FCC Radio Test Report

FCC ID: OYR-CF-813B

Original Grant

Report No.	:	TB-FCC186041
Applicant	:	Shenzhen Four Seas Global Link Network Technology Co., Ltd.
Equipment Under Test (EUT)		
EUT Name	:	AC Wireless Network Card
Model No.	:	CF-813B
Series Model No.	:	CF-723B, CF-725B, CF-726B, CF-727B, CF-927B, CF-759B, CF-963B, CF-728B, CF-729B
Brand Name	:	----
Sample ID	:	20211223-01_03-01#& 20211223-01_03-02#
Receipt Date	:	2021-12-29
Test Date	:	2021-12-29 to 2022-01-22
Issue Date	:	2022-01-22
Standards	:	FCC Part 15, Subpart E 15.407
Test Method	:	ANSI C63.10: 2013
Conclusions	:	**PASS**

In the configuration tested, the EUT complied with the standards specified above.

Witness Engineer	:	Camille Li	Camille Li
Engineer Supervisor	:	IVAN SU	Ivan Su
Engineer Manager	:	Ray Lai	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
TB-FCC186041	Rev.01	Initial issue of report	2022-01-22

1. General Information about EUT

1.1 Client Information

Applicant	:	Shenzhen Four Seas Global Link Network Technology Co., Ltd.
Address	:	Room 607-610, Block B, TAOJINDI Electronic Business Incubation Base, Tenglong Road, Longhua District, Shenzhen, China
Manufacturer	:	Shenzhen Four Seas Global Link Network Technology Co., Ltd.
Address	:	Room 607-610, Block B, TAOJINDI Electronic Business Incubation Base, Tenglong Road, Longhua District, Shenzhen, China

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	AC Wireless Network Card	
Models No.	:	CF-813B, CF-723B, CF-725B, CF-726B, CF-727B, CF-927B, CF-759B, CF-963B, CF-728B, CF-729B	
Model Difference	:	All PCB boards and circuit diagrams are the same, the only difference is that names and appearance color.	
Product Description	:	Operation Frequency: U-NII-1: 5180MHz~5240MHz, U-NII-3: 5745MHz~5825MHz	
		Antenna Gain:	2dBi Metal Antenna
		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	:	DC 5V	
Software Version	:	V1.0	
Hardware Version	:	V1.0	
Remark	:	The adapter and antenna gain provided by the applicant, the verified for the RF conduction test provided by TOBY test lab.	

Note:

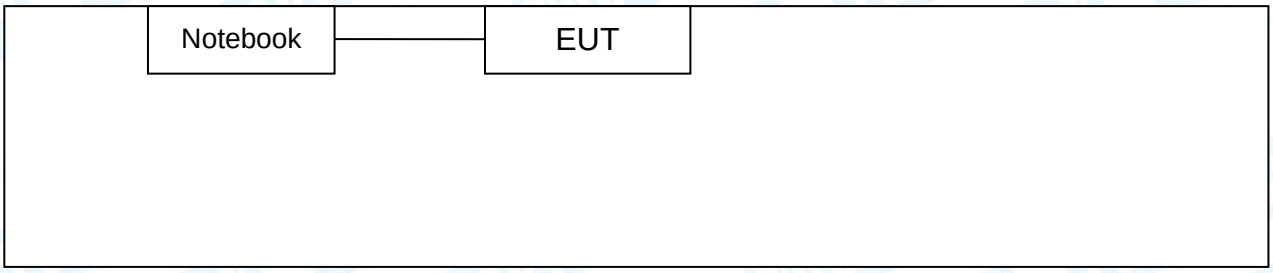
(1) This Test Report is FCC Part 15, Subpart E(15.407) for 802.11a/n/ac, the test procedure follows the KDB 789033 D02 General U-NII Test Procedures New Rules v02r01. More detailed features description, please refer to the manufacturer's specifications or the User's Manual.

(2) 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**
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

Charging + TX Mode



1.4 Description of Support Units

Equipment Information				
Name	**Model**	**FCC ID/VOC**	**Manufacturer**	**Used "√"**
Notebook	----	----	MI	√
Cable Information				
Number	**Shielded Type**	**Ferrite Core**	**Length**	**Note**
----	----	----	----	----
Remark: Notebook 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	Charging + TX a Mode(5180MHz)
For Radiated Test Below 1GHz	
Final Test Mode	**Description**
Mode 2	Charging + 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-3	Mode 9	TX Mode 802.11a Mode Channel 149/157/165
	Mode 10	TX Mode 802.11n(HT20) Mode Channel 149/157/165
	Mode 11	TX Mode 802.11ac(vHT20) Mode Channel 149/157/165
	Mode 12	TX Mode 802.11n(HT40) Mode Channel 151/159
	Mode 13	TX Mode 802.11ac(VHT40) Mode Channel 151/159
	Mode 14	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)

(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; 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 WLAN.

Test Software: 8788-LaunchEngMode		
U-NII-1		
Mode	Frequency (MHz)	Parameters
802.11a	5180	17
	5200	17
	5240	17
802.11n(HT20)	5180	17
	5200	17
	5240	17
802.11ac(VHT20)	5180	17
	5200	17
	5240	17
802.11n(HT40)	5190	17
	5230	17
802.11ac(VHT40)	5190	17
	5230	17
802.11ac(VHT80)	5210	17
U-NII-3		
Mode	Frequency (MHz)	Parameters
802.11a	5745	17
	5785	17
	5825	17
802.11n(HT20)	5745	17
	5785	17
	5825	17
802.11ac(VHT20)	5745	17
	5785	17
	5825	17
802.11n(HT40)	5755	17
	5795	17
802.11ac(VHT40)	5755	17
	5795	17
802.11ac(VHT80)	5775	17

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 was performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at:1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, 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: 2005 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 17025：2005 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.

