RF Test Report

FCC ID: 2ATVI-P07S

Report No.	:	TBR-C-202307-0061-53
Applicant	:	Shenzhen Suichen Technology Co., Ltd
Equipment Under Test (EUT)		
EUT Name	:	Pico Projector
Model No.	:	P07S
Series Model No.	:	P07-D, P12, P12S, P12 Pro
Brand Name	:	Amoowa
Sample ID	:	202307-0061-4-#1 & 202307-0061-4-#2
Receipt Date	:	2023-07-18
Test Date	:	2023-07-18 to 2023-08-28
Issue Date	:	2023-08-29
Standards	:	FCC Part 15 Subpart E 15.407
Test Method	:	ANSI C63.10: 2013 KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Conclusions	:	**PASS** In the configuration tested, the EUT complied with the standards specified above.
Witness Engineer	:	Wade. Lv
Engineer Supervisor	:	Ivan Su
Engineer Manager	:	Ray Lai

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.

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Revision History

Report No.	Version	Description	Issued Date
TBR-C-202307-0061-53	Rev.01	Initial issue of report	2023-08-29

1. General Information about EUT

1.1 Client Information

Applicant	:	Shenzhen Suichen Technology Co., Ltd
Address	:	Room 3510, Building A, Building A, B, C, D, Mangrove Huafu, No. 8, Shazui Road, Shazui Community, Shatou Street, Futian District, Shenzhen, China
Manufacturer	:	Shenzhen Suichen Technology Co., Ltd
Address	:	Room 3510, Building A, Building A, B, C, D, Mangrove Huafu, No. 8, Shazui Road, Shazui Community, Shatou Street, Futian District, Shenzhen, China

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	Pico Projector	
Models No.	:	P07S, P07-D, P12, P12S, P12 Pro	
Model Different	:	All these models are identical in the same PCB, layout and electrical circuit, the only difference is different customers, different model name.	
Product Description	:	Operation Frequency: U-NII-1: 5180MHz~5240MHz, U-NII-2A: 5260MHz~5320MHz U-NII-2C: 5500MHz~5700MHz, U-NII-3: 5745MHz~5825MHz	
		Modulation Type:	802.11a: OFDM (QPSK, BPSK, 16QAM) 802.11n: OFDM (QPSK, BPSK, 16QAM, 64QAM) 802.11ac: OFDM (QPSK, BPSK, 16QAM, 64QAM, 256QAM)
		Bit Rate of Transmitter:	802.11a: 6/9/12/18/24/36/48/54 Mbps 802.11n: up to 150Mbps 802.11ac: at most 433.3 Mbps
Power Rating	:	USB Input: DC 5V2.4A	
Li-ion Polymer Battery	:	DC 3.7V by 4200mAh 15.54Wh Rechargeable Li-ion battery	
Software Version	:	N/A	
Hardware Version	:	N/A	

Remark:

(1) The antenna gain provided by the applicant, adapter and the verified for the RF conduction test provided by TOBY test lab.

(2) For a more detailed features description, please refer to the manufacturer's

specifications or the User's Manual.

(3) Antenna information provided by the applicant.

(4) Channel List:

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5180~5240MHz **(U-NII-1)**	36	5180MHz	44	5220MHz
	38	5190MHz	46	5230MHz
	40	5200MHz	48	5240MHz
	42	5210MHz		
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**
5260~5320MHz **(U-NII-2A)**	52	5260MHz	60	5300MHz
	54	5270MHz	62	5310MHz
	56	5280MHz	64	5320MHz
	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**
5500~5720MHz **(U-NII-2C)**	100	5500MHz	124	5620MHz
	102	5510MHz	126	5630MHz
	104	5520MHz	128	5640MHz
	106	5530MHz	132	5660MHz
	108	5540MHz	134	5670MHz
	110	5550MHz	136	5680MHz
	112	5560MHz	138	5690MHz
	116	5580MHz	140	5700MHz
	118	5590MHz	142	5710MHz
	120	5600MHz	144	5720MHz
	122	5610MHz		
For 20 MHz Bandwidth, use channel 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144 For 40 MHz Bandwidth, use channel 102, 110, 118, 126, 134, 142 For 80 MHz Bandwidth, use channel 106, 122, 138.				
Note: For the protection of Environment, the5600-5650MHz band restricted in Canada. So the CH 188/120/122/124/126/128 was restricted use in Canada.				

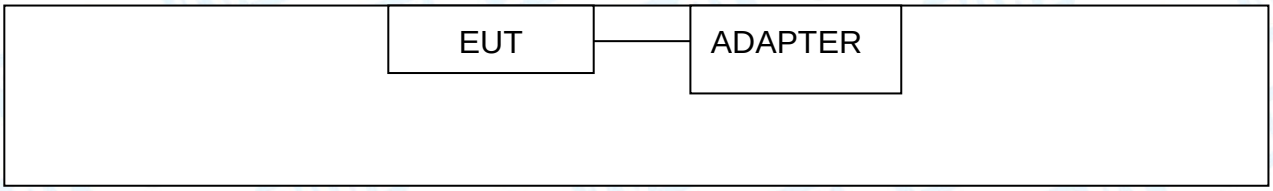
Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5745~5825MHz **(U-NII-3)**	149	5745MHz	157	5785MHz
	151	5755MHz	159	5795MHz
	153	5765MHz	161	5805MHz
	155	5775MHz	165	5825MHz
For 20 MHz Bandwidth, use channel 149, 153, 157, 161, 165. For 40 MHz Bandwidth, use channel 151, 159. For 80 MHz Bandwidth, use channel 155.				

(5) Antenna information

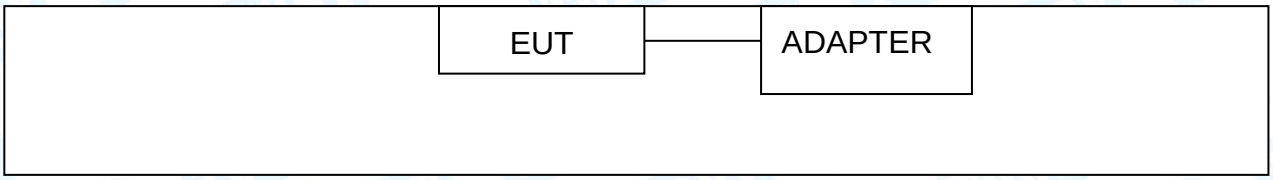
(U-NII-1) 5180~5240MHz				
Antenna	**Brand**	**Model Name**	**Type**	**Antenna Gain(dBi)**
ANT. 1	N/A	N/A	FPC	2.28
(U-NII-2A) 5260~5320MHz				
Antenna	**Brand**	**Model Name**	**Type**	**Antenna Gain(dBi)**
ANT. 1	N/A	N/A	FPC	2.53
(U-NII-2C) 5500~5700MHz				
Antenna	**Brand**	**Model Name**	**Type**	**Antenna Gain(dBi)**
ANT. 1	N/A	N/A	FPC	1.84
(U-NII-3) 5745~5825MHz				
Antenna	**Brand**	**Model Name**	**Type**	**Antenna Gain(dBi)**
ANT. 1	N/A	N/A	FPC	1.42

1.3 Block Diagram Showing the Configuration of System Tested

Conducted Test



Radiated Test



1.4 Description of Support Units

Equipment Information				
Name	**Model**	**FCC ID/SDOC**	**Manufacturer**	**Used "√"**
Adapter	----	----	HUAWEI	√
Cable Information				
Number	**Shielded Type**	**Ferrite Core**	**Length**	**Note**
----	----	----	----	----
Remark: The adapter is provided by Toby test lab.				

