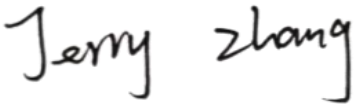
RF Test Report

Applicant:	Quectel Wireless Solutions Company Limited
Address:	Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, 200233 China
Product:	Wi-Fi & Bluetooth Module
Model No.:	FCS960K-E
Brand Name:	QUECTEL
FCC ID:	XMR25FCS960KE
Standards:	FCC CFR47 Part 15E
Report No.:	PD20240165-R3D
Issue Date:	2025/03/25
Test Result:	PASS *

* **Testing performed at Hefei Panwin Technology Co., Ltd. on the above equipment indicates the product meets the requirements of the relevant standards.**



Reviewed By: Jerry Zhang **Approved By:** Alec Yang

Hefei Panwin Technology Co., Ltd.

Floor 1, Zone E, Plant 2#, Mingzhu Industrial Park, No.106 Chuangxin Avenue, High-tech Zone, Hefei City, Anhui Province,China

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Revision History

Report No.	Version	Description	Issue Date	Note
PD20240165-R3D	1	Initial Report	2025/03/25	Valid

CONTENTS

Summary of Test Results

No.	Test Case	FCC Rules	Verdict
1	Occupied Bandwidth Measurement	15.407(e)	PASS
2	Maximum Conducted Output Power Measurement	15.407(a)	PASS
3	Power Spectral Density Measurement	15.407(a)	PASS
4	Unwanted Emissions Measurement	15.407(b)	PASS
5	AC Conducted Emission Measurement	15.207	NA
6	Antenna Requirements	15.203 & 15.407(a)	PASS
7	Frequency Stability[Note1]	15.407(g)	NA

Date of Testing: 2024/12/09 to 2025/03/24
Date of Sample Received: 2024/12/09

• We, Hefei Panwin Technology Co., Ltd., would like to declare that the tested sample has been evaluated in accordance with the procedures given in applied standard(s) in **Section 2.3** of this report and shown compliance with the applicable technical standards.

• All indications of PASS/FAIL in this report are based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.

Note1: 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.

1 General Information

1.1 Notes of the Test Report

This report is invalid without signature of auditor and approver or with any alterations. The report shall not be partially reproduced without written approval of the testing company. Entrusted test results are only responsible for incoming samples. If there is any objection to the testing report, it shall be raised to the testing company within 15 days from the date of receiving the report. In the test results, "NA" means "not applicable", and the test items marked with "Δ" are subcontracted projects.

1.2 Test Facility

A2LA (Certificate Number: 6849.01)

Hefei Panwin Technology Co., Ltd. has been accredited by American Association for Laboratory Accreditation to perform measurement.

FCC (Designation Number: CN1361, Test Firm Registration Number: 473156)

Hefei Panwin Technology Co., Ltd. has been accredited on the US Federal Communications Commission list of test facilities recognized to perform measurements.

1.3 Testing Laboratory

Company Name	Hefei Panwin Technology Co., Ltd.
Address	Floor 1, Zone E, Plant 2#, Mingzhu Industrial Park, No.106 Chuangxin Avenue, High-tech Zone, Hefei City, Anhui Province,China
Telephone	+86-0551-63811775
Post Code	230031

2 General Description of Equipment under Test

2.1 Details of Application

Applicant	Quectel Wireless Solutions Company Limited
Applicant Address	Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, 200233 China
Manufacturer	Quectel Wireless Solutions Company Limited
Manufacturer Address	Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, 200233 China

2.2 General Information

Product	Wi-Fi & Bluetooth Module
Model	FCS960K-E
SN	Conducted: E1M24EN08000121 Radiated: E1M24EN08000176
Hardware Version	R1.0
Software Version	/
Antenna Type	External Antenna
Max. Conducted Power	Wi-Fi 5G: 18.98dBm
WLAN Mode Supported:	802.11a 802.11n 20M/40M 802.11ac 20M/40M/80M 802.11ax 20M/40M/80M
Antenna Gain	5150MHz to 5250MHz: -0.70dBi 5250MHz to 5350MHz: -0.80dBi 5470MHz to 5725MHz: -1.20dBi 5725MHz to 5850MHz: -1.50dBi
Directional Gain	NA
Test Band	U-NII-1(5150MHz-5250MHz) U-NII-2A(5250MHz-5350MHz) U-NII-2C(5470MHz-5725MHz) U-NII-3(5725MHz-5850MHz)
Operating voltage	Typical 3.3Vdc
Modulation Type	802.11a/n/ac/ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM

Remark 1: The declared of product specification for EUT and/or Antenna presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.
Remark 2: 802.11ax only supports full RU tones and does not support partial RU tones.

2.3 Application Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part 15 Subpart E
- FCC KDB 789033 D02 General UN ll Test Procedures New Rules v02r01
- ANSI C63.10-2013

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

3 Test Condition

3.1 Test Configuration

Test mode

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). The worst cases were recorded in this report.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes (Z, X, Y axis), receiver antenna polarization (horizontal and vertical), the worst emission was found in Z position and the worst case was recorded.This report presents the data for the worst polarity.

Test Mode	Data Rate(Mbps)
802.11a	6
802.11n 20M	MCS0
802.11n 40M	MCS0
802.11ac 20M	MCS0
802.11ac 40M	MCS0
802.11ac 80M	MCS0
802.11ax 20M	MCS0
802.11ax 40M	MCS0
802.11ax 80M	MCS0

3.2 Wireless Technology and Frequency Range

Wireless Technology	Bandwidth		Channel	Frequency
Wi-Fi	U-NII-1	20MHz	36	5180 MHz
			40	5200 MHz
			44	5220 MHz
			48	5240 MHz
		40MHz	38	5190 MHz
			46	5230 MHz
		80MHz	42	5210 MHz
	U-NII-2A	20MHz	52	5260 MHz
			56	5280 MHz
			60	5300 MHz
			64	5320 MHz
		40MHz	54	5270 MHz
			62	5310 MHz
		80MHz	58	5290 MHz
	U-NII-2C	20MHz	100	5500 MHz
			104	5520 MHz
			108	5540 MHz
			112	5560 MHz
			116	5580 MHz
			120	5600 MHz
			124	5620 MHz
			128	5640 MHz
			132	5660 MHz
			136	5680 MHz
			140	5700 MHz
			144	5720 MHz
		40MHz	102	5510 MHz
			110	5550 MHz
			118	5590 MHz
			126	5630 MHz
			134	5670 MHz
			142	5710 MHz
		80MHz	106	5530 MHz
			122	5610 MHz
			138	5690 MHz
	U-NII-3	20MHz	149	5745 MHz

