

FCC PART 15C TEST REPORT



Issued to

SZ DJI TECHNOLOGY CO., LTD

For

Remote Control

Model Name: NDJ6
Trade Name: DJI
Brand Name: DJI
FCC ID: SS3-WM300U24G
Standard: 47 CFR Part 15 Subpart C
Test date: 2014-08-18 to 2014-09-18
Issue date: 2014-09-19

by

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2014.9.19

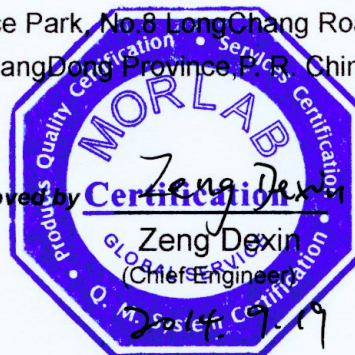
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Date

2014.09.19



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Change History		
Issue	Date	Reason for change
1.0	September 19, 2014	First edition

1. GENERAL INFORMATION

1.1. EUT Description

EUT Type.....:	Remote Control
Serial No.:	(n.a, marked #1 by test site)
Hardware Version.....:	1.01
Software Version.....:	1.0.1.14
Applicant.....:	SZ DJI TECHNOLOGY CO., LTD 17th floor, West Wing, Skyworth Semiconductor Design Building NO.18 Gaoxin South 4th Ave, Nanshan District, Shenzhen, China
Manufacturer	SZ DJI TECHNOLOGY CO., LTD 17th floor, West Wing, Skyworth Semiconductor Design Building NO.18 Gaoxin South 4th Ave, Nanshan District, Shenzhen, China
Frequency Range.....:	2405.375MHz~2477.055MHz
Channel Number	36
Modulation Type.....:	GFSK
Antenna Type	Dipole Antenna
Antenna Gain.....:	2.0dBi

Note :

1. The EUT is Remote Control, it operating at 2.4GHz ISM band, the frequencies allocated is F (MHz) $=2405.375+2.048*(n-1)$ ($1 \leq n \leq 36$). The lowest, middle, highest channel numbers of the EUT used and tested in this report are separately 1 (2405.375MHz), 18 (2440.191MHz) and 36 (2477.055MHz).
2. For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.
3. The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%

1.2. Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 15 Subpart C (Bluetooth, 2.4GHz ISM band radiators) for the EUT FCC Certification:

No.	Identity	Document Title
1	47 CFR Part 15 (10-1-13 Edition)	Radio Frequency Devices

Test detailed items/section required by FCC rules and results are as below:

No.	Section in CFR 47	Description	Result
1	15.203	Antenna Requirement	<u>PASS</u>
2	15.247(b)	Peak Output Power	<u>PASS</u>
3	15.247(b)	Average power	<u>PASS</u>
4	15.247(a)	6dB Bandwidth	<u>PASS</u>
5	15.247(a)	99% Bandwidth	<u>PASS</u>
8	15.247(d)	Conducted Spurious Emission and Band Edge	<u>PASS</u>
9	15.247(d)	Restricted Frequency Bands	<u>PASS</u>
10	15.207	Conducted Emission	<u>PASS</u>
11	15.209 15.247(d)	Radiated Emission	<u>PASS</u>
12	15.247(e)	Power spectral density (PSD)	<u>PASS</u>

The tests of Conducted Emission and Radiated Emission were performed according to the method of measurements prescribed in ANSI C63.4 2009.

These RF tests were performed according to the method of measurements prescribed in KDB558074 D01 v03r02 (05/06/2014).

1.3. Facilities and Accreditations

1.3.1. Facilities

Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L3572.

All measurement facilities used to collect the measurement data are located at FL.1, Building A, FeiYang Science Park, Block 67, BaoAn District, Shenzhen, 518101 P. R. China. The test site is constructed in conformance with the requirements of ANSI C63.10 2009, ANSI C63.4 2009 and CISPR Publication 22; the FCC registration number is 695796.

The IC registration number is 7183A-2.

1.3.2. Test Environment Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15 - 35
Relative Humidity (%):	30 -60
Atmospheric Pressure (kPa):	86-106

2. 47 CFR PART 15C REQUIREMENTS

2.1. Antenna requirement

2.1.1. Applicable Standard

According to FCC 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

2.1.2. Result: Compliant

The EUT has a permanently and irreplaceable attached antenna. Please refer to the EUT internal photos.

2.2. Peak Output Power

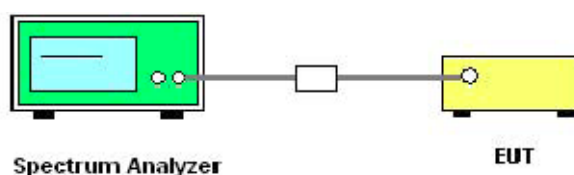
2.2.1. Requirement

According to FCC section 15.247(b)(3), For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: The maximum peak conducted output power of the intentional radiator shall not exceed 1 Watt.

2.2.2. Test Description

The measured output power was calculated by the reading of the spectrum analyzer and calibration.

A. Test Setup:



The EUT (Equipment under the test) which is powered by the Battery is coupled to the Spectrum analyzer; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading, all test result in Spectrum analyzer.

B. Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum analyzer	Agilent	E4407B	MY45101810	2014.02.26	2015.02.25

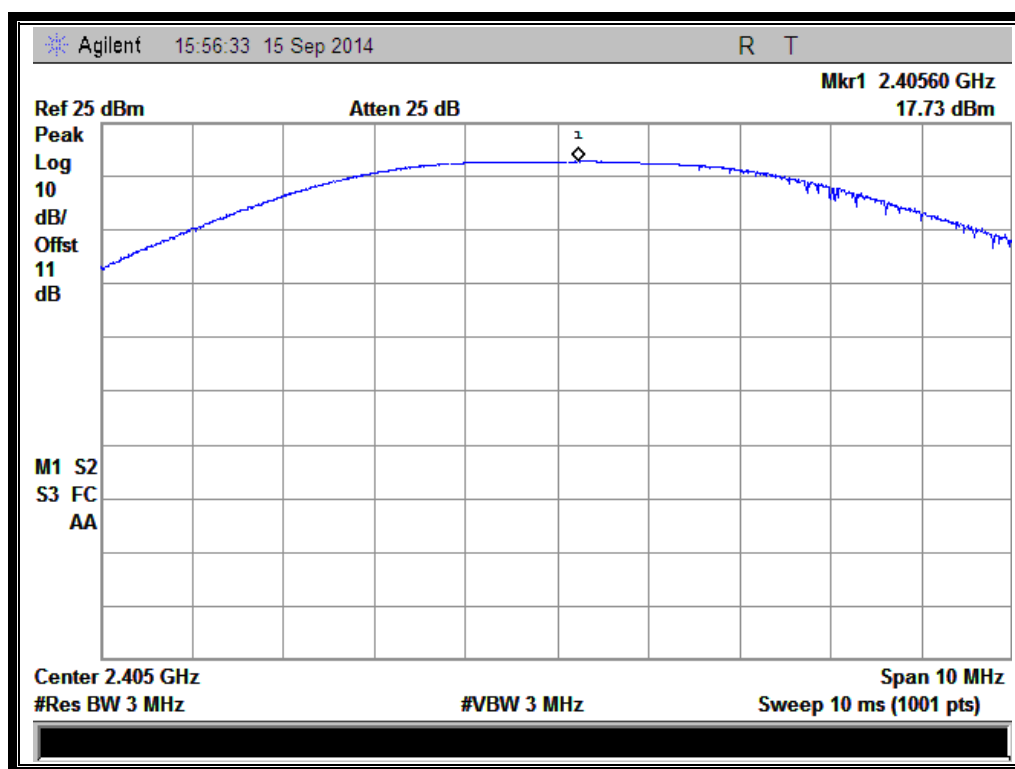
2.2.3. Test Result

The lowest, middle and highest channels are selected to perform testing to verify the conducted RF output peak power of the Module.

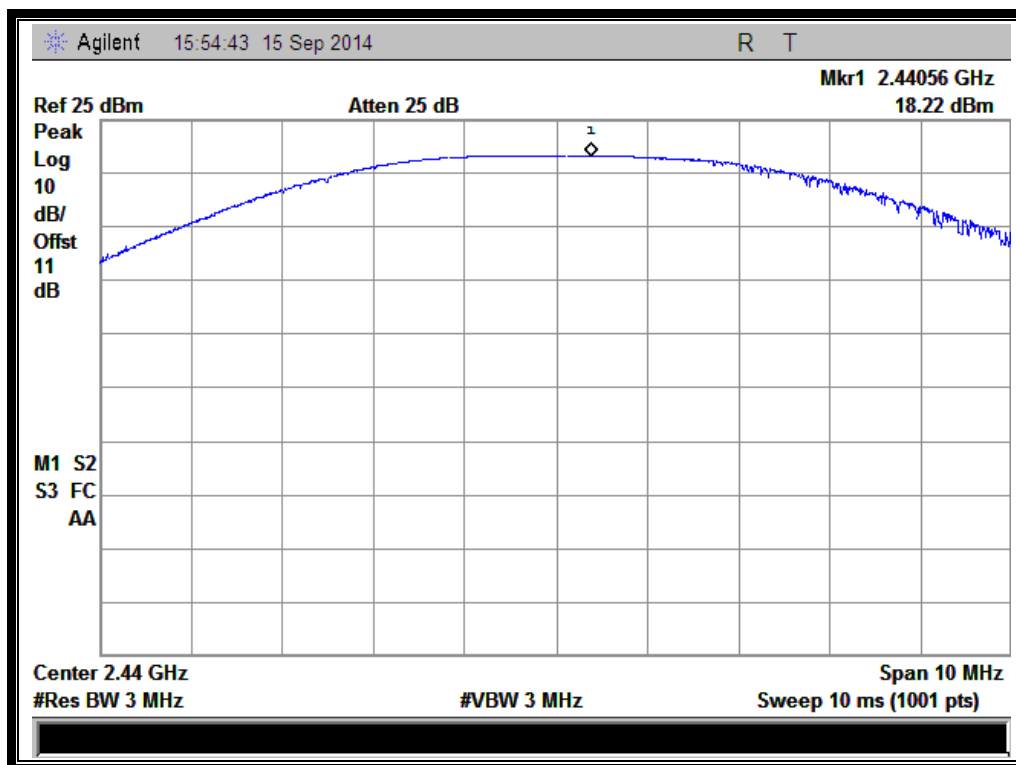
A. Test Verdict:

Channel	Frequency (MHz)	Measured Output Peak Power		Refer to Plot	Limit		Verdict
		dBm	W		dBm	W	
1	2405.375	17.73	0.059293	Plot A	30	1	PASS
18	2440.191	18.22	0.066374	Plot B			PASS
36	2477.055	18.04	0.063680	Plot C			PASS