2. Test Summary

FCC Part 15 Subpart E(15.407)				
Standard Section FCC	**Test Item**	**Test Sample(s)**	**Judgment**	**Remark**
15.203	Antenna Requirement	20211223-01_03-02#	PASS	N/A
FCC 15.207(a)	Conducted Emission	20211223-01_03-01#	PASS	N/A
FCC 15.407(b)& 15.205	Emissions in Restricted Bands	20211223-01_03-02#	PASS	N/A
15.407(a)	26dB Bandwidth	20211223-01_03-02#	PASS	N/A
15.407(e)	6dB Bandwidth	20211223-01_03-02#	PASS	N/A
15.407(a)	Maximum Conducted Output Power	20211223-01_03-02#	PASS	N/A
15.407(a)	Power Spectral Density	20211223-01_03-02#	PASS	N/A
15.209 15.407(b)	Transmitter Radiated Spurious Emission	20211223-01_03-01# 20211223-01_03-02#	PASS	N/A
15.407(g)	Frequency Stability	20211223-01_03-02#	PASS	N/A
/	On Time and Duty Cycle	20211223-01_03-02#	PASS	N/A
	Note: "/" for no requirement for this test item. N/A is an abbreviation for Not Applicable.			

3. Test Software

Test Item	Test Software	Manufacturer	Version No.
Conducted Emission	MTS-8310	EZ	V2.0.0.0
Radiation Emission	EZ-EMC	EZ	FA-03A2RE
RF Conducted Measurement	JS1120-3	Tonsced	2.6.88.0341
2/3/4G Conducted Measurement	JS1120	Tonsced	2.6.9.0526

4. Test Equipment

Conducted Emission Test					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jul. 05, 2021	Jul. 04, 2022
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jul. 05, 2021	Jul. 04, 2022
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jul. 05, 2021	Jul. 04, 2022
LISN	Rohde & Schwarz	ENV216	101131	Jul. 05, 2021	Jul. 04, 2022
Radiation Emission Test (A Site)					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jul. 02, 2021	Jul. 01, 2022
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jul. 02, 2021	Jul. 01, 2022
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar. 01, 2020	Feb.28, 2022
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar. 01, 2020	Feb.28, 2022
Horn Antenna	SCHWARZBECK	BBHA 9170	1118	May. 20, 2021	May. 19, 2022
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jul. 06, 2021	Jul. 05, 2022
Pre-amplifier	SONOMA	310N	185903	Feb. 25, 2021	Feb.24, 2022
Pre-amplifier	HP	8449B	3008A00849	Feb. 25, 2021	Feb.24, 2022
HF Amplifier	Tonscend	TAP0184050	AP21C806129	Sep. 03, 2021	Sep. 02, 2022
Radiation Emission Test (B Site)					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
Spectrum Analyzer	KEYSIGT	N9020B	MY60110172	Sep. 03, 2021	Sep. 02, 2022
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jul. 02, 2021	Jul. 01, 2022
Bilog Antenna	SCHWARZBECK	VULB 9168	1225	Dec. 05, 2021	Dec. 04, 2023
Horn Antenna	SCHWARZBECK	BBHA 9120 D	2463	May 20, 2021	May 19, 2022
Horn Antenna	SCHWARZBECK	BBHA 9170	1118	May 20, 2021	May 19, 2022
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jul. 06, 2021	Jul. 05, 2022
HF Amplifier	Tonscend	TAP9E6343	AP21C806117	Sep. 03, 2021	Sep. 02, 2022
HF Amplifier	Tonscend	TAP051845	AP21C806141	Sep. 03, 2021	Sep. 02, 2022
HF Amplifier	Tonscend	TAP0184050	AP21C806129	Sep. 03, 2021	Sep. 02, 2022
Antenna Conducted Emission					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 02, 2021	Jul. 01, 2022
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jul. 02, 2021	Jul. 01, 2022
MXA Signal Analyzer	Agilent	N9020A	MY49100060	Sep. 03, 2021	Sep. 02, 2022
MXA Signal Analyzer	Agilent	N9020A	MY47380425	Sep. 03, 2021	Sep. 02, 2022
Vector Signal Generator	Agilent	N5182A	MY50141294	Sep. 03, 2021	Sep. 02, 2022

Analog Signal Generator	Agilent	N5181A	MY50141953	Sep. 03, 2021	Sep. 02, 2022
Vector Signal Generator	Agilent	5182B	MY59101429	Sep. 03, 2021	Sep. 02, 2022
Analog Signal Generator	Agilent	5181A	MY48180463	Sep. 03, 2021	Sep. 02, 2022
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Sep. 03, 2021	Sep. 02, 2022
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Sep. 03, 2021	Sep. 02, 2022
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Sep. 03, 2021	Sep. 02, 2022
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Sep. 03, 2021	Sep. 02, 2022
RF Control Unit	Tonsced	JS0806-1	21C8060380	N/A	N/A
RF Control Unit	Tonsced	JS0806-2	21F8060439	Sep. 03, 2021	Sep. 02, 2022
Band Reject Filter Group	Tonsced	JS0806-F	21D8060414	Jul. 02, 2021	Jul. 01, 2022
Power Control Box	Tonsced	JS0806-4ADC	21C8060387	N/A	N/A
Wideband Radio Comunication Tester	Rohde & Schwarz	CMW500	144382	Sep. 03, 2021	Sep. 02, 2022
Universal Radio Communication Tester	Rohde&Schwarz	CMU200	103903	Jul. 02, 2021	Jul. 01, 2022

5. Conducted Emission Test

5.1 Test Standard and Limit

5.1.1Test Standard

FCC Part 15.207(a)

5.1.2 Test Limit

Conducted Emission 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

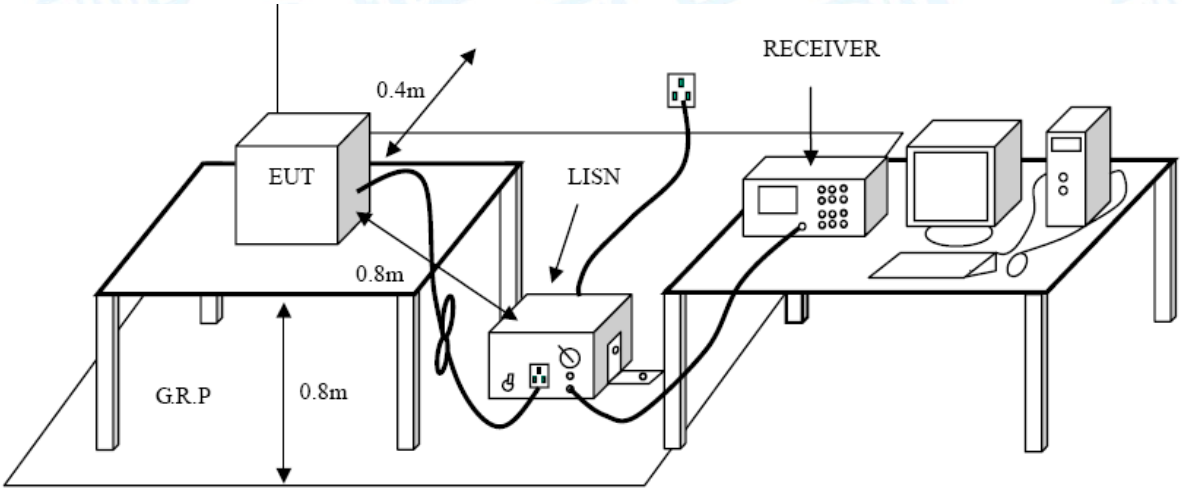
Notes:

(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 9kHz, 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.

