Radio Test Report

FCC ID: 2A2GJ-M2808

IC: 27498-M2808

Report No.	:	TB-RF183070
Applicant	:	Heltec Automation Technology Co., Ltd
Equipment Under Test (EUT)		
EUT Name	:	Heltec Indoor Hotspot
Model No.	:	HT-M2808
Series Model No.	:	HT-M2802
Brand Name	:	----
Sample ID	:	20210603-15-1#& 20210603-15-2#
Receipt Date	:	2021-06-04
Test Date	:	2021-06-05 to 2021-08-19
Issue Date	:	2021-08-20
Standards	:	FCC Part 15 Subpart E 15.407 RSS-247 Issue 2 February 2017 RSS-Gen Issue 5 March 2019
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	:	Joy
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.

1/F.,Building 6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an District, Shenzhen, Guangdong, China
Tel: +86 75526509301 Fax: +86 75526509195

Contents

Revision History

Report No.	Version	Description	Issued Date
TB-RF183070	Rev.01	Initial issue of report	2021-08-20

1. General Information about EUT

1.1 Client Information

Applicant	:	Heltec Automation Technology Co., Ltd
Address	:	2-208, Block A, Yusha Building, 64 Hangtian Road, Longtan Industrial Park, Chenghua District, Chengdu, Sichuan, China
Manufacturer	:	Heltec Automation Technology Co., Ltd
Address	:	2-208, Block A, Yusha Building, 64 Hangtian Road, Longtan Industrial Park, Chenghua District, Chengdu, Sichuan, China

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	Heltec Indoor Hotspot	
HVIN/Models No.	:	HT-M2808, HT-M2802	
Model Different	:	All these models are identical in the same PCB, layout and electrical circuit, The only difference is model name.	
Product Description	:	Operation Frequency: U-NII-1: 5180MHz~5240MHz	
		Modulation Type:	802.11a: OFDM (QPSK, BPSK, 16QAM) 802.11n: OFDM (QPSK, BPSK, 16QAM, 64QAM) 802.11ac: OFDM (QPSK, BPSK, 16QAM, 64QAM, 256QAM)
		Antenna Gain:	5dBi internal Antenna
		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	:	Adapter: Input: 90-264V~, 50/60Hz, 1.5A Output: DC 12V3.0A	
Software Version	:	N/A	
Hardware Version	:	N/A	

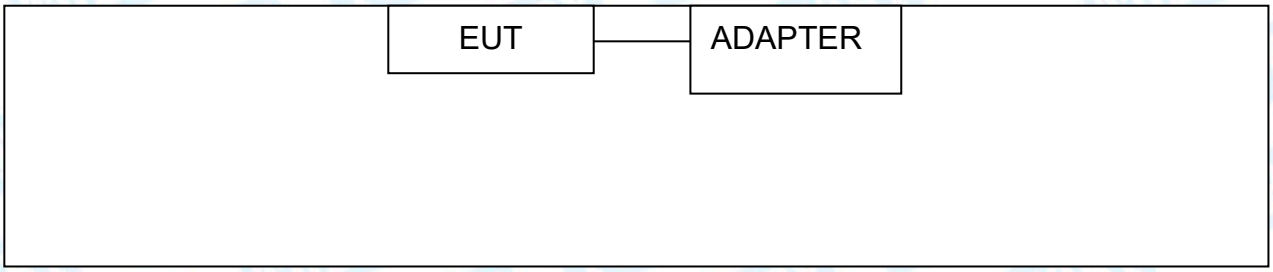
Remark:
(1) The antenna gain and adapter provided by the applicant, the verified for the RF conduction test provided by TOBY test lab.
(2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
(3) Antenna information provided by the applicant.

(4) Channel List:

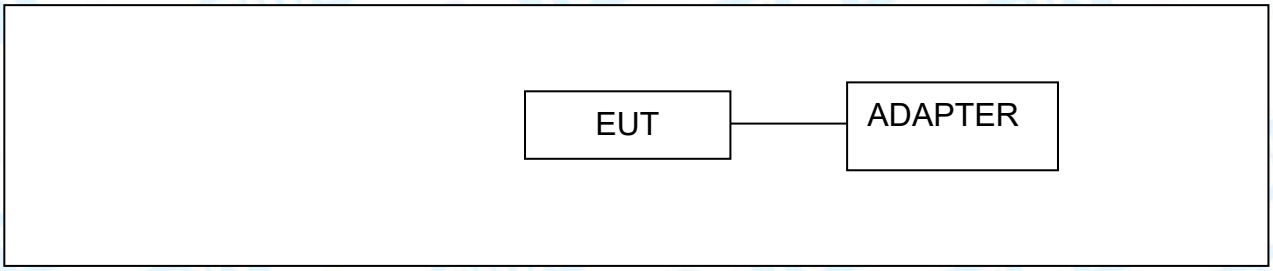
Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5180~5240MHz **(U-NII-1)**	36	5180 MHz	44	5220 MHz
	38	5190 MHz	46	5230 MHz
	40	5200 MHz	48	5240 MHz
	42	5210 MHz		
For 20 MHz Bandwidth, use channel 36, 40, 44, 48. For 40 MHz Bandwidth, use channel 38, 46. For 80 MHz Bandwidth, use channel 42.				