			153	5765 MHz
			157	5785 MHz
			161	5805 MHz
			165	5825 MHz
		40MHz	151	5755 MHz
			159	5795 MHz
		80MHz	155	5775 MHz
Does this device support TPC function?		☐ Yes		☑ No
Does this device support TDWR band?		☑ Yes		☐ No

3.3 Equipment List

Conducted

Instrument	Manufacturer	Model	Asset No.	Cal. Interval	Cal. Due Date
Spectrum Analyzer	KEYSIGHT	N9020B	PWC0048	1 Year	2025/09/11
RF Control Unit	Tonseced	JS0806-2	PWC0055	/	/
Shielded Chamber	Maorui	MR543	PWC0041	3 Years	2026/08/26
Test Software	Tonseced	JS1120-3 V3.2.22	/	/	/

Radiated

Instrument	Manufacturer	Model	Asset No.	Cal. Interval	Cal. Due Date
EMI Test Receiver	R&S	ESR7	PWB0023	1 Year	2025/09/11
Spectrum Analyzer	R&S	FSV3044	PWB0024	1 Year	2025/09/11
Loop Antenna	R&S	HFH2-Z2E	PWB0026	1 Year	2025/09/13
TRILOG Broadband	Schwarzbeck	VULB9162	PWB0029	1 Year	2025/09/09
Double-Ridged Guide Antenna	ETS-Lindgren	3117	PWB0031	1 Year	2025/09/26
k Type Horn Antenna	Steatite Antennas	QMS-00880	PWB0035	1 Year	2025/09/08
Pre-Amplifier	R&S	SCU40F1	PWB0036	1 Year	2025/09/11
Pre-Amplifier	COM-MW	DLNA8	PWB0094	1 Year	2025/09/11
Pre-Amplifier	R&S	SCU18F	PWB0034	1 Year	2025/09/11
Pre-Amplifier	R&S	OSP220 (OSP-B155G)	PWB0042	1 Year	2025/09/11
Anechoic Chamber	ETS.LINDGREN	Fact 3-2m	PWB0003	3 Years	2026/06/05
Test Software	Tonscend	JS36	/	/	/

3.4 Support Equipment List

Equipment	Manufacturer	Description	Model	Serial Number
EVB	Quectel	/	Q1-C1950	E1C24A21H000109; E1C23H816000098
Adapter	STH	AC to DC power supply to EVB	P60EB120500	/

3.5 Test Uncertainty

No.	Parameter	Uncertainty
1	Emission Bandwidth	1.9%
2	Occupied channel bandwidth	1.9%
3	Min emission bandwidth	1.9%
4	Unwanted Emissions Measurement	9kHz-7GHz: 1.21dB 7GHz-40GHz: 3.31dB
5	Radiated Band Edges and Spurious Emission	Below 1GHz: 4.88 dB Above 1GHz: 5.06 dB
6	Temperature	3 °C
7	Humidity	1.3 %
8	Supply voltages	0.006 V

4 Test Items Description

Ambient condition

Shielded Chamber

Temperature [°C]	20.0 to 24.2
Humidity [%RH]	26 to 36
Pressure [kPa]	101.7 to 103.1

Anechoic Chamber

Temperature [°C]	20.2 to 24.8
Humidity [%RH]	30 to 49
Pressure [kPa]	101.0 to 102.9

4.1 6dB and 26dB and 99% Occupied Bandwidth Measurement

4.1.1 6dB and 26dB and 99% Occupied Bandwidth Measurement

The minimum 6 dB bandwidth shall be at least 500 kHz

26dB and 99% Occupied bandwidth are reporting only.

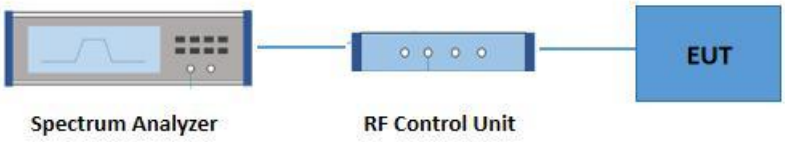
4.1.2 Measuring Instruments

The measuring equipment is listed in the section 3.3 of this test report.

4.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01Section C) Emission bandwidth.
2. For 6dB BW, Set RBW = 100kHz.
   For 26dB BW, Set RBW = approximately 1% of the emission bandwidth.
   For 99% OBW, Set RBW = 1% to 5% of the OBW.
3. For 26dB BW. Set the VBW > RBW.
   For 6dB BW & 99% OBW. Set the VBW ≥ 3 × RBW
4. Detector = Peak.
5. Trace mode = max hold
6. 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 analyzer, Readjust RBW and repeat measurements needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set1% to 5% of the OBW and set the Video bandwidth (VBW) ≥ 3* RBW.
8. Measure and record the results in the test report.

4.1.4 Test Setup



4.1.5 Test Results

See ANNEX A.1.

4.2 Maximum Conducted Output Power Measurement

4.2.1 Limit of Maximum Conducted Output Power

<FCC 14 -30 CFR 15.407>

For the band 5.15–5.25 GHz.

(i) For an outdoor access point operating in the band 5.15–5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15–5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15–5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point U–NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U–NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(2)For the 5.25 – 5.35 GHz and 5.47 – 5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3)For the band 5.725–5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

4.2.2 Measuring Instruments

The measuring equipment is listed in the section 3.3 of this test report.

