., 15 cm away), or by connecting a dummy load to the measuring instrument, through an attenuator if necessary.

NOTE—An instrument that has an adequate level of accuracy as specified by the procuring or regulatory agency is the recommended measuring instrument.

c) Adjust the location of the measurement antenna and the controls on the measurement instrument to obtain a suitable signal level (i.e., a level that will not overload the measurement instrument but is strong enough to allow measurement of the operating or fundamental frequency of the EUT).

d) Turn the EUT OFF and place it inside the environmental temperature chamber. For devices that have oscillator heaters, energize only the heater circuit.

e) Set the temperature control on the chamber to the highest specified in the regulatory requirements for the type of device and allow the oscillator heater and the chamber temperature to stabilize.

f) While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized. Four measurements in total are made.

g) Measure the frequency at each of frequencies specified in 5.6.

h) Switch OFF the EUT but do not switch OFF the oscillator heater.

i) Lower the chamber temperature by not more than 10°C, and allow the temperature



inside the chamber to stabilize.

j) Repeat step f) through step i) down to the lowest specified temperature.

Frequency stability when varying supply voltage

Unless otherwise specified, these tests shall be made at ambient room temperature (+15°C to +25°C). An antenna shall be connected to the antenna output terminals of the EUT if possible. If the EUT is equipped with or uses an adjustable-length antenna, then it shall be fully extended.

a) Supply the EUT with nominal voltage or install a new or fully charged battery in the EUT. Turn ON the EUT and couple its output to a frequency counter or other frequency-measuring instrument.

NOTE—An instrument that has an adequate level of accuracy as specified by the procuring or regulatory agency is the recommended measuring instrument.

b) Tune the EUT to one of the number of frequencies required in 5.6. Adjust the location of the measurement antenna and the controls on the measurement instrument to obtain a suitable signal level (i.e., a level that will not overload the measurement instrument but is strong enough to allow measurement of the operating or fundamental frequency of the EUT).

c) Measure the frequency at each of the frequencies specified in 5.6.

d) Repeat the above procedure at 85% and 115% of the nominal supply voltage as described in 5.13.

11.4 Deviation From Test Standard

No deviation

11.5 Antenna Connected Construction

Please refer to the description of test mode.

11.6 Test Data

Please refer to the external appendix report of 5G Wi-Fi.



12. Antenna Requirement

12.1 Test Standard and Limit

12.1.1 Test Standard

RSS 247 6.8

FCC Part 15.203

12.1.2 Requirement

(FCC Part 15.203)

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

(RSS-Gen 6.8)

The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

For expediting the testing, measurements may be performed using only the antenna with highest gain of each combination of transmitter and antenna type, with the transmitter output power set at the maximum level. However, the transmitter shall comply with the applicable requirements under all operational conditions and when in combination with any type of antenna from the list provided in the test report (and in the notice to be included in the user manual, provided below).

12.2 Deviation From Test Standard

No deviation

12.3 Antenna Connected Construction

The Max. gains of the antenna used for transmitting is 2.59dBi, and the antenna designed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.



12.4 Test Data

The EUT antenna is a FPC Antenna. It complies with the standard requirement.

Antenna Type
☒ Permanent attached antenna
☐ Unique connector antenna
☐ Professional installation antenna





13. Duty cycle

13.1 Test Standard and Limit

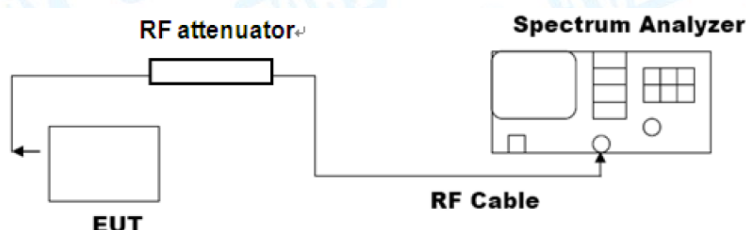
13.1.1 Test Standard

/

13.1.2 Test Limit

/

13.2 Test Setup



13.3 Test Procedure

● Measurements of duty cycle and transmission duration shall be performed using below techniques. The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the ON and OFF times of the transmitted signal:

- 1) Set the center frequency of the instrument to the center frequency of the transmission.
- 2) Span=0Hz
- 3) Set RBW=8MHz.
- 4) Set RBW=8MHz.
- 5) Set Detector= peak.
- 6) Trace mode = clear write.

13.4 Deviation From Test Standard

No deviation

13.5 Antenna Connected Construction

Please refer to the description of test mode.

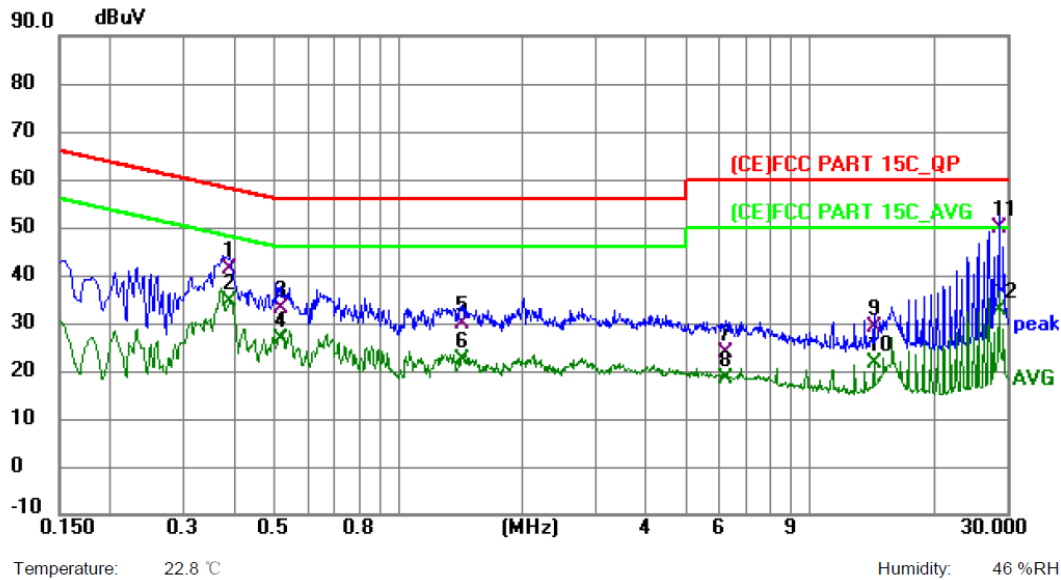
13.6 Test Data

Please refer to the external appendix report of 5G Wi-Fi.



Attachment A-- Conducted Emission Test Data

Test Voltage:	AC 120V/60Hz
Terminal:	Line
Test Mode:	Mode 1
Remark:	Only worse case is reported.



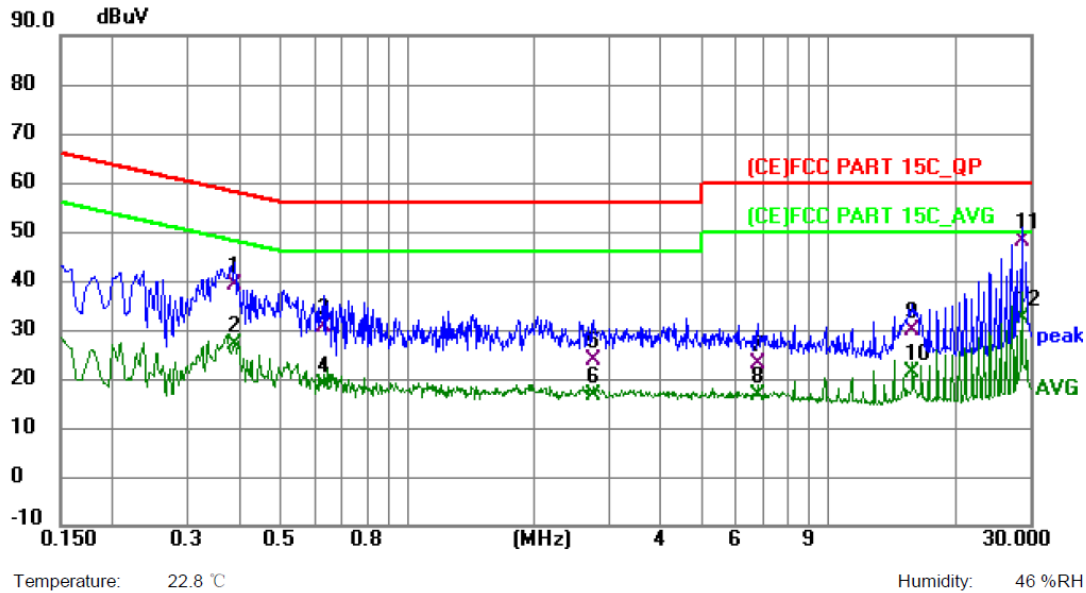
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.389	31.99	9.40	41.39	58.09	-16.70	QP
2		0.389	25.04	9.40	34.44	48.09	-13.65	AVG
3		0.514	23.65	9.41	33.06	56.00	-22.94	QP
4		0.514	17.32	9.41	26.73	46.00	-19.27	AVG
5		1.428	20.42	9.38	29.80	56.00	-26.20	QP
6		1.428	13.11	9.38	22.49	46.00	-23.51	AVG
7		6.247	14.34	9.54	23.88	60.00	-36.12	QP
8		6.247	8.75	9.54	18.29	50.00	-31.71	AVG
9		14.329	19.37	9.76	29.13	60.00	-30.87	QP
10		14.329	11.79	9.76	21.55	50.00	-28.45	AVG
11	*	28.694	39.20	10.71	49.91	60.00	-10.09	QP
12		28.694	21.99	10.71	32.70	50.00	-17.30	AVG

Remark:

1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Margin (dB) = QuasiPeak/Average (dBuV) - Limit (dBuV)



Test Voltage:	AC 120V/60Hz
Terminal:	Neutral
Test Mode:	Mode 1
Remark:	Only worse case is reported.



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.389	29.66	9.42	39.08	58.09	-19.01	QP
2		0.389	17.49	9.42	26.91	48.09	-21.18	AVG
3		0.636	21.15	9.54	30.69	56.00	-25.31	QP
4		0.636	9.34	9.54	18.88	46.00	-27.12	AVG
5		2.769	14.42	9.49	23.91	56.00	-32.09	QP
6		2.769	7.01	9.49	16.50	46.00	-29.50	AVG
7		6.783	13.34	9.58	22.92	60.00	-37.08	QP
8		6.783	7.08	9.58	16.66	50.00	-33.34	AVG
9		15.841	19.65	10.05	29.70	60.00	-30.30	QP
10		15.841	11.31	10.05	21.36	50.00	-28.64	AVG
11	*	28.689	37.41	10.78	48.19	60.00	-11.81	QP
12		28.689	21.50	10.78	32.28	50.00	-17.72	AVG

Remark:

1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Margin (dB) = QuasiPeak/Average (dBuV) - Limit (dBuV)



Attachment B--Unwanted Emissions Data

---Radiated Unwanted Emissions

9 KHz~30 MHz

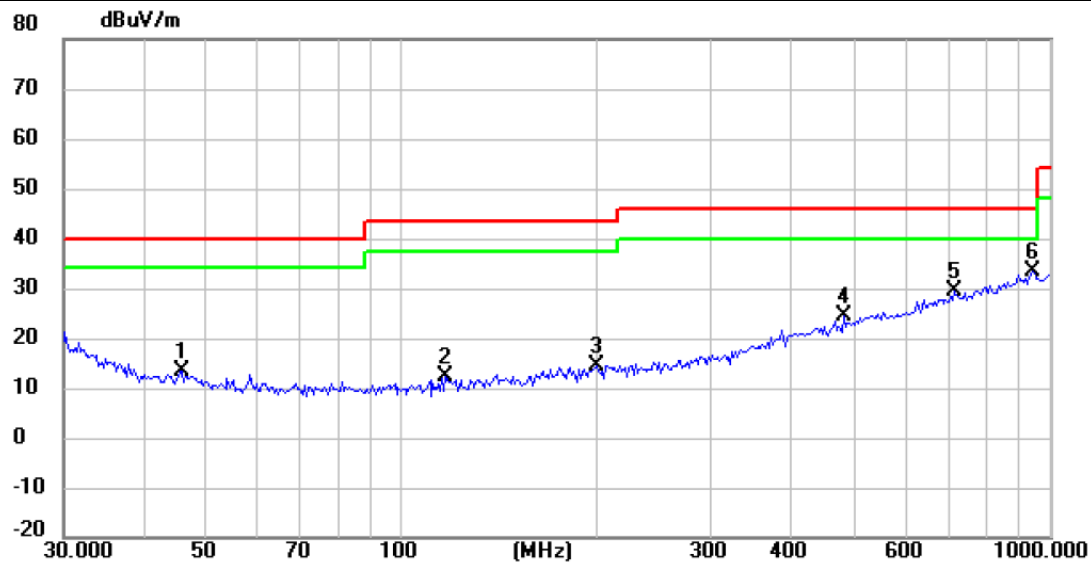
From 9 KHz to 30 MHz: Conclusion: PASS

Note: The amplitude of spurious emissions which are attenuated by more than 20dB

Below the permissible value has no need to be reported.