6. Radiated Emission Test

6.1 Test Standard and Limit

6.1.1 Test Standard

FCC Part 15.209

6.1.2 Test Limit

Radiated Emission Limits (9kHz~1000MHz)

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
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

Radiated Emission Limit (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)

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

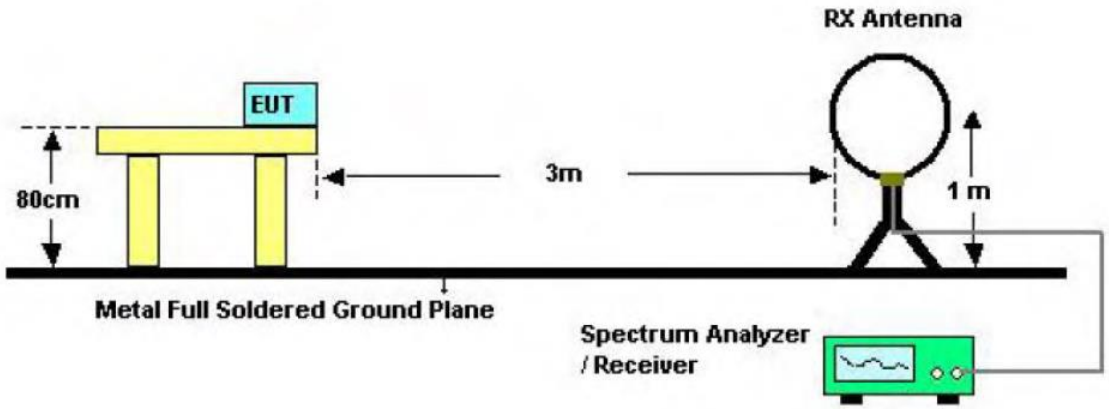
NOTE:

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

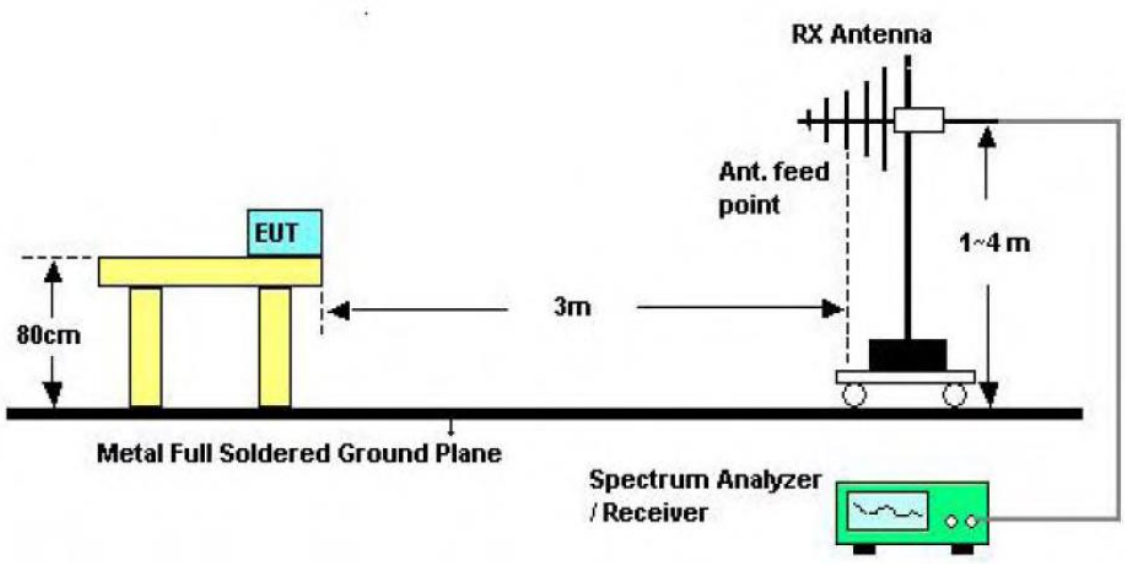
E= $\frac{1000000\sqrt{30P}}{3}$ uV/m, where P is the eirp (Watts)

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 theband 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 orbelow 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.