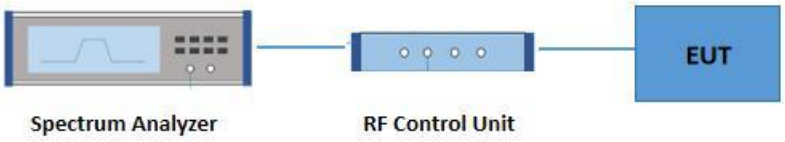
4.2.3 Test Procedures

The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep):

1. Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.
2. Set RBW = 1 MHz.
3. Set VBW ≥ 3 MHz.
4. Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)
5. Sweep time = auto.
6. Detector = power averaging (rms), if available. Otherwise, use sample detector mode.
7. If transmit duty cycle < 98%, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle ≥ 98%, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run."
8. Trace average at least 100 traces in power averaging (rms) mode.
9. Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

4.2.4 Test Setup



4.2.5 Test Result of Maximum Conducted Output Power

Please refer to ANNEX A.2.

4.3 Power Spectral Density Measurement

4.3.1 Limit of Power Spectral Density

Rule FCC Part 15.407(a)(1)/ Part 15.407(a)(2)/Part 15.407(a)(3

For an indoor access point operating in the band 5.15–5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band.

For client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For the 5.25-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any1 megahertz band.

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

For Straddle Channel, According to KDB 789033 D02 General UNll Test Procedures New Rules v02r01, If the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

4.3.2 Measuring Instruments

The measuring equipment is listed in the section 3.3 of this test report.

4.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNll Test Procedures New Rules v02r01 Section F) Maximum power spectral density.

1.Measure the duty cycle.

2.Set span to encompass the entire emission bandwidth (EBW) of the signal.

3.Set RBW ≥ 1/T, where T is defined in II.B.I.a).

4.Set VBW ≥ 3 RBW.

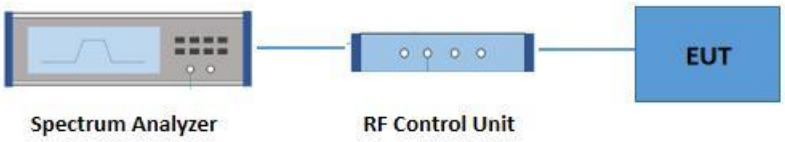
5.If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10 log (500 kHz/RBW) to the measured result, whereas RBW (<500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.

6.If measurement bandwidth of Maximum PSD is specified in 1 MHz, add 10 log (1MHz/RBW) to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.

7. Care must be taken to ensure that the measurements are performed during a period of continuous

transmission or are corrected upward for duty cycle.

4.3.4 Test Setup



4.3.5 Test Result of Power Spectral Density

Please refer to ANNEX A.3.

4.4 Unwanted Emissions Measurement

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

4.4.1 Limit of Unwanted Emissions

(1) For transmitters operating in the 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27dBm/MHz.

For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of-27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

For transmitters operating in the 5470-5725 MHz band: all emissions outside of the 5470-5725MHz band shall not exceed an EIRP of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band:
15.407(b)(4)(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

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

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

EIRP (dBm)	Field Strength at 3m (dB μ V/m)
- 27	68.2

Note: The following formula is used to convert the EIRP to field strength.

$$EIRP = E_{Meas} + 20\log(d_{Meas}) - 104.7$$

where

EIRP is the equivalent isotropically radiated power, in dBm

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

d_{Meas} is the measurement distance, in m

4.4.2 Measuring Instruments

The measuring equipment is listed in the section 3.3 of this test report.

4.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNll Test Procedures New Rules v02r01 Section G) Unwanted emissions measurement.

   (1)Procedure for Unwanted Emissions Measurements Below 1000MHz
   - RBW = 120 kHz
   - VBW = 300 kHz
   - Detector = Peak
   - Trace mode = max hold

   (2)Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
   - RBW= 1 MHz
   - VBW ≥ 3 MHz
   - Detector = Peak
   - Sweep time = auto
   - Trace mode = max hold

   (3)Procedures for Average Unwanted Emissions Measurements Above 1000MHz
   - RBW = 1 MHz
   - VBW = 10 Hz, when duty cycle is no less than 98 percent
   - VBW ⩾ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.

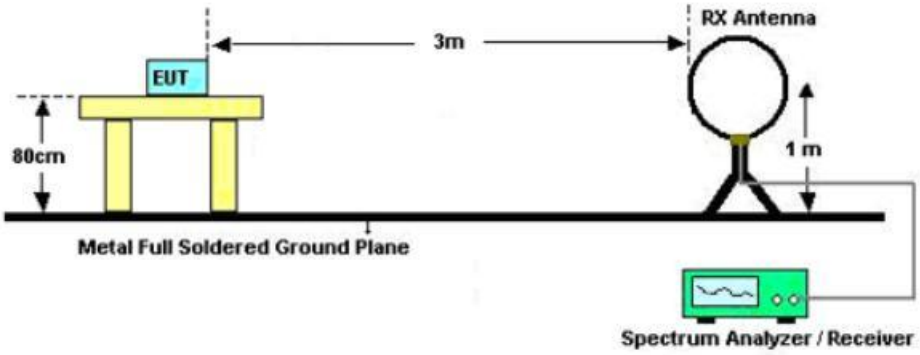
4.. The antenna is a broadband antenna and its height is adjusted between one meter and four.

meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.