30MHz~1GHz

Test Voltage:	AC 120V/60Hz
Ant. Pol.	Horizontal
Test Mode:	Mode 1
Remark:	Only worse case is reported.



Temperature: 23.6 °C

Humidity: 49 %RH

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	45.6948	28.69	-15.21	13.48	40.00	-26.52	peak	P
2	116.9495	28.62	-16.22	12.40	43.50	-31.10	peak	P
3	199.2855	28.10	-13.73	14.37	43.50	-29.13	peak	P
4	482.2156	29.51	-4.90	24.61	46.00	-21.39	peak	P
5	714.1734	29.03	0.49	29.52	46.00	-16.48	peak	P
6 *	938.8326	28.89	4.39	33.28	46.00	-12.72	peak	P

Remark:

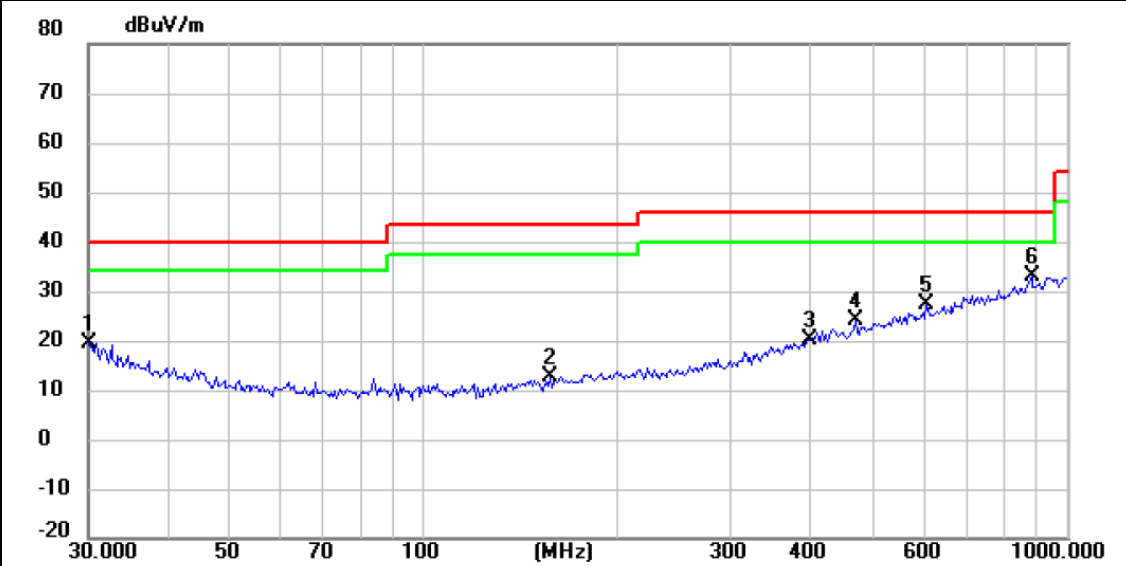
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)

2. QuasiPeak (dBuV/m)= Corr. (dB/m)+ Read Level (dBuV)

3. Margin (dB) = QuasiPeak (dBuV/m)-Limit QPK(dBuV/m)



Test Voltage:	AC 120V/60Hz
Ant. Pol.	Vertical
Test Mode:	Mode 1
Remark:	Only worse case is reported.



Temperature: 23.6 °C

Humidity: 49 %RH

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	30.2111	26.54	-7.12	19.42	40.00	-20.58	peak	P
2	157.0074	27.96	-15.29	12.67	43.50	-30.83	peak	P
3	399.0302	27.23	-7.08	20.15	46.00	-25.85	peak	P
4	468.8762	29.50	-5.27	24.23	46.00	-21.77	peak	P
5	603.5392	29.60	-2.36	27.24	46.00	-18.76	peak	P
6 *	875.2470	29.61	3.37	32.98	46.00	-13.02	peak	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. QuasiPeak (dBuV/m)= Corr. (dB/m)+ Read Level (dBuV)
3. Margin (dB) = QuasiPeak (dBuV/m)-Limit QPK(dBuV/m)

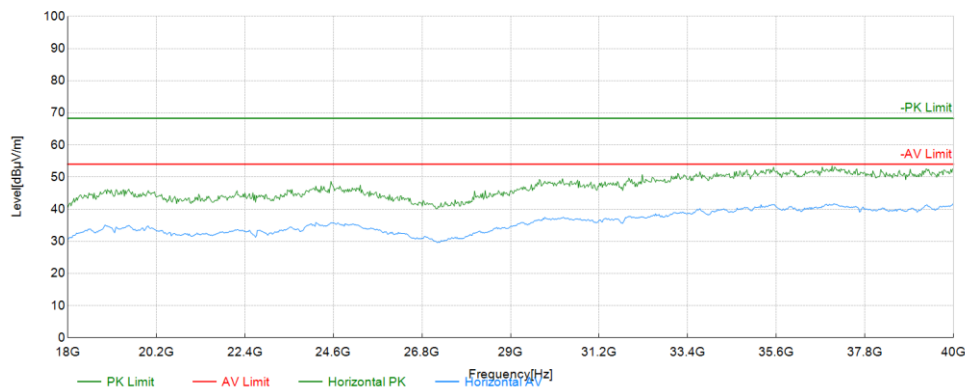
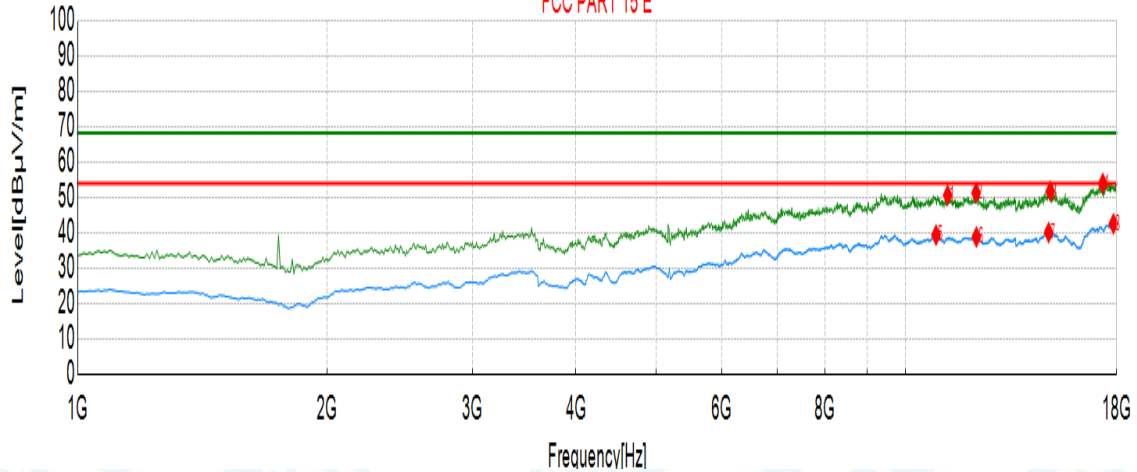


Above 1GHz

Test Mode:	802.11A 5180MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	11247.62	45.18	5.46	50.64	68.30	17.66	PK	Horizont	PASS
2	12174.59	44.25	7.05	51.30	68.30	17.00	PK	Horizont	PASS
3	14963.98	43.21	8.54	51.75	68.30	16.55	PK	Horizont	PASS
4	17319.66	43.84	10.14	53.98	68.30	14.32	PK	Horizont	PASS
5	10890.45	34.76	4.58	39.34	54.00	14.66	AV	Horizont	PASS
6	12183.09	31.77	7.03	38.80	54.00	15.20	AV	Horizont	PASS
7	14895.95	31.12	8.93	40.05	54.00	13.95	AV	Horizont	PASS
8	17838.42	30.34	12.20	42.54	54.00	11.46	AV	Horizont	PASS

Remark:

1. Level (dBμV/m)= Factor (dB/m)+ Read Level (dBμV)

2. Margin (dB) =Limit(dBμV/m)-Level(dBμV/m)

3. The tests evaluated 1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency:8-25G)., and 18GHz-40GHz is the noise, No other signals were detected.

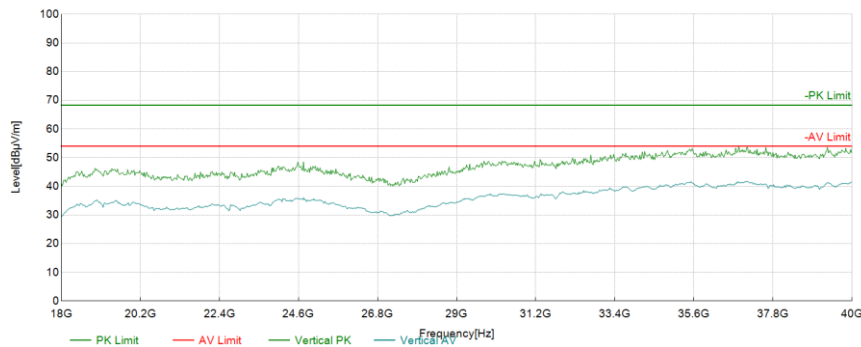
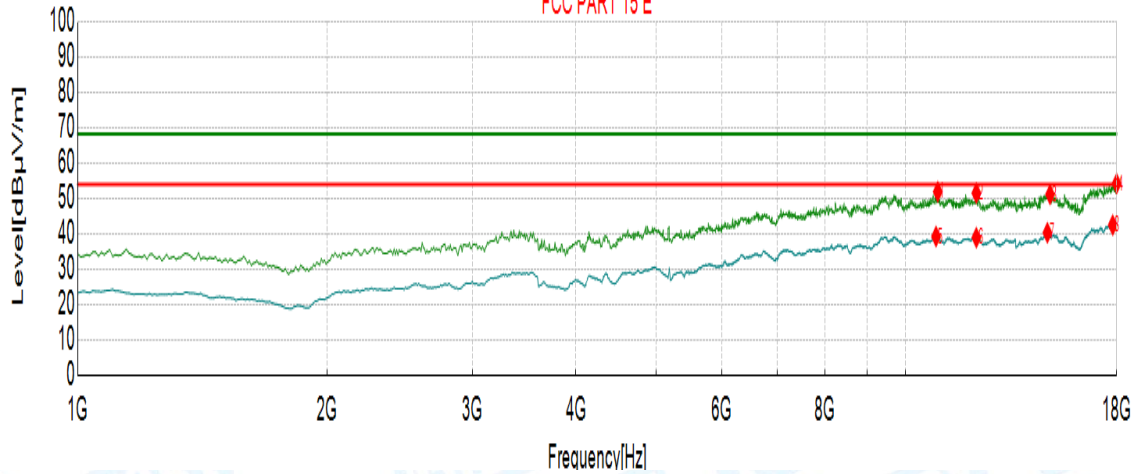
4. No report for the emission which below the prescribed limit.