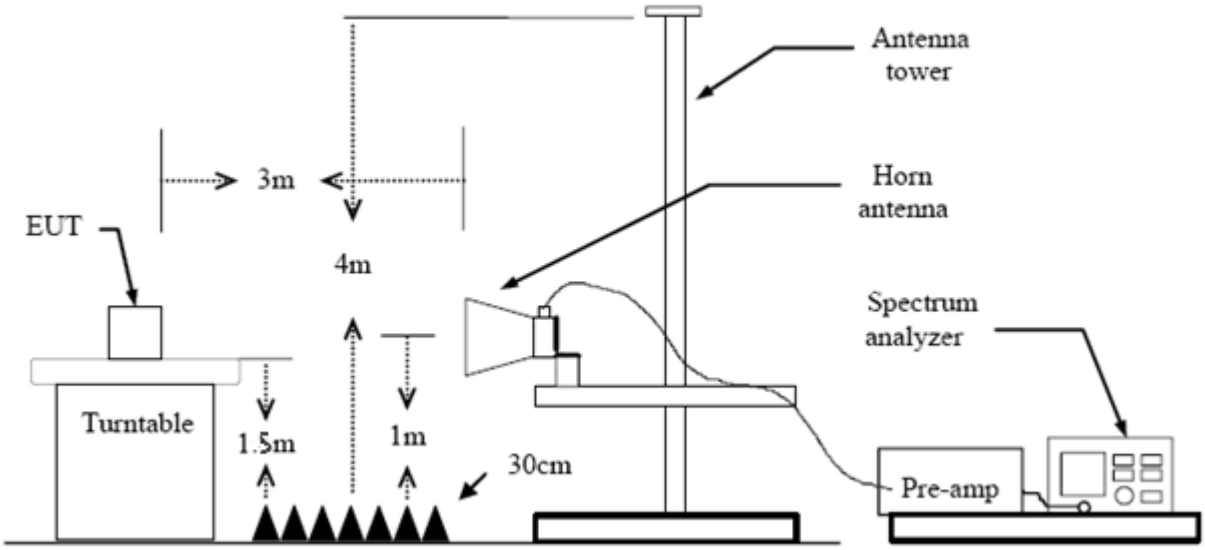
6.2 Test Setup



Below 30MHz Test Setup



Below 1000MHz Test Setup



Above 1GHz Test Setup

6.3 Test Procedure

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

(2) 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.

(3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical Antenna 0re set to make measurement.

(4) 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.

(5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 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.

(6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.

(7) 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.

(8) For the actual test configuration, please see the test setup photo.

6.4 Deviation From Test Standard

No deviation

6.5 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

6.6 Test Data

Remark: During testing 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.

Please refer to the Attachment B.

7. Restricted Band Edge Emissions

7.1 Test Standard and Limit

7.1.1 Test Standard

FCC Part 15.407(b)

7.1.2 Test Limit

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

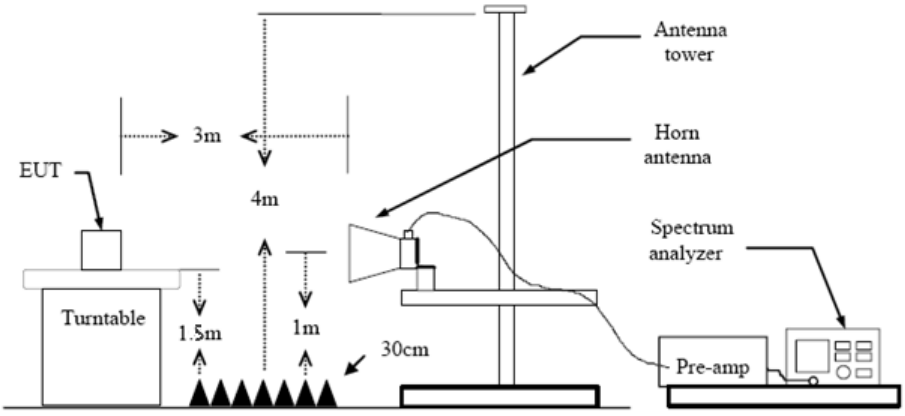
NOTE:

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

$E=\frac{1000000\sqrt{30P}}{3}$ 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 theband 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 orbelow 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.

7.2 Test Setup



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 = 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 Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

7.6 Test Data

Please refer to the Appendix C.

8. Bandwidth Test

8.1 Test Standard and Limit

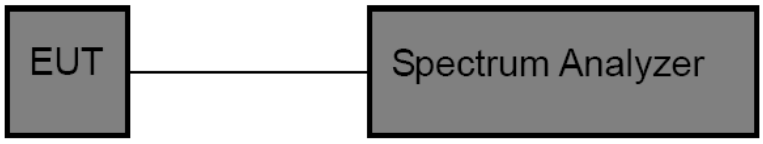
8.1.1 Test Standard

FCC Part 15.407

8.1.2 Test Limit

FCC Part 15 Subpart C(15.407)		
Test Item	**Limit**	**Frequency Range (MHz)**
26 Bandwidth	N/A	5150~5250
		5250~5350
		5500~5700
6 dB Bandwidth	>500kHz	5725~5850

8.2 Test Setup



8.3 Test Procedure

(1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.

(2) The setting of the spectrum analyser as below:

26dB Bandwidth Test	
Spectrum Parameters	**Setting**
Attenuation	Auto
Span	>26 dB Bandwidth
RBW	Approximately 1% of the emission bandwidth
VBW	VBW>RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

6dB Bandwidth Test	
Spectrum Parameters	**Setting**
Attenuation	Auto
Span	>6 dB Bandwidth
RBW	100 kHz
VBW	VBW>=3*RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto
99% Occupied Bandwidth Test	
Spectrum Parameters	**Setting**
Attenuation	Auto
RBW	1% to 5% of the OBW
VBW	≥ 3RBW
Detector	Peak
Trace	Max Hold

8.4 Deviation From Test Standard

No deviation

8.5 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, Middle and high channel for the test.

8.6 Test Data

Please refer to the Appendix C.

9. Maximum Conducted Output Power

9.1 Test Standard and Limit

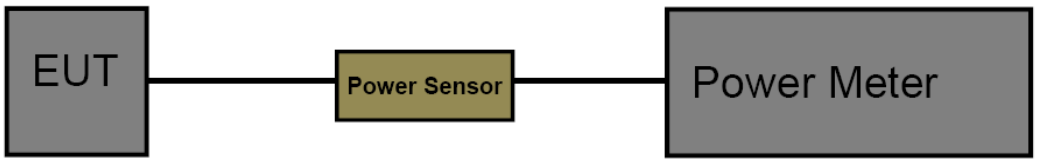
9.1.1 Test Standard

FCC Part 15.407 (a)

9.1.2 Test Limit

FCC Part 15 Subpart E(15.407)		
Test Item	**Limit**	**Frequency Range(MHz)**
Conducted Output Power	Fixed: 1 Watt (30dBm) Mobile and Portable: 250mW (24dBm)	5150~5250
	250mW (24dBm)	5250~5350
	250mW (24dBm)	5500~5700
	1 Watt (30dBm)	5725~5850

9.2 Test Setup



9.3 Test Procedure

The measurement is according to section 3 of KDB 789033 D02 General U-NII Test Procedures New Rules v02r01.
The EUT was connected to RF power meter via a broadband power sensor as show the block above.

9.4 Deviation From Test Standard

No deviation

9.5 EUT Operating Condition

The EUT was set to continuously transmitting in the max power during the test.

9.6 Test Date

Please refer to the Appendix C.