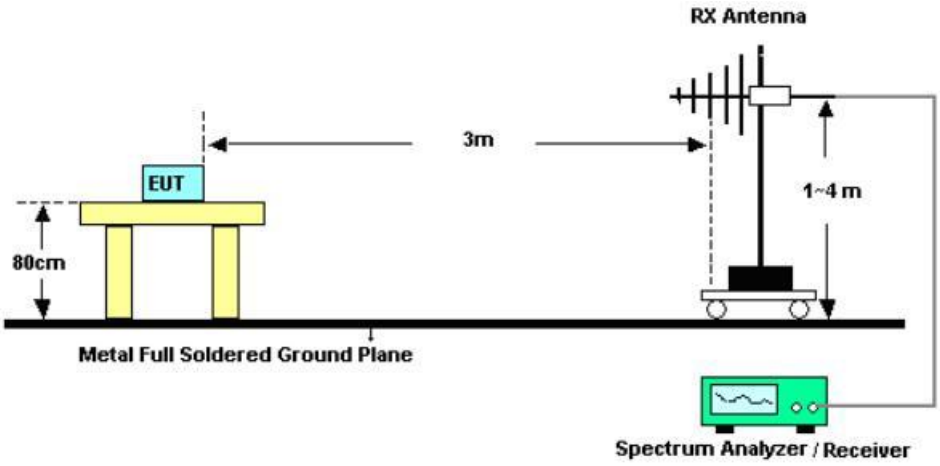
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than peak limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

4.4.4 Test Setup

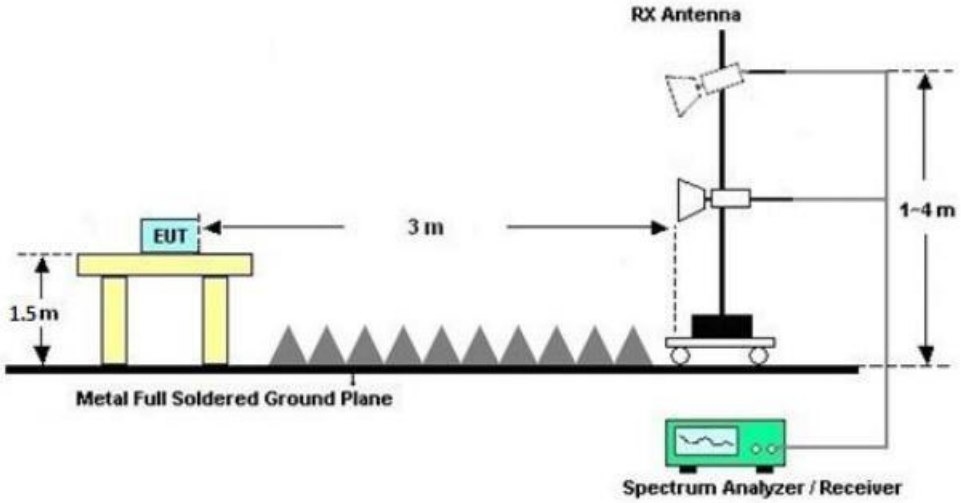
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



4.4.5Test Results of Radiated Spurious Emissions (9 kHz - 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

4.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to ANNEX B.1.

4.4.7 Test Result of Radiated Spurious Emissions (30MHz - 10th Harmonic or 40GHz whichever is lower)

Please refer to ANNEX B.1

4.4.8 Duty Cycle

Please refer to ANNEX A.4.

4.5 AC Conducted Emission Measurement

4.5.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

Decreases with the logarithm of the frequency.

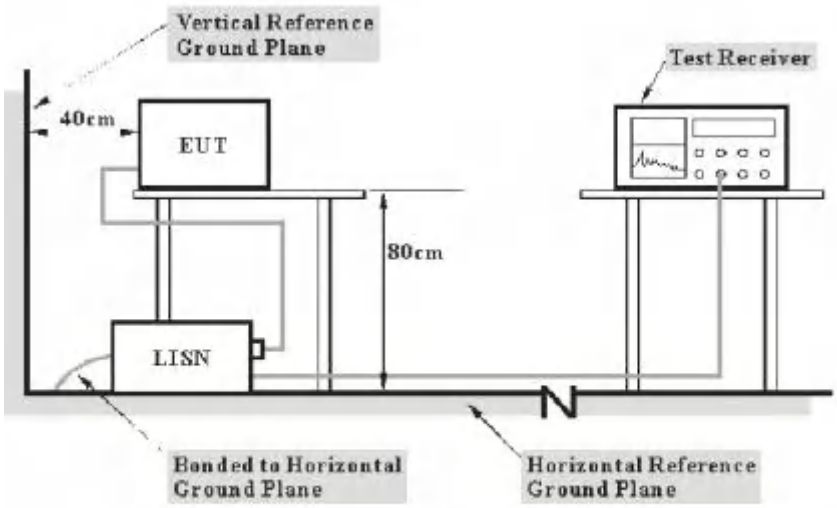
4.5.2 Measuring Instruments

The section 3.3 of List of Measuring Equipment of this test report is used for test.

4.5.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth =9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

4.5.4 Test Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

4.5.5 Uncertainty Measurement

Where relevant,the following measurement uncertainty levels have been estimated for tests performed on the EUT. The listed uncertainties are the worst case uncertainty for the entire range of measurement. Please note that the uncertainty values are provided for informational purposes only and are not used in determining the PASS/FAIL results.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

CASE	Uncertainty
Continuous Emission (AC port)	2.92 dB

4.5.6 Test Result

Remark: The product is DC powered, this test item is not applicable.

4.6 Antenna Requirements

4.6.1 Standard Applicable

15.203 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, 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.

15.247(b) (4) requirement: The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and(b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6dBi.

4.6.2 Antenna Anti-Replacement Construction

The antenna is External on the main PCB and no consideration of replacement. The best case gain of the antenna is -0.70dBi.