Test Mode:	802.11A 5180MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	10941.47	47.13	4.77	51.90	68.30	16.40	PK	Vertical	PASS
2	12183.09	44.49	7.03	51.52	68.30	16.78	PK	Vertical	PASS
3	14955.48	42.55	8.60	51.15	68.30	17.15	PK	Vertical	PASS
4	18000.00	41.83	12.40	54.23	68.30	14.07	PK	Vertical	PASS
5	10890.45	34.65	4.58	39.23	54.00	14.77	AV	Vertical	PASS
6	12183.09	31.86	7.03	38.89	54.00	15.11	AV	Vertical	PASS
7	14844.92	31.46	8.82	40.28	54.00	13.72	AV	Vertical	PASS
8	17804.40	30.16	12.29	42.45	54.00	11.55	AV	Vertical	PASS

Remark:

1. Level (dBμV/m)= Factor (dB/m)+ Read Level (dBμV)

2. Margin (dB) =Limit(dBμV/m)-Level(dBμV/m)

3. The tests evaluated 1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency:8-25G)., and 18GHz-40GHz is the noise, No other signals were detected.

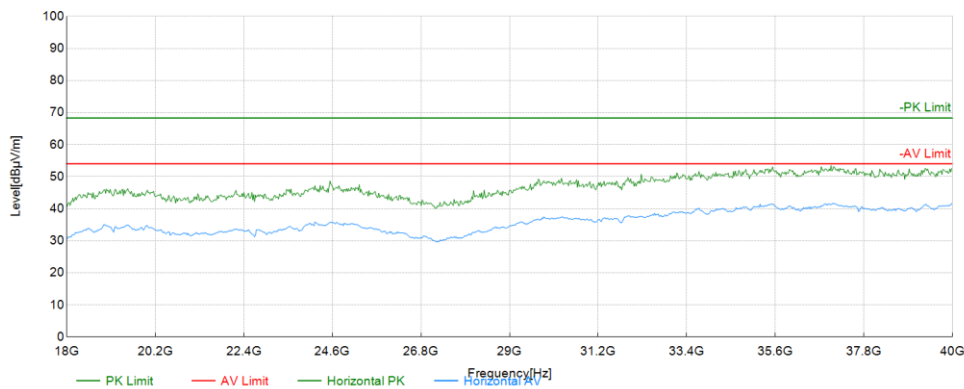
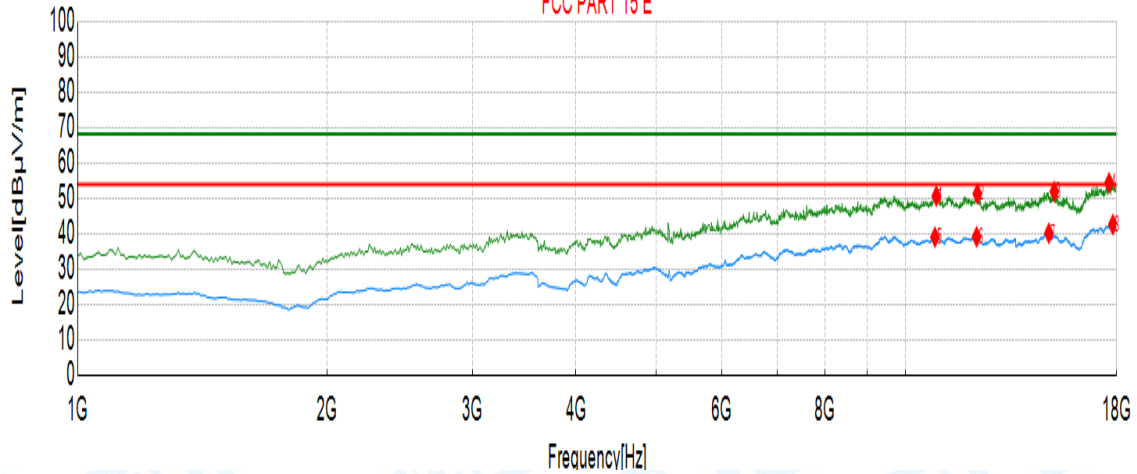
4. No report for the emission which below the prescribed limit.



Test Mode:	802.11A 5200MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	10898.95	46.05	4.63	50.68	68.30	17.62	PK	Horizont	PASS
2	12217.11	44.45	6.86	51.31	68.30	16.99	PK	Horizont	PASS
3	15134.07	43.41	8.53	51.94	68.30	16.36	PK	Horizont	PASS
4	17625.81	43.68	10.71	54.39	68.30	13.91	PK	Horizont	PASS
5	10856.43	34.62	4.41	39.03	54.00	14.97	AV	Horizont	PASS
6	12191.60	32.14	6.99	39.13	54.00	14.87	AV	Horizont	PASS
7	14904.45	31.23	8.91	40.14	54.00	13.86	AV	Horizont	PASS
8	17812.91	30.33	12.27	42.60	54.00	11.40	AV	Horizont	PASS

Remark:

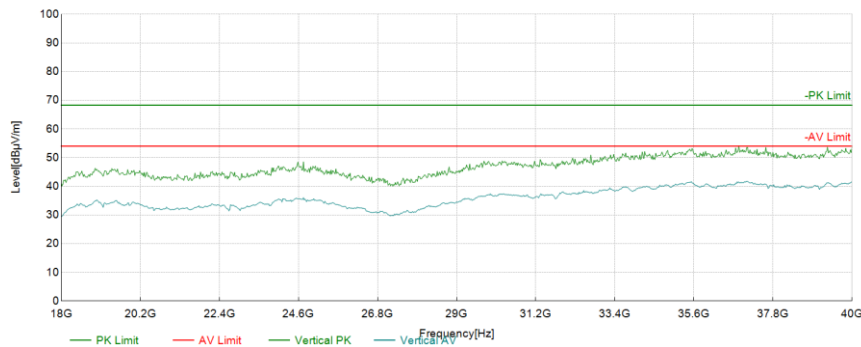
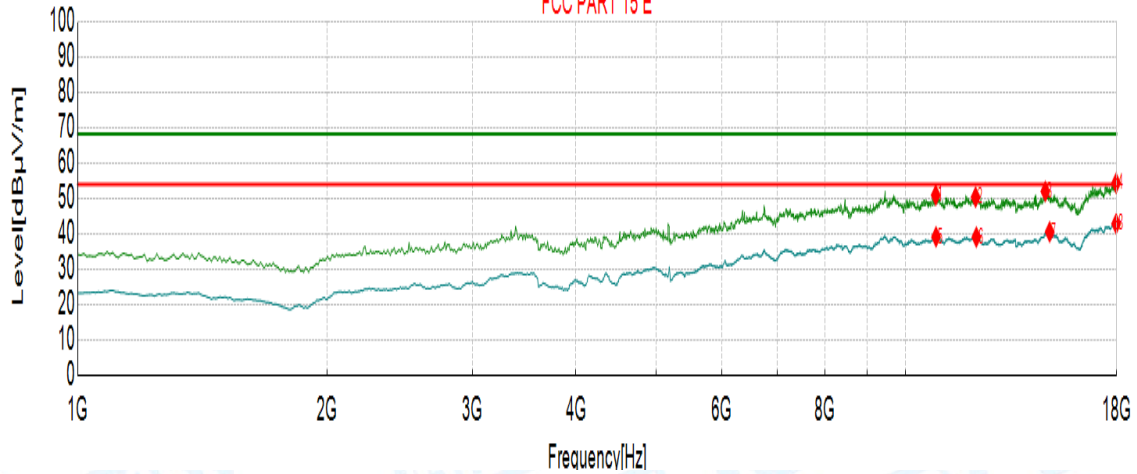
- Level (dBμV/m)= Factor (dB/m)+ Read Level (dBμV)
- Margin (dB) =Limit(dBμV/m)-Level(dBμV/m)
- The tests evaluated 1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency:8-25G)., and 18GHz-40GHz is the noise, No other signals were detected.
- No report for the emission which below the prescribed limit.



Test Mode:	802.11A 5200MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	10881.94	46.39	4.54	50.93	68.30	17.37	PK	Vertical	PASS
2	12157.58	43.27	7.10	50.37	68.30	17.93	PK	Vertical	PASS
3	14759.88	43.56	8.42	51.98	68.30	16.32	PK	Vertical	PASS
4	17974.49	42.06	12.31	54.37	68.30	13.93	PK	Vertical	PASS
5	10890.45	34.54	4.58	39.12	54.00	14.88	AV	Vertical	PASS
6	12183.09	32.01	7.03	39.04	54.00	14.96	AV	Vertical	PASS
7	14938.47	31.82	8.70	40.52	54.00	13.48	AV	Vertical	PASS
8	17974.49	30.51	12.31	42.82	54.00	11.18	AV	Vertical	PASS

Remark:

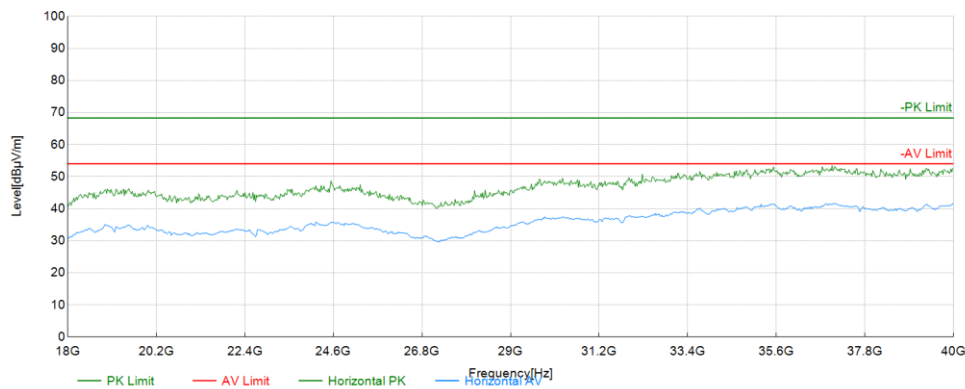
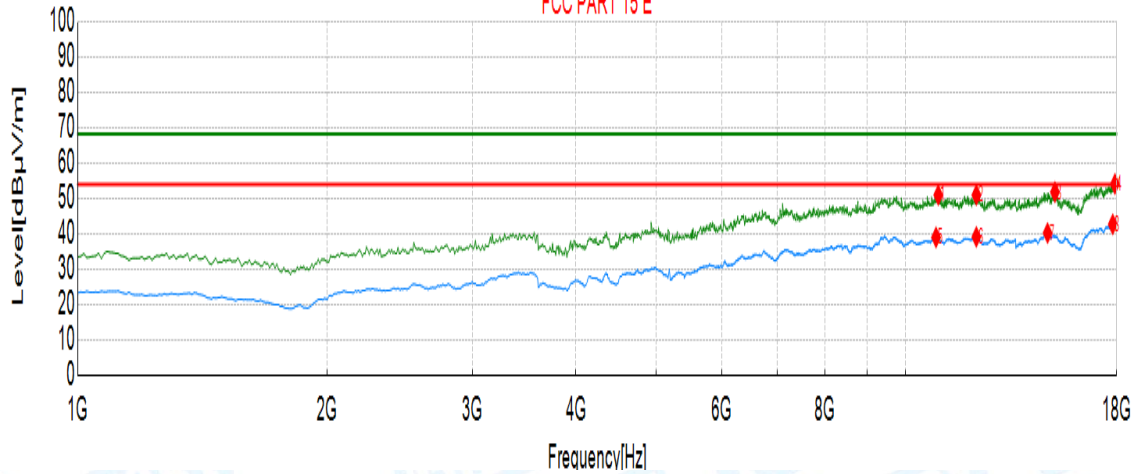
- Level (dBμV/m)= Factor (dB/m)+ Read Level (dBμV)
- Margin (dB) =Limit(dBμV/m)-Level(dBμV/m)
- The tests evaluated 1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency:8-25G)., and 18GHz-40GHz is the noise, No other signals were detected.
- No report for the emission which below the prescribed limit.