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/VOC**	**Manufacturer**	**Used "√"**
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Cable Information				
Number	**Shielded Type**	**Ferrite Core**	**Length**	**Note**
Cable 1	Yes	NO	1.0M	Accessory

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

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: 8788-LaunchEngMode		
U-NII-1		
Mode	**Frequency (MHz)**	**Parameters**
802.11a	**5180**	**45**
	5200	**45**
	5240	**45**
802.11n(HT20)	**5180**	**45**
	5200	**45**
	5240	**45**
802.11ac(VHT20)	**5180**	**45**
	5200	**45**
	5240	**45**
802.11n(HT40)	**5190**	**42**
	5230	**42**
802.11ac(VHT40)	**5190**	**38**
	5230	**42**
802.11ac(VHT80)	**5210**	**35**

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	IC				
FCC 15.207(a)	RSS-Gen 8.8	Conducted Emission	20210603-15-1#	PASS	N/A
FCC 15.209 & 15.407(b)	RSS-Gen 8.9 & RSS 247 5.5	Radiated Unwanted Emissions	20210603-15-1#	PASS	N/A
FCC 15.203	RSS-247 6.8	Antenna Requirement	20210603-15-2#	PASS	N/A
FCC 15.407(a)	RSS-247(6.2.1.2)	-26dB Emission Bandwidth	20210603-15-2#	PASS	N/A
FCC 15.407(a)	RSS-247(6.2.1.2)	99% Occupied Bandwidth	20210603-15-2#	PASS	N/A
FCC 15.407(e)	RSS-247(6.2.4.1)	-6dB Min Emission Bandwidth	20210603-15-2#	PASS	N/A
FCC 15.407(a)	RSS-247(6.2.1.1& 6.2.2.1&6.2.3.1& 6.2.4.1)	Maximum Conducted Output Power	20210603-15-2#	PASS	N/A
FCC 15.407(a)	RSS-247(6.2.1.1& 6.2.2.1&6.2.3.1& 6.2.4.1)	Power Spectral Density	20210603-15-2#	PASS	N/A
FCC 15.407(b)& 15.205	RSS-Gen 8.10& RSS-247 5.5	Emissions in Restricted Bands	20210603-15-2#	PASS	N/A
FCC 15.407(b)&15.209	RSS-Gen 8.9 & RSS 247 5.5	Conducted Unwanted Emissions	20210603-15-2#	PASS	N/A
FCC 15.407(g)	RSS-Gen 8.11	Frequency Stability	20210603-15-2#	PASS	N/A
/	/	On Time and Duty Cycle	20210603-15-2#	/	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	Tonscend	V2.6.88.0336

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. 06, 2020	Jul. 05, 2021
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jul. 06, 2020	Jul. 05, 2021
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jul. 06, 2020	Jul. 05, 2021
LISN	Rohde & Schwarz	ENV216	101131	Jul. 06, 2020	Jul. 05, 2021
Radiation Emission Test					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 06, 2020	Jul. 05, 2021
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jul. 06, 2020	Jul. 05, 2021
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jul. 06, 2020	Jul. 05, 2021
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	ETS-LINDGREN	BBHA 9170	BBHA9170582	Mar.01, 2020	Feb. 28, 2022
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jul. 07, 2020	Jul. 06, 2021
Pre-amplifier	Sonoma	310N	185903	Feb. 25, 2021	Feb. 24, 2022
Pre-amplifier	HP	8449B	3008A00849	Feb. 25, 2021	Feb. 24, 2022
Pre-amplifier	SKET	LNPA_1840G-50	SK201904032	Feb. 25, 2021	Feb. 24, 2022
Cable	HUBER+SUHNER	100	SUCOFLEX	Feb. 25, 2021	Feb. 24, 2022
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A
Antenna Conducted Emission					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 06, 2020	Jul. 05, 2021
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jul. 06, 2020	Jul. 05, 2021
MXA Signal Analyzer	Agilent	N9020A	MY49100060	Sep. 11, 2020	Sep. 10, 2021
Vector Signal Generator	Agilent	N5182A	MY50141294	Sep. 11, 2020	Sep. 10, 2021
Analog Signal Generator	Agilent	N5181A	MY50141953	Sep. 11, 2020	Sep. 10, 2021
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Sep. 11, 2020	Sep. 10, 2021
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Sep. 11, 2020	Sep. 10, 2021
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Sep. 11, 2020	Sep. 10, 2021
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Sep. 11, 2020	Sep. 10, 2021

Conducted Emission Test					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jul. 02, 2021	Jul. 01, 2022
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jul. 02, 2021	Jul. 01, 2022
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jul. 02, 2021	Jul. 01, 2022
LISN	Rohde & Schwarz	ENV216	101131	Jul. 02, 2021	Jul. 01, 2022
Radiation Emission Test					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 02, 2021	Jul. 01, 2022
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jul. 02, 2021	Jul. 01, 2022
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	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	ETS-LINDGREN	BBHA 9170	BBHA9170582	Mar.01, 2020	Feb. 28, 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
Pre-amplifier	SKET	LNPA_1840G-50	SK201904032	Feb. 25, 2021	Feb. 24, 2022
Cable	HUBER+SUHNER	100	SUCOFLEX	Feb. 25, 2021	Feb. 24, 2022
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A
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. 11, 2020	Sep. 10, 2021
Vector Signal Generator	Agilent	N5182A	MY50141294	Sep. 11, 2020	Sep. 10, 2021
Analog Signal Generator	Agilent	N5181A	MY50141953	Sep. 11, 2020	Sep. 10, 2021
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Sep. 11, 2020	Sep. 10, 2021
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Sep. 11, 2020	Sep. 10, 2021
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Sep. 11, 2020	Sep. 10, 2021
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Sep. 11, 2020	Sep. 10, 2021