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		
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 Mobile 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: CMD		
U-NII-1		
Mode	Frequency (MHz)	Parameters
802.11a	5180	60
	5200	60
	5240	60
802.11n(HT20)	5180	60
	5200	60
	5240	60
802.11ac(VHT20)	5180	54
	5200	54
	5240	54
802.11n(HT40)	5190	46
	5230	50
802.11ac(VHT40)	5190	46
	5230	46
802.11ac(VHT80)	5210	40

U-NII-2A		
Mode	Frequency (MHz)	Parameters
802.11a	5260	60
	5280	60
	5320	56
802.11n(HT20)	5260	60
	5280	60
	5320	56
802.11ac(VHT20)	5260	54
	5280	54
	5320	54
802.11n(HT40)	5270	50
	5310	46
802.11ac(VHT40)	5270	46
	5310	40
802.11ac(VHT80)	5290	40

U-NII-2C		
Mode	Frequency (MHz)	Parameters
802.11a	5500	60
	5580	60
	5700	52
802.11n(HT20)	5500	60
	5580	60
	5700	50
802.11ac(VHT20)	5500	54
	5580	54
	5700	54
802.11n(HT40)	5510	50
	5550	50
	5670	50
802.11ac(VHT40)	5510	40
	5550	46
	5670	40
802.11ac(VHT80)	5530	44
	5610	44

U-NII-3		
Mode	**Frequency (MHz)**	**Parameters**
802.11a	**5745**	**68**
	5785	**68**
	5825	**68**
802.11n(HT20)	**5745**	**60**
	5785	**60**
	5825	**60**
802.11ac(VHT20)	**5745**	**54**
	5785	**54**
	5825	**54**
802.11n(HT40)	**5755**	**50**
	5795	**50**
802.11ac(VHT40)	**5755**	**46**
	5795	**46**
802.11ac(VHT80)	**5775**	**46**

1.7 Measurement Uncertainty

The reported uncertainty of measurement y±U，where expended 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				
FCC 15.207(a)	Conducted Emission	202307-0061-4-#1	PASS	N/A
FCC 15.209 & 15.407(b)	Radiated Unwanted Emissions	202307-0061-4-#1	PASS	N/A
FCC 15.203	Antenna Requirement	202307-0061-4-#2	PASS	N/A
FCC 15.407(a)	-26dB Emission Bandwidth	202307-0061-4-#2	PASS	N/A
FCC 15.407(a)	99% Occupied Bandwidth	202307-0061-4-#2	PASS	N/A
FCC 15.407(e)	-6dB Min Emission Bandwidth	202307-0061-4-#2	PASS	N/A
FCC 15.407(a)	Maximum Conducted Output Power	202307-0061-4-#2	PASS	N/A
FCC 15.407(a)	Power Spectral Density	202307-0061-4-#2	PASS	N/A
FCC 15.407(b)& 15.205	Emissions in Restricted Bands	202307-0061-4-#2	PASS	N/A
FCC 15.407(b)&15.209	Conducted Unwanted Emissions	202307-0061-4-#2	PASS	N/A
FCC 15.407(g)	Frequency Stability	202307-0061-4-#2	PASS	N/A
/	On Time and Duty Cycle	202307-0061-4-#2	/	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	FA-03A2RE
RF Conducted Measurement	MTS-8310	MWRFtest	V2.0.0.0
RF Test System	JS1120-3	Tonscend	V3.2.22

4. Test Equipment

Conducted Emission Test					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jun. 20, 2023	Jun. 19, 2024
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jun. 20, 2023	Jun. 19, 2024
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jun. 20, 2023	Jun. 19, 2024
LISN	Rohde & Schwarz	ENV216	101131	Jun. 20, 2023	Jun. 19, 2024
ISN	SCHWARZBECK	NTFM 8131	8131-193	Jun. 20, 2023	Jun. 19, 2024
ISN	SCHWARZBECK	CAT3 8158	cat3 5158-0094	Jun. 20, 2023	Jun. 19, 2024
ISN	SCHWARZBECK	NTFM5158	NTFM5158 0145	Jun. 20, 2023	Jun. 19, 2024
ISN	SCHWARZBECK	CAT 8158	cat5 8158-179	Jun. 20, 2023	Jun. 19, 2024
Radiation Emission Test (B Site)					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
Spectrum Analyzer	Agilent	N9020A	MY49100060	Sep.01.2022	Aug. 31, 2023
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 20, 2023	Jun. 19, 2024
EMI Test Receiver	Rohde & Schwarz	ESU-8	100472/008	Feb. 23, 2023	Feb. 22, 2024
Bilog Antenna	SCHWARZBECK	VULB 9168	1225	Dec. 05, 2021	Dec. 04, 2023
Horn Antenna	SCHWARZBECK	BBHA 9120 D	2463	Feb. 26, 2022	Feb.25, 2024
Horn Antenna	SCHWARZBECK	BBHA 9170	1118	Jun. 26, 2022	Jun.25, 2024
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jun. 26, 2022	Jun.25, 2024
HF Amplifier	Tonscend	TAP9E6343	AP21C806117	Sep.01.2022	Aug. 31, 2023
HF Amplifier	Tonscend	TAP051845	AP21C806141	Sep.01.2022	Aug. 31, 2023
HF Amplifier	Tonscend	TAP0184050	AP21C806129	Sep.01.2022	Aug. 31, 2023
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	Agilent	E4407B	MY45106456	Jun. 20, 2023	Jun. 19, 2024
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 20, 2023	Jun. 19, 2024
MXA Signal Analyzer	KEYSIGHT	N9020B	MY60110172	Sep.01.2022	Aug. 31, 2023