Test Mode:	802.11A 5240MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	10958.48	46.14	4.83	50.97	68.30	17.33	PK	Horizont	PASS
2	12183.09	43.96	7.03	50.99	68.30	17.31	PK	Horizont	PASS
3	15159.58	43.20	8.59	51.79	68.30	16.51	PK	Horizont	PASS
4	17914.96	42.01	12.10	54.11	68.30	14.19	PK	Horizont	PASS
5	10890.45	34.39	4.58	38.97	54.00	15.03	AV	Horizont	PASS
6	12183.09	32.07	7.03	39.10	54.00	14.90	AV	Horizont	PASS
7	14853.43	31.36	8.84	40.20	54.00	13.80	AV	Horizont	PASS
8	17804.40	30.38	12.29	42.67	54.00	11.33	AV	Horizont	PASS

Remark:

1. Level (dBμV/m)= Factor (dB/m)+ Read Level (dBμV)

2. Margin (dB) =Limit(dBμV/m)-Level(dBμV/m)

3. The tests evaluated 1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency:8-25G)., and 18GHz-40GHz is the noise, No other signals were detected.

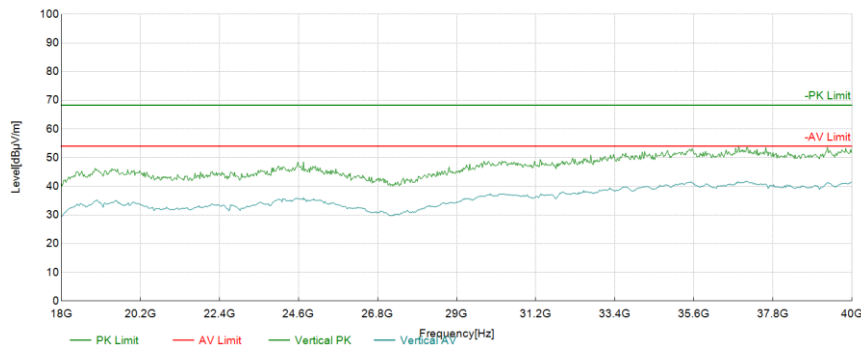
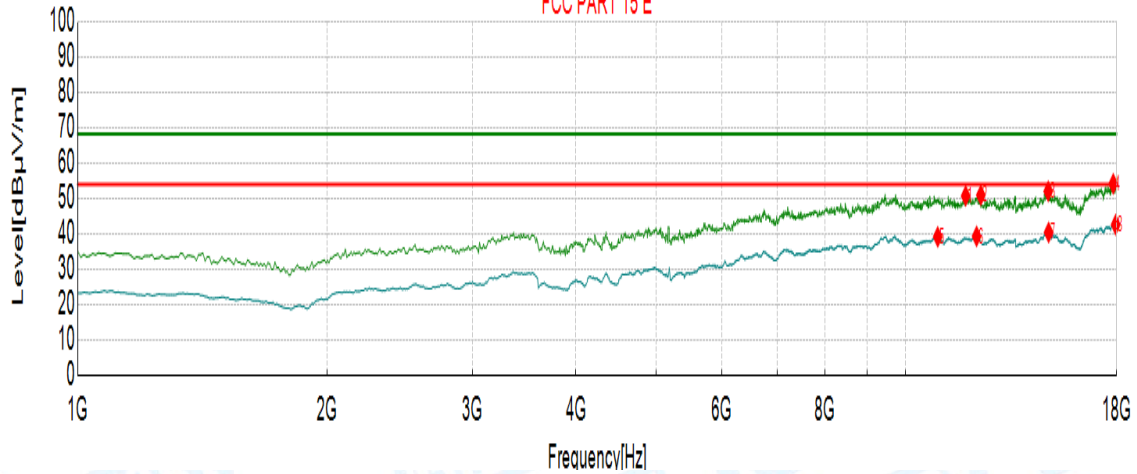
4. No report for the emission which below the prescribed limit.



Test Mode:	802.11A 5240MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List									
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	11825.91	43.95	6.78	50.73	68.30	17.57	PK	Vertical	PASS
2	12336.17	44.73	6.19	50.92	68.30	17.38	PK	Vertical	PASS
3	14878.94	43.14	8.89	52.03	68.30	16.27	PK	Vertical	PASS
4	17829.91	41.92	12.22	54.14	68.30	14.16	PK	Vertical	PASS
5	10941.47	34.34	4.77	39.11	54.00	14.89	AV	Vertical	PASS
6	12191.60	32.27	6.99	39.26	54.00	14.74	AV	Vertical	PASS
7	14895.95	31.45	8.93	40.38	54.00	13.62	AV	Vertical	PASS
8	17948.97	30.36	12.22	42.58	54.00	11.42	AV	Vertical	PASS

Remark:

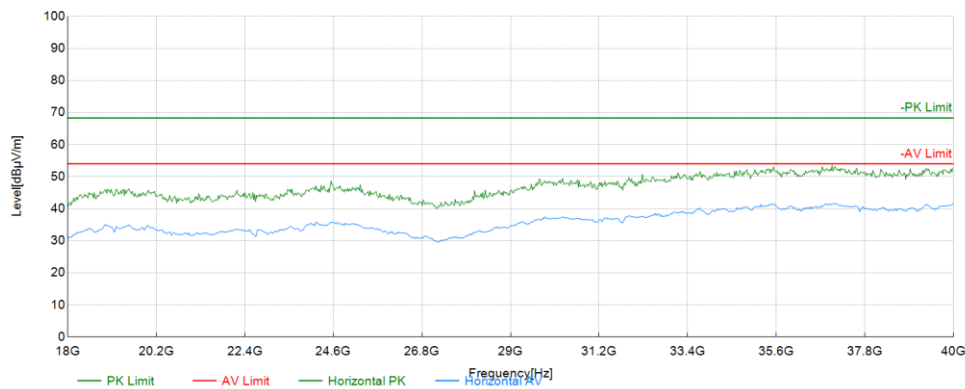
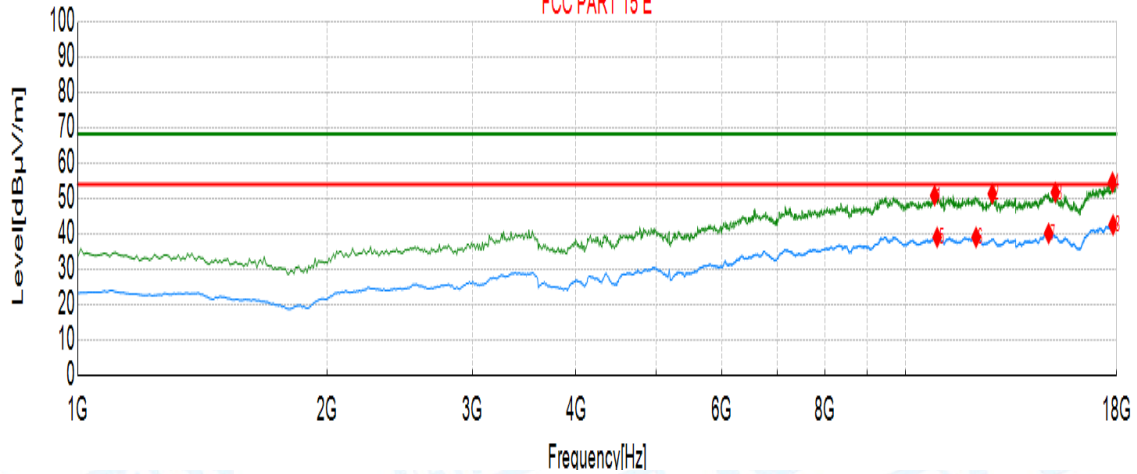
1. Level (dBμV/m)= Factor (dB/m)+ Read Level (dBμV)
2. Margin (dB) =Limit(dBμV/m)-Level(dBμV/m)
3. The tests evaluated 1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency:8-25G)., and 18GHz-40GHz is the noise, No other signals were detected.
4. No report for the emission which below the prescribed limit.



Test Mode:	802.11A 5260MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	10847.92	46.44	4.35	50.79	68.30	17.51	PK	Horizont	PASS
2	12735.87	45.28	6.04	51.32	68.30	16.98	PK	Horizont	PASS
3	15176.59	43.09	8.63	51.72	68.30	16.58	PK	Horizont	PASS
4	17795.90	42.29	12.25	54.54	68.30	13.76	PK	Horizont	PASS
5	10924.46	34.26	4.71	38.97	54.00	15.03	AV	Horizont	PASS
6	12174.59	31.91	7.05	38.96	54.00	15.04	AV	Horizont	PASS
7	14895.95	31.14	8.93	40.07	54.00	13.93	AV	Horizont	PASS
8	17821.41	30.22	12.25	42.47	54.00	11.53	AV	Horizont	PASS

Remark:

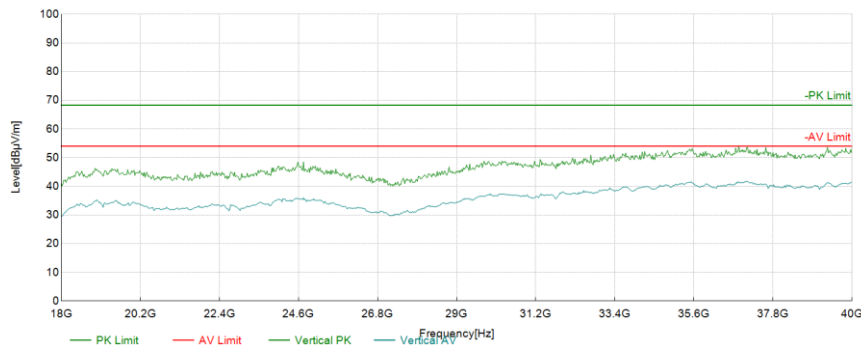
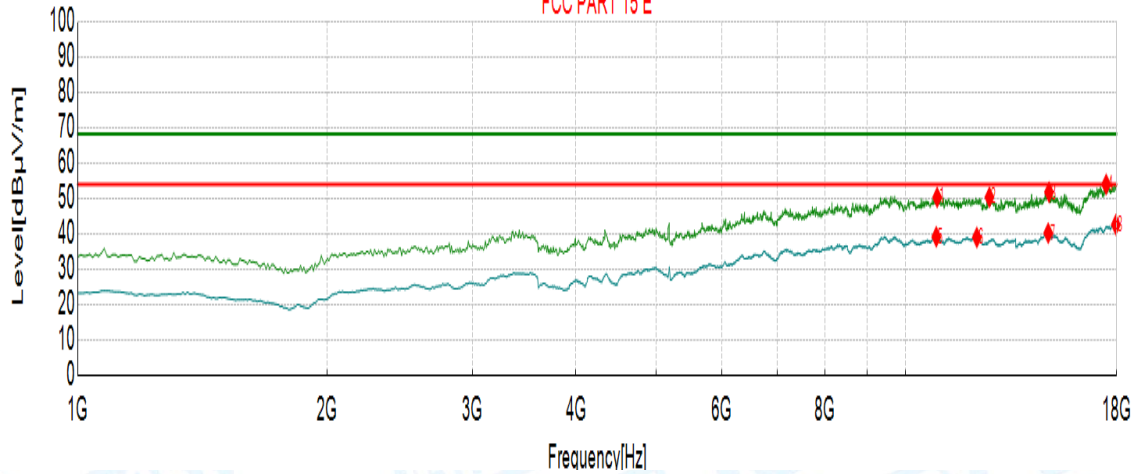
1. Level (dBμV/m)= Factor (dB/m)+ Read Level (dBμV)
2. Margin (dB) =Limit(dBμV/m)-Level(dBμV/m)
3. The tests evaluated 1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency:8-25G)., and 18GHz-40GHz is the noise, No other signals were detected.
4. No report for the emission which below the prescribed limit.