5. Conducted Emission Test

5.1 Test Standard and Limit

5.1.1 Test Standard

RSS-Gen 8.8

FCC Part 15.207

5.1.2 Test Limit

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

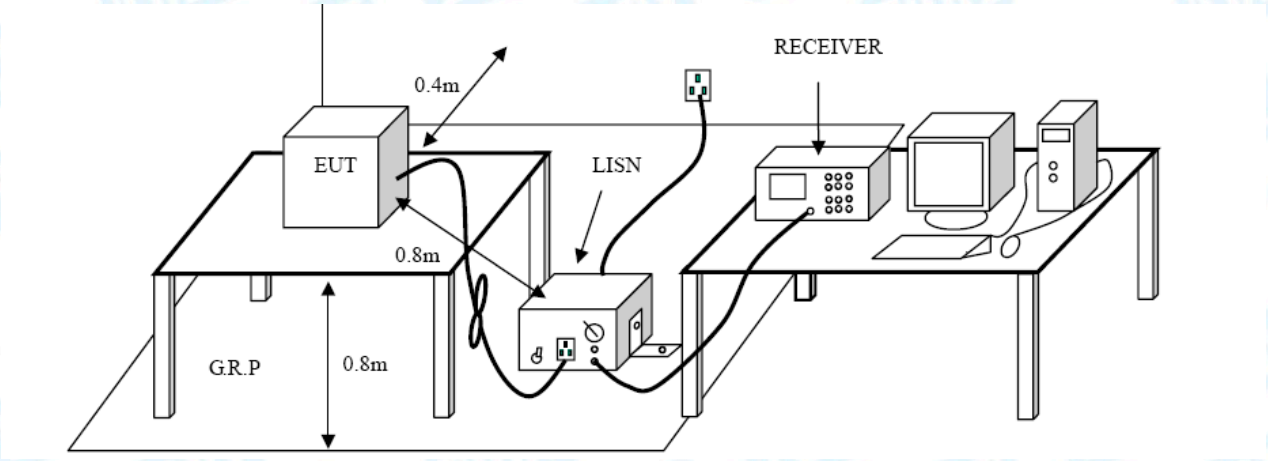
Notes:

(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

RSS-Gen 8.9 & RSS 247 5.5

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.			

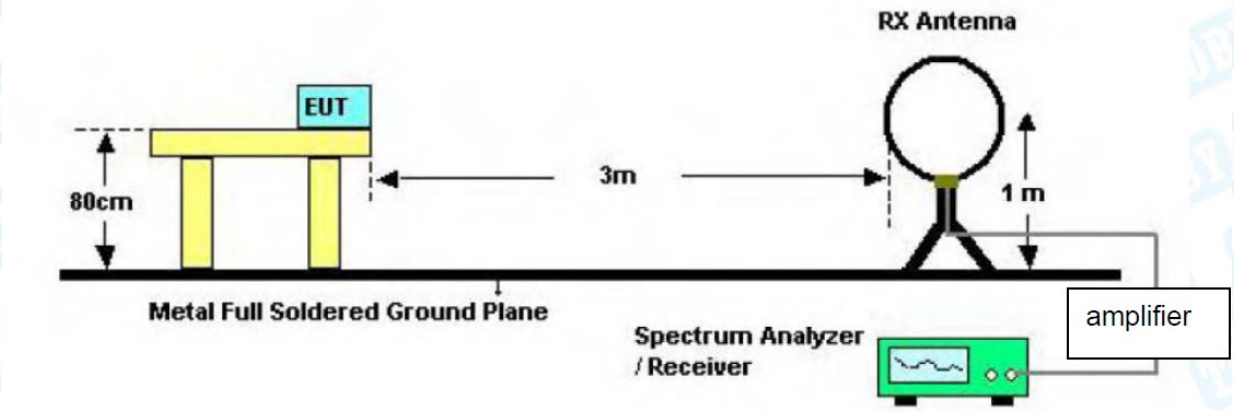
General field strength limits at frequencies above 30 MHz		
Frequency (MHz)	**Field strength (μV/m at 3 m)**	**Measurement Distance (meters)**
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

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)		

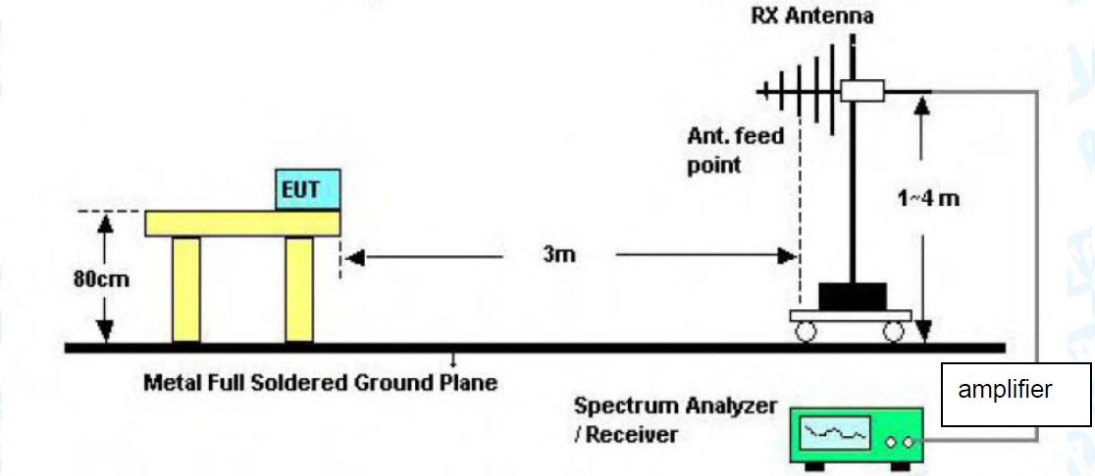
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either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