MXA Signal Analyzer	Agilent	N9020A	MY47380425	Sep.01.2022	Aug. 31, 2023
Vector Signal Generator	Agilent	N5182A	MY50141294	Sep.01.2022	Aug. 31, 2023
Analog Signal Generator	Agilent	N5181A	MY48180463	Sep.01.2022	Aug. 31, 2023
Vector Signal Generator	KEYSIGHT	N5182B	MY59101429	Sep.01.2022	Aug. 31, 2023
Analog Signal Generator	KEYSIGHT	N5173B	MY61252685	Sep.01.2022	Aug. 31, 2023
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Sep.01.2022	Aug. 31, 2023
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Sep.01.2022	Aug. 31, 2023
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Sep.01.2022	Aug. 31, 2023
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Sep.01.2022	Aug. 31, 2023
RF Control Unit	Tonsced	JS0806-1	21C8060380	N/A	N/A
RF Control Unit	Tonsced	JS0806-2	21F8060439	Sep.01.2022	Aug. 31, 2023
Band Reject Filter Group	Tonsced	JS0806-F	21D8060414	Jun. 20, 2023	Jun. 19, 2024
Power Control Box	Tonsced	JS0806-4ADC	21C8060387	N/A	N/A
Wideband Radio Comunication Tester	Rohde & Schwarz	CMW500	144382	Sep.01.2022	Aug. 31, 2023
Universal Radio Communication Tester	Rohde&Schwarz	CMW500	168796	Feb. 23, 2023	Feb.22, 2024
Temperature and Humidity Chamber	ZhengHang	ZH-QTH-1500	ZH2107264	Jun. 20, 2023	Jun. 19, 2024

5. Conducted Emission Test

5.1 Test Standard and Limit

5.1.1 Test Standard

FCC Part 15.207

5.1.2 Test Limit

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

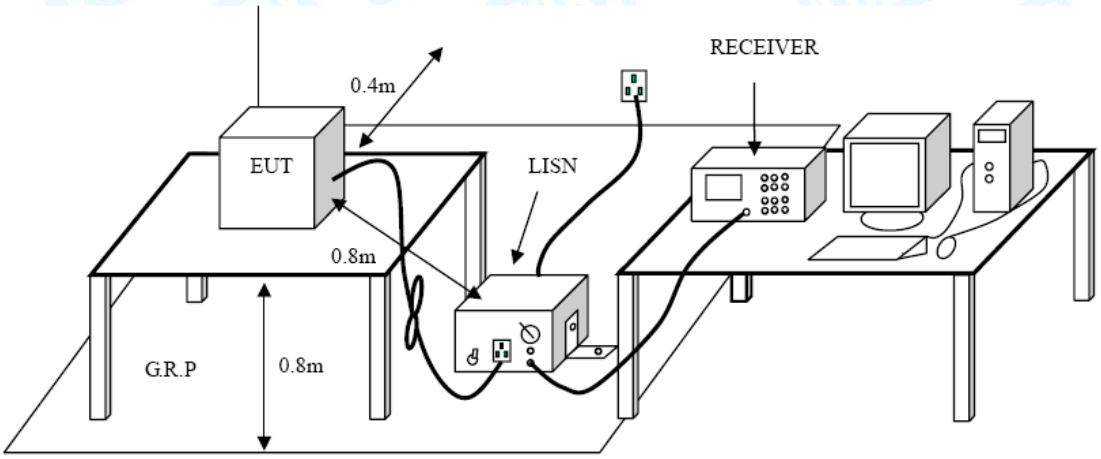
Notes:

(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

FCC Part 15.209 & FCC Part 15.407(b)

6.1.2 Test Limit

General field strength limits at frequencies Below 30MHz			
Frequency (MHz)	**Field Strength (μA/m)***	**Field Strength (microvolt/meter)****	**Measurement Distance (meters)**
0.009~0.490	6.37/F (F in kHz)	2400/F(KHz)	300
0.490~1.705	63.7/F (F in kHz)	24000/F(KHz)	30
1.705~30.0	0.08	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.

2, *is for RSS Standard, **is for FCC Standard.

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.

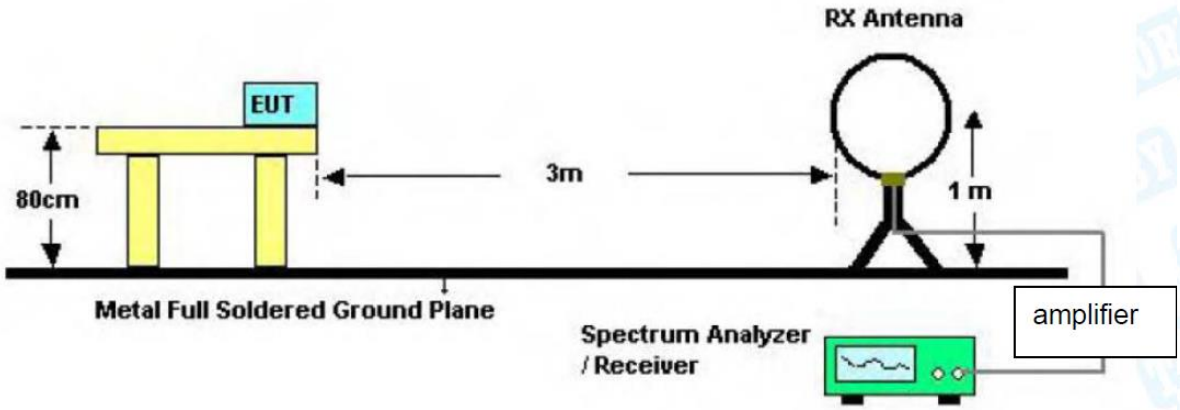
(2) Emission Level(dBuV/m)=20log Emission Level(uV/m)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided

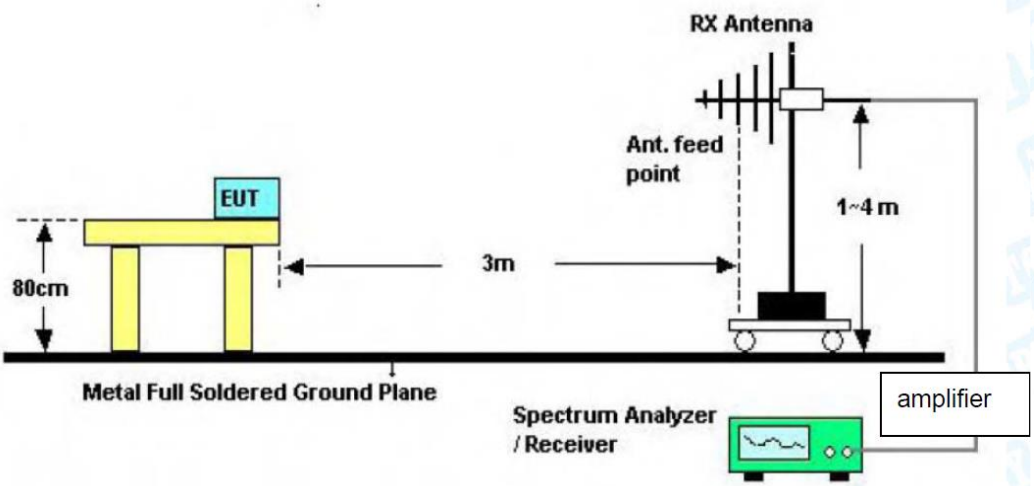
that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