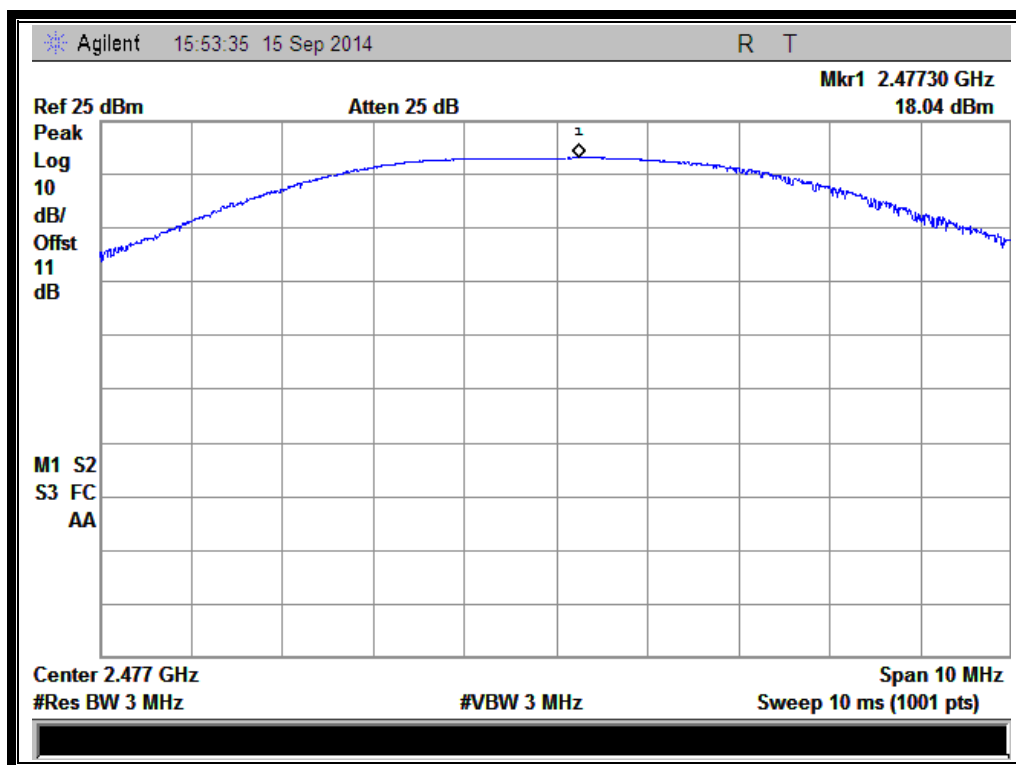
B. Test Plots:



(Plot A: Channel 1: 2405.375MHz)



(Plot B: Channel 18: 2440.191MHz)



(Plot C: Channel 36: 2477.055MHz)

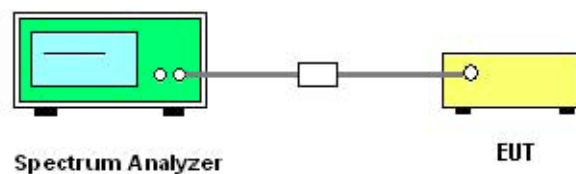
2.3. 6dB Bandwidth

2.3.1. Requirement

According to FCC section 15.247(a) (2), Systems using digital modulation techniques may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725 - 5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

2.3.2. Test Description

A. Test Set:



The EUT which is powered by the Battery, is coupled to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading.

Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. In order to make an accurate measurement, set the span greater than RBW.

B. Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum analyzer	Agilent	E4407B	MY45101810	2014.02.26	2015.02.25

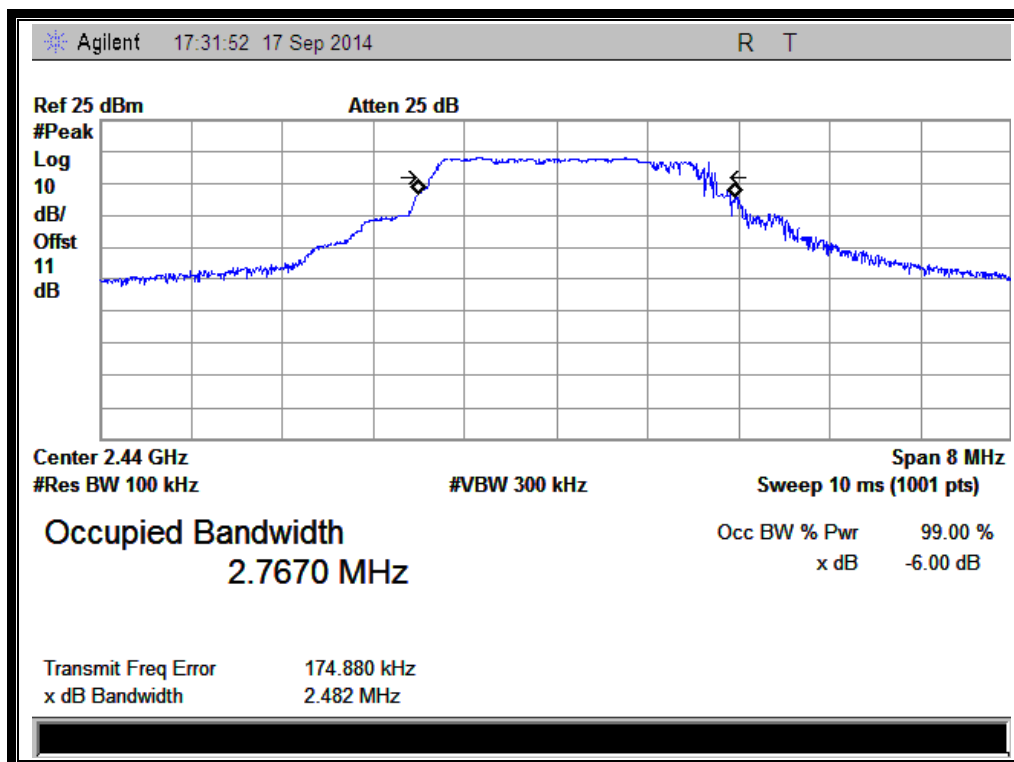
2.3.3. Test Result

The lowest, middle and highest channels are selected to perform testing to record the 6 dB bandwidth of the Module.

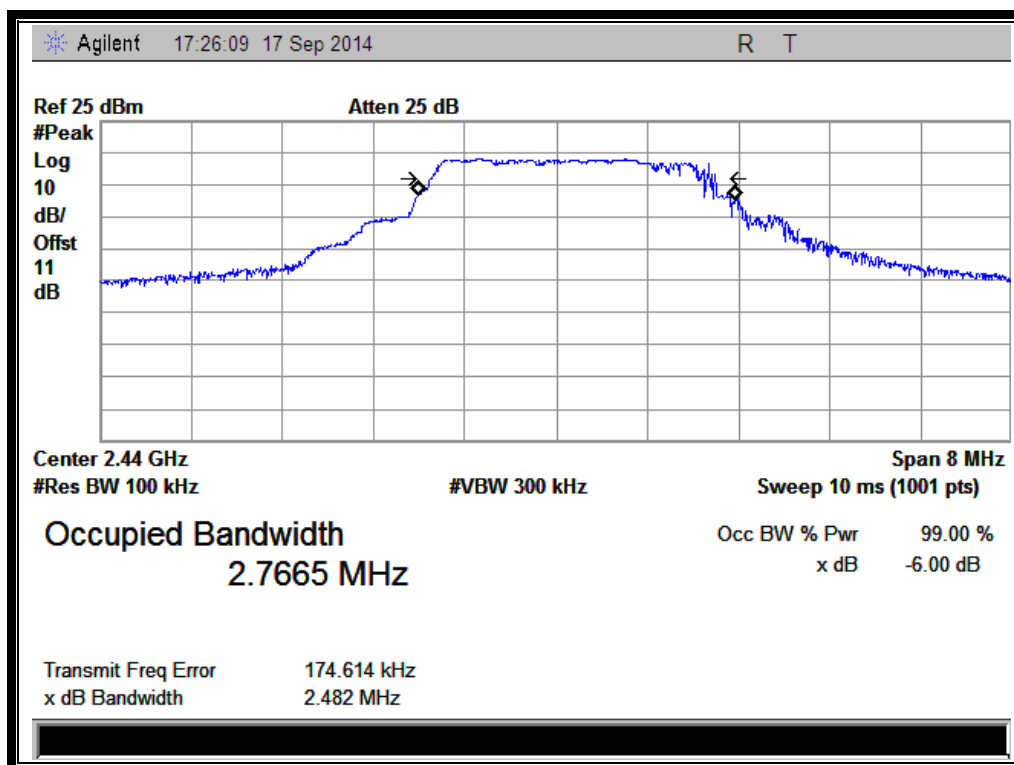
A. Test Verdict:

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Refer to Plot	Limits(kHz)	Result
1	2405.375	2.482	Plot A	≥500	PASS
18	2440.191	2.482	Plot B	≥500	PASS
36	2477.055	2.435	Plot C	≥500	PASS

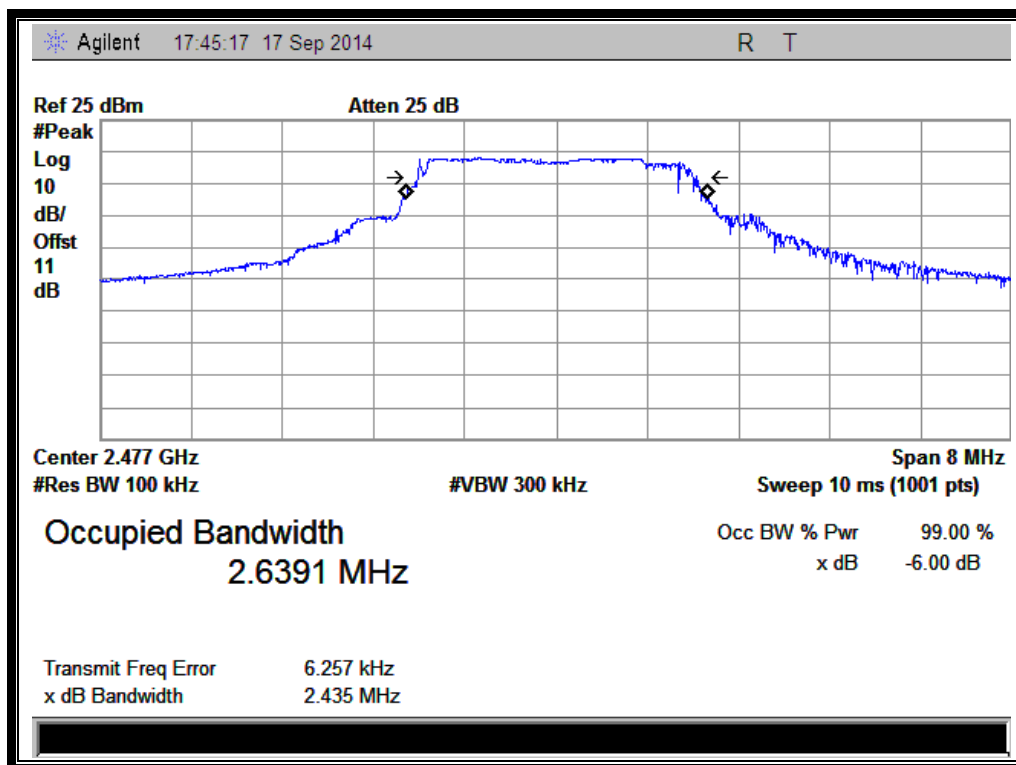
B. Test Plots:



(Plot A: Channel 1: 2405.375MHz)



(Plot B: Channel 18: 2440.191 MHz)



(Plot C: Channel 36: 2477.055MHz)

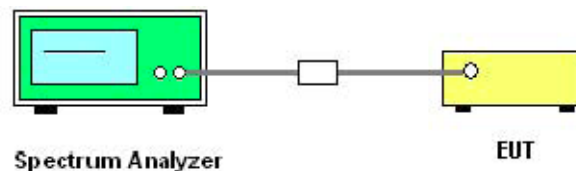
2.4. Conducted Spurious Emissions and Band Edge

2.4.1. Requirement

According to FCC section 15.247(d), in any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

2.4.2. Test Description

A. Test Set:



The EUT which is powered by the Battery, is coupled to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading.

Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. In order to make an accurate measurement, set the span greater than RBW.

B. Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum analyzer	Agilent	E4407B	MY45101810	2014.02.26	2015.02.25

2.4.3. Test Result

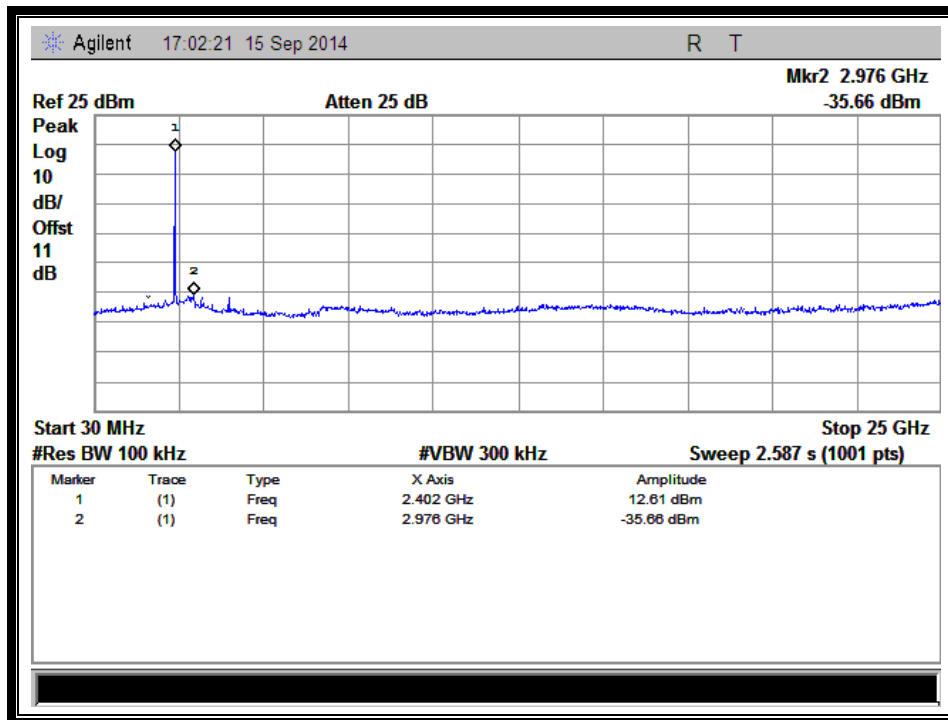
The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the spurious emissions.

A. Test Verdict:

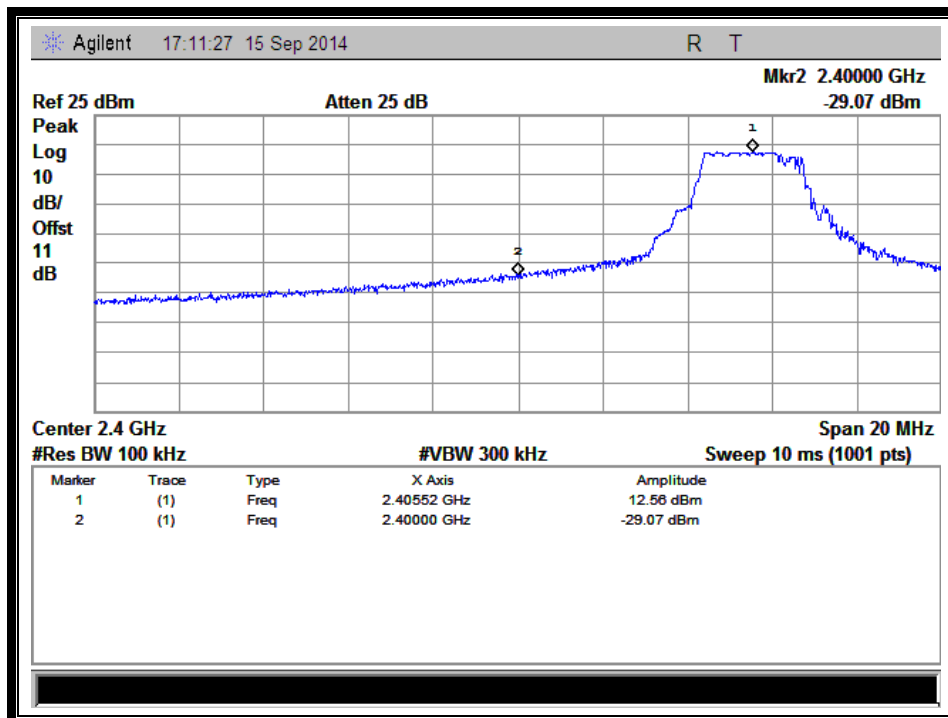
Channel	Frequency (MHz)	Measured Max. Out of Band Emission (dBm)	Refer to Plot	Limit (dBm)		Verdict
				Carrier Level	Calculated -20dBc Limit	
1	2405.375	-35.66	Plot A.1	12.61	-7.4	PASS
18	2440.191	-35.79	Plot B.1	12.84	-7.2	PASS
36	2477.055	-36.82	Plot C.1	13.09	-7.0	PASS

B. Test Plots:

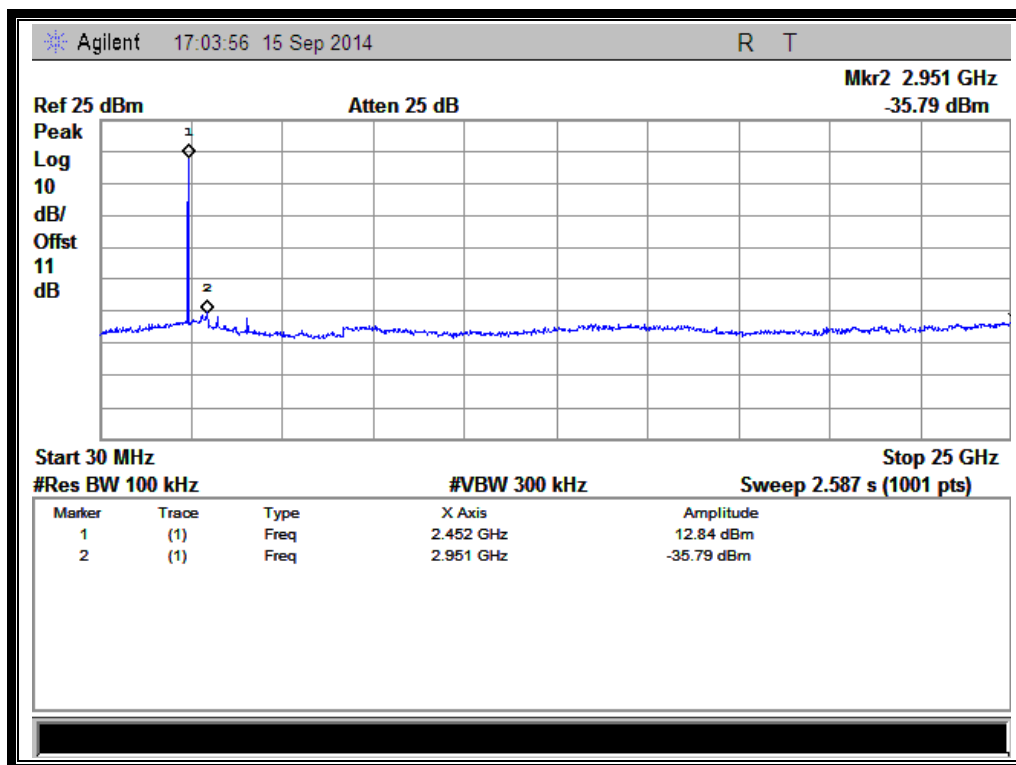
Note: the power of the Module transmitting frequency should be ignored.



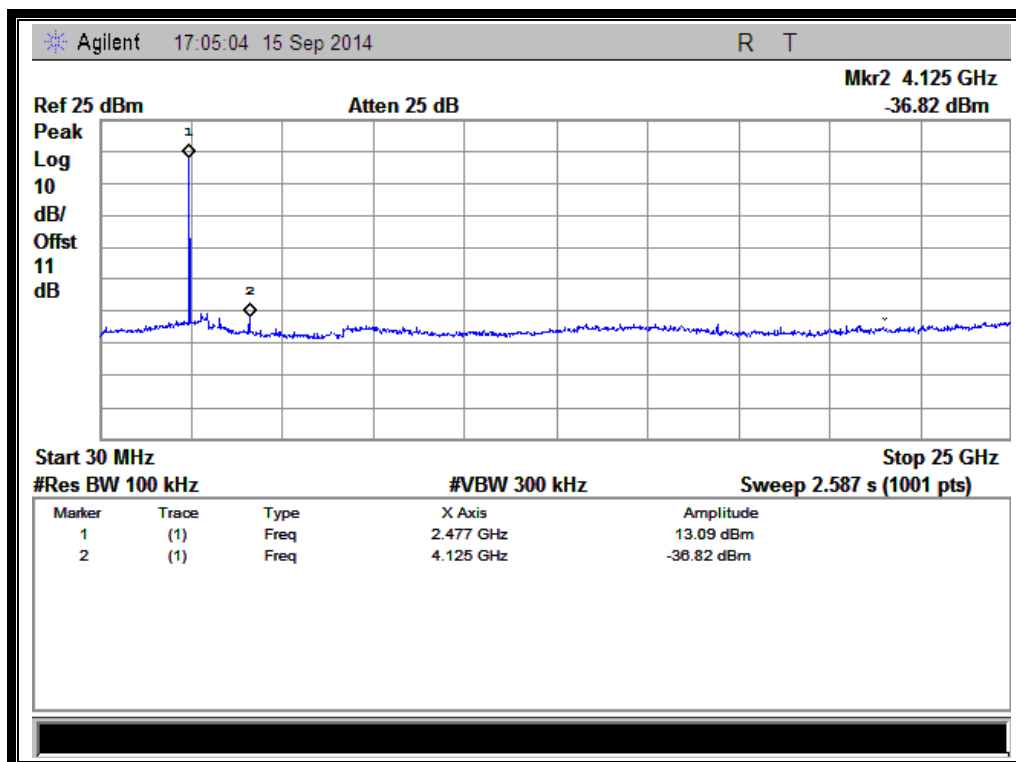
(Plot A.1: Channel = 1, 30MHz to 25GHz)