-------- THE END --------

ANNEX A: Test Results of Conducted Test

A.1 6dB and 26dB and 99% Occupied Bandwidth Measurement

Test Result_26dB Bandwidth

Test Mode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	25.800	5165.600	5191.400	---	---
11A	Ant1	5220	25.760	5206.000	5231.760	---	---
11A	Ant1	5240	25.280	5226.960	5252.240	---	---
11A	Ant1	5260	25.600	5245.400	5271.000	---	---
11A	Ant1	5300	23.360	5288.080	5311.440	---	---
11A	Ant1	5320	23.240	5307.560	5330.800	---	---
11A	Ant1	5500	26.120	5487.920	5514.040	---	---
11A	Ant1	5580	25.280	5567.560	5592.840	---	---
11A	Ant1	5700	23.680	5688.360	5712.040	---	---
11A	Ant1	5720	25.920	5705.800	5731.720	---	---
11A	Ant1	5720_UNII-2C	19.2	5705.800	5725	---	---
11A	Ant1	5720_UNII-3	6.72	5725	5731.720	---	---
11A	Ant1	5745	26.280	5731.480	5757.760	---	---
11A	Ant1	5785	24.320	5772.800	5797.120	---	---
11A	Ant1	5825	26.840	5810.400	5837.240	---	---
11N20SISO	Ant1	5180	23.880	5167.720	5191.600	---	---
11N20SISO	Ant1	5220	26.960	5204.880	5231.840	---	---
11N20SISO	Ant1	5240	25.000	5227.600	5252.600	---	---
11N20SISO	Ant1	5260	25.520	5247.280	5272.800	---	---
11N20SISO	Ant1	5300	27.680	5287.560	5315.240	---	---
11N20SISO	Ant1	5320	25.040	5307.400	5332.440	---	---
11N20SISO	Ant1	5500	27.320	5487.040	5514.360	---	---
11N20SISO	Ant1	5580	31.400	5564.480	5595.880	---	---
11N20SISO	Ant1	5700	24.920	5686.960	5711.880	---	---
11N20SISO	Ant1	5720	26.560	5706.520	5733.080	---	---
11N20SISO	Ant1	5720_UNII-2C	18.48	5706.520	5725	---	---
11N20SISO	Ant1	5720_UNII-3	8.08	5725	5733.080	---	---
11N20SISO	Ant1	5745	26.600	5732.280	5758.880	---	---
11N20SISO	Ant1	5785	24.720	5771.920	5796.640	---	---
11N20SISO	Ant1	5825	24.720	5812.520	5837.240	---	---
11N40SISO	Ant1	5190	45.440	5166.560	5212.000	---	---
11N40SISO	Ant1	5230	44.320	5207.760	5252.080	---	---
11N40SISO	Ant1	5270	45.840	5247.040	5292.880	---	---

11N40SISO	Ant1	5310	45.040	5286.800	5331.840	---	---
11N40SISO	Ant1	5510	45.440	5487.920	5533.360	---	---
11N40SISO	Ant1	5550	44.960	5527.200	5572.160	---	---
11N40SISO	Ant1	5670	45.200	5647.200	5692.400	---	---
11N40SISO	Ant1	5710	55.840	5677.280	5733.120	---	---
11N40SISO	Ant1	5710_UNII-2C	47.72	5677.280	5725	---	---
11N40SISO	Ant1	5710_UNII-3	8.12	5725	5733.120	---	---
11N40SISO	Ant1	5755	63.840	5720.760	5784.600	---	---
11N40SISO	Ant1	5795	59.360	5761.480	5820.840	---	---
11AC20SISO	Ant1	5180	24.840	5167.600	5192.440	---	---
11AC20SISO	Ant1	5220	24.000	5208.200	5232.200	---	---
11AC20SISO	Ant1	5240	28.640	5225.520	5254.160	---	---
11AC20SISO	Ant1	5260	24.600	5247.840	5272.440	---	---
11AC20SISO	Ant1	5300	25.240	5287.680	5312.920	---	---
11AC20SISO	Ant1	5320	25.360	5307.520	5332.880	---	---
11AC20SISO	Ant1	5500	25.400	5487.680	5513.080	---	---
11AC20SISO	Ant1	5580	27.120	5565.840	5592.960	---	---
11AC20SISO	Ant1	5700	30.560	5686.160	5716.720	---	---
11AC20SISO	Ant1	5720	28.480	5706.800	5735.280	---	---
11AC20SISO	Ant1	5720_UNII-2C	18.2	5706.800	5725	---	---
11AC20SISO	Ant1	5720_UNII-3	10.28	5725	5735.280	---	---
11AC20SISO	Ant1	5745	30.200	5729.280	5759.480	---	---
11AC20SISO	Ant1	5785	27.360	5772.360	5799.720	---	---
11AC20SISO	Ant1	5825	26.200	5811.760	5837.960	---	---
11AC40SISO	Ant1	5190	52.240	5160.560	5212.800	---	---
11AC40SISO	Ant1	5230	47.280	5206.160	5253.440	---	---
11AC40SISO	Ant1	5270	44.560	5247.280	5291.840	---	---
11AC40SISO	Ant1	5310	43.840	5287.680	5331.520	---	---
11AC40SISO	Ant1	5510	44.800	5487.360	5532.160	---	---
11AC40SISO	Ant1	5550	45.520	5527.440	5572.960	---	---
11AC40SISO	Ant1	5670	46.880	5645.200	5692.080	---	---
11AC40SISO	Ant1	5710	44.080	5687.520	5731.600	---	---
11AC40SISO	Ant1	5710_UNII-2C	37.48	5687.520	5725	---	---
11AC40SISO	Ant1	5710_UNII-3	6.6	5725	5731.600	---	---
11AC40SISO	Ant1	5755	48.480	5729.800	5778.280	---	---
11AC40SISO	Ant1	5795	46.480	5772.040	5818.520	---	---
11AC80SISO	Ant1	5210	96.640	5160.240	5256.880	---	---
11AC80SISO	Ant1	5290	106.080	5237.680	5343.760	---	---
11AC80SISO	Ant1	5530	99.840	5478.960	5578.800	---	---