6.2 Test Setup

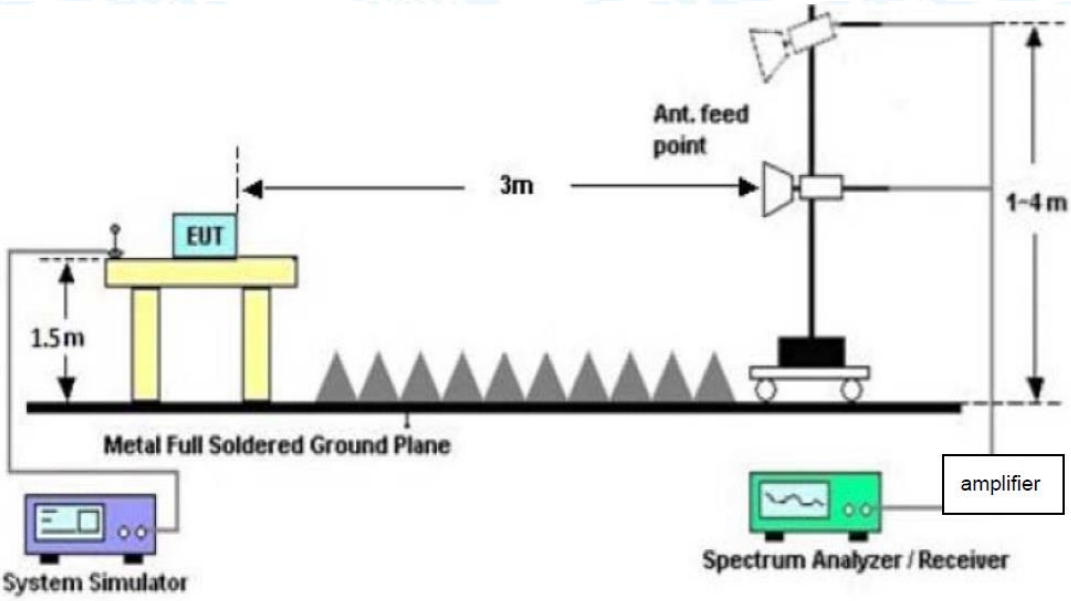
Radiated measurement



Below 30MHz Test Setup

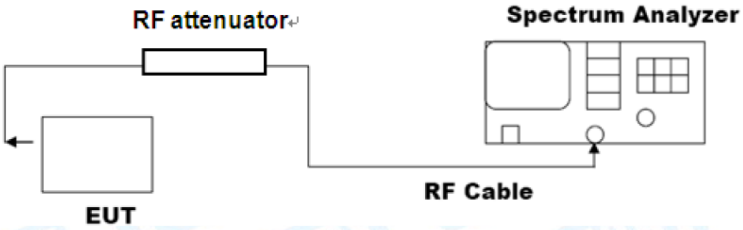


Below 1000MHz Test Setup



Above 1GHz Test Setup

Conducted measurement



6.3 Test Procedure

---Radiated measurement

●The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.

● 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.

●If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Below 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode

measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.

●Testing frequency range 30MHz-1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection. Testing frequency range 9KHz-150Hz the measuring instrument use VBW=200Hz with Quasi-peak detection. Testing frequency range 9KHz-30MHz the measuring instrument use VBW=9kHz with Quasi-peak detection.

●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=10 Hz with Peak Detector for Average Values.

●For the actual test configuration, please see the test setup photo.

--- Conducted measurement

●Reference level measurement

Establish a reference level by using the following procedure:

a) Set instrument center frequency to DTS channel center frequency.

b) Set the span to≥1.5 times the DTS bandwidth.

c) Set the RBW = 100 kHz.

d) Set the VBW≥[3*RBW].

e) Detector = peak.

f) Sweep time = auto couple.

g) Trace mode = max hold.

h) Allow trace to fully stabilize.

i) Use the peak marker function to determine the maximum PSD level.

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

●Emission level measurement

Establish an emission level by using the following procedure:

a) Set the center frequency and span to encompass frequency range to be measured.

b) Set the RBW = 100 kHz.

c) Set the VBW≥[3*RBW].

d) Detector = peak.

e) Sweep time = auto couple.

f) Trace mode = max hold.

g) Allow trace to fully stabilize.

h) Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum

requirements specified in 11.11. Report the three highest emissions relative to the limit.

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 Appendix D.

7. Restricted Bands Requirement

7.1 Test Standard and Limit

7.1.1 Test Standard

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:

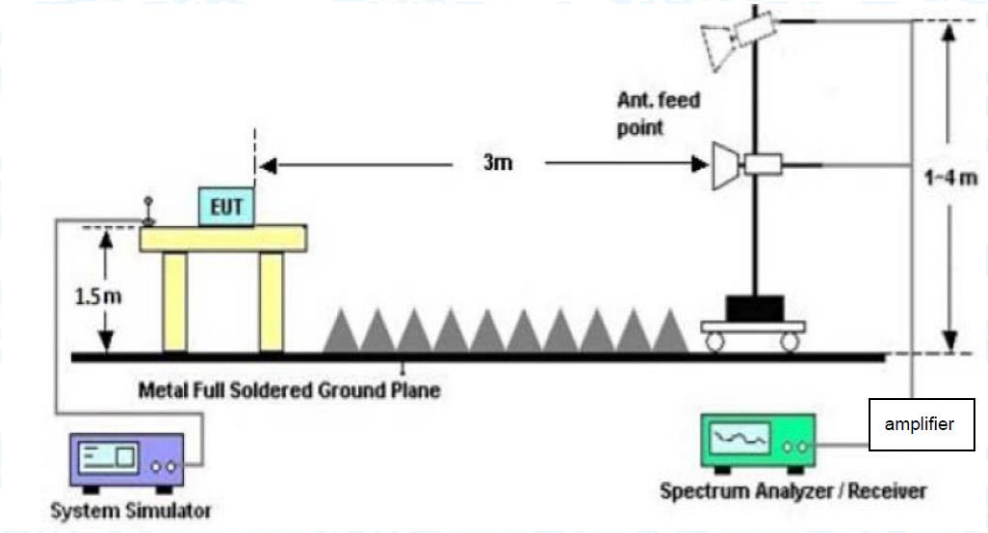
E= $\frac{1000000\sqrt{30P}}{3}$ uV/m, where P is the eirp (Watts)

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.

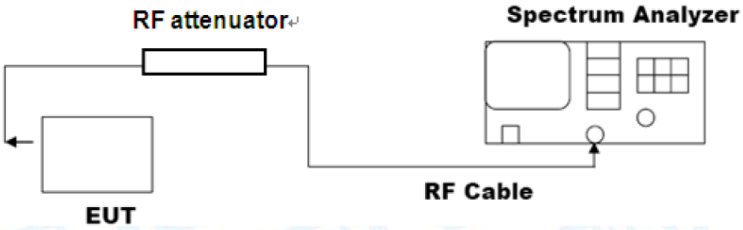
Note: According the ANSI C63.10 11.12.2 antenna-port conducted measurements may also be used as an alternative to radiated measurements for determining compliance in the restricted frequency bands requirements. If conducted measurements are performed, then proper impedance matching must be ensured and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

Remark: The test uses antenna-port conducted measurements as an alternative to radiated measurements for determining compliance in the restricted frequency bands requirements.