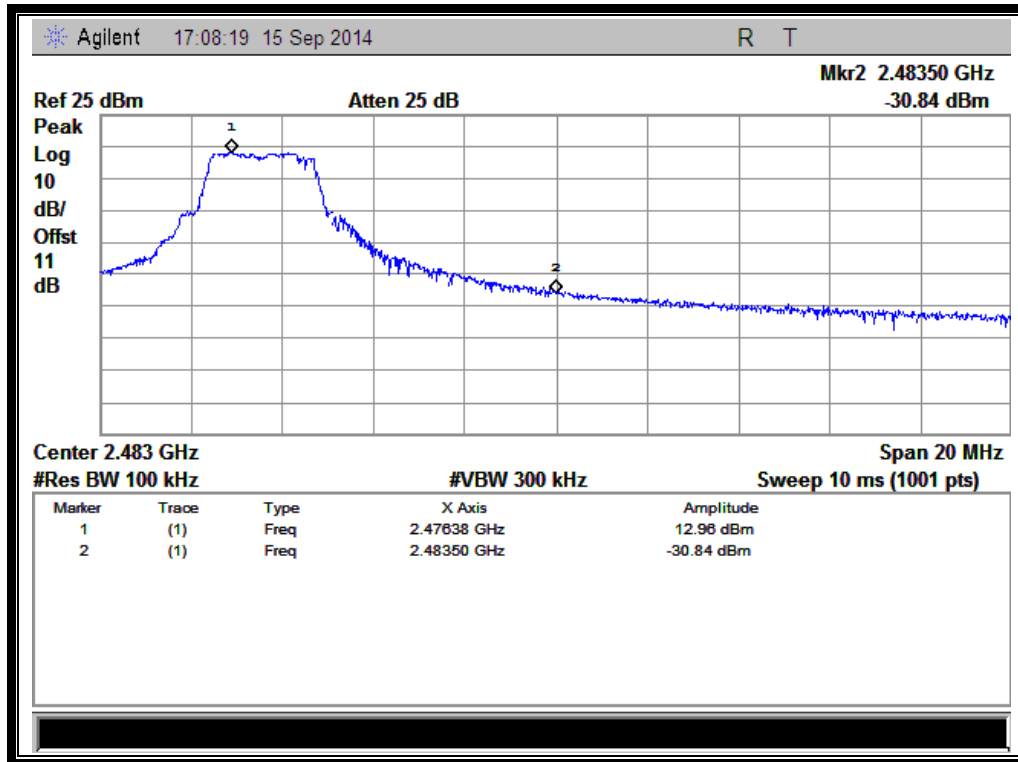
(Band Edge@ Channel = 1)



(Plot B.1: Channel = 18, 30MHz to 25GHz)



(Plot C.1: Channel = 36, 30MHz to 25GHz)



(Band Edge@ Channel = 36)

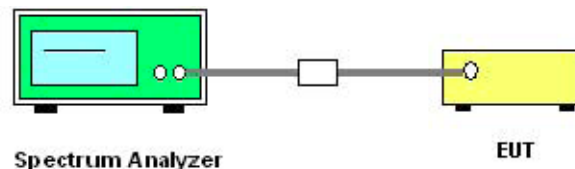
2.5. Power spectral density (PSD)

2.5.1. Requirement

According to FCC section 15.247(e), the same method of determining the conducted output power shall be used to determine the power spectral density. If a peak output power is measured, then a peak power spectral density measurement is required. If an average output power is measured, then an average power spectral density measurement should be used.

2.5.2. Test Description

A. Test Set:



The EUT which is powered by the Battery, is coupled to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading.

B. Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum analyzer	Agilent	E4407B	MY45101810	2014.02.26	2015.02.25

2.5.3. Test Result

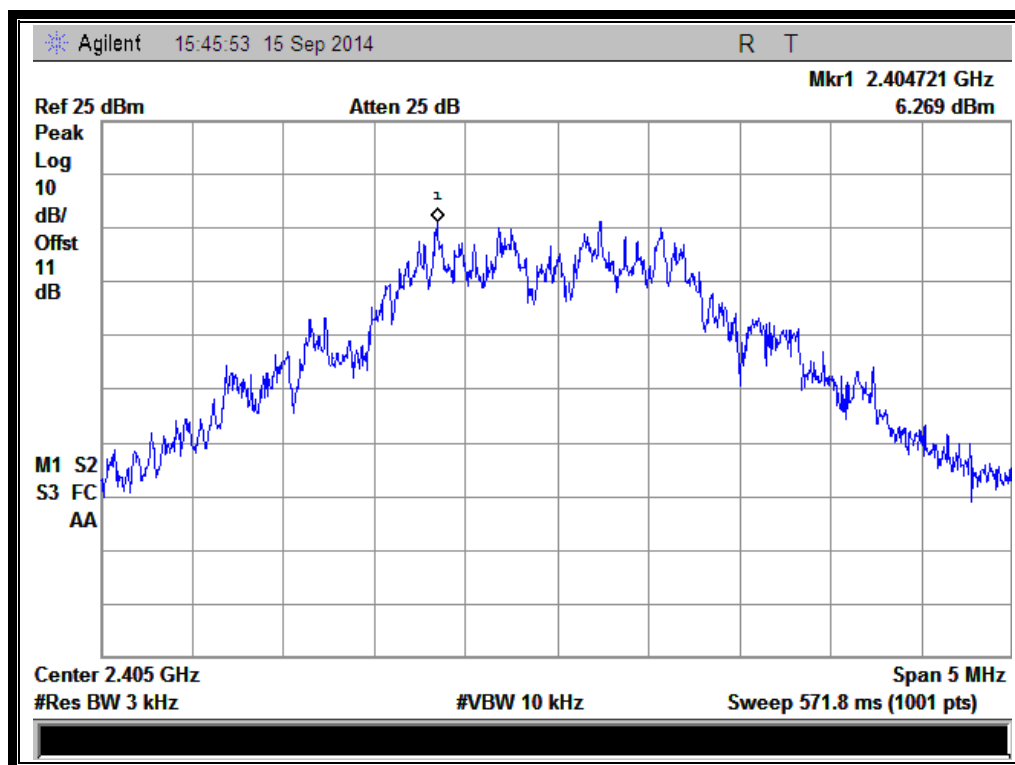
The lowest, middle and highest channels are tested.

A. Test Verdict:

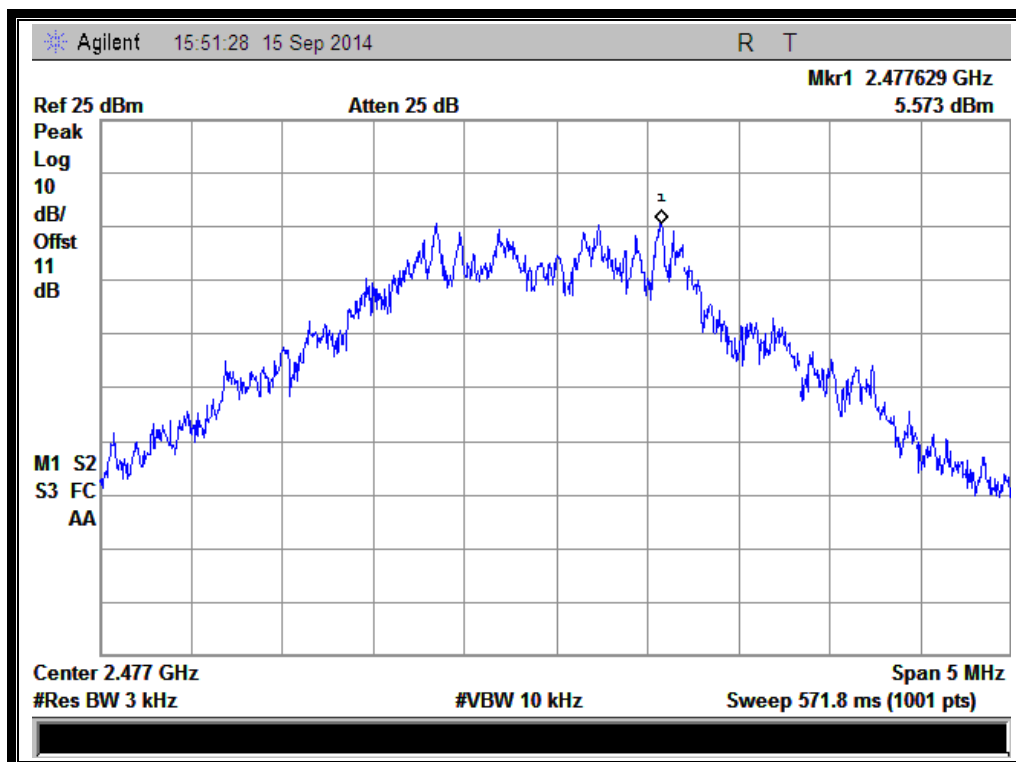
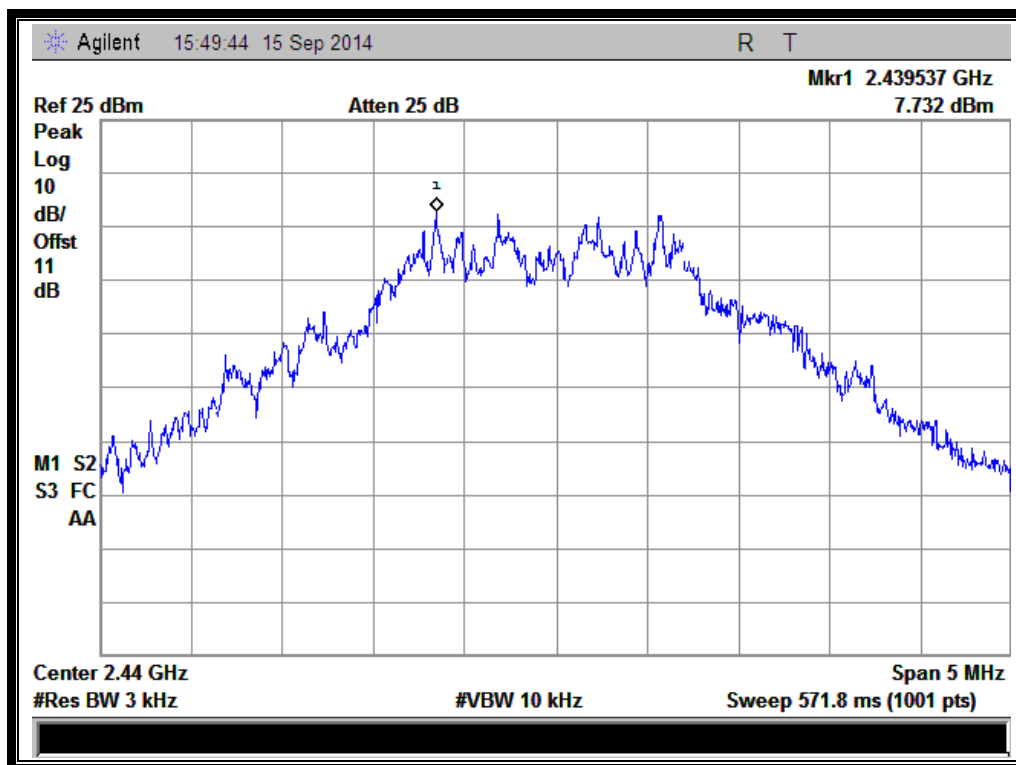
Spectral power density (dBm/3kHz)					
Channel	Frequency (MHz)	Measured PSD (dBm/3kHz)	Refer to Plot	Limit (dBm/3kHz)	Verdict
1	2405.375	6.269	Plot A	8	PASS
18	2440.191	7.732	Plot B	8	PASS
36	2477.055	5.573	Plot C	8	PASS

Measurement uncertainty: ± 1.3 dB

B. Test Plots:



(Plot A: Channel = 1)