10. Power Spectral Density Test

10.1 Test Standard and Limit

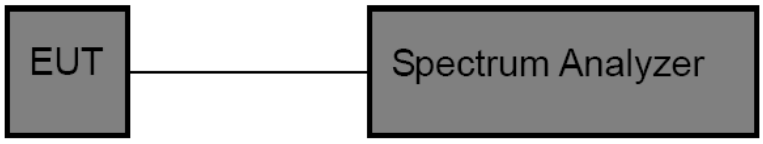
10.1.1 Test Standard

FCC Part 15.407 (a)

10.1.2 Test Limit

FCC Part 15 Subpart E(15.407)		
Test Item	**Limit**	**Frequency Range(MHz)**
Power Spectral Density	Other than Mobile and Portable : 17dBm/MHz Mobile and Portable : 11dBm/MHz	5150~5250
	11dBm/MHz	5250~5350
	11dBm/MHz	5500~5700
	30dBm/500kHz	5725~5850

9.2 Test Setup



10.3 Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement is according to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01.

(1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.

(2) Set analyser centre frequency to transmitting frequency.

(3) Set the span to encompass the entire emissions bandwidth (EBW)(alternatively, the entire 99% OBW) of the signal.

(4) Set the RBW to: 1 MHz

(5) Set the VBW to: 3 MHz

(6) Detector: RMS

(7) Trace: Max Hold

(7) Sweep time: auto

(8) Trace average at least 100 traces in power averaging.

(9) User the peak marker function to determine the maximum amplitude level within the RBW. Apply correction to the result if different RBW is used.

10.4 Deviation From Test Standard

No deviation

10.5 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, Middle and high channel for the test.

10.6 Test Data

Please refer to the Appendix C.

11. Frequency Stability Measurement

11.1 Test Standard and Limit

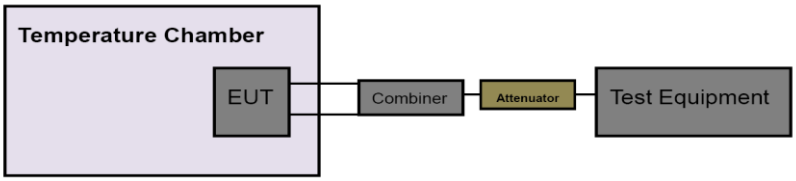
11.1.1 Test Standard

FCC Part 15.407(g)

11.1.2 Test Limit

FCC Part 15 Subpart C(15.407)		
Test Item	**Limit**	**Frequency Range(MHz)**
Frequency Stability Measurement	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	5150~5250
		5250~5350
		5500~5700
		5725~5850

11.2 Test Setup



11.3 Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above.

(1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.

(2) Set analyser centre frequency to transmitting frequency.

(3) Set the span to encompass the entire emissions bandwidth (EBW) of the signal.

(4) Set the RBW to: 10 kHz, VBW=10 kHz with peak detector and maxhold settings.

(5) The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

(6) Extreme temperature is 0℃~50℃

11.4 Deviation From Test Standard

No deviation

11.5 EUT Operating Condition

The EUT was set to continuously transmitting in continuously un-modulation transmitting mode.

11.6 Test Data

Please refer to the Appendix C.

12. Antenna Requirement

12.1 Standard Requirement

12.1.1 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 Antenna Connected Construction

The gains of the antenna used for transmitting is 2dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

12.3 Deviation From Test Standard

No deviation

12.4 Result

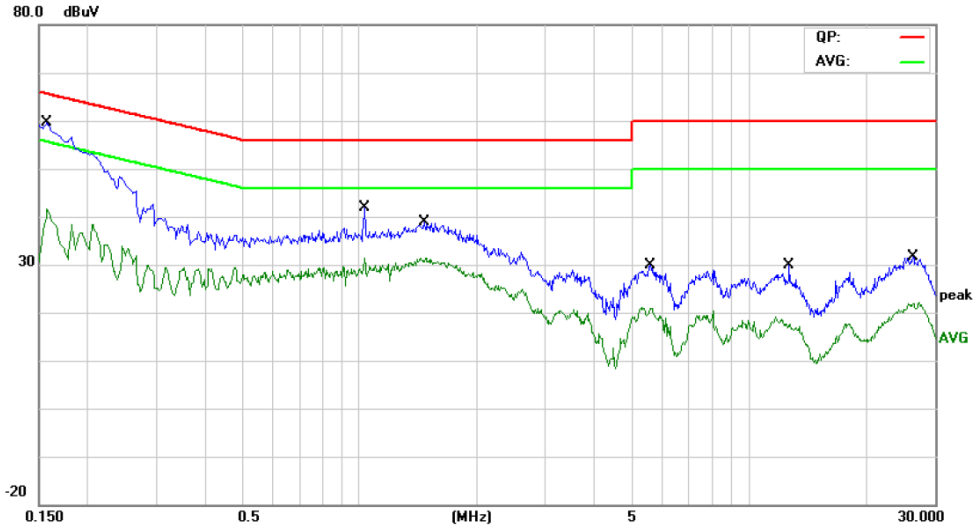
The EUT antennas are Metal Antenna. It complies with the standard requirement.

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

Attachment A-- Conducted Emission Test Data

Remark: All channels have been tested and Shows only the worst channels.

Temperature:	24.5 ℃	**Relative Humidity:**	45%
Test Voltage:	AC 120V/60 Hz		
Terminal:	Line		
Test Mode:	TX 802.11a Mode CH36		
Remark:	Only worse case is reported.		