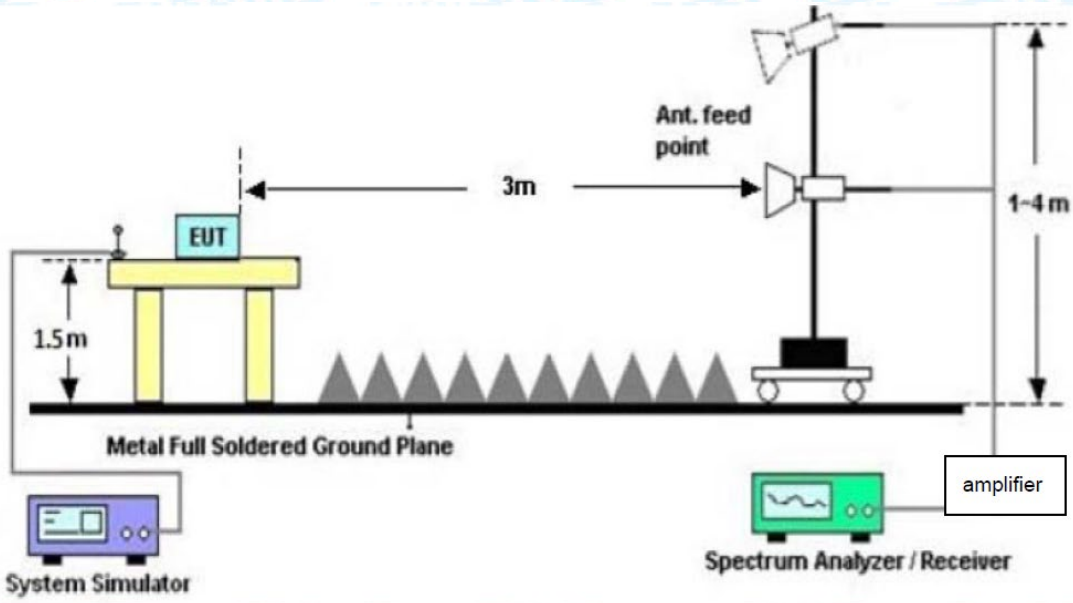
Radiated measurement



Below 30MHz Test Setup

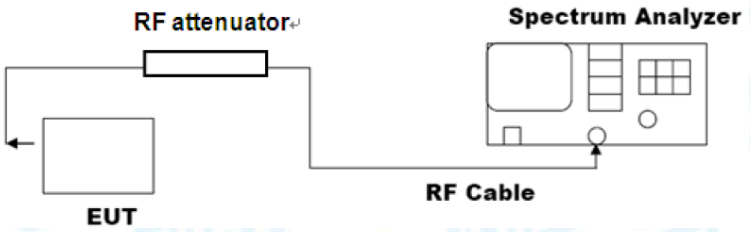


Below 1000MHz Test Setup



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 section 7.

7. Restricted Bands Requirement

7.1 Test Standard and Limit

7.1.1 Test Standard

RSS-Gen 8.10 & RSS 247 5.5
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:

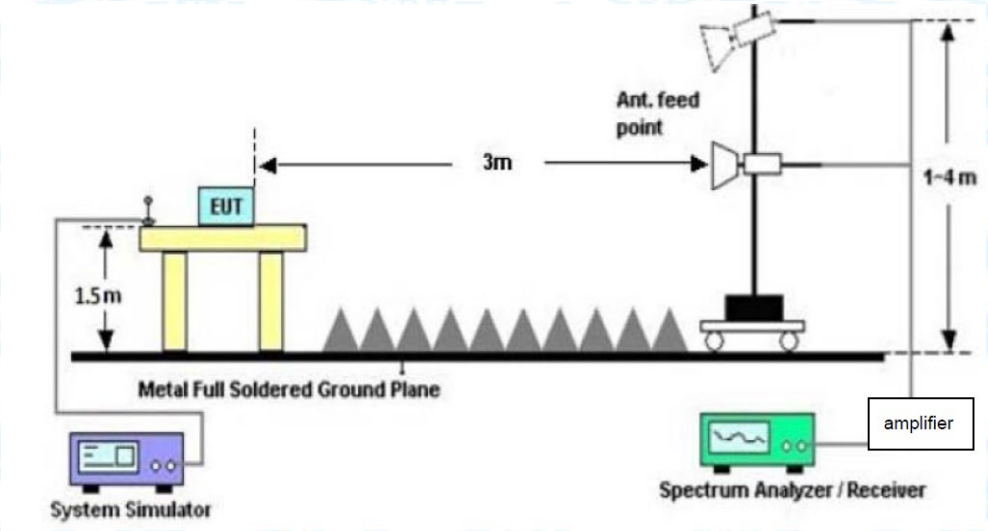
$E=\frac{1000000\sqrt{30P}}{3}$ uV/m, where P is the eirp (Watts)

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.

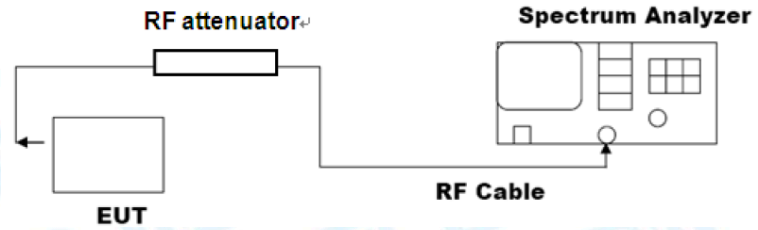
Note: According the ANSI C63.10 11.12.2 antenna-port conducted measurements may also be used as an alternative to radiated measurements for determining compliance in the restricted frequency bands requirements. If conducted measurements are performed, then proper impedance matching must be ensured and 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 section 6.