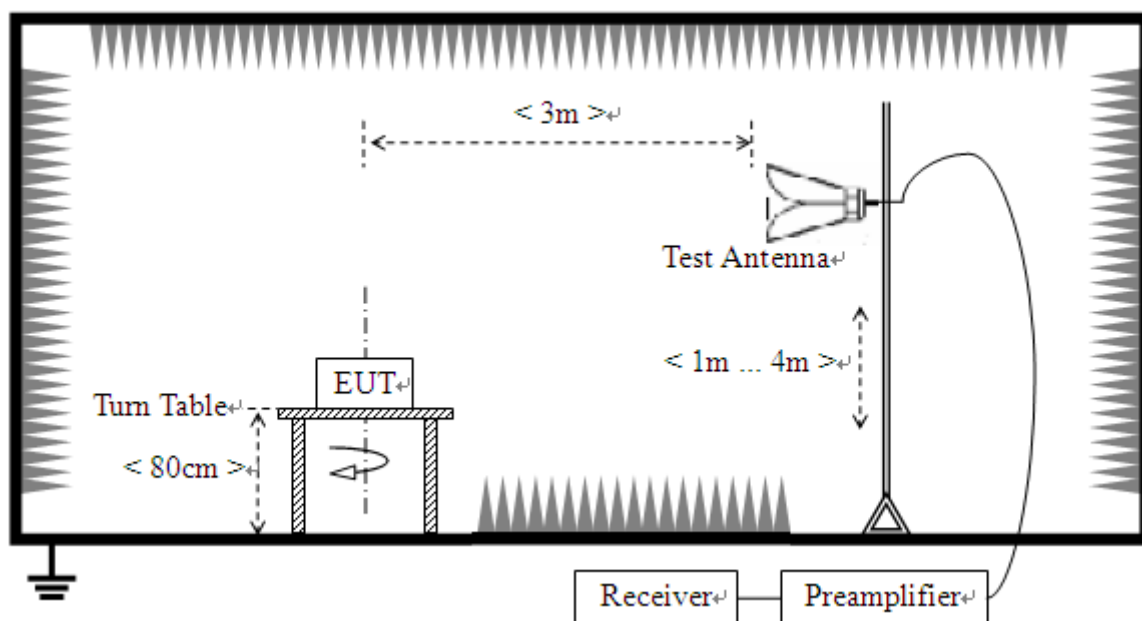
2.6. Restricted Frequency Bands

2.6.1. Requirement

According to FCC section 15.247(d), in any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, as defined in 15.205(a), must also comply with the radiated emission limits specified in 15.209(a).

2.6.2. Test Description

A. Test Setup



The Module is located in a 3m Semi-Anechoic Chamber; the antenna factors, cable loss and so on of the site as factors are calculated to correct the reading.

For the Test Antenna:

Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength.

B. Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Receiver	Agilent	E7405A	US44210471	2014.02.26	2015.02.25
Full-Anechoic Chamber	Albatross	9m*6m*6m	(n.a.)	2014.02.26	2015.02.25
Test Antenna - Horn	Schwarzbeck	BBHA 9120D	9120D-963	2014.02.26	2015.02.25

2.6.3. Test Result

The lowest and highest channels are tested to verify the Restricted Frequency Bands.

The measurement results are obtained as below:

$$E \text{ [dB}\mu\text{V/m]} = U_R + A_T + A_{\text{Factor}} \text{ [dB]}; A_T = L_{\text{Cable loss}} \text{ [dB]} - G_{\text{preamp}} \text{ [dB]}$$

A_T : Total correction Factor except Antenna

U_R : Receiver Reading

G_{preamp} : Preamplifier Gain

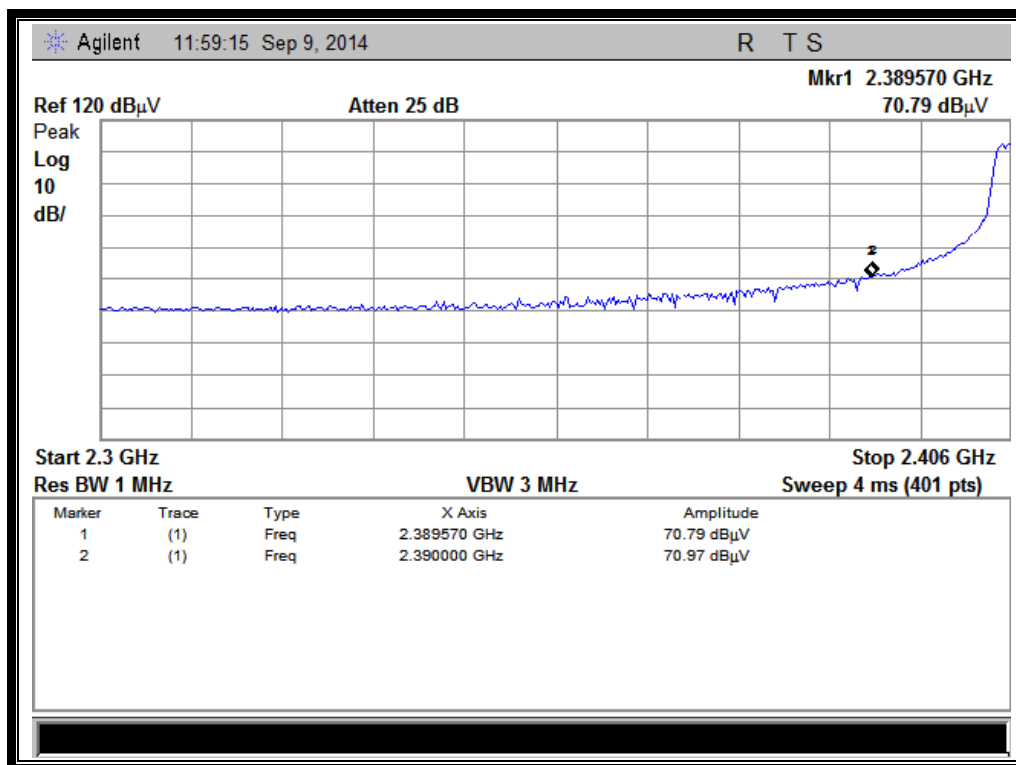
A_{Factor} : Antenna Factor at 3m

Note: Restricted Frequency Bands were performed when antenna was at vertical and horizontal polarity, and only the worse test condition (vertical) was recorded in this test report.

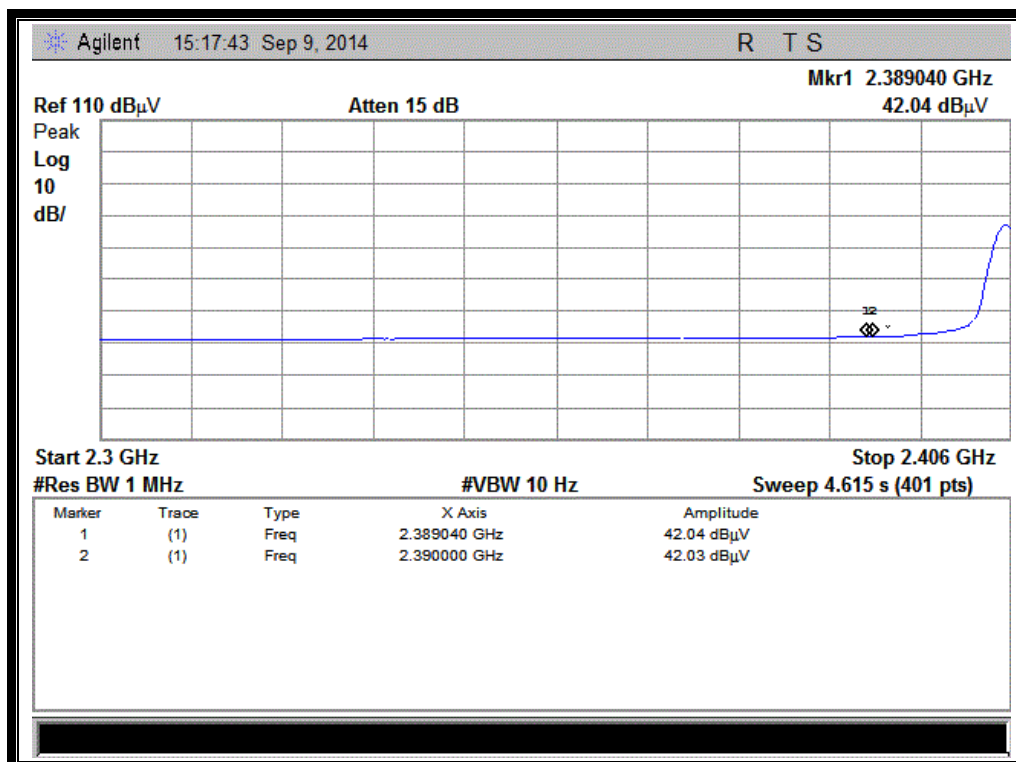
A. Test Verdict:

Channel	Frequency (MHz)	Detector	Receiver Reading UR (dBuV)	AT (dB)	AFactor (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		PK/ AV						
1	2390.000	PK	70.97	-33.63	32.56	69.9	74	Pass
1	2389.040	AV	42.04	-33.63	32.56	40.97	54	Pass
36	2484.205	PK	61.41	-33.18	32.5	60.73	74	Pass
36	2483.500	AV	41.17	-33.18	32.5	40.49	54	Pass

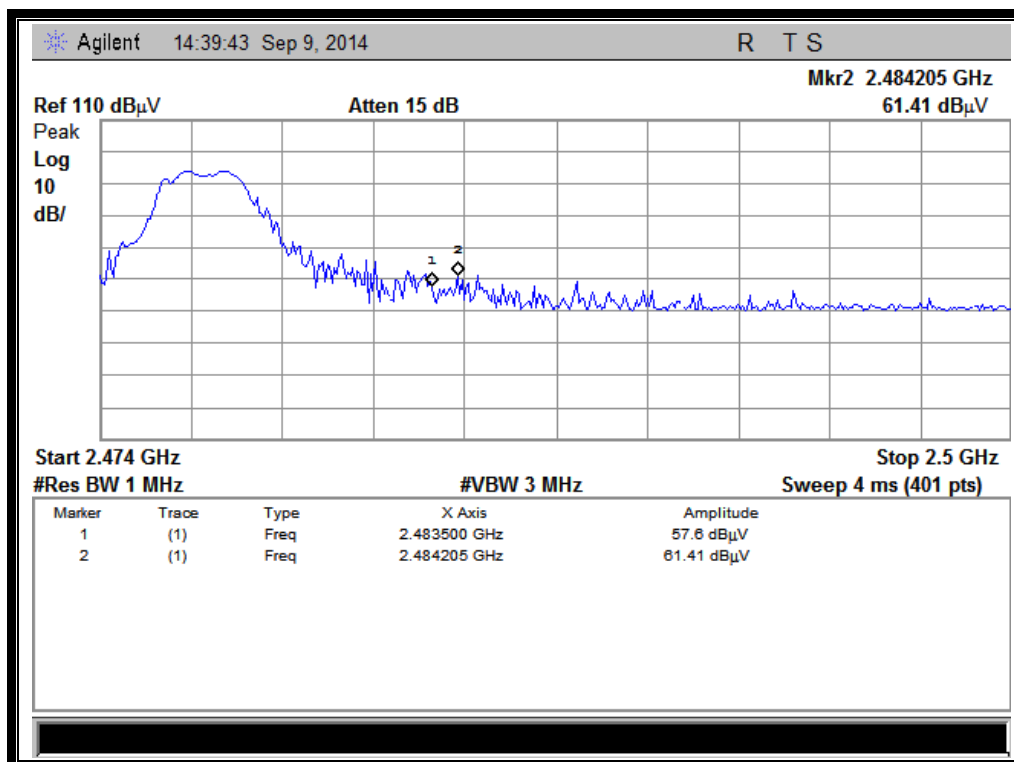
B. Test Plots:



