FCC RADIO TEST REPORT
FCC ID: AMBJN7

Product：	Wireless USB Adapter
Trade Name：	BearExtender
Model Name：	JN7
Serial Model：	NWC2, NW200, NW610, NW614, NWA2, NWB2, NW617, NW618, NWD2
Report No.：	BZT13071814-1ER

Prepared for

BearExtender

1406 Henry Street, Berkeley, California, 94709, USA

Prepared by

BZT Testing Technology Co., Ltd

Add. : 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen P.R. China.

TEST RESULT CERTIFICATION

Applicant's name ..... :	BearExtender
Address ..... :	1406 Henry Street, Berkeley, California, 94709, USA
Manufacture's Name ..... :	HK YUNLINK TECHNOLOGY LTD
Address ..... :	A9 Building, Longwangmiao Industrial Zone, Baishixia East,Fuyong Town, Baoan, Shenzhen Guangdong Province China
Product description	
Product name..... :	Wireless USB Adapter