11AC80SISO	Ant1	5610	119.360	5546.000	5665.360	---	---
11AC80SISO	Ant1	5690	121.280	5612.400	5733.680	---	---
11AC80SISO	Ant1	5690_UNII-2C	112.6	5612.400	5725	---	---
11AC80SISO	Ant1	5690_UNII-3	8.68	5725	5733.680	---	---
11AC80SISO	Ant1	5775	120.640	5712.280	5832.920	---	---
11AX20SISO	Ant1	5180	24.280	5167.800	5192.080	---	---
11AX20SISO	Ant1	5220	24.600	5207.320	5231.920	---	---
11AX20SISO	Ant1	5240	27.800	5225.040	5252.840	---	---
11AX20SISO	Ant1	5260	24.840	5248.040	5272.880	---	---
11AX20SISO	Ant1	5300	26.280	5286.520	5312.800	---	---
11AX20SISO	Ant1	5320	24.720	5307.400	5332.120	---	---
11AX20SISO	Ant1	5500	24.760	5487.760	5512.520	---	---
11AX20SISO	Ant1	5580	22.920	5568.560	5591.480	---	---
11AX20SISO	Ant1	5700	27.560	5685.280	5712.840	---	---
11AX20SISO	Ant1	5720	24.000	5707.720	5731.720	---	---
11AX20SISO	Ant1	5720_UNII-2C	17.28	5707.720	5725	---	---
11AX20SISO	Ant1	5720_UNII-3	6.72	5725	5731.720	---	---
11AX20SISO	Ant1	5745	26.520	5731.320	5757.840	---	---
11AX20SISO	Ant1	5785	26.800	5770.240	5797.040	---	---
11AX20SISO	Ant1	5825	23.840	5813.320	5837.160	---	---
11AX40SISO	Ant1	5190	44.800	5168.000	5212.800	---	---
11AX40SISO	Ant1	5230	52.400	5201.200	5253.600	---	---
11AX40SISO	Ant1	5270	44.160	5246.960	5291.120	---	---
11AX40SISO	Ant1	5310	44.800	5286.640	5331.440	---	---
11AX40SISO	Ant1	5510	46.880	5487.120	5534.000	---	---
11AX40SISO	Ant1	5550	48.800	5525.280	5574.080	---	---
11AX40SISO	Ant1	5670	51.840	5644.880	5696.720	---	---
11AX40SISO	Ant1	5710	54.400	5681.440	5735.840	---	---
11AX40SISO	Ant1	5710_UNII-2C	43.56	5681.440	5725	---	---
11AX40SISO	Ant1	5710_UNII-3	10.84	5725	5735.840	---	---
11AX40SISO	Ant1	5755	48.400	5730.920	5779.320	---	---
11AX40SISO	Ant1	5795	46.480	5771.400	5817.880	---	---
11AX80SISO	Ant1	5210	87.200	5165.520	5252.720	---	---
11AX80SISO	Ant1	5290	82.240	5249.040	5331.280	---	---
11AX80SISO	Ant1	5530	85.600	5487.920	5573.520	---	---
11AX80SISO	Ant1	5610	86.560	5565.840	5652.400	---	---
11AX80SISO	Ant1	5690	86.720	5645.360	5732.080	---	---
11AX80SISO	Ant1	5690_UNII-2C	79.64	5645.360	5725	---	---
11AX80SISO	Ant1	5690_UNII-3	7.08	5725	5732.080	---	---

11AX80SISO	Ant1	5775	100.160	5717.240	5817.400	---	---

Test Result_6dB Bandwidth

U-NII-3

Test Mode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.400	5736.760	5753.160	0.5	PASS
11A	Ant1	5785	16.400	5776.720	5793.120	0.5	PASS
11A	Ant1	5825	16.320	5816.800	5833.120	0.5	PASS
11N20SISO	Ant1	5745	17.600	5736.160	5753.760	0.5	PASS
11N20SISO	Ant1	5785	17.800	5776.080	5793.880	0.5	PASS
11N20SISO	Ant1	5825	17.600	5816.160	5833.760	0.5	PASS
11N40SISO	Ant1	5755	36.400	5736.760	5773.160	0.5	PASS
11N40SISO	Ant1	5795	36.320	5776.760	5813.080	0.5	PASS
11AC20SISO	Ant1	5745	17.600	5736.160	5753.760	0.5	PASS
11AC20SISO	Ant1	5785	17.640	5776.120	5793.760	0.5	PASS
11AC20SISO	Ant1	5825	17.600	5816.160	5833.760	0.5	PASS
11AC40SISO	Ant1	5755	36.400	5736.760	5773.160	0.5	PASS
11AC40SISO	Ant1	5795	36.400	5776.760	5813.160	0.5	PASS
11AC80SISO	Ant1	5775	76.320	5736.760	5813.080	0.5	PASS
11AX20SISO	Ant1	5745	18.960	5735.480	5754.440	0.5	PASS
11AX20SISO	Ant1	5785	18.960	5775.440	5794.400	0.5	PASS
11AX20SISO	Ant1	5825	19.080	5815.400	5834.480	0.5	PASS
11AX40SISO	Ant1	5710	37.920	5690.960	5728.880	---	---
11AX40SISO	Ant1	5710_UNII-2C	34.04	5690.960	5725	---	---
11AX40SISO	Ant1	5710_UNII-3	3.88	5725	5728.880	0.5	PASS
11AX40SISO	Ant1	5755	38.160	5735.880	5774.040	0.5	PASS
11AX40SISO	Ant1	5795	38.000	5775.960	5813.960	0.5	PASS
11AX80SISO	Ant1	5775	77.600	5736.120	5813.720	0.5	PASS

Test Result_99% Bandwidth

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.762	5171.5836	5188.3456	---	---
11A	Ant1	5220	16.812	5211.4826	5228.2946	---	---
11A	Ant1	5240	17.087	5231.4068	5248.4938	---	---
11A	Ant1	5260	17.008	5251.4269	5268.4349	---	---
11A	Ant1	5300	17.016	5291.4439	5308.4599	---	---
11A	Ant1	5320	17.018	5311.4333	5328.4513	---	---
11A	Ant1	5500	17.113	5491.3936	5508.5066	---	---
11A	Ant1	5580	17.294	5571.2854	5588.5794	---	---