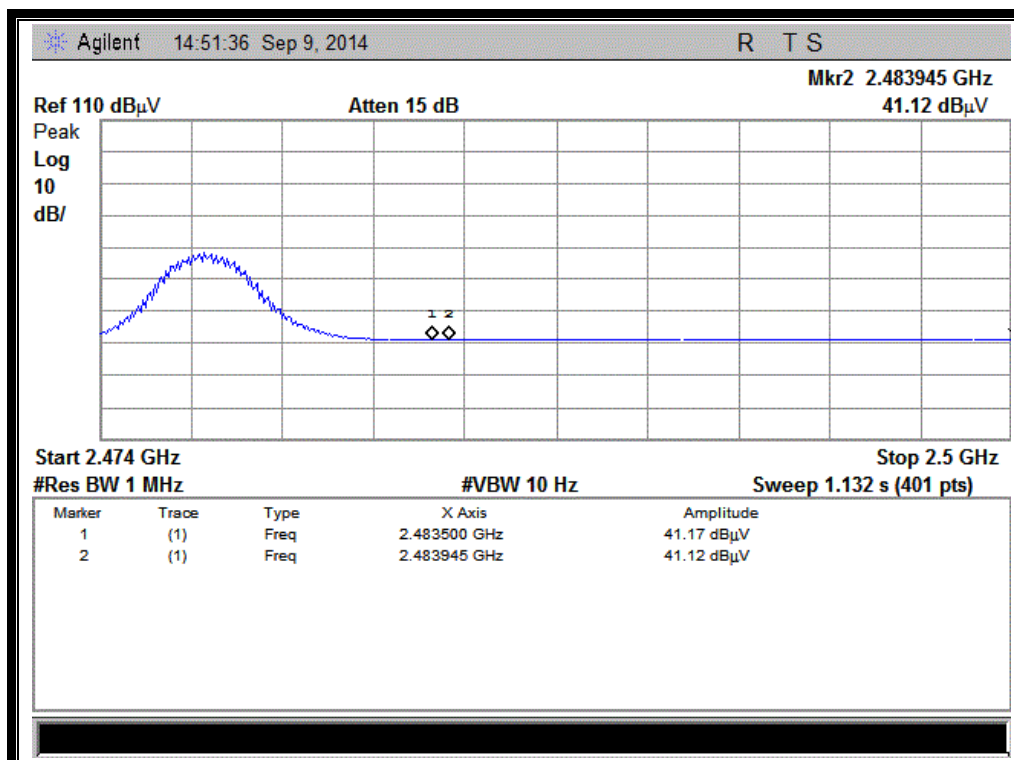
(Plot A1: Channel = 1 PEAK)



(Plot A2: Channel = 1 AVG)



(Plot B1: Channel = 36 PEAK)



(Plot B2: Channel = 36 AVG)

2.7. Conducted Emission

2.7.1. Requirement

According to FCC section 15.207, for an intentional radiator 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 within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 Ω line impedance stabilization network (LISN).

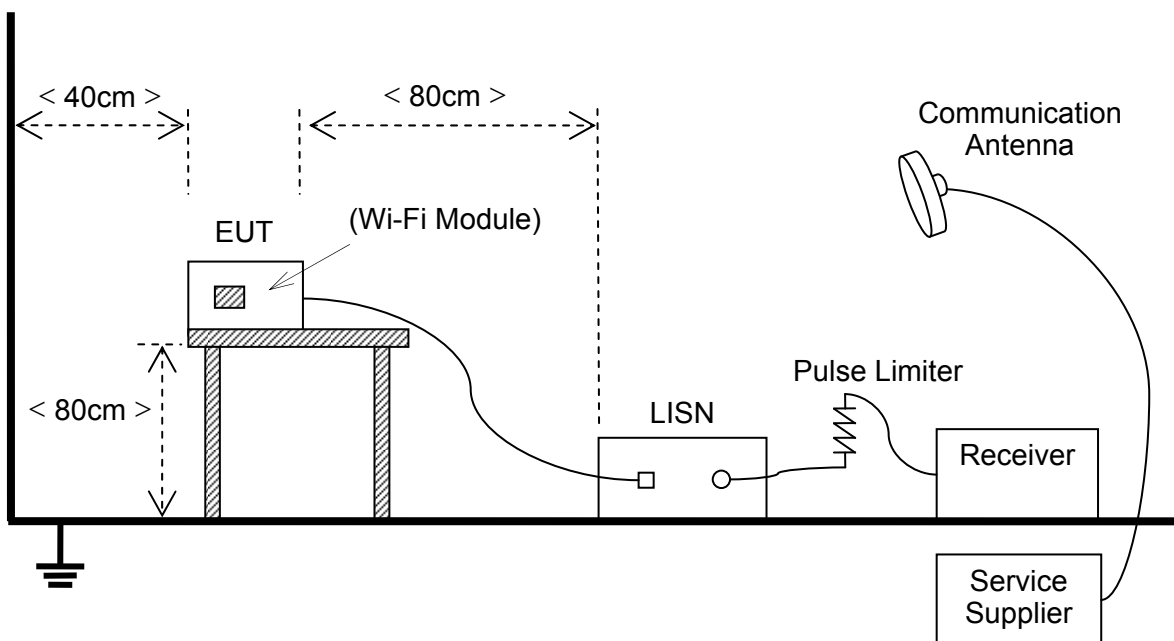
Frequency range (MHz)	Conducted Limit (dB μ V)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

NOTE:

- (a) The lower limit shall apply at the band edges.
- (b) The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50MHz.

2.7.2. Test Description

A. Test Setup:



The Table-top EUT was placed upon a non-metallic table 0.8m above the horizontal metal reference ground plane. EUT was connected to LISN and LISN was connected to reference Ground Plane. EUT was 80cm from LISN. The set-up and test methods were according to ANSI C63.4:2009

B. Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Receiver	Agilent	E7405A	US44210471	2014.02.26	2015.02.25
LISN	Schwarzbeck	NSLK 8127	812744	2014.02.26	2015.02.25
Service Supplier	R&S	CMU200	100448	2014.02.26	2015.02.25
Pulse Limiter (20dB)	Schwarzbeck	VTSD 9561-D	9391	(n.a.)	(n.a.)

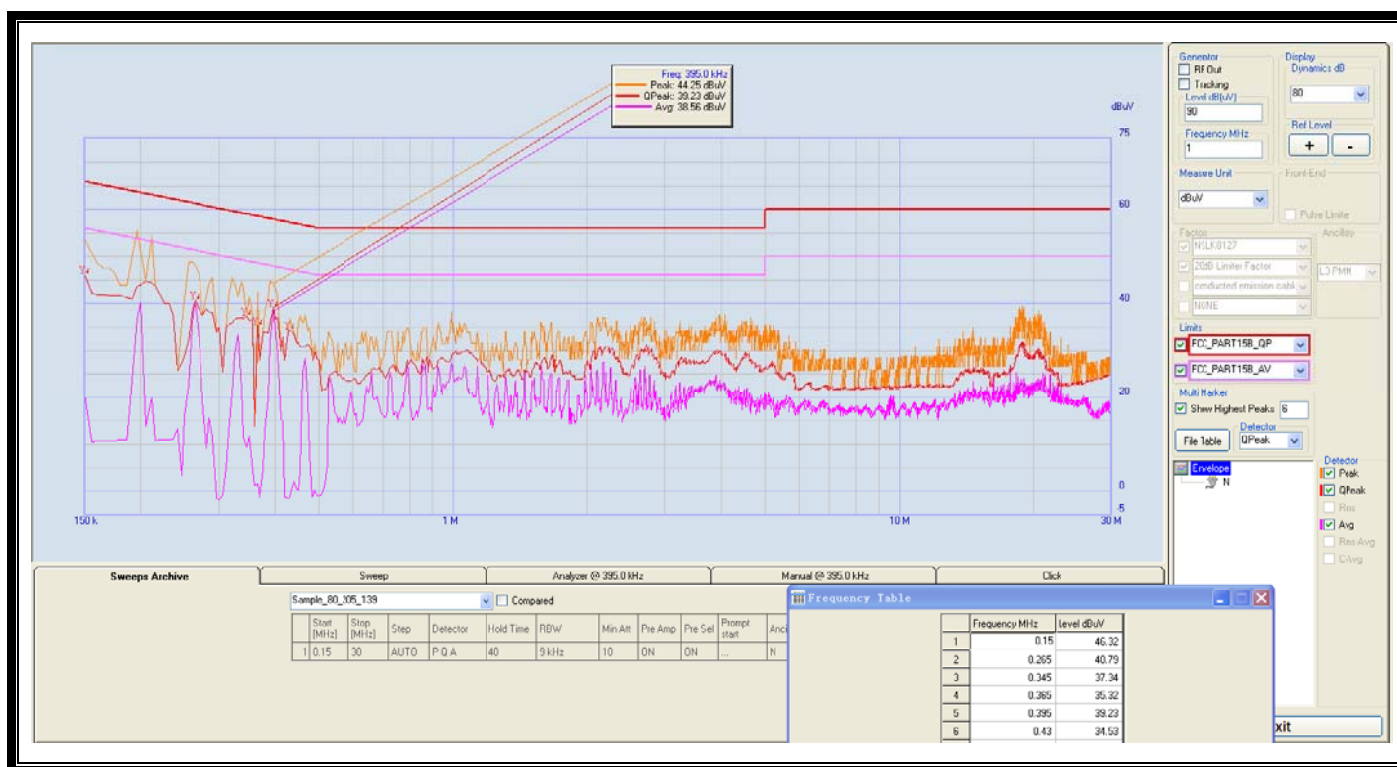
2.7.3. Test Result

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Refer to recorded points and plots below.

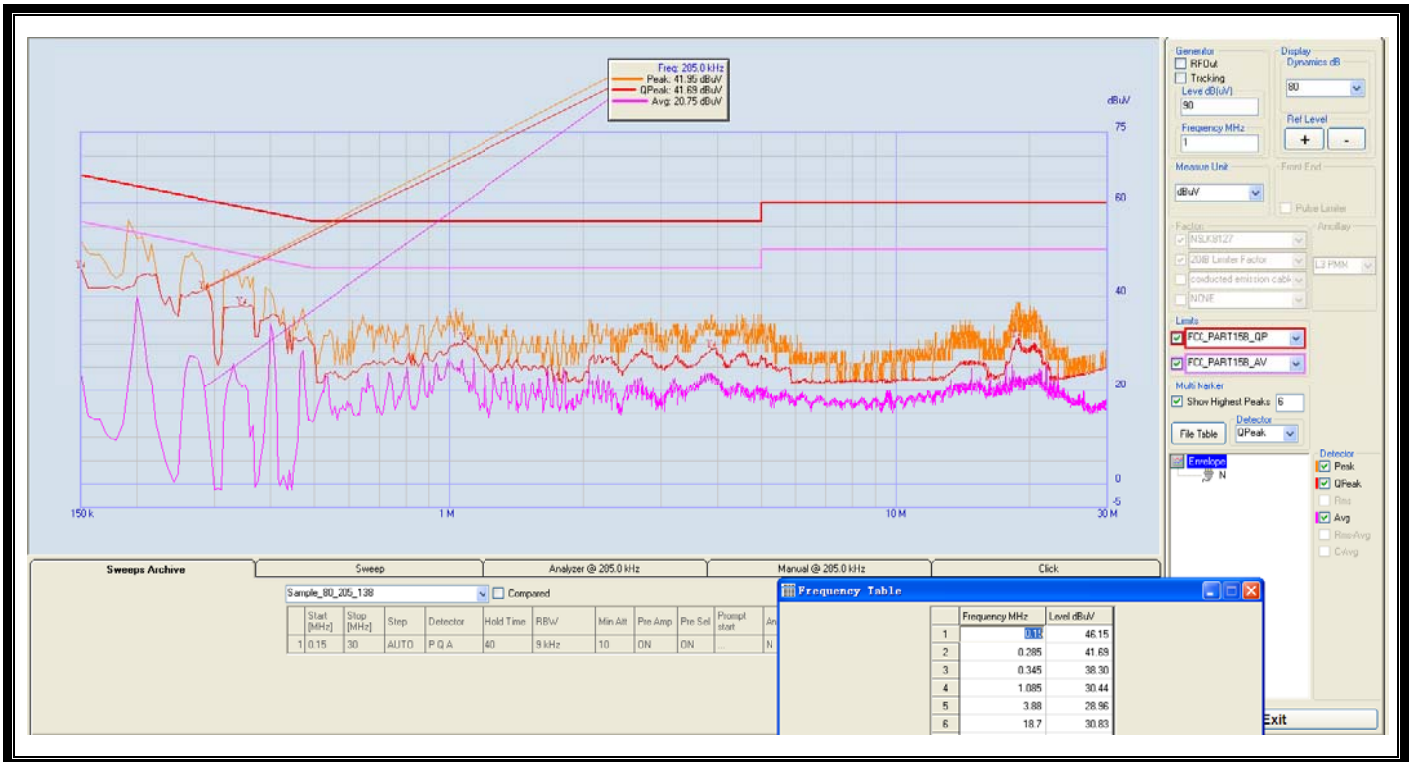
A. Test setup:

The EUT configuration of the emission tests is EUT + Link.