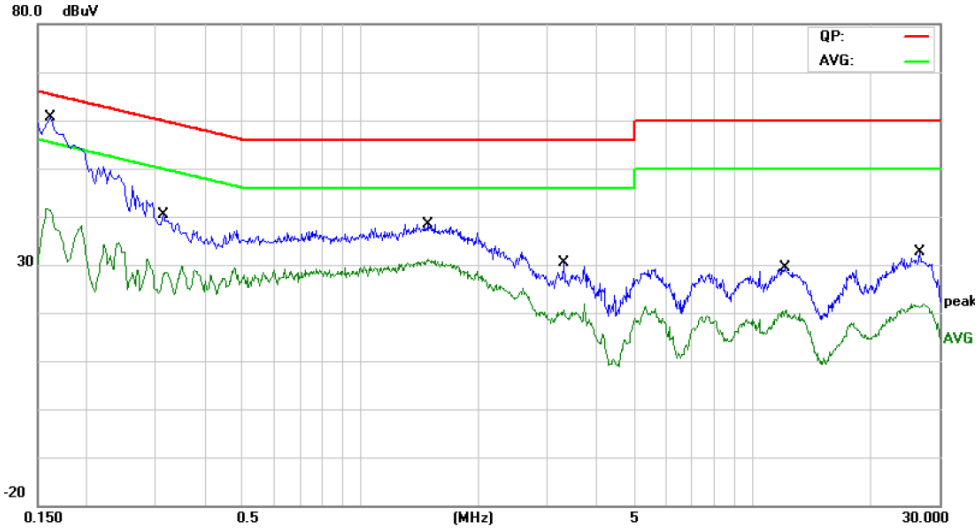


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	*	0.1580	45.22	11.63	56.85	65.56	-8.71	QP
2		0.1580	27.40	11.63	39.03	55.56	-16.53	AVG
3		1.0300	22.65	11.17	33.82	56.00	-22.18	QP
4		1.0300	17.61	11.17	28.78	46.00	-17.22	AVG
5		1.4660	24.14	10.90	35.04	56.00	-20.96	QP
6		1.4660	19.56	10.90	30.46	46.00	-15.54	AVG
7		5.5700	13.84	10.09	23.93	60.00	-36.07	QP
8		5.5700	8.52	10.09	18.61	50.00	-31.39	AVG
9		12.7140	10.37	10.34	20.71	60.00	-39.29	QP
10		12.7140	4.85	10.34	15.19	50.00	-34.81	AVG
11		26.4100	14.94	10.62	25.56	60.00	-34.44	QP
12		26.4100	9.53	10.62	20.15	50.00	-29.85	AVG

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

Emission Level= Read Level+ Correct Factor

Temperature:	24.5 ℃	**Relative Humidity:**	45%
Test Voltage:	AC 120V/60 Hz		
Terminal:	Neutral		
Test Mode:	TX 802.11a Mode CH36		
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	*	0.1620	44.67	11.60	56.27	65.36	-9.09	QP
2		0.1620	27.83	11.60	39.43	55.36	-15.93	AVG
3		0.3140	25.98	11.55	37.53	59.86	-22.33	QP
4		0.3140	16.89	11.55	28.44	49.86	-21.42	AVG
5		1.4940	24.33	10.84	35.17	56.00	-20.83	QP
6		1.4940	19.77	10.84	30.61	46.00	-15.39	AVG
7		3.2940	14.08	10.15	24.23	56.00	-31.77	QP
8		3.2940	9.52	10.15	19.67	46.00	-26.33	AVG
9		12.0900	14.23	10.23	24.46	60.00	-35.54	QP
10		12.0900	8.71	10.23	18.94	50.00	-31.06	AVG
11		26.8100	15.02	10.60	25.62	60.00	-34.38	QP
12		26.8100	9.70	10.60	20.30	50.00	-29.70	AVG

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

Emission Level= Read Level+ Correct Factor

Attachment B-- Radiated Emission Test Data

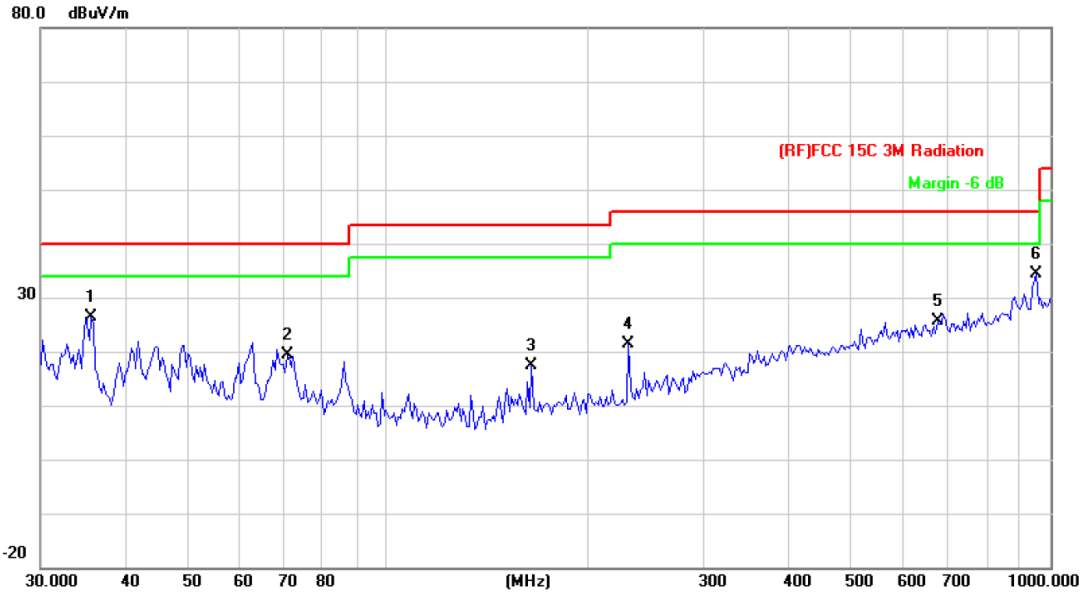
9 KHz~30 MHz

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:	23.5 ℃	**Relative Humidity:**	46%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5180MHz (U-NII-1)		
Remark:	Only worse case is reported		