Please refer to the Appendix D.

8. Bandwidth Test

8.1 Test Standard and Limit

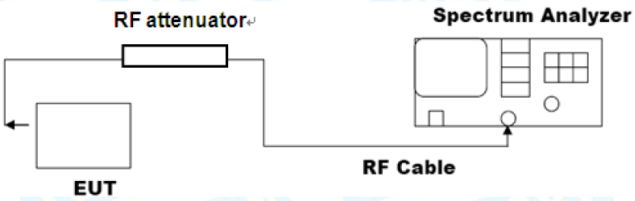
8.1.1 Test Standard

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:

a) Set RBW = approximately 1% of the emission bandwidth.

b) Set the VBW > RBW.

c) Detector = peak.

d) Trace mode = max hold.

e) 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.

---DTS bandwidth

●The steps for the first option are as follows:

a) Set RBW = 100 kHz.

b) Set the VBW≥[3*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 (OBW/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 Appendix D.

9. Maximum Conducted Output Power

9.1 Test Standard and Limit

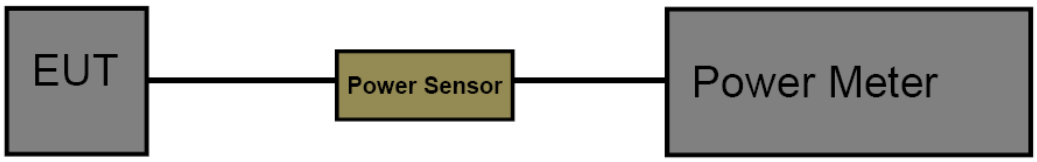
9.1.1 Test Standard

FCC Part 15.407(a)

9.1.2 Test Limit

<table>
<tr><th colspan="5">FCC Part 15 Subpart E(15.407)</th></tr>
<tr><th rowspan="2">Limit</th><th colspan="4">Frequency Range(MHz)</th></tr>
<tr><th>5150~5250</th><th>5250~5350</th><th>5500~5725</th><th>5725~5850</th></tr>
<tr><td>Max Conducted TX Power</td><td>Master Device: 1 Watt(30dBm) Client Device: 250mW(24dBm)</td><td colspan="2">24dBm (250 mW) or 11 dBm+ 10 log B, whichever is lower (B= 26-dB emission BW)</td><td>1 Watt (30dBm)</td></tr>
<tr><td rowspan="3">Max E.I.R.P</td><td>4 W (36 dBm) with 6 dBi antenna</td><td colspan="2" rowspan="3">1 W (30 dBm) with 6 dBi antenna</td><td rowspan="3">4 W (36 dBm) with 6 dBi antenna</td></tr>
<tr><td>200 W (53 dBm) for fixed P-t-P application with 23 dBiantenna</td></tr>
<tr><td>Additional rule for outdoor operation: Max_EIRP< 125 mW(21 dBm) at any elevation angle > 30°from horizon</td></tr>
<tr><td rowspan="2">TPC</td><td rowspan="2">NO</td><td colspan="2">YES, if Max_EIRP ≥ 500 mW (27 dBm) and able to lower EIRP below 24dBm</td><td rowspan="2">NO</td></tr>
<tr><td colspan="2">NO, if Max_EIRP < 500mW (27dBm)</td></tr>
</table>

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.

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 Appendix D.

10. Power Spectral Density Test

10.1 Test Standard and Limit

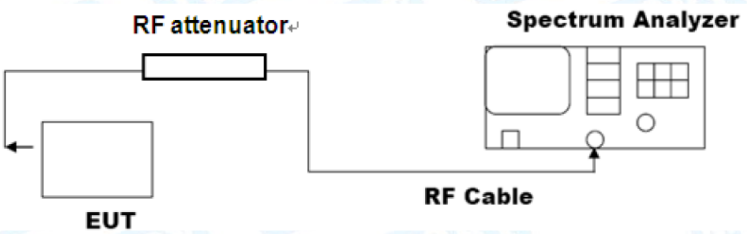
10.1.1 Test Standard

FCC Part 15.407(a)

10.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)
Power Spectral Density	Master Device: 17dBm/MHz Client Device: 11dBm/MHz	5150~5250
	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:

a) 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.)

b) Use the peak search function on the instrument to find the peak of the spectrum.

c) Make the following adjustments to the peak value of the spectrum, if applicable:

1) 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.

2) 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≥1 / T, where T is defined in 12.2 a).

2) Set VBW ≥ [3*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 Appendix D.

11. Frequency Stability

11.1 Test Standard and Limit

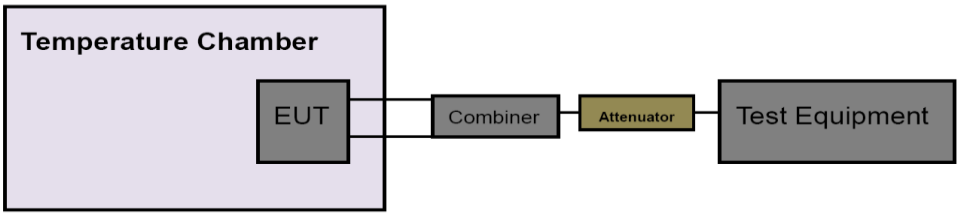
11.1.1 Test Standard

FCC Part 15.407(g)

11.1.2 Test Limit

If the frequency stability of the licence-exempt radio apparatus is not specified in the applicable RSS, the fundamental emissions of the radio apparatus should be kept within at least the central 80% of its permitted operating frequency band in order to minimize the possibility of out-of-band operation.

11.2 Test Setup



11.3 Test Procedure

●Determining compliance with the peak excursion requirement shall be done by confirming that the ratio of the maximum of the peak-max-hold spectrum to the maximum of the average spectrum for continuous transmission does not exceed the regulatory requirement.[96] The procedure for this method is as follows:

a) The following guidance for limiting the number of tests applies only to peak excursion measurements:

1) Testing each modulation mode on a single channel in a single operating band is sufficient to determine compliance with the peak excursion requirement. (If all modulation modes are not available on a single channel in a single band, then testing must be extended to other channels and bands as needed to ensure that all modulation modes are tested.)

2) Tests must include all variations in signal structure, such as:

i) All signal types [e.g., direct sequence spread spectrum (DSSS) and OFDM].

ii) All modulation types [e.g., binary phase-shift keying (BPSK), quadrature phase-shift keying (QPSK), 16-QAM, 64-QAM, and 256-QAM].

iii) All bandwidth modes.

iv) All variations in signal parameters (e.g., changes in subcarrier spacing or number of subcarriers).