Test Mode:	802.11A 5260MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	10924.46	45.60	4.71	50.31	68.30	17.99	PK	Vertical	PASS
2	12633.82	44.39	5.97	50.36	68.30	17.94	PK	Vertical	PASS
3	14912.96	42.90	8.86	51.76	68.30	16.54	PK	Vertical	PASS
4	17481.24	43.54	10.45	53.99	68.30	14.31	PK	Vertical	PASS
5	10898.95	34.50	4.63	39.13	54.00	14.87	AV	Vertical	PASS
6	12200.10	31.97	6.97	38.94	54.00	15.06	AV	Vertical	PASS
7	14878.94	31.28	8.89	40.17	54.00	13.83	AV	Vertical	PASS
8	17957.48	30.30	12.25	42.55	54.00	11.45	AV	Vertical	PASS

Remark:

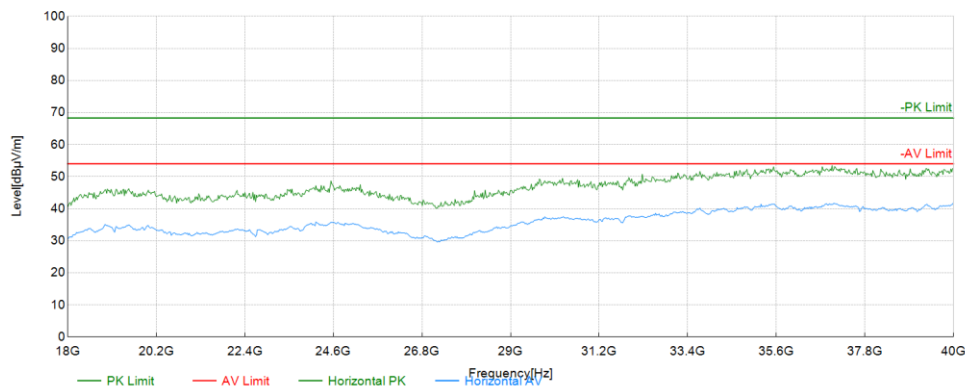
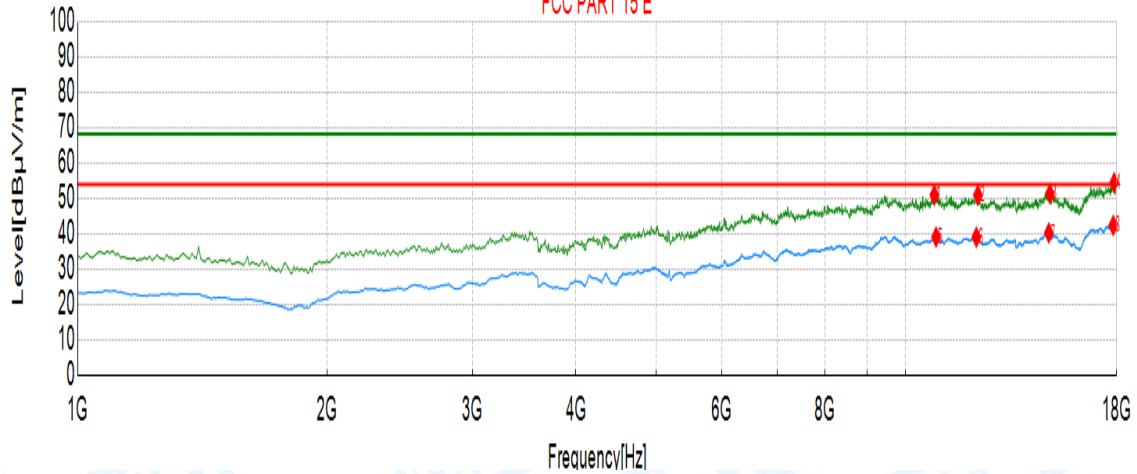
1. Level (dBμV/m)= Factor (dB/m)+ Read Level (dBμV)
2. Margin (dB) =Limit(dBμV/m)-Level(dBμV/m)
3. The tests evaluated 1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency:8-25G)., and 18GHz-40GHz is the noise, No other signals were detected.
4. No report for the emission which below the prescribed limit.



Test Mode:	802.11A 5280MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	10839.42	46.65	4.31	50.96	68.30	17.34	PK	Horizont	PASS
2	12234.12	44.17	6.76	50.93	68.30	17.37	PK	Horizont	PASS
3	14946.97	42.67	8.65	51.32	68.30	16.98	PK	Horizont	PASS
4	17872.44	42.32	12.12	54.44	68.30	13.86	PK	Horizont	PASS
5	10890.45	34.47	4.58	39.05	54.00	14.95	AV	Horizont	PASS
6	12183.09	31.99	7.03	39.02	54.00	14.98	AV	Horizont	PASS
7	14904.45	31.30	8.91	40.21	54.00	13.79	AV	Horizont	PASS
8	17829.91	30.14	12.22	42.36	54.00	11.64	AV	Horizont	PASS

Remark:

1. Level (dBμV/m)= Factor (dB/m)+ Read Level (dBμV)

2. Margin (dB) =Limit(dBμV/m)-Level(dBμV/m)

3. The tests evaluated 1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency:8-25G)., and 18GHz-40GHz is the noise, No other signals were detected.

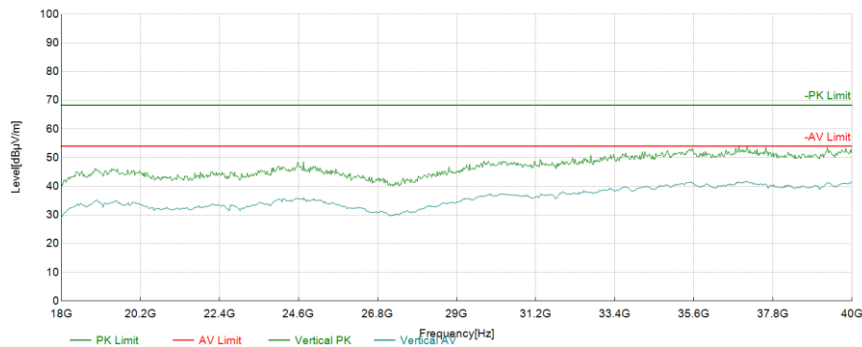
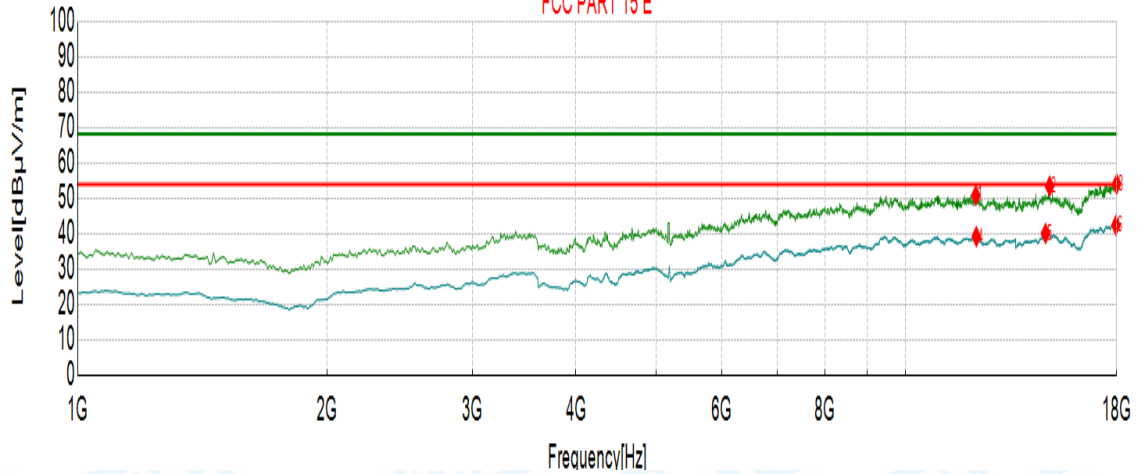
4. No report for the emission which below the prescribed limit.



Test Mode:	802.11A 5280MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	12166.08	43.80	7.06	50.86	68.30	17.44	PK	Vertical	PASS
2	14938.47	44.76	8.70	53.46	68.30	14.84	PK	Vertical	PASS
3	18000.00	41.68	12.40	54.08	68.30	14.22	PK	Vertical	PASS
4	12183.09	32.16	7.03	39.19	54.00	14.81	AV	Vertical	PASS
5	14768.38	31.60	8.48	40.08	54.00	13.92	AV	Vertical	PASS
6	17965.98	30.10	12.29	42.39	54.00	11.61	AV	Vertical	PASS

Remark:

1. Level (dBμV/m)= Factor (dB/m)+ Read Level (dBμV)

2. Margin (dB) =Limit(dBμV/m)-Level(dBμV/m)

3. The tests evaluated 1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency:8-25G)., and 18GHz-40GHz is the noise, No other signals were detected.

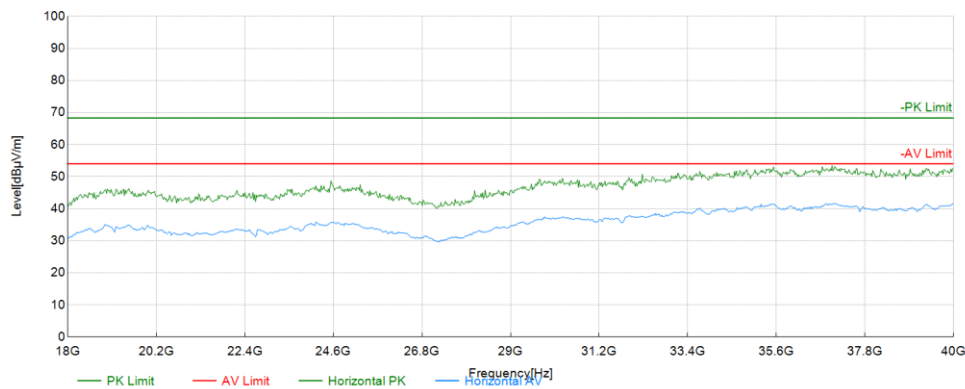
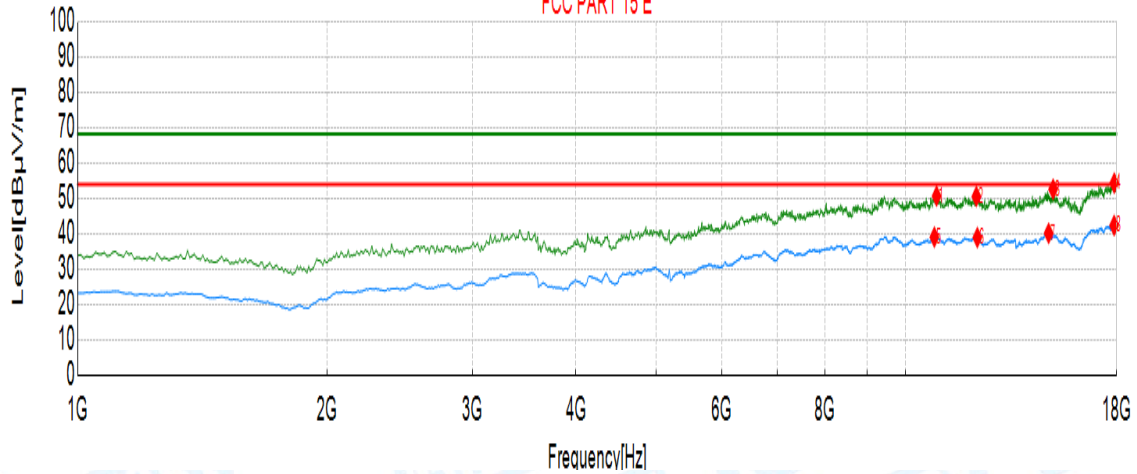
4. No report for the emission which below the prescribed limit.



Test Mode:	802.11A 5320MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	10907.45	46.03	4.66	50.69	68.30	17.61	PK	Horizont	PASS
2	12183.09	43.53	7.03	50.56	68.30	17.74	PK	Horizont	PASS
3	15083.04	44.16	8.44	52.60	68.30	15.70	PK	Horizont	PASS
4	17880.94	42.26	12.10	54.36	68.30	13.94	PK	Horizont	PASS
5	10839.42	34.73	4.31	39.04	54.00	14.96	AV	Horizont	PASS
6	12217.11	32.06	6.86	38.92	54.00	15.08	AV	Horizont	PASS
7	14895.95	31.18	8.93	40.11	54.00	13.89	AV	Horizont	PASS
8	17872.44	30.23	12.12	42.35	54.00	11.65	AV	Horizont	PASS

Remark:

1. Level (dBμV/m)= Factor (dB/m)+ Read Level (dBμV)

2. Margin (dB) =Limit(dBμV/m)-Level(dBμV/m)

3. The tests evaluated 1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency:8-25G)., and 18GHz-40GHz is the noise, No other signals were detected.