B. Test Plots:



(Plot A: L Phase)



(Plot B: N Phase)

2.8. Radiated Emission

2.8.1. Requirement

According to FCC section 15.247(d), radiated emission outside the frequency band attenuation below the general limits specified in FCC section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in FCC section 15.205(a), must also comply with the radiated emission limits specified in FCC section 15.209(a).

According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength ($\mu\text{V/m}$)	Measurement Distance (m)
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

Note:

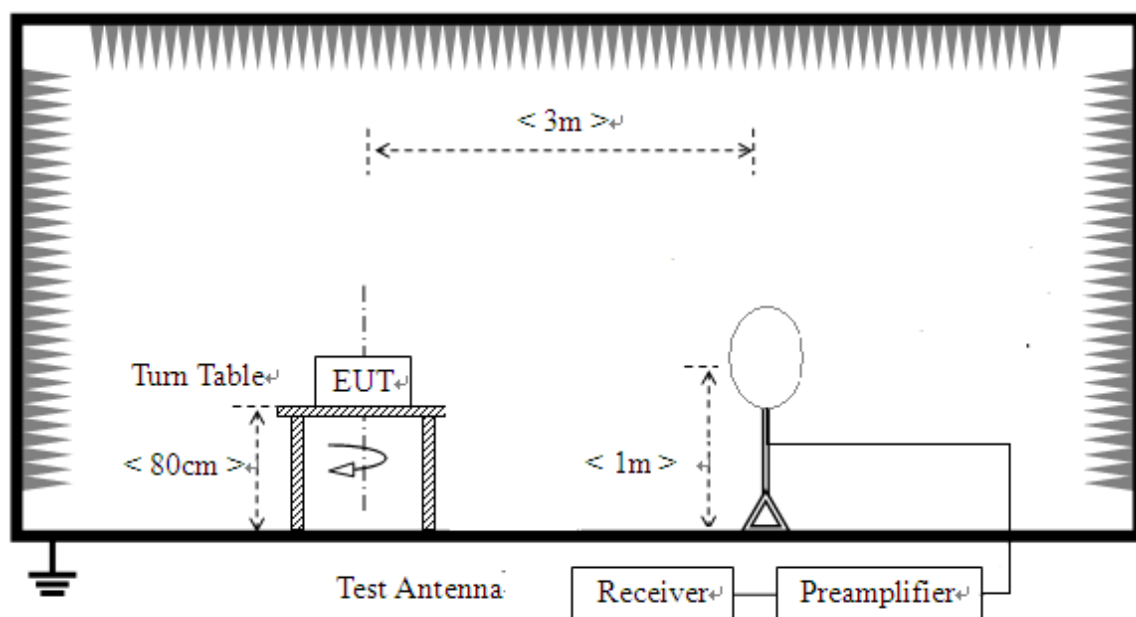
1. For Above 1000MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.
2. For above 1000MHz, limit field strength of harmonics: 54dBuV/m@3m (AV) and 74dBuV/m@3m (PK)

In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), also should comply with the radiated emission limits specified in Section 15.209(a)(above table)

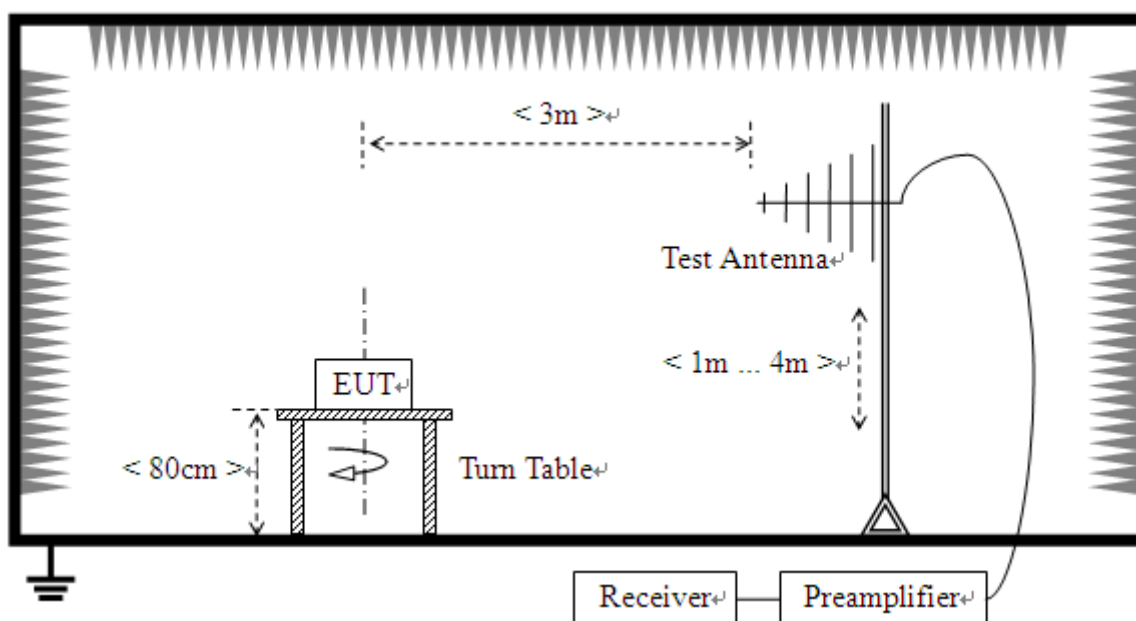
2.8.2. Test Description

A. Test Setup:

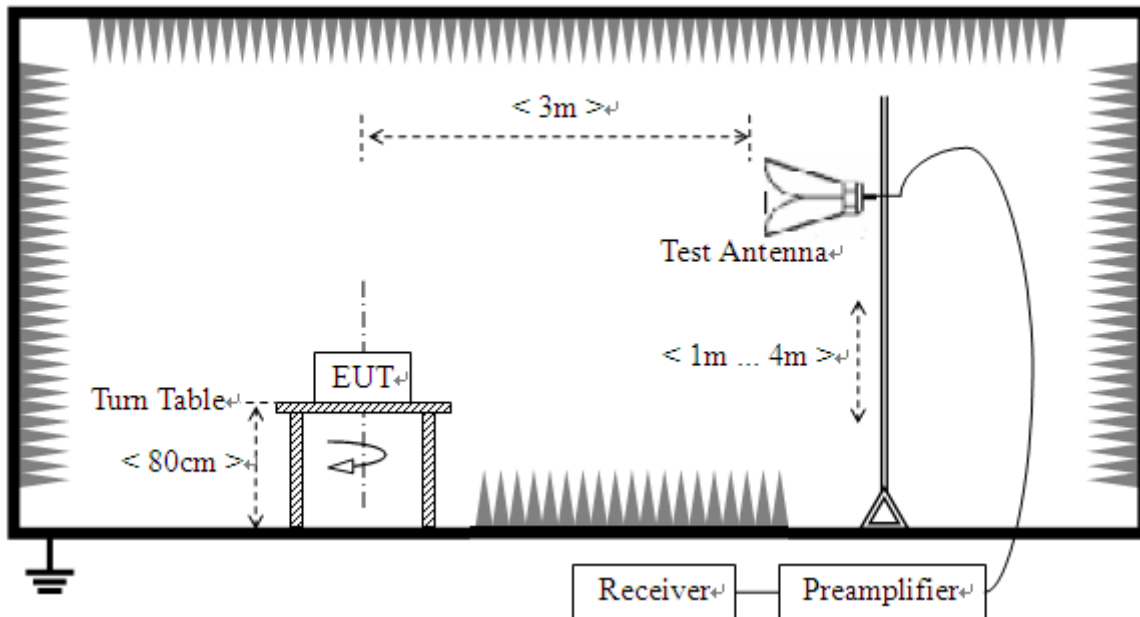
- 1) For radiated emissions from 9kHz to 30MHz



2) For radiated emissions from 30MHz to 1GHz



3) For radiated emissions above 1GHz



The test site semi-anechoic chamber has met the requirement of NSA tolerance 4dB according to the standards: ANSI C63.4 (2009). The EUT was set-up on insulator 80cm above the Ground Plane. The set-up and test methods were according to ANSI C63.4.

The EUT of the EUT is powered by the Battery charged with the AC Adapter which is powered by 120V, 60Hz AC mains supply. The Module is located in a 3m Semi-Anechoic Chamber; the antenna factors, cable loss and so on of the site as factors are calculated to correct the reading. During the measurement, the EUT is activated and controlled by the Wireless Router via a Common Antenna, and is set to operate under hopping-on test mode.

For the Test Antenna:

- (a) In the frequency range of 9kHz to 30MHz, magnetic field is measured with Loop Test Antenna. The Test Antenna is positioned with its plane vertical at 1m distance from the EUT. The center of the Loop Test Antenna is 1m above the ground. During the measurement the Loop Test Antenna rotates about its vertical axis for maximum response at each azimuth about the EUT.
- (b) In the frequency range above 30MHz, Bi-Log Test Antenna (30MHz to 2GHz) and Horn Test Antenna (above 2GHz) are used. Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength. The emission levels at both horizontal and vertical polarizations should be tested.

B. Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
System Simulator	R&S	CMU200	100448	2014.02.26	2015.02.25
Receiver	Agilent	E7405A	US44210471	2014.02.26	2015.02.25
Full-Anechoic Chamber	Albatross	9m*6m*6m	(n.a.)	2012.05.12	2015.02.25
Test Antenna - Bi-Log	Schwarzbeck	VULB 9163	9163-274	2014.02.26	2015.02.25
Test Antenna - Horn	Schwarzbeck	BBHA 9120D	9120D-963	2014.02.26	2015.02.25
Test Antenna - Horn	R&S	HL050S7	71688	2014.02.26	2015.02.25
Test Antenna -Loop	Schwarzbeck	FMZB 1519	1519-022	2014.02.26	2015.02.25

2.8.3. Test Result

According to ANSI C63.4 selection 4.2.2, because of peak detection will yield amplitudes equal to or greater than amplitudes measured with the quasi-peak (or average) detector, the measurement data from a spectrum analyzer peak detector will represent the worst-case results, if the peak measured value complies with the quasi-peak limit, it is unnecessary to perform an quasi-peak measurement.