3) For a given signal structure, testing of multiple error-correction coding rates is not

required (e.g., 1/2, 2/3, and 3/4).

4) For MIMO devices, testing of a single output port is sufficient to determine compliance with the peak excursion requirement. If a given signal structure can be exercised with various combinations of spatial multiplexing (such as different numbers of spatial streams), beamforming, and cyclic delay diversity, peak excursion tests are not required to include those variations.

b) The procedure is as follows:

1) Set the span of the spectrum analyzer or EMI receiver to view the entire emission bandwidth or occupied bandwidth.

2) Find the maximum of the peak-max-hold spectrum:

i) Set RBW = 1 MHz.

ii) VBW □ 3 MHz.

iii) Detector = peak.

iv) Trace mode = max-hold.

v) Allow the sweeps to continue until the trace stabilizes.

vi) Use the peak search function to find the peak of the spectrum.

3) Use the procedure found in 12.5 to measure the PPSD.

4) Compute the ratio of the maximum of the peak-max-hold spectrum to the PPSD.

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 Appendix D.

12. Antenna Requirement

12.1 Test Standard and Limit

12.1.1 Test Standard

FCC Part 15.203

12.1.2 Requirement

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.

12.2 Deviation From Test Standard

No deviation

12.3 Antenna Connected Construction

The gains of the antenna used for transmitting is please refer to page 10, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

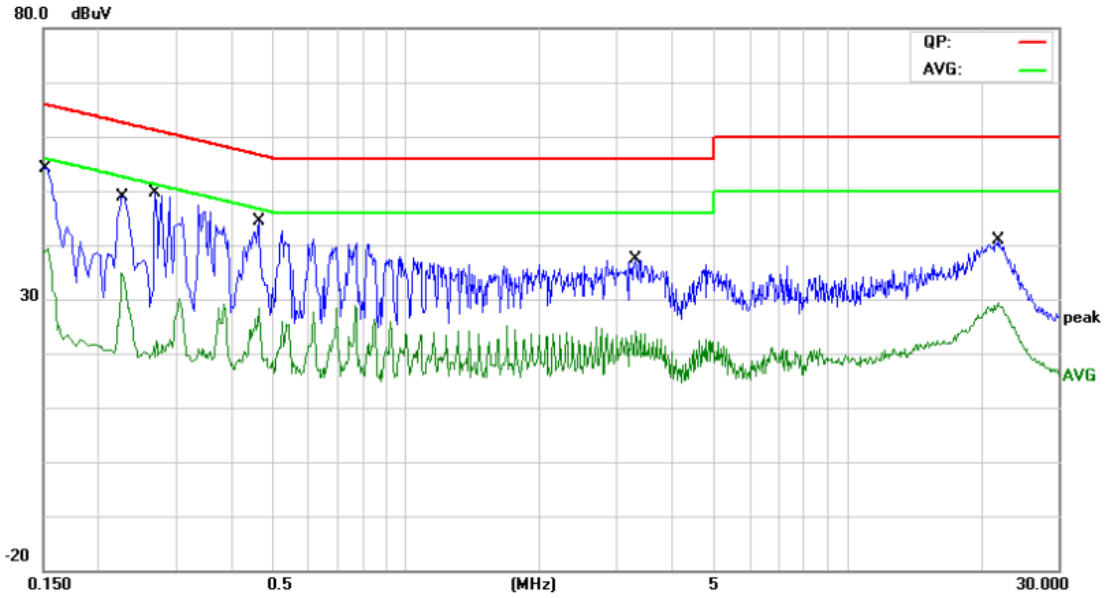
12.4 Test Data

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

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

Attachment A-- Conducted Emission Test Data

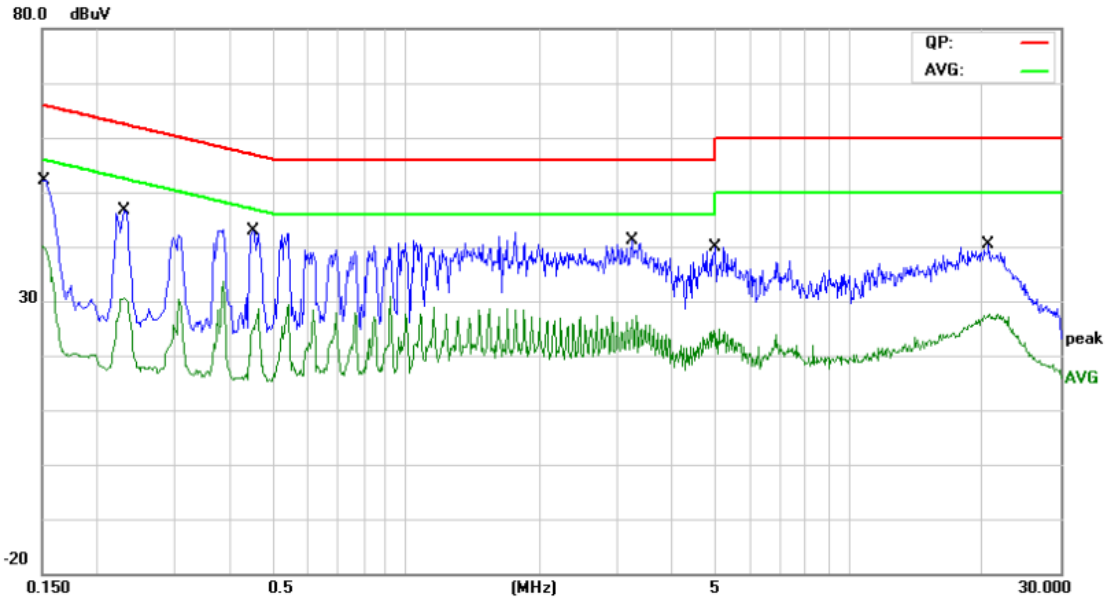
Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	AC 120V 60Hz		
Terminal:	Line		
Test Mode:	Mode 1		
Remark:	Only worse case is reported.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1539	43.21	10.99	54.20	65.79	-11.59	QP
2		0.1539	28.48	10.99	39.47	55.79	-16.32	AVG
3		0.2300	37.66	11.08	48.74	62.45	-13.71	QP
4		0.2300	23.80	11.08	34.88	52.45	-17.57	AVG
5	*	0.2700	38.74	11.01	49.75	61.12	-11.37	QP
6		0.2700	10.39	11.01	21.40	51.12	-29.72	AVG
7		0.4620	33.50	10.91	44.41	56.66	-12.25	QP
8		0.4620	17.42	10.91	28.33	46.66	-18.33	AVG
9		3.3100	27.19	10.17	37.36	56.00	-18.64	QP
10		3.3100	13.87	10.17	24.04	46.00	-21.96	AVG
11		21.9980	30.22	10.71	40.93	60.00	-19.07	QP
12		21.9980	17.81	10.71	28.52	50.00	-21.48	AVG