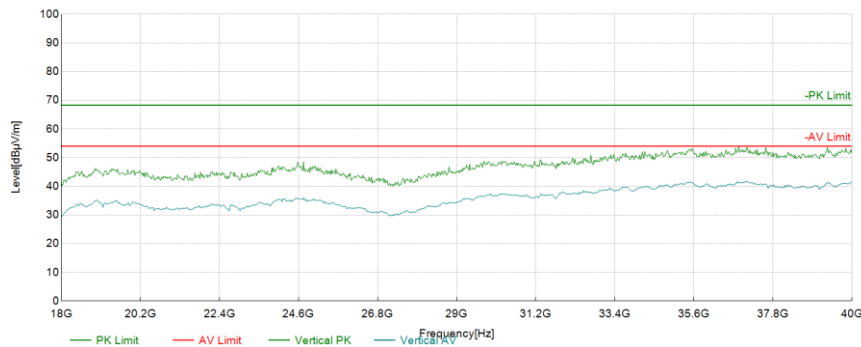
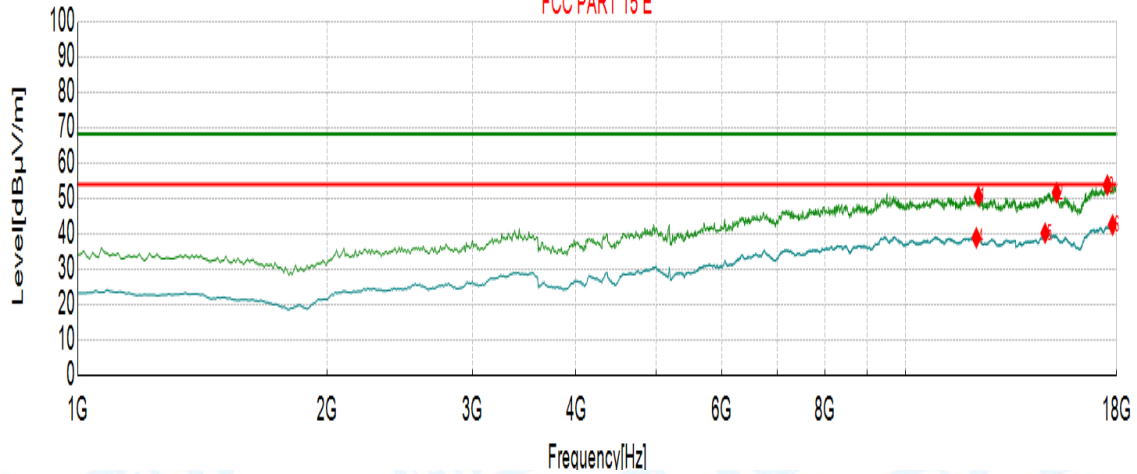
4. No report for the emission which below the prescribed limit.



Test Mode:	802.11A 5320MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	12251.13	43.95	6.67	50.62	68.30	17.68	PK	Vertical	PASS
2	15227.61	43.07	8.55	51.62	68.30	16.68	PK	Vertical	PASS
3	17540.77	43.20	10.57	53.77	68.30	14.53	PK	Vertical	PASS
4	12183.09	31.81	7.03	38.84	54.00	15.16	AV	Vertical	PASS
5	14751.38	31.80	8.35	40.15	54.00	13.85	AV	Vertical	PASS
6	17795.90	30.21	12.25	42.46	54.00	11.54	AV	Vertical	PASS

Remark:

1. Level (dBμV/m)= Factor (dB/m)+ Read Level (dBμV)

2. Margin (dB) =Limit(dBμV/m)-Level(dBμV/m)

3. The tests evaluated 1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency:8-25G)., and 18GHz-40GHz is the noise, No other signals were detected.

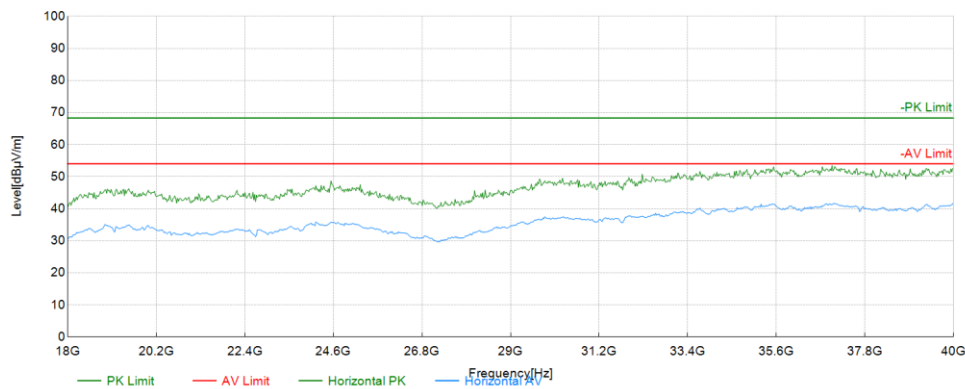
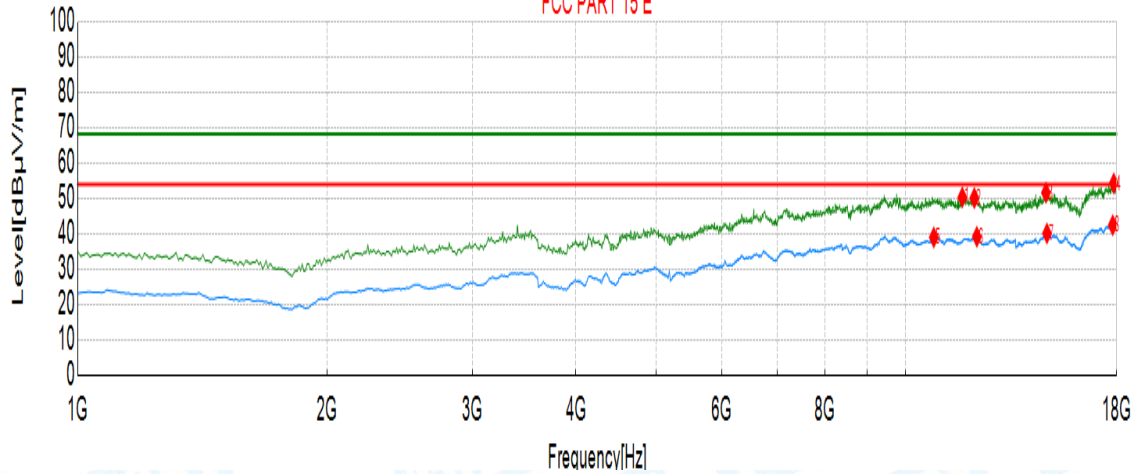
4. No report for the emission which below the prescribed limit.



Test Mode:	802.11A 5500MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	11715.36	44.17	6.14	50.31	68.30	17.99	PK	Horizont	PASS
2	12115.06	42.89	7.21	50.10	68.30	18.20	PK	Horizont	PASS
3	14785.39	43.01	8.62	51.63	68.30	16.67	PK	Horizont	PASS
4	17855.43	42.11	12.15	54.26	68.30	14.04	PK	Horizont	PASS
5	10822.41	34.75	4.21	38.96	54.00	15.04	AV	Horizont	PASS
6	12200.10	32.17	6.97	39.14	54.00	14.86	AV	Horizont	PASS
7	14827.91	31.30	8.79	40.09	54.00	13.91	AV	Horizont	PASS
8	17804.40	30.13	12.29	42.42	54.00	11.58	AV	Horizont	PASS

Remark:

1. Level (dBμV/m)= Factor (dB/m)+ Read Level (dBμV)

2. Margin (dB) =Limit(dBμV/m)-Level(dBμV/m)

3. The tests evaluated 1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency:8-25G)., and 18GHz-40GHz is the noise, No other signals were detected.

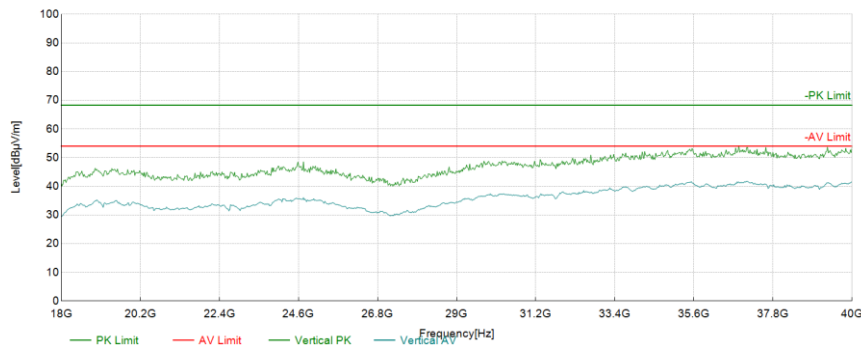
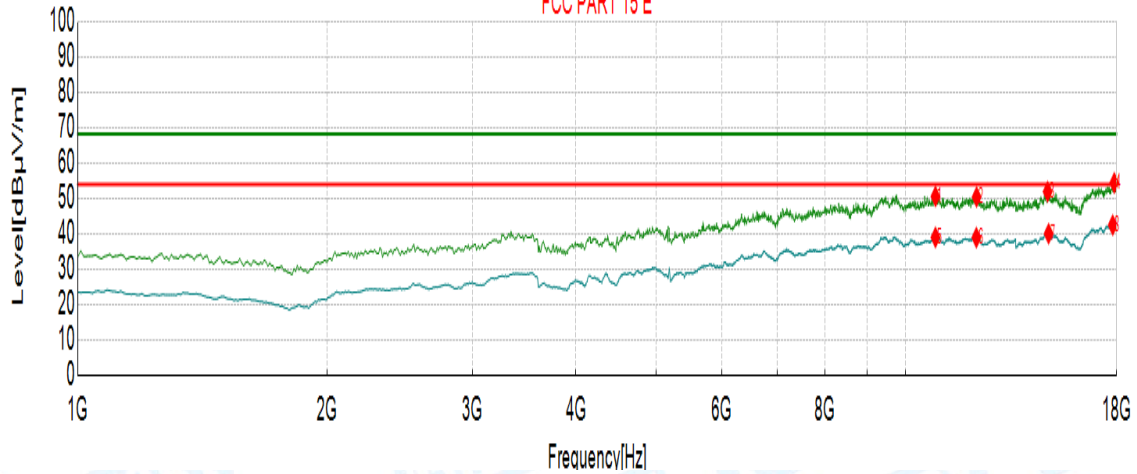
4. No report for the emission which below the prescribed limit.