8. Bandwidth Test

8.1 Test Standard and Limit

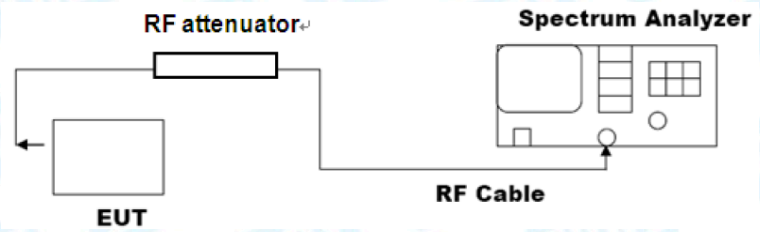
8.1.1 Test Standard

RSS 247 (6.2.1.2) & RSS 247 (6.2.1.4)
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 section 1&2&3.

9. Maximum Conducted Output Power

9.1 Test Standard and Limit

9.1.1 Test Standard

RSS 247 (6.2.11&6.2.2.1&6.2.3.1&6.2.4.1)

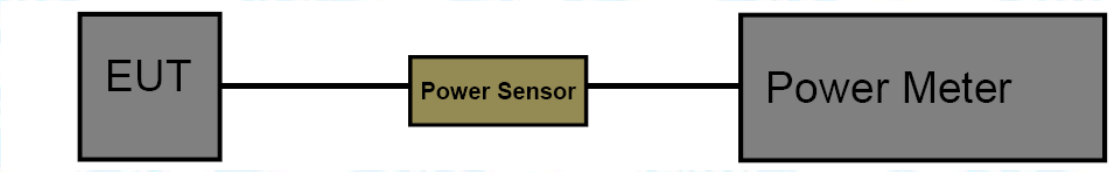
FCC Part 15.407(a)

9.1.2 Test Limit

RSS-247				
Limit	**Frequency Range(MHz)**			
	5150~5250	**5250~5350**	**5500~5725**	**5725~5850**
Max Conducted TX Power	N/A	The maximum conducted output power shall not exceed 250 mW or 11 + 10 log10B, dBm		1 Watt (30dBm)
Max E.I.R.P	For other devices, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log10B, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.	The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.		4 W (36 dBm) with 6 dBi antenna
TPC	NO	YES, if Max_EIRP ≥ 500 mW (27 dBm) and able to lower EIRP below 24dBm		NO
		NO, if Max_EIRP < 500mW (27dBm)		

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

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 section 4.

10. Power Spectral Density Test

10.1 Test Standard and Limit

10.1.1 Test Standard

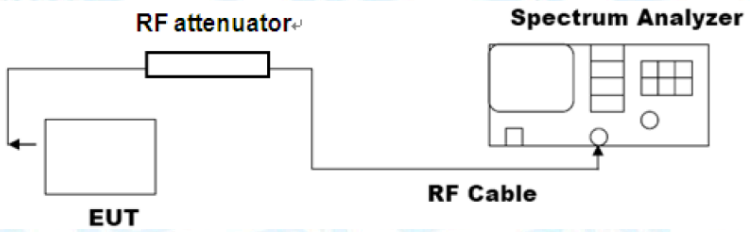
RSS 247 (6.2.11&6.2.2.1&6.2.3.1&6.2.4.1)

FCC Part 15.407(a)

10.1.2 Test Limit

Test Item	Limit		Frequency Range(MHz)
Power Spectral Density	FCC	Master Device: 17dBm/MHz Client Device: 11dBm/MHz	5150~5250
	IC	10dBm/MHz	
	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 section 5.

11. Frequency Stability

11.1 Test Standard and Limit

11.1.1 Test Standard

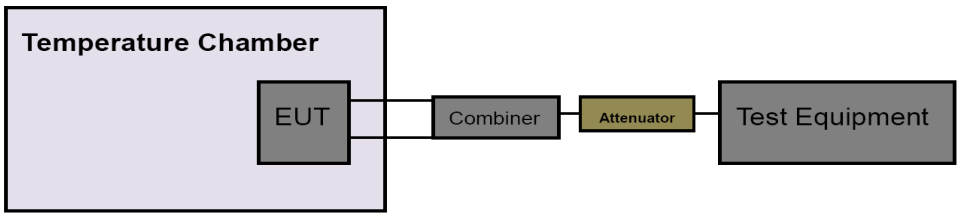
RSS-Gen 8.11

FCC Part 15.407(g)

11.1.2 Test Limit

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 section 8.