11A	Ant1	5700	17.204	5691.3253	5708.5293	---	---
11A	Ant1	5720	17.031	5711.4031	5728.4341	---	---
11A	Ant1	5720_UNII-2C	13.597	5711.4031	5725	---	---
11A	Ant1	5720_UNII-3	3.434	5725	5728.4341	---	---
11A	Ant1	5745	17.243	5736.3821	5753.6251	---	---
11A	Ant1	5785	17.207	5776.3357	5793.5427	---	---
11A	Ant1	5825	17.189	5816.3048	5833.4938	---	---
11N20SISO	Ant1	5180	18.277	5170.8750	5189.1520	---	---
11N20SISO	Ant1	5220	18.226	5210.7919	5229.0179	---	---
11N20SISO	Ant1	5240	18.197	5230.8658	5249.0628	---	---
11N20SISO	Ant1	5260	18.284	5250.7814	5269.0654	---	---
11N20SISO	Ant1	5300	18.207	5290.8342	5309.0412	---	---
11N20SISO	Ant1	5320	18.199	5310.8327	5329.0317	---	---
11N20SISO	Ant1	5500	18.403	5490.7582	5509.1612	---	---
11N20SISO	Ant1	5580	18.473	5570.7123	5589.1853	---	---
11N20SISO	Ant1	5700	18.310	5690.7687	5709.0787	---	---
11N20SISO	Ant1	5720	18.471	5710.7130	5729.1840	---	---
11N20SISO	Ant1	5720_UNII-2C	14.287	5710.7130	5725	---	---
11N20SISO	Ant1	5720_UNII-3	4.184	5725	5729.1840	---	---
11N20SISO	Ant1	5745	18.469	5735.7296	5754.1986	---	---
11N20SISO	Ant1	5785	18.428	5775.7187	5794.1467	---	---
11N20SISO	Ant1	5825	18.471	5815.7107	5834.1817	---	---
11N40SISO	Ant1	5190	36.599	5171.6915	5208.2905	---	---
11N40SISO	Ant1	5230	36.496	5211.7270	5248.2230	---	---
11N40SISO	Ant1	5270	36.564	5251.6633	5288.2273	---	---
11N40SISO	Ant1	5310	36.520	5291.6776	5328.1976	---	---
11N40SISO	Ant1	5510	36.834	5491.5343	5528.3683	---	---
11N40SISO	Ant1	5550	36.693	5531.6084	5568.3014	---	---
11N40SISO	Ant1	5670	36.660	5651.5909	5688.2509	---	---
11N40SISO	Ant1	5710	36.824	5691.5038	5728.3278	---	---
11N40SISO	Ant1	5710_UNII-2C	33.496	5691.5038	5725	---	---
11N40SISO	Ant1	5710_UNII-3	3.328	5725	5728.3278	---	---
11N40SISO	Ant1	5755	36.722	5736.6175	5773.3395	---	---
11N40SISO	Ant1	5795	36.813	5776.4699	5813.2829	---	---
11AC20SISO	Ant1	5180	18.132	5170.8592	5188.9912	---	---
11AC20SISO	Ant1	5220	18.202	5210.8504	5229.0524	---	---
11AC20SISO	Ant1	5240	18.268	5230.8287	5249.0967	---	---
11AC20SISO	Ant1	5260	18.258	5250.8497	5269.1077	---	---
11AC20SISO	Ant1	5300	18.164	5290.8568	5309.0208	---	---

11AC20SISO	Ant1	5320	18.279	5310.7654	5329.0444	---	---
11AC20SISO	Ant1	5500	18.375	5490.7992	5509.1742	---	---
11AC20SISO	Ant1	5580	18.432	5570.7591	5589.1911	---	---
11AC20SISO	Ant1	5700	18.403	5690.7161	5709.1191	---	---
11AC20SISO	Ant1	5720	18.436	5710.6932	5729.1292	---	---
11AC20SISO	Ant1	5720_UNII-2C	14.307	5710.6932	5725	---	---
11AC20SISO	Ant1	5720_UNII-3	4.129	5725	5729.1292	---	---
11AC20SISO	Ant1	5745	18.368	5735.7515	5754.1195	---	---
11AC20SISO	Ant1	5785	18.412	5775.7011	5794.1131	---	---
11AC20SISO	Ant1	5825	18.389	5815.7421	5834.1311	---	---
11AC40SISO	Ant1	5190	36.648	5171.6517	5208.2997	---	---
11AC40SISO	Ant1	5230	36.647	5211.6382	5248.2852	---	---
11AC40SISO	Ant1	5270	36.662	5251.7148	5288.3768	---	---
11AC40SISO	Ant1	5310	36.612	5291.6663	5328.2783	---	---
11AC40SISO	Ant1	5510	36.889	5491.5843	5528.4733	---	---
11AC40SISO	Ant1	5550	36.659	5531.6016	5568.2606	---	---
11AC40SISO	Ant1	5670	36.838	5651.4886	5688.3266	---	---
11AC40SISO	Ant1	5710	36.699	5691.5387	5728.2377	---	---
11AC40SISO	Ant1	5710_UNII-2C	33.461	5691.5387	5725	---	---
11AC40SISO	Ant1	5710_UNII-3	3.238	5725	5728.2377	---	---
11AC40SISO	Ant1	5755	36.876	5736.4387	5773.3147	---	---
11AC40SISO	Ant1	5795	36.938	5776.5366	5813.4746	---	---
11AC80SISO	Ant1	5210	76.084	5171.9436	5248.0276	---	---
11AC80SISO	Ant1	5290	75.912	5251.9389	5327.8509	---	---
11AC80SISO	Ant1	5530	76.328	5491.8036	5568.1316	---	---
11AC80SISO	Ant1	5610	76.628	5571.6661	5648.2941	---	---
11AC80SISO	Ant1	5690	76.340	5651.7374	5728.0774	---	---
11AC80SISO	Ant1	5690_UNII-2C	73.263	5651.7374	5725	---	---
11AC80SISO	Ant1	5690_UNII-3	3.077	5725	5728.0774	---	---
11AC80SISO	Ant1	5775	76.759	5736.4360	5813.1950	---	---
11AX20SISO	Ant1	5180	19.168	5170.3984	5189.5664	---	---
11AX20SISO	Ant1	5220	19.173	5210.4038	5229.5768	---	---
11AX20SISO	Ant1	5240	19.220	5230.2825	5249.5025	---	---
11AX20SISO	Ant1	5260	19.118	5250.4035	5269.5215	---	---
11AX20SISO	Ant1	5300	19.099	5290.4291	5309.5281	---	---
11AX20SISO	Ant1	5320	19.041	5310.4266	5329.4676	---	---
11AX20SISO	Ant1	5500	19.217	5490.3562	5509.5732	---	---
11AX20SISO	Ant1	5580	19.228	5570.3251	5589.5531	---	---
11AX20SISO	Ant1	5700	19.221	5690.3297	5709.5507	---	---