Test Mode:	802.11A 5500MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	10873.44	46.09	4.48	50.57	68.30	17.73	PK	Vertical	PASS
2	12191.60	43.41	6.99	50.40	68.30	17.90	PK	Vertical	PASS
3	14853.43	43.10	8.84	51.94	68.30	16.36	PK	Vertical	PASS
4	17880.94	42.30	12.10	54.40	68.30	13.90	PK	Vertical	PASS
5	10873.44	34.49	4.48	38.97	54.00	15.03	AV	Vertical	PASS
6	12183.09	31.87	7.03	38.90	54.00	15.10	AV	Vertical	PASS
7	14895.95	31.09	8.93	40.02	54.00	13.98	AV	Vertical	PASS
8	17804.40	30.16	12.29	42.45	54.00	11.55	AV	Vertical	PASS

Remark:

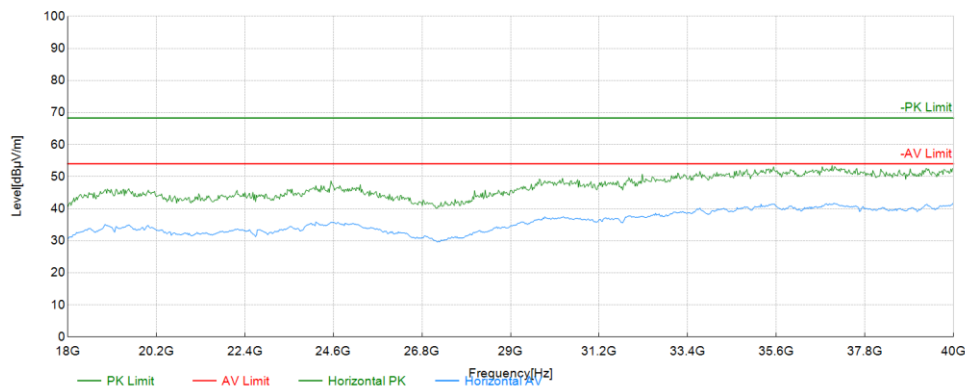
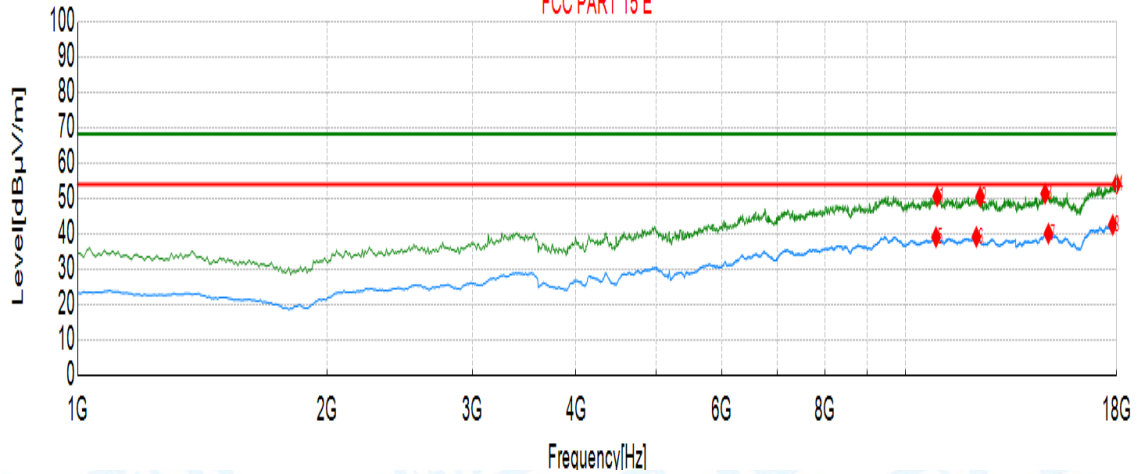
1. Level (dBμV/m)= Factor (dB/m)+ Read Level (dBμV)
2. Margin (dB) =Limit(dBμV/m)-Level(dBμV/m)
3. The tests evaluated 1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency:8-25G)., and 18GHz-40GHz is the noise, No other signals were detected.
4. No report for the emission which below the prescribed limit.



Test Mode:	802.11A 5580MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	10924.46	45.86	4.71	50.57	68.30	17.73	PK	Horizontal	PASS
2	12310.66	44.18	6.32	50.50	68.30	17.80	PK	Horizontal	PASS
3	14751.38	42.98	8.35	51.33	68.30	16.97	PK	Horizontal	PASS
4	18000.00	41.70	12.40	54.10	68.30	14.20	PK	Horizontal	PASS
5	10890.45	34.44	4.58	39.02	54.00	14.98	AV	Horizontal	PASS
6	12183.09	32.06	7.03	39.09	54.00	14.91	AV	Horizontal	PASS
7	14887.44	31.10	8.91	40.01	54.00	13.99	AV	Horizontal	PASS
8	17804.40	30.19	12.29	42.48	54.00	11.52	AV	Horizontal	PASS

Remark:

1. Level (dBμV/m)= Factor (dB/m)+ Read Level (dBμV)

2. Margin (dB) =Limit(dBμV/m)-Level(dBμV/m)

3. The tests evaluated 1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency:8-25G)., and 18GHz-40GHz is the noise, No other signals were detected.

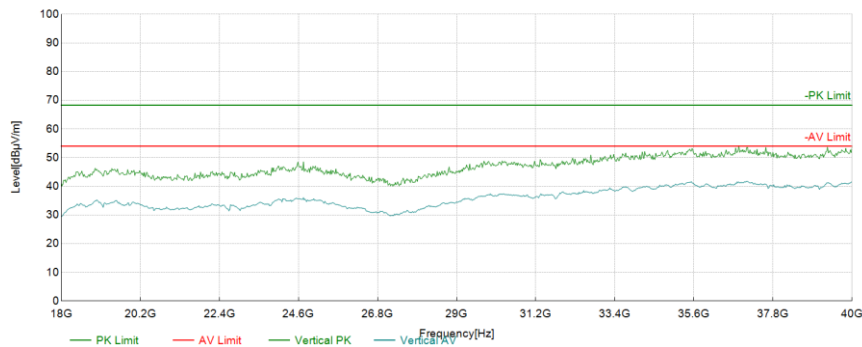
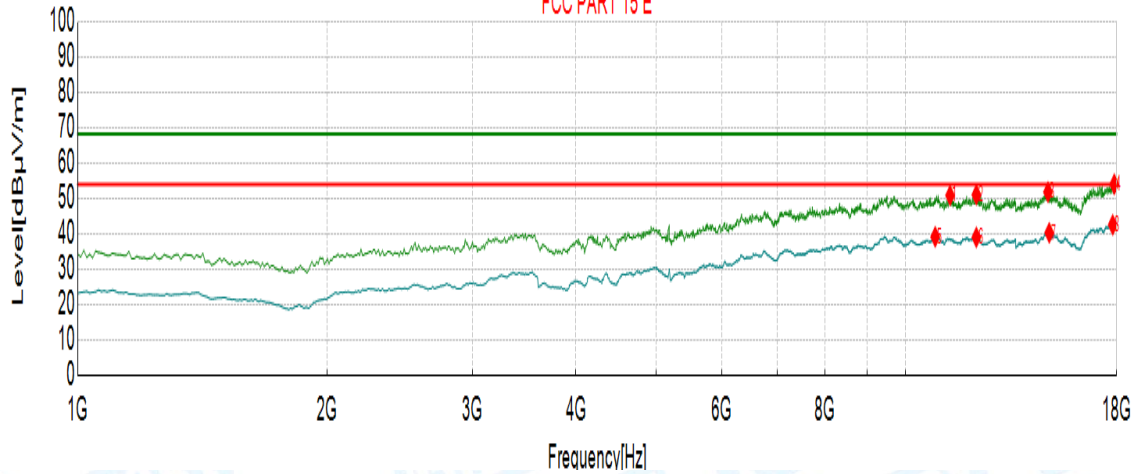
4. No report for the emission which below the prescribed limit.



Test Mode:	802.11A 5580MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	11324.16	45.19	5.66	50.85	68.30	17.45	PK	Vertical	PASS
2	12183.09	44.04	7.03	51.07	68.30	17.23	PK	Vertical	PASS
3	14870.44	42.92	8.88	51.80	68.30	16.50	PK	Vertical	PASS
4	17880.94	41.93	12.10	54.03	68.30	14.27	PK	Vertical	PASS
5	10864.93	34.68	4.44	39.12	54.00	14.88	AV	Vertical	PASS
6	12183.09	31.95	7.03	38.98	54.00	15.02	AV	Vertical	PASS
7	14921.46	31.46	8.80	40.26	54.00	13.74	AV	Vertical	PASS
8	17804.40	30.23	12.29	42.52	54.00	11.48	AV	Vertical	PASS

Remark:

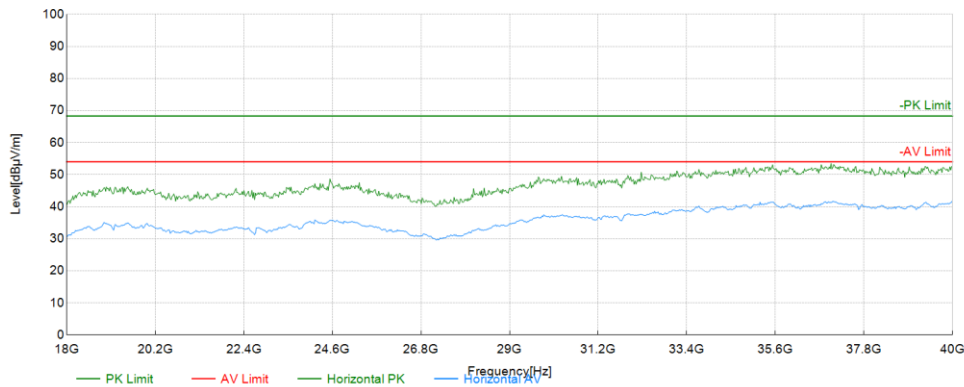
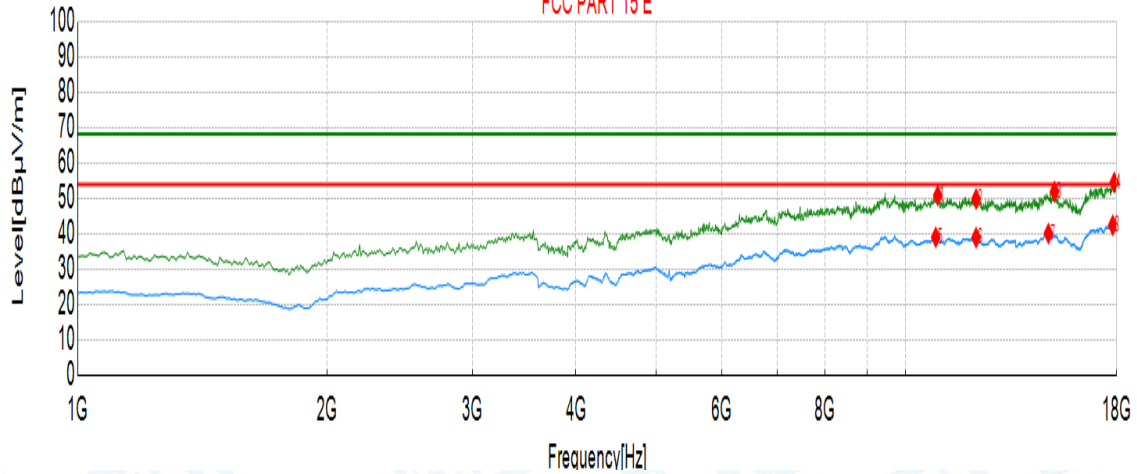
1. Level (dBμV/m)= Factor (dB/m)+ Read Level (dBμV)
2. Margin (dB) =Limit(dBμV/m)-Level(dBμV/m)
3. The tests evaluated 1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency:8-25G)., and 18GHz-40GHz is the noise, No other signals were detected.
4. No report for the emission which below the prescribed limit.



Test Mode:	802.11A 5700MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	10941.47	46.05	4.77	50.82	68.30	17.48	PK	Horizontal	PASS
2	12174.59	42.81	7.05	49.86	68.30	18.44	PK	Horizontal	PASS
3	15142.57	43.39	8.55	51.94	68.30	16.36	PK	Horizontal	PASS
4	17880.94	42.42	12.10	54.52	68.30	13.78	PK	Horizontal	PASS
5	10881.94	34.46	4.54	39.00	54.00	15.00	AV	Horizontal	PASS
6	12174.59	31.85	7.05	38.90	54.00	15.10	AV	Horizontal	PASS
7	14887.44	31.14	8.91	40.05	54.00	13.95	AV	Horizontal	PASS
8	17804.40	30.12	12.29	42.41	54.00	11.59	AV	Horizontal	PASS

Remark:

1. Level (dBμV/m)= Factor (dB/m)+ Read Level (dBμV)

2. Margin (dB) =Limit(dBμV/m)-Level(dBμV/m)

3. The tests evaluated 1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency:8-25G)., and 18GHz-40GHz is the noise, No other signals were detected.