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

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	AC 120V 60Hz		
Terminal:	Neutral		
Test Mode:	Mode 1		
Remark:	Only worse case is reported.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1539	41.06	10.99	52.05	65.79	-13.74	QP
2		0.1539	29.17	10.99	40.16	55.79	-15.63	AVG
3		0.2300	35.67	11.08	46.75	62.45	-15.70	QP
4		0.2300	19.61	11.08	30.69	52.45	-21.76	AVG
5		0.4500	31.90	10.90	42.80	56.88	-14.08	QP
6	*	0.4500	22.73	10.90	33.63	46.88	-13.25	AVG
7		3.2260	30.91	10.18	41.09	56.00	-14.91	QP
8		3.2260	17.24	10.18	27.42	46.00	-18.58	AVG
9		4.9898	29.85	10.04	39.89	56.00	-16.11	QP
10		4.9898	14.47	10.04	24.51	46.00	-21.49	AVG
11		20.6460	29.91	10.58	40.49	60.00	-19.51	QP
12		20.6460	17.02	10.58	27.60	50.00	-22.40	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

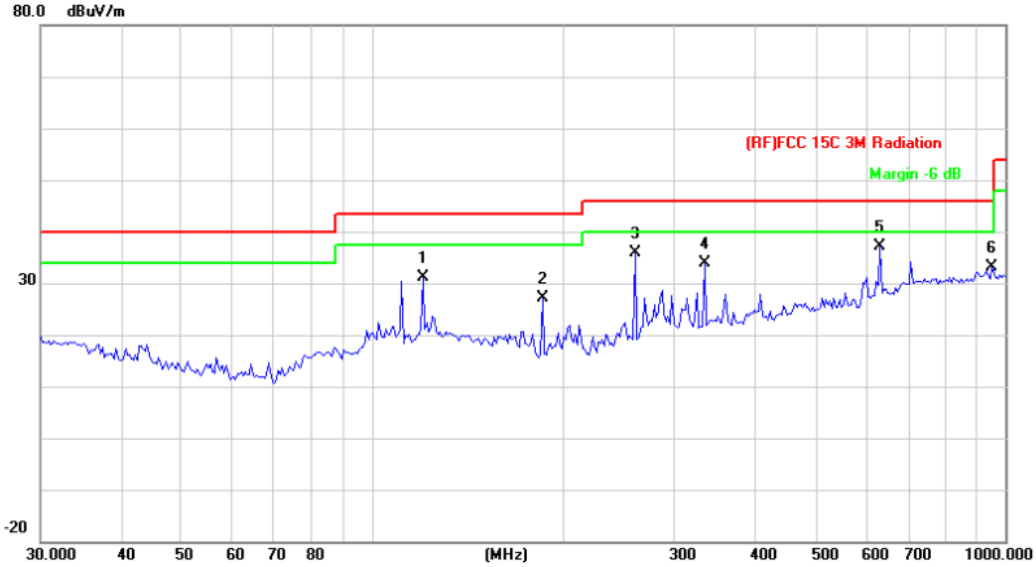
9 KHz~30 MHz

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

Temperature:	24.6℃	**Relative Humidity:**	52%
Test Voltage:	AC 120V 60Hz		
Ant. Pol.	Horizontal		
Test Mode:	Mode 2 TX a Mode 5180MHz		
Remark:	Only worse case is reported.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		120.2766	46.86	-15.85	31.01	43.50	-12.49	peak
2		185.7880	40.58	-13.51	27.07	43.50	-16.43	peak
3		260.1444	46.31	-10.45	35.86	46.00	-10.14	peak
4		334.8589	41.41	-7.48	33.93	46.00	-12.07	peak
5	*	633.9071	38.61	-1.37	37.24	46.00	-8.76	peak
6		952.0937	28.90	4.16	33.06	46.00	-12.94	peak

*:Maximum data x:Over limit !:over margin

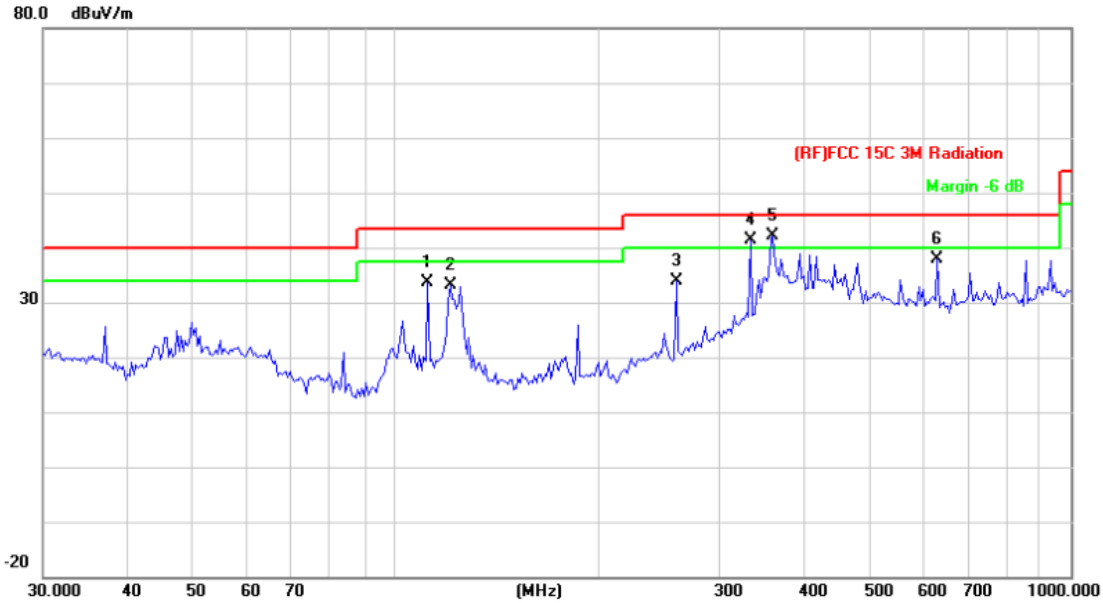
Remark:

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

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

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

Temperature:	24.6℃	**Relative Humidity:**	52%
Test Voltage:	AC 120V 60Hz		
Ant. Pol.	Vertical		
Test Mode:	Mode 2 TX a Mode 5180MHz		
Remark:	Only worse case is reported.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		111.3468	48.81	-15.26	33.55	43.50	-9.95	peak
2		120.2766	49.00	-15.85	33.15	43.50	-10.35	peak
3		260.1444	44.37	-10.45	33.92	46.00	-12.08	peak
4	!	334.8589	48.94	-7.48	41.46	46.00	-4.54	peak
5	*	361.7139	49.14	-7.12	42.02	46.00	-3.98	peak
6		633.9071	39.17	-1.37	37.80	46.00	-8.20	peak

*:Maximum data x:Over limit !:over margin

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

Above 1GHz

Only showed the worst mode test data.