11AX20SISO	Ant1	5720	19.141	5710.3823	5729.5233	---	---
11AX20SISO	Ant1	5720_UNII-2C	14.618	5710.3823	5725	---	---
11AX20SISO	Ant1	5720_UNII-3	4.523	5725	5729.5233	---	---
11AX20SISO	Ant1	5745	19.268	5735.3145	5754.5825	---	---
11AX20SISO	Ant1	5785	19.157	5775.3535	5794.5105	---	---
11AX20SISO	Ant1	5825	19.161	5815.3830	5834.5440	---	---
11AX40SISO	Ant1	5190	37.989	5170.9621	5208.9511	---	---
11AX40SISO	Ant1	5230	37.948	5210.9918	5248.9398	---	---
11AX40SISO	Ant1	5270	38.030	5250.9679	5288.9979	---	---
11AX40SISO	Ant1	5310	38.018	5290.8790	5328.8970	---	---
11AX40SISO	Ant1	5510	38.220	5490.8478	5529.0678	---	---
11AX40SISO	Ant1	5550	38.240	5530.9678	5569.2078	---	---
11AX40SISO	Ant1	5670	38.257	5650.7639	5689.0209	---	---
11AX40SISO	Ant1	5710	37.993	5690.9948	5728.9878	---	---
11AX40SISO	Ant1	5710_UNII-2C	34.005	5690.9948	5725	---	---
11AX40SISO	Ant1	5710_UNII-3	3.988	5725	5728.9878	---	---
11AX40SISO	Ant1	5755	38.268	5735.6962	5773.9642	---	---
11AX40SISO	Ant1	5795	38.292	5775.8330	5814.1250	---	---
11AX80SISO	Ant1	5210	77.628	5171.1470	5248.7750	---	---
11AX80SISO	Ant1	5290	77.545	5251.1563	5328.7013	---	---
11AX80SISO	Ant1	5530	77.733	5491.1548	5568.8878	---	---
11AX80SISO	Ant1	5610	77.751	5571.0982	5648.8492	---	---
11AX80SISO	Ant1	5690	77.866	5651.1517	5729.0177	---	---
11AX80SISO	Ant1	5690_UNII-2C	73.848	5651.1517	5725	---	---
11AX80SISO	Ant1	5690_UNII-3	4.018	5725	5729.0177	---	---
11AX80SISO	Ant1	5775	77.979	5735.9587	5813.9377	---	---

Test Graphs

26dB Occupied Bandwidth

11A-Ant1-5180	11A-Ant1-5220
	

11A-Ant1-5240	11A-Ant1-5260
	
11A-Ant1-5300	11A-Ant1-5320
	
11A-Ant1-5500	11A-Ant1-5580
	
11A-Ant1-5700	11A-Ant1-5720
	

11A-Ant1-5745	11A-Ant1-5785
	
11A-Ant1-5825	**11N20SISO-Ant1-5180**
	
11N20SISO-Ant1-5220	**11N20SISO-Ant1-5240**
	
11N20SISO-Ant1-5260	**11N20SISO-Ant1-5300**
	

11N20SISO-Ant1-5320	11N20SISO-Ant1-5500
	
11N20SISO-Ant1-5580	11N20SISO-Ant1-5700
	
11N20SISO-Ant1-5720	11N20SISO-Ant1-5745
	
11N20SISO-Ant1-5785	11N20SISO-Ant1-5825
	

11N40SISO-Ant1-5190	11N40SISO-Ant1-5230
	
11N40SISO-Ant1-5270	**11N40SISO-Ant1-5310**
	
11N40SISO-Ant1-5510	**11N40SISO-Ant1-5550**
	
11N40SISO-Ant1-5670	**11N40SISO-Ant1-5710**
	

11N40SISO-Ant1-5755	11N40SISO-Ant1-5795
	
11AC20SISO-Ant1-5180	**11AC20SISO-Ant1-5220**
	
11AC20SISO-Ant1-5240	**11AC20SISO-Ant1-5260**
	
11AC20SISO-Ant1-5300	**11AC20SISO-Ant1-5320**
	

11AC20SISO-Ant1-5500	11AC20SISO-Ant1-5580
	
11AC20SISO-Ant1-5700	11AC20SISO-Ant1-5720
	
11AC20SISO-Ant1-5745	11AC20SISO-Ant1-5785
	
11AC20SISO-Ant1-5825	11AC40SISO-Ant1-5190
	

11AC40SISO-Ant1-5230	11AC40SISO-Ant1-5270
	
11AC40SISO-Ant1-5310	11AC40SISO-Ant1-5510
	
11AC40SISO-Ant1-5550	11AC40SISO-Ant1-5670
	
11AC40SISO-Ant1-5710	11AC40SISO-Ant1-5755
	

11AC40SISO-Ant1-5795	11AC80SISO-Ant1-5210
	
11AC80SISO-Ant1-5290	11AC80SISO-Ant1-5530
	
11AC80SISO-Ant1-5610	11AC80SISO-Ant1-5690
	
11AC80SISO-Ant1-5775	11AX20SISO-Ant1-5180
	

11AX20SISO-Ant1-5220	11AX20SISO-Ant1-5240
	
11AX20SISO-Ant1-5260	11AX20SISO-Ant1-5300
	
11AX20SISO-Ant1-5320	11AX20SISO-Ant1-5500
	
11AX20SISO-Ant1-5580	11AX20SISO-Ant1-5700
	

11AX20SISO-Ant1-5720	11AX20SISO-Ant1-5745
	
11AX20SISO-Ant1-5785	11AX20SISO-Ant1-5825
	
11AX40SISO-Ant1-5190	11AX40SISO-Ant1-5230
	
11AX40SISO-Ant1-5270	11AX40SISO-Ant1-5310
	

11AX40SISO-Ant1-5510	11AX40SISO-Ant1-5550
	
11AX40SISO-Ant1-5670	**11AX40SISO-Ant1-5710**
	
11AX40SISO-Ant1-5755	**11AX40SISO-Ant1-5795**
	
11AX80SISO-Ant1-5210	**11AX80SISO-Ant1-5290**