12. Antenna Requirement

12.1 Test Standard and Limit

12.1.1 Test Standard

RSS 247 6.8

FCC Part 15.203

12.1.2 Requirement

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 5dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

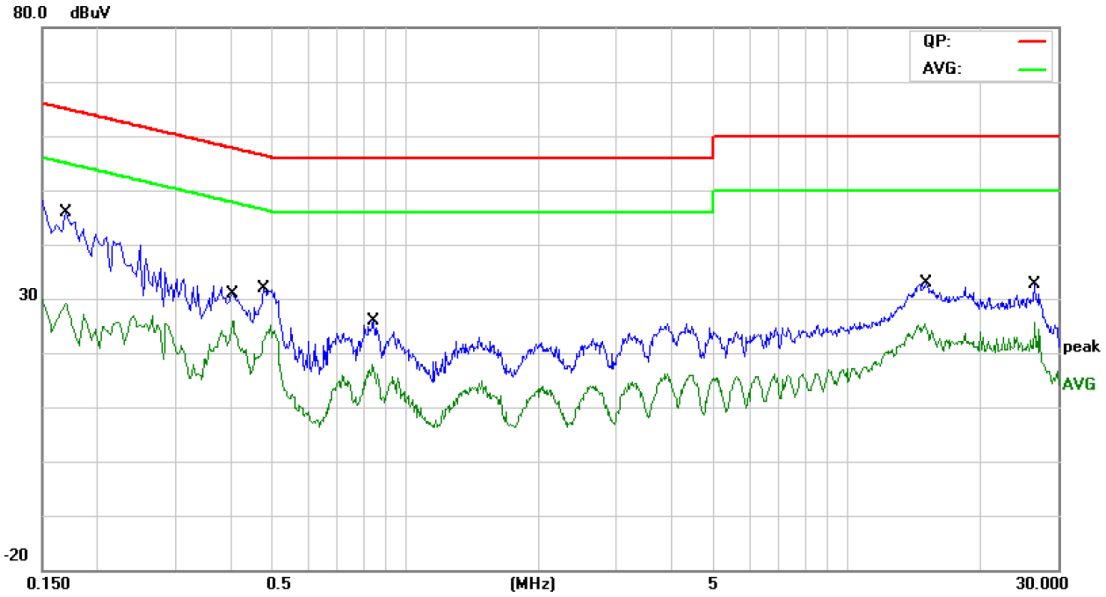
12.4 Test Data

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

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

Attachment A-- Conducted Emission Test Data

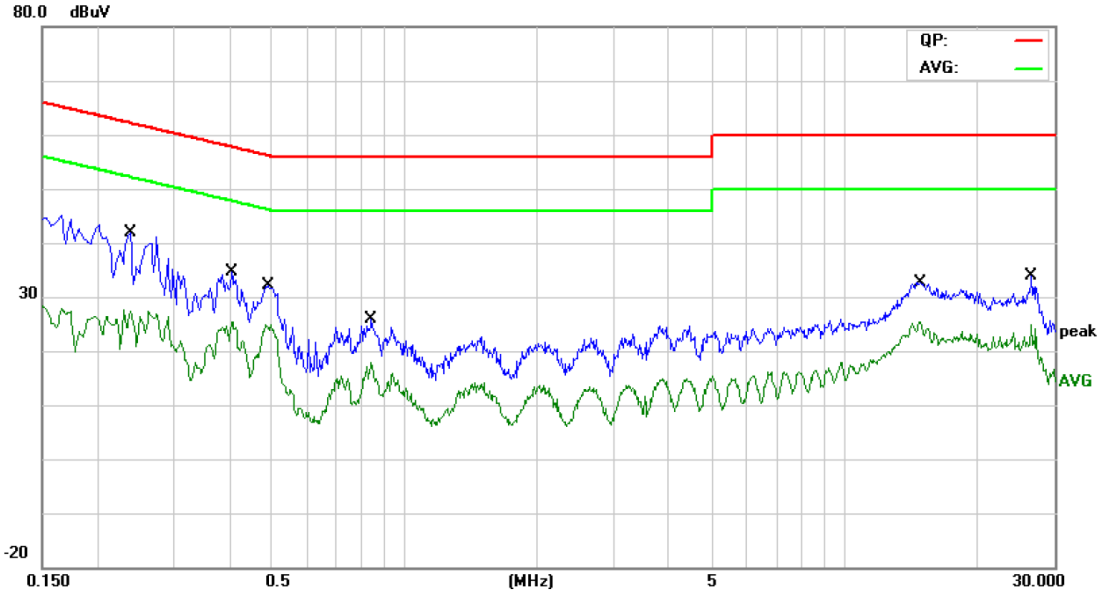
Temperature:	24.6℃	**Relative Humidity:**	42%
Test Voltage:	AC 120V 60Hz		
Terminal:	Line		
Test Mode:	Mode 1		
Remark:	Only worse case is reported.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1700	31.29	9.70	40.99	64.96	-23.97	QP
2		0.1700	17.15	9.70	26.85	54.96	-28.11	AVG
3		0.4060	19.71	9.70	29.41	57.73	-28.32	QP
4		0.4060	13.90	9.70	23.60	47.73	-24.13	AVG
5		0.4780	19.42	9.70	29.12	56.37	-27.25	QP
6	*	0.4780	13.60	9.70	23.30	46.37	-23.07	AVG
7		0.8460	12.55	9.75	22.30	56.00	-33.70	QP
8		0.8460	6.85	9.75	16.60	46.00	-29.40	AVG
9		15.0820	18.20	10.00	28.20	60.00	-31.80	QP
10		15.0820	12.91	10.00	22.91	50.00	-27.09	AVG
11		26.4860	19.65	10.11	29.76	60.00	-30.24	QP
12		26.4860	14.56	10.11	24.67	50.00	-25.33	AVG

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

Temperature:	24.6℃	**Relative Humidity:**	42%
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		0.2380	25.97	9.70	35.67	62.16	-26.49	QP
2		0.2380	14.25	9.70	23.95	52.16	-28.21	AVG
3		0.4060	20.44	9.70	30.14	57.73	-27.59	QP
4		0.4060	14.19	9.70	23.89	47.73	-23.84	AVG
5		0.4900	19.86	9.70	29.56	56.17	-26.61	QP
6	*	0.4900	13.93	9.70	23.63	46.17	-22.54	AVG
7		0.8420	13.03	9.75	22.78	56.00	-33.22	QP
8		0.8420	7.37	9.75	17.12	46.00	-28.88	AVG
9		14.8500	19.31	9.99	29.30	60.00	-30.70	QP
10		14.8500	14.28	9.99	24.27	50.00	-25.73	AVG
11		26.6100	19.94	10.11	30.05	60.00	-29.95	QP
12		26.6100	15.01	10.11	25.12	50.00	-24.88	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