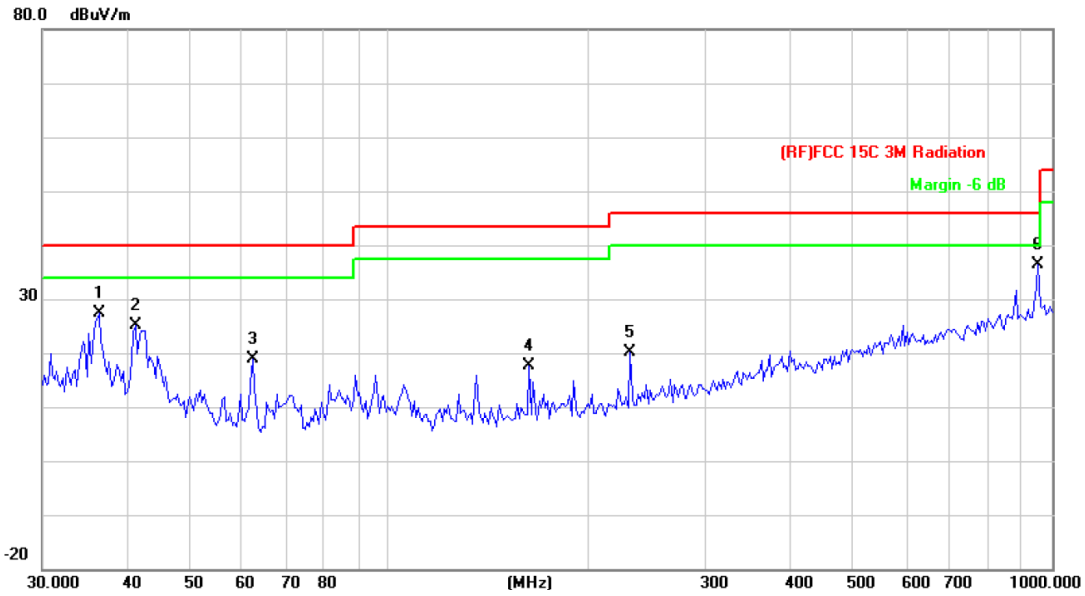


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		35.7490	43.98	-17.48	26.50	40.00	-13.50	peak
2		70.5835	43.14	-23.64	19.50	40.00	-20.50	peak
3		164.9072	38.14	-20.84	17.30	43.50	-26.20	peak
4		230.9067	39.86	-18.36	21.50	46.00	-24.50	peak
5		675.2078	33.08	-7.39	25.69	46.00	-20.31	peak
6	*	952.0937	37.30	-3.02	34.28	46.00	-11.72	peak

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

Emission Level= Read Level+ Correct Factor

Temperature:	23.5 ℃	Relative Humidity:	46%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5180MHz (U-NII-1)		
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		36.5092	45.21	-17.83	27.38	40.00	-12.62	peak
2		41.4215	45.23	-20.16	25.07	40.00	-14.93	peak
3		62.2128	43.37	-24.41	18.96	40.00	-21.04	peak
4		162.6106	38.60	-20.92	17.68	43.50	-25.82	peak
5		230.9068	38.44	-18.36	20.08	46.00	-25.92	peak
6	*	952.0937	39.43	-3.02	36.41	46.00	-9.59	peak

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

Emission Level= Read Level+ Correct Factor

5180MHz-5240MHz(U-NII-1)

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5180MHz (U-NII-1)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10360.225	45.33	6.24	51.57	68.30	-16.73	peak
2 *	10360.240	32.32	6.24	38.56	54.00	-15.44	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5180MHz (U-NII-1)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10359.717	32.55	6.03	38.58	54.00	-15.42	AVG
2	10360.289	46.49	6.04	52.53	68.30	-15.77	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5200MHz (U-NII-1)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10400.840	31.91	6.47	38.38	54.00	-15.62	AVG
2	10401.220	45.38	6.47	51.85	68.30	-16.45	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5200MHz (U-NII-1)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10399.200	32.15	6.29	38.44	54.00	-15.56	AVG
2	10401.230	44.92	6.29	51.21	68.30	-17.09	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5240MHz (U-NII-1)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10479.090	33.39	5.89	39.28	54.00	-14.72	AVG
2	10480.600	40.55	5.88	46.43	68.30	-21.87	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5240MHz (U-NII-1)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10480.615	33.00	6.25	39.25	54.00	-14.75	AVG
2	10480.705	46.00	6.25	52.25	68.30	-16.05	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mode 5180MHz (U-NII-1)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10359.611	32.18	6.24	38.42	54.00	-15.58	AVG
2	10360.400	44.83	6.25	51.08	68.30	-17.22	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT20) Mode 5180MHz (U-NII-1)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10359.919	32.59	6.03	38.62	54.00	-15.38	AVG
2	10360.429	45.29	6.04	51.33	68.30	-16.97	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mode 5200MHz (U-NII-1)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10399.552	38.48	6.48	44.96	68.30	-23.34	peak
2 *	10399.558	31.83	6.48	38.31	54.00	-15.69	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT20) Mode 5200MHz (U-NII-1)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10398.105	32.13	6.28	38.41	54.00	-15.59	AVG
2	10399.275	39.32	6.29	45.61	68.30	-22.69	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mode 5240MHz (U-NII-1)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10480.005	33.26	5.88	39.14	54.00	-14.86	AVG
2	10480.163	45.97	5.88	51.85	68.30	-16.45	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT20) Mode 5240MHz (U-NII-1)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10479.180	32.94	6.25	39.19	54.00	-14.81	AVG
2	10479.470	42.36	6.25	48.61	68.30	-19.69	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT20) Mode 5180MHz (U-NII-1)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10360.097	32.27	6.24	38.51	54.00	-15.49	AVG
2	10360.287	45.47	6.24	51.71	68.30	-16.59	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT20) Mode 5180MHz (U-NII-1)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10359.610	32.32	6.03	38.35	54.00	-15.65	AVG
2	10360.402	45.11	6.04	51.15	68.30	-17.15	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT20) Mode 5200MHz (U-NII-1)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10399.674	31.78	6.48	38.26	54.00	-15.74	AVG
2	10399.708	39.35	6.48	45.83	68.30	-22.47	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT20) Mode 5200MHz (U-NII-1)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10399.816	40.79	6.29	47.08	68.30	-21.22	peak
2 *	10400.043	31.97	6.29	38.26	54.00	-15.74	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11 ac(VHT20) Mode 5240MHz (U-NII-1)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10479.576	33.17	5.89	39.06	54.00	-14.94	AVG
2	10480.194	46.19	5.88	52.07	68.30	-16.23	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT20) Mode 5240MHz (U-NII-1)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10479.848	32.76	6.25	39.01	54.00	-14.99	AVG
2	10480.042	45.79	6.25	52.04	68.30	-16.26	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT40) Mode 5190MHz (U-NII-1)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10380.365	32.08	6.36	38.44	54.00	-15.56	AVG
2	10380.374	45.96	6.36	52.32	68.30	-15.98	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT40) Mode 5190MHz (U-NII-1)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10379.275	42.57	6.15	48.72	68.30	-19.58	peak
2 *	10380.980	32.27	6.17	38.44	54.00	-15.56	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT40) Mode 5230MHz (U-NII-1)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10460.103	46.35	6.03	52.38	68.30	-15.92	peak
2 *	10460.135	32.88	6.03	38.91	54.00	-15.09	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT40) Mode 5230MHz (U-NII-1)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10459.616	40.35	6.26	46.61	68.30	-21.69	peak
2 *	10460.062	32.61	6.26	38.87	54.00	-15.13	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT40) Mode 5190MHz (U-NII-1)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10379.967	40.46	6.36	46.82	68.30	-21.48	peak
2 *	10380.083	32.06	6.36	38.42	54.00	-15.58	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT40) Mode 5190MHz (U-NII-1)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10379.723	32.24	6.16	38.40	54.00	-15.60	AVG
2	10380.077	45.34	6.16	51.50	68.30	-16.80	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT40) Mode 5230MHz (U-NII-1)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10459.720	32.84	6.04	38.88	54.00	-15.12	AVG
2	10459.775	41.39	6.04	47.43	68.30	-20.87	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT40) Mode 5230MHz (U-NII-1)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10459.724	32.63	6.26	38.89	54.00	-15.11	AVG
2	10460.185	45.87	6.26	52.13	68.30	-16.17	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT80) Mode 5210MHz (U-NII-1)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10419.612	42.30	6.34	48.64	68.30	-19.66	peak
2 *	10419.933	32.33	6.34	38.67	54.00	-15.33	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT80) Mode 5210MHz (U-NII-1)		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10420.382	32.37	6.29	38.66	54.00	-15.34	AVG
2	10420.498	45.41	6.29	51.70	68.30	-16.60	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