The measurement results are obtained as below:

$$E [\text{dB}\mu\text{V/m}] = U_R + A_T + A_{\text{Factor}} [\text{dB}]; A_T = L_{\text{Cable loss}} [\text{dB}] - G_{\text{preamp}} [\text{dB}]$$

A_T : Total correction Factor except Antenna

U_R : Receiver Reading

G_{preamp} : Preamplifier Gain

A_{Factor} : Antenna Factor at 3m

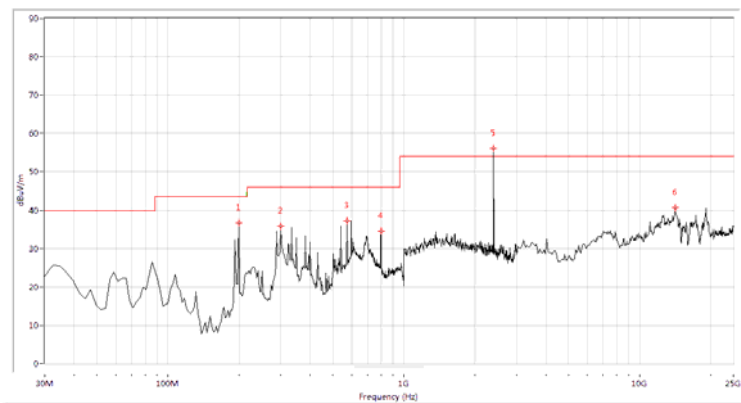
During the test, the total correction Factor A_T and A_{Factor} were built in test software.

Note: All radiated emission tests were performed in X, Y, Z axis direction and the EUT's antenna could be rotated, the different rotated angle has been pre-scanned, Only the worst test condition was recorded in this test report.

The low frequency, which started from 9KHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

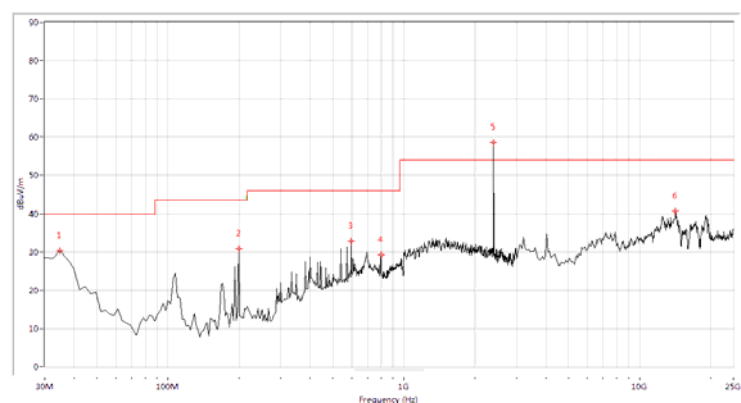
A. Test Plots for the Whole Measurement Frequency Range:

Plots for Channel = 1



Fre. (MHz)	Pk	QP	AV	Limit-PK	Limit-QP	Limit-AV	Antenna	Verdict
199.327	36.77	N.A	N.A	N.A	43.5	N.A	Horizontal	PASS
300.923	35.87	N.A	N.A	N.A	46.0	N.A	Horizontal	PASS
574.264	37.28	N.A	N.A	N.A	46.0	N.A	Horizontal	PASS
801.646	34.52	N.A	N.A	N.A	46.0	N.A	Horizontal	PASS
2405.375	56.10	N.A	N.A	N.A	N.A	N.A	Horizontal	N.A
14137.157	40.64	N.A	N.A	74.0	N.A	54.0	Horizontal	PASS

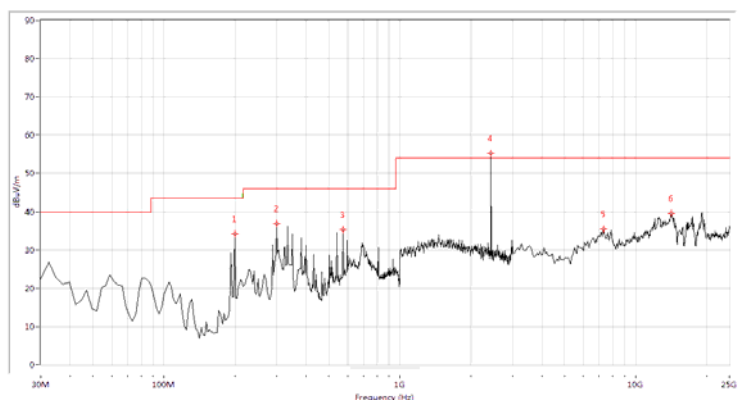
(Antenna Horizontal, 30MHz to 25GHz)



Fre. (MHz)	Pk	QP	AV	Limit-PK	Limit-QP	Limit-AV	Antenna	Verdict
34.838	30.22	N.A	N.A	N.A	40.0	N.A	Vertical	PASS
199.327	30.76	N.A	N.A	N.A	43.5	N.A	Vertical	PASS
598.454	32.87	N.A	N.A	N.A	46.0	N.A	Vertical	PASS
801.646	29.24	N.A	N.A	N.A	46.0	N.A	Vertical	PASS
2405.375	58.67	N.A	N.A	N.A	N.A	N.A	Vertical	N.A
14192.020	40.57	N.A	N.A	74.0	N.A	54.0	Vertical	PASS

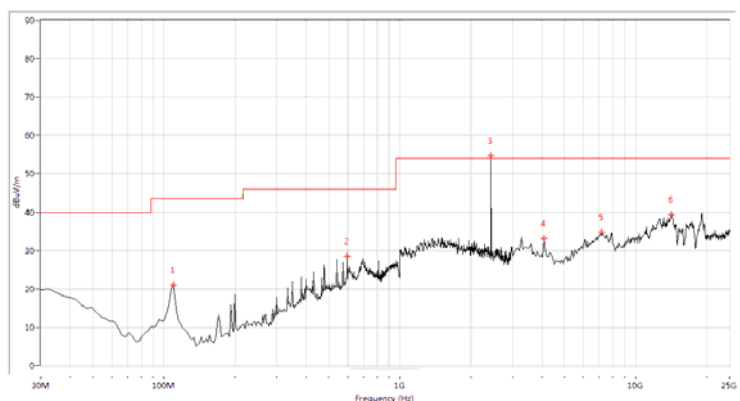
(Antenna Vertical, 30MHz to 25GHz)

Plot for Channel = 18



Fre. (MHz)	Pk	QP	AV	Limit-PK	Limit-QP	Limit-AV	Antenna	Verdict
199.327	34.23	N.A	N.A	N.A	43.5	N.A	Horizontal	PASS
300.923	36.82	N.A	N.A	N.A	46.0	N.A	Horizontal	PASS
574.264	35.21	N.A	N.A	N.A	46.0	N.A	Horizontal	PASS
2440.191	55.22	N.A	N.A	N.A	N.A	N.A	Horizontal	N.A
7334.165	35.43	N.A	N.A	74.0	N.A	54.0	Horizontal	PASS
14137.157	39.57	N.A	N.A	74.0	N.A	54.0	Horizontal	PASS

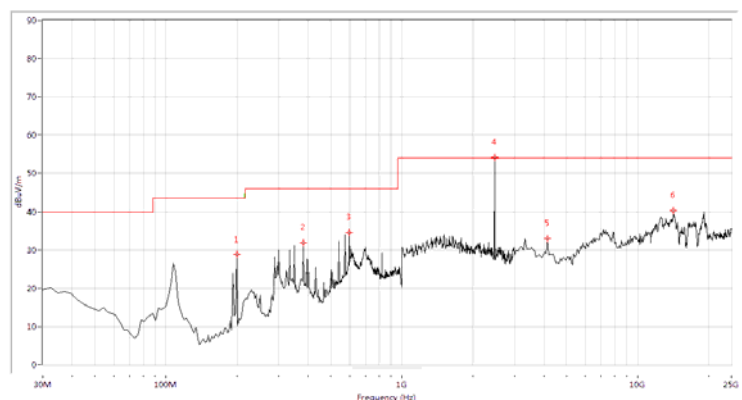
(Antenna Horizontal, 30MHz to 25GHz)



Fre. (MHz)	Pk	QP	AV	Limit-PK	Limit-QP	Limit-AV	Antenna	Verdict
109.825	21.10	N.A	N.A	N.A	43.5	N.A	Vertical	PASS
598.454	28.60	N.A	N.A	N.A	46.0	N.A	Vertical	PASS
2440.191	54.75	N.A	N.A	N.A	N.A	N.A	Vertical	N.A
4097.257	33.08	N.A	N.A	74.0	N.A	54.0	Vertical	PASS
7169.576	34.74	N.A	N.A	74.0	N.A	54.0	Vertical	PASS
14192.020	39.42	N.A	N.A	74.0	N.A	54.0	Vertical	PASS

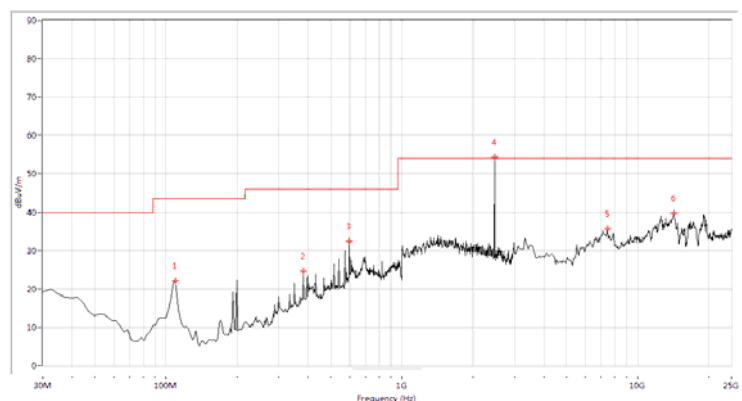
(Antenna Vertical, 30MHz to 25GHz)

Plot for Channel = 36



Fre. (MHz)	Pk	QP	AV	Limit-PK	Limit-QP	Limit-AV	Antenna	Verdict
199.327	28.85	N.A	N.A	N.A	43.5	N.A	Horizontal	PASS
383.167	31.95	N.A	N.A	N.A	46.0	N.A	Horizontal	PASS
598.454	34.56	N.A	N.A	N.A	46.0	N.A	Horizontal	PASS
2477.055	54.26	N.A	N.A	N.A	N.A	N.A	Horizontal	N.A
4152.120	32.98	N.A	N.A	74.0	N.A	54.0	Horizontal	PASS
14192.020	40.27	N.A	N.A	74.0	N.A	54.0	Horizontal	PASS

(Antenna Horizontal, 30MHz to 25GHz)



Fre. (MHz)	Pk	QP	AV	Limit-PK	Limit-QP	Limit-AV	Antenna	Verdict
109.825	22.02	N.A	N.A	N.A	43.5	N.A	Vertical	PASS
383.167	24.52	N.A	N.A	N.A	46.0	N.A	Vertical	PASS
598.454	32.40	N.A	N.A	N.A	46.0	N.A	Vertical	PASS
2477.055	54.29	N.A	N.A	54.0	N.A	54.0	Vertical	N.A
7443.890	35.70	N.A	N.A	54.0	N.A	54.0	Vertical	PASS
14246.883	39.69	N.A	N.A	54.0	N.A	54.0	Vertical	PASS

(Antenna Vertical, 30MHz to 25GHz)

** END OF REPORT **