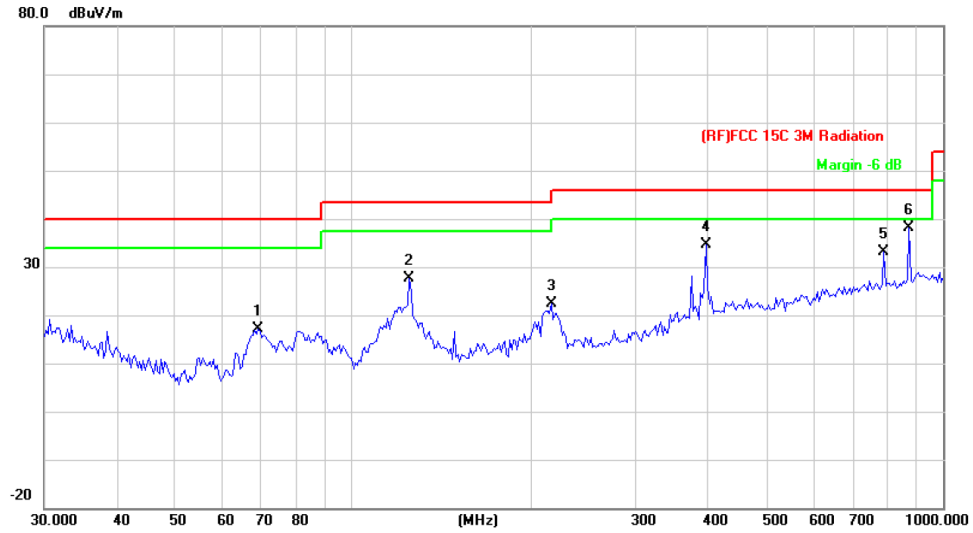
9 KHz~30 MHz

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:	23.9℃	**Relative Humidity:**	44%
Test Voltage:	AC 120V 60Hz		
Ant. Pol.	Horizontal		
Test Mode:	Mode 2		
Remark:	Only worse case is reported.		

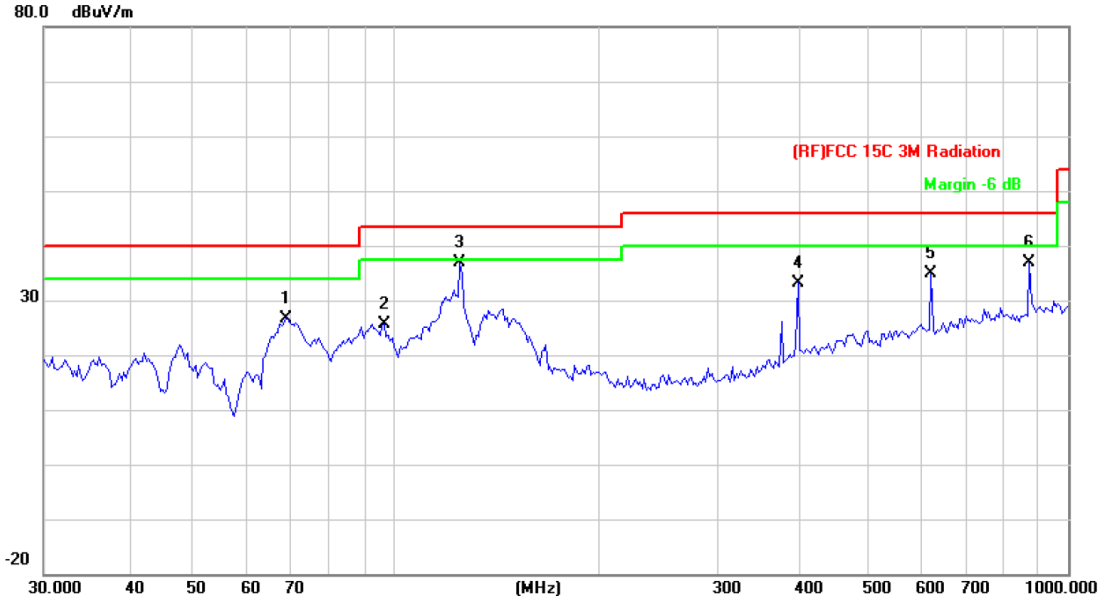


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		69.1141	40.47	-23.46	17.01	40.00	-22.99	peak
2		124.5690	49.93	-22.23	27.70	43.50	-15.80	peak
3		216.7828	41.40	-19.04	22.36	46.00	-23.64	peak
4		396.2415	47.09	-12.48	34.61	46.00	-11.39	peak
5		793.3960	38.87	-5.78	33.09	46.00	-12.91	peak
6	*	875.2470	43.07	-5.06	38.01	46.00	-7.99	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:	23.9℃	Relative Humidity:	44%
Test Voltage:	AC 120V 60Hz		
Ant. Pol.	Vertical		
Test Mode:	Mode 2		
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		68.6310	50.19	-23.51	26.68	40.00	-13.32	peak
2		96.0986	47.66	-21.91	25.75	43.50	-17.75	peak
3	*	124.5690	59.07	-22.23	36.84	43.50	-6.66	peak
4		396.2415	45.73	-12.48	33.25	46.00	-12.75	peak
5		625.0780	43.06	-8.14	34.92	46.00	-11.08	peak
6		875.2470	41.89	-5.06	36.83	46.00	-9.17	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)