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

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5745MHz (U-NII-3)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	11489.919	39.78	8.68	48.46	68.30	-19.84	peak
2 *	11490.184	30.86	8.68	39.54	54.00	-14.46	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5745MHz (U-NII-3)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	11488.235	40.13	8.65	48.78	68.30	-19.52	peak
2 *	11488.820	30.88	8.65	39.53	54.00	-14.47	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5785MHz (U-NII-3)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	11569.925	31.33	8.39	39.72	54.00	-14.28	AVG
2	11570.250	44.30	8.39	52.69	68.30	-15.61	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5785MHz (U-NII-3)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	11568.200	31.55	8.23	39.78	54.00	-14.22	AVG
2	11569.425	39.91	8.22	48.13	68.30	-20.17	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5825MHz (U-NII-3)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	11649.318	26.09	18.56	44.65	54.00	-9.35	AVG
2		11650.110	39.06	18.55	57.61	68.30	-10.69	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5825MHz (U-NII-3)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		11649.650	38.66	18.56	57.22	68.30	-11.08	peak
2	*	11650.266	26.63	18.55	45.18	54.00	-8.82	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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	11491.826	43.27	8.66	51.93	68.30	-16.37	peak
2 *	11492.286	30.82	8.66	39.48	54.00	-14.52	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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	11490.224	43.89	8.62	52.51	68.30	-15.79	peak
2 *	11490.286	30.86	8.62	39.48	54.00	-14.52	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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 *	11569.639	31.26	8.39	39.65	54.00	-14.35	AVG
2	11569.815	42.36	8.39	50.75	68.30	-17.55	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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 *	11569.660	31.45	8.22	39.67	54.00	-14.33	AVG
2	11570.249	44.29	8.22	52.51	68.30	-15.79	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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 *	11650.180	30.44	8.63	39.07	54.00	-14.93	AVG
2	11651.880	43.57	8.64	52.21	68.30	-16.09	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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 *	11650.255	30.89	8.16	39.05	54.00	-14.95	AVG
2	11651.370	43.43	8.16	51.59	68.30	-16.71	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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	11489.723	39.67	8.69	48.36	68.30	-19.94	peak
2 *	11489.973	30.69	8.68	39.37	54.00	-14.63	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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	11489.692	39.56	8.64	48.20	68.30	-20.10	peak
2 *	11489.754	30.73	8.64	39.37	54.00	-14.63	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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 *	11570.215	31.24	8.39	39.63	54.00	-14.37	AVG
2	11570.484	43.77	8.39	52.16	68.30	-16.14	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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	11569.506	37.86	8.22	46.08	68.30	-22.22	peak
2 *	11570.129	31.40	8.22	39.62	54.00	-14.38	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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	11649.528	37.60	8.62	46.22	68.30	-22.08	peak
2 *	11650.313	30.38	8.63	39.01	54.00	-14.99	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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 *	11650.166	30.86	8.16	39.02	54.00	-14.98	AVG
2	11650.313	43.40	8.16	51.56	68.30	-16.74	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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 *	11509.939	30.97	8.57	39.54	54.00	-14.46	AVG
2	11510.367	43.80	8.57	52.37	68.30	-15.93	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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	11509.571	39.13	8.48	47.61	68.30	-20.69	peak
2 *	11510.019	31.08	8.48	39.56	54.00	-14.44	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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 *	11589.569	31.09	8.33	39.42	54.00	-14.58	AVG
2	11589.629	38.49	8.33	46.82	68.30	-21.48	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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 *	11589.537	31.30	8.13	39.43	54.00	-14.57	AVG
2	11589.565	38.43	8.13	46.56	68.30	-21.74	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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 *	11509.644	31.02	8.57	39.59	54.00	-14.41	AVG
2	11509.836	39.99	8.57	48.56	68.30	-19.74	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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	11509.951	39.03	8.48	47.51	68.30	-20.79	peak
2 *	11510.292	31.09	8.48	39.57	54.00	-14.43	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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	11589.830	38.44	8.33	46.77	68.30	-21.53	peak
2 *	11590.165	31.08	8.33	39.41	54.00	-14.59	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)

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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	11589.815	39.94	8.13	48.07	68.30	-20.23	peak
2 *	11590.162	31.28	8.13	39.41	54.00	-14.59	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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 *	11550.066	31.38	8.45	39.83	54.00	-14.17	AVG
2	11550.238	44.34	8.45	52.79	68.30	-15.51	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
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	11549.574	38.53	8.31	46.84	68.30	-21.46	peak
2 *	11549.946	31.45	8.30	39.75	54.00	-14.25	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 evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

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