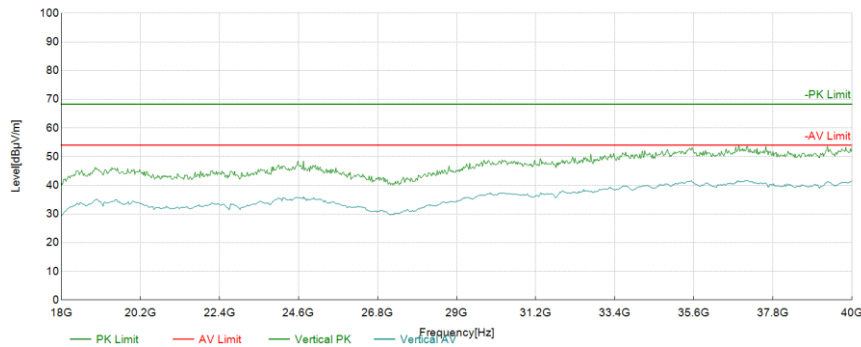
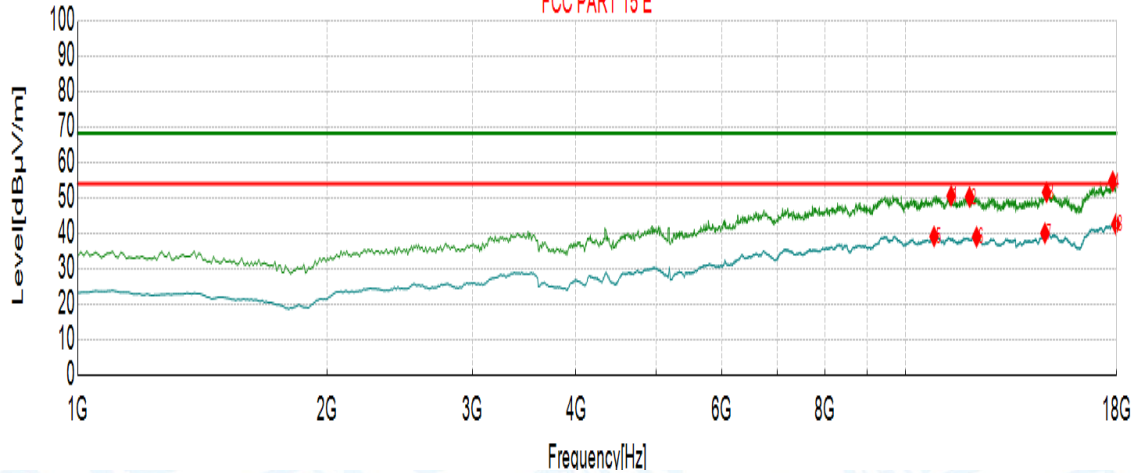
4. No report for the emission which below the prescribed limit.



Test Mode:	802.11A 5700MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	11358.18	44.85	5.71	50.56	68.30	17.74	PK	Vertical	PASS
2	11953.48	43.21	7.03	50.24	68.30	18.06	PK	Vertical	PASS
3	14810.91	42.80	8.76	51.56	68.30	16.74	PK	Vertical	PASS
4	17804.40	42.34	12.29	54.63	68.30	13.67	PK	Vertical	PASS
5	10830.92	34.81	4.26	39.07	54.00	14.93	AV	Vertical	PASS
6	12191.60	31.97	6.99	38.96	54.00	15.04	AV	Vertical	PASS
7	14742.87	31.72	8.28	40.00	54.00	14.00	AV	Vertical	PASS
8	17957.48	30.28	12.25	42.53	54.00	11.47	AV	Vertical	PASS

Remark:

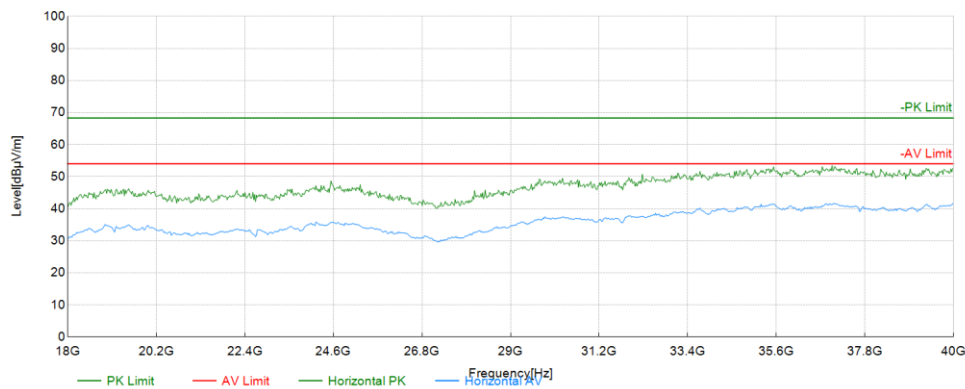
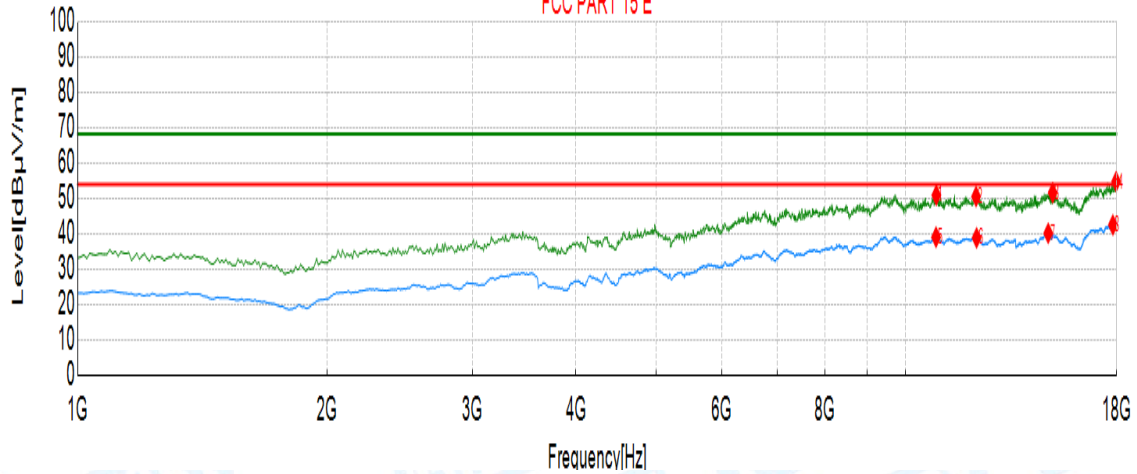
- Level (dBμV/m) = Factor (dB/m) + Read Level (dBμV)
- Margin (dB) = Limit (dBμV/m) - Level (dBμV/m)
- The tests evaluated 1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency: 8-25G), and 18GHz-40GHz is the noise, No other signals were detected.
- No report for the emission which below the prescribed limit.



Test Mode:	802.11A 5745MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	10898.95	46.31	4.63	50.94	68.30	17.36	PK	Horizontal	PASS
2	12174.59	43.51	7.05	50.56	68.30	17.74	PK	Horizontal	PASS
3	15066.03	43.21	8.41	51.62	68.30	16.68	PK	Horizontal	PASS
4	17974.49	42.48	12.31	54.79	68.30	13.51	PK	Horizontal	PASS
5	10890.45	34.44	4.58	39.02	54.00	14.98	AV	Horizontal	PASS
6	12191.60	31.84	6.99	38.83	54.00	15.17	AV	Horizontal	PASS
7	14878.94	31.24	8.89	40.13	54.00	13.87	AV	Horizontal	PASS
8	17812.91	30.21	12.27	42.48	54.00	11.52	AV	Horizontal	PASS

Remark:

1. Level (dBμV/m)= Factor (dB/m)+ Read Level (dBμV)

2. Margin (dB) =Limit(dBμV/m)-Level(dBμV/m)

3. The tests evaluated 1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency:8-25G)., and 18GHz-40GHz is the noise, No other signals were detected.

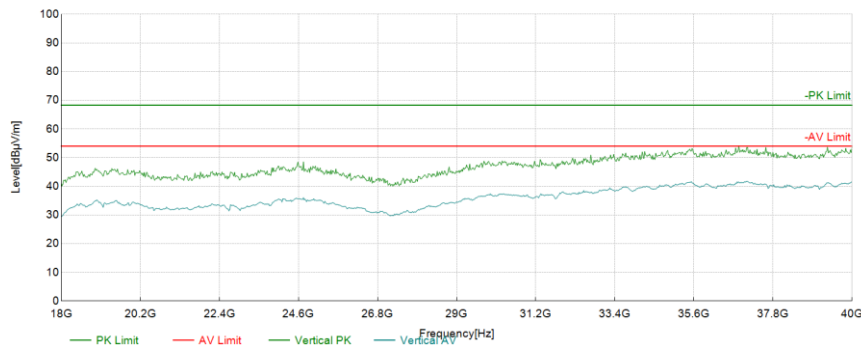
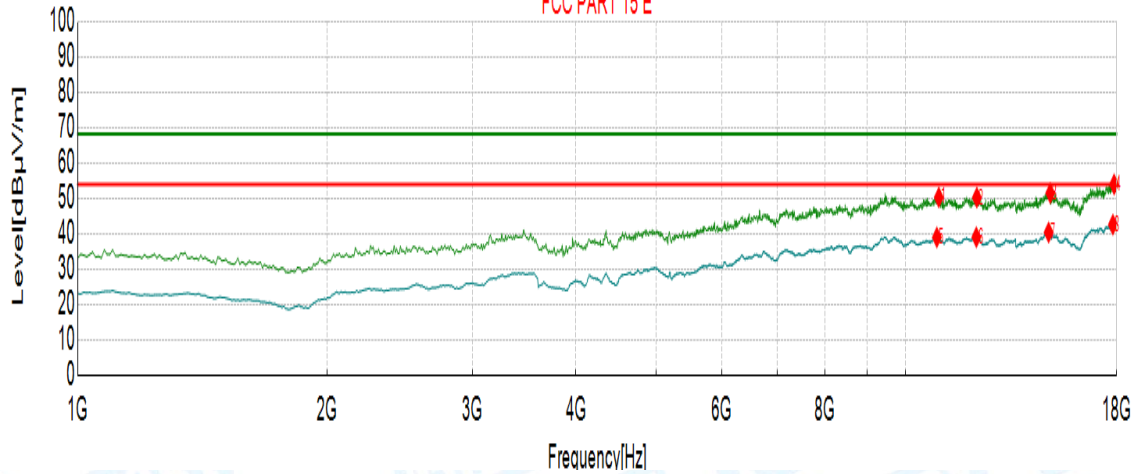
4. No report for the emission which below the prescribed limit.



Test Mode:	802.11A 5745MHz Tx Mode	Test Voltage:	DC 3.85V
Temperature: (°C):	23.8	Humidity (%):	48
Remark:	Only show the worst data.		

Test Graph

FCC PART 15 E



Data List									
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	Verdict
1	10975.49	45.42	4.89	50.31	68.30	17.99	PK	Vertical	PASS
2	12200.10	43.29	6.97	50.26	68.30	18.04	PK	Vertical	PASS
3	14963.98	42.97	8.54	51.51	68.30	16.79	PK	Vertical	PASS
4	17872.44	41.87	12.12	53.99	68.30	14.31	PK	Vertical	PASS
5	10915.96	34.27	4.69	38.96	54.00	15.04	AV	Vertical	PASS
6	12183.09	31.99	7.03	39.02	54.00	14.98	AV	Vertical	PASS
7	14895.95	31.43	8.93	40.36	54.00	13.64	AV	Vertical	PASS
8	17812.91	30.32	12.27	42.59	54.00	11.41	AV	Vertical	PASS

Remark:

1. Level (dBμV/m)= Factor (dB/m)+ Read Level (dBμV)
2. Margin (dB) =Limit(dBμV/m)-Level(dBμV/m)
3. The tests evaluated 1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz. Test with highpass filter (Pass Frequency:8-25G)., and 18GHz-40GHz is the noise, No other signals were detected.
4. No report for the emission which below the prescribed limit.