5745MHz-5825MHz(U-NII-3)

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5745MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	11744.000	45.03	-1.10	43.93	68.30	-24.37	peak
2	13359.000	43.76	0.02	43.78	68.30	-24.52	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5745MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10877.000	47.22	-1.88	45.34	68.30	-22.96	peak
2	11489.000	52.52	-1.00	51.52	68.30	-16.78	peak
3 *	11489.000	52.52	-1.00	51.52	54.00	-2.48	AVG
4	17235.000	46.96	3.44	50.40	68.30	-17.90	peak
5	17235.000	46.96	3.44	50.40	54.00	-3.60	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5785MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10911.000	45.54	-1.78	43.76	68.30	-24.54	peak
2	13376.000	43.58	0.09	43.67	68.30	-24.63	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5785MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10928.000	46.39	-1.79	44.60	68.30	-23.70	peak
2	11557.000	52.00	-1.21	50.79	68.30	-17.51	peak
3	11557.000	52.00	-1.21	50.79	54.00	-3.21	AVG
4	17371.000	48.54	4.29	52.83	68.30	-15.47	peak
5 *	17371.000	47.90	4.29	52.19	54.00	-1.81	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5825MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10962.000	45.14	-1.81	43.33	68.30	-24.97	peak
2 *	13580.000	43.70	-0.03	43.67	68.30	-24.63	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5825MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	11642.000	48.44	-1.30	47.14	68.30	-21.16	peak
2	13325.000	44.85	-0.11	44.74	68.30	-23.56	peak
3	17473.000	46.86	4.92	51.78	68.30	-16.52	peak
4 *	17473.000	46.86	4.92	51.78	54.00	-2.22	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mode 5745MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	11472.000	44.55	-1.02	43.53	68.30	-24.77	peak
2	13580.000	43.23	-0.03	43.20	68.30	-25.10	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT20) Mode 5745MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	11489.000	51.08	-1.00	50.08	68.30	-18.22	peak
2 *	11489.000	51.08	-1.00	50.08	54.00	-3.92	AVG
3	12526.000	43.94	-0.67	43.27	68.30	-25.03	peak
4	17235.000	44.61	3.44	48.05	68.30	-20.25	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mode 5785MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10945.000	44.86	-1.80	43.06	68.30	-25.24	peak
2 *	13036.000	43.99	-0.33	43.66	68.30	-24.64	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT20) Mode 5785MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	11574.000	50.19	-1.27	48.92	68.30	-19.38	peak
2	12815.000	44.81	-0.68	44.13	68.30	-24.17	peak
3	17354.000	46.44	4.18	50.62	68.30	-17.68	peak
4 *	17354.000	46.44	4.18	50.62	54.00	-3.38	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mode 5825MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10911.000	44.97	-1.78	43.19	68.30	-25.11	peak
2 *	13342.000	43.61	-0.04	43.57	68.30	-24.73	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT20) Mode 5825MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	11642.000	49.29	-1.30	47.99	68.30	-20.31	peak
2	11999.000	44.91	-0.80	44.11	68.30	-24.19	peak
3	17490.000	44.80	5.02	49.82	68.30	-18.48	peak
4 *	17490.000	44.80	5.02	49.82	54.00	-4.18	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT20) Mode 5745MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	11744.000	44.26	-1.10	43.16	68.30	-25.14	peak
2 *	13461.000	44.26	0.14	44.40	68.30	-23.90	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT20) Mode 5745MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	11591.000	47.90	-1.31	46.59	68.30	-21.71	peak
2	14753.000	44.08	0.72	44.80	68.30	-23.50	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT20) Mode 5785MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10894.000	44.95	-1.80	43.15	68.30	-25.15	peak
2	12033.000	43.78	-0.73	43.05	68.30	-25.25	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT20) Mode 5785MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10894.000	46.30	-1.80	44.50	68.30	-23.80	peak
2	11523.000	52.44	-1.09	51.35	68.30	-16.95	peak
3 *	11523.000	52.44	-1.09	51.35	54.00	-2.65	AVG
4	17303.000	46.86	3.85	50.71	68.30	-17.59	peak
5	17303.000	46.86	3.85	50.71	54.00	-3.29	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT20) Mode 5825MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10945.000	45.09	-1.80	43.29	68.30	-25.01	peak
2	12832.000	44.02	-0.73	43.29	68.30	-25.01	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT20) Mode 5825MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10707.000	45.96	-2.93	43.03	68.30	-25.27	peak
2	11625.000	49.96	-1.33	48.63	68.30	-19.67	peak
3	11625.000	49.96	-1.33	48.63	54.00	-5.37	AVG
4	17405.000	46.77	4.51	51.28	68.30	-17.02	peak
5 *	17405.000	46.77	4.51	51.28	54.00	-2.72	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT40) Mode 5755MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10928.000	46.33	-1.79	44.54	68.30	-23.76	peak
2	13223.000	43.93	-0.21	43.72	68.30	-24.58	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT40) Mode 5755MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	11523.000	49.83	-1.09	48.74	68.30	-19.56	peak
2	12866.000	45.64	-0.85	44.79	68.30	-23.51	peak
3	17269.000	44.42	3.65	48.07	68.30	-20.23	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT40) Mode 5795MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10894.000	44.67	-1.80	42.87	68.30	-25.43	peak
2 *	11999.000	43.83	-0.80	43.03	68.30	-25.27	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT40) Mode 5795MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	11591.000	48.48	-1.31	47.17	68.30	-21.13	peak
2	13223.000	45.03	-0.21	44.82	68.30	-23.48	peak
3 *	17388.000	43.29	4.40	47.69	68.30	-20.61	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT40) Mode 5755MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10911.000	45.25	-1.78	43.47	68.30	-24.83	peak
2 *	12798.000	44.37	-0.62	43.75	68.30	-24.55	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT40) Mode 5755MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10945.000	46.59	-1.80	44.79	68.30	-23.51	peak
2	13138.000	44.92	-0.17	44.75	68.30	-23.55	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT40) Mode 5795MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10928.000	46.62	-1.79	44.83	68.30	-23.47	peak
2	13087.000	44.03	-0.19	43.84	68.30	-24.46	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT40) Mode 5795MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	11591.000	47.75	-1.31	46.44	68.30	-21.86	peak
2	13308.000	45.21	-0.19	45.02	68.30	-23.28	peak
3 *	17388.000	42.75	4.40	47.15	68.30	-21.15	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT80) Mode 5775MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10911.000	45.20	-1.78	43.42	68.30	-24.88	peak
2	12798.000	44.00	-0.62	43.38	68.30	-24.92	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	25.3℃	**Relative Humidity:**	52%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT80) Mode 5775MHz (U-NII-3)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10894.000	46.37	-1.80	44.57	68.30	-23.73	peak
2	12832.000	44.95	-0.73	44.22	68.30	-24.08	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.

-----END OF THE REPORT------