1-40GHz

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

Temperature:	23.9℃	**Relative Humidity:**	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5180MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10360.501	67.56	-21.04	46.52	54.00	-7.48	AVG
2		10360.562	74.30	-21.04	53.26	68.30	-15.04	peak

Remark:
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:	23.9℃	**Relative Humidity:**	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5180MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10360.062	67.40	-21.04	46.36	54.00	-7.64	AVG
2		10360.522	77.45	-21.04	56.41	68.30	-11.89	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5200MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10400.012	66.60	-20.98	45.62	54.00	-8.38	AVG
2		10400.065	75.24	-20.98	54.26	68.30	-14.04	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5200MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10400.512	75.24	-20.98	54.26	68.30	-14.04	peak
2		10400.912	65.23	-20.98	44.25	54.00	-9.75	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5240MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10480.025	75.07	-20.87	54.20	68.30	-14.10	peak
2	*	10480.125	65.00	-20.87	44.13	54.00	-9.87	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5240MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10480.035	76.99	-20.87	56.12	68.30	-12.18	peak
2	*	10480.325	67.10	-20.87	46.23	54.00	-7.77	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mode 5180MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10360.062	76.19	-21.04	55.15	68.30	-13.15	peak
2	*	10360.362	65.16	-21.04	44.12	54.00	-9.88	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT20) Mode 5180MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10360.112	67.27	-21.04	46.23	54.00	-7.77	AVG
2		10360.162	76.89	-21.04	55.85	68.30	-12.45	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 or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mode 5200MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10400.120	65.08	-20.98	44.10	54.00	-9.90	AVG
2		10400.362	76.10	-20.98	55.12	68.30	-13.18	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT20) Mode 5200MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10400.052	66.34	-20.98	45.36	54.00	-8.64	AVG
2		10400.062	76.30	-20.98	55.32	68.30	-12.98	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mode 5240MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10480.331	75.47	-20.87	54.60	68.30	-13.70	peak
2	*	10480.621	66.10	-20.87	45.23	54.00	-8.77	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT20) Mode 5240MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10480.323	75.49	-20.87	54.62	68.30	-13.68	peak
2	*	10480.623	65.93	-20.87	45.06	54.00	-8.94	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT20) Mode 5180MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10360.632	77.27	-21.04	56.23	68.30	-12.07	peak
2	*	10360.652	66.24	-21.04	45.20	54.00	-8.80	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT20) Mode 5180MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10360.142	66.27	-21.04	45.23	54.00	-8.77	AVG
2		10360.162	77.17	-21.04	56.13	68.30	-12.17	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT20) Mode 5200MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10400.612	66.08	-20.98	45.10	54.00	-8.90	AVG
2		10400.652	76.12	-20.98	55.14	68.30	-13.16	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT20) Mode 5200MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10400.122	66.10	-20.98	45.12	54.00	-8.88	AVG
2		10400.362	76.10	-20.98	55.12	68.30	-13.18	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11 ac(VHT20) Mode 5240MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10480.032	65.49	-20.87	44.62	54.00	-9.38	AVG
2		10480.652	76.51	-20.87	55.64	68.30	-12.66	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT20) Mode 5240MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10480.002	65.49	-20.87	44.62	54.00	-9.38	AVG
2		10480.062	76.49	-20.87	55.62	68.30	-12.68	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:	23.9℃	**Relative Humidity:**	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT40) Mode 5190MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10380.012	66.31	-21.01	45.30	54.00	-8.70	AVG
2		10380.415	76.13	-21.01	55.12	68.30	-13.18	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:	23.9℃	**Relative Humidity:**	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT40) Mode 5190MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10380.062	76.63	-21.01	55.62	68.30	-12.68	peak
2	*	10380.212	66.32	-21.01	45.31	54.00	-8.69	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 or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT40) Mode 5230MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10460.226	76.04	-20.90	55.14	68.30	-13.16	peak
2	*	10460.261	65.46	-20.90	44.56	54.00	-9.44	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT40) Mode 5230MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10460.031	77.31	-20.90	56.41	68.30	-11.89	peak
2	*	10460.231	65.00	-20.90	44.10	54.00	-9.90	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT40) Mode 5190MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10380.113	66.34	-21.01	45.33	54.00	-8.67	AVG
2		10380.185	77.57	-21.01	56.56	68.30	-11.74	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT40) Mode 5190MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10380.133	66.14	-21.01	45.13	54.00	-8.87	AVG
2		10380.163	77.02	-21.01	56.01	68.30	-12.29	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT40) Mode 5230MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10460.220	66.03	-20.90	45.13	54.00	-8.87	AVG
2		10460.512	77.40	-20.90	56.50	68.30	-11.80	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT40) Mode 5230MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10460.236	66.03	-20.90	45.13	54.00	-8.87	AVG
2		10460.636	76.41	-20.90	55.51	68.30	-12.79	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 or 40GHz.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT80) Mode 5210MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10420.012	77.40	-20.95	56.45	68.30	-11.85	peak
2	*	10420.712	65.07	-20.95	44.12	54.00	-9.88	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:	23.9℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT80) Mode 5210MHz (U-NII-1)		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10420.152	75.98	-20.95	55.03	68.30	-13.27	peak
2	*	10420.752	66.57	-20.95	45.62	54.00	-8.38	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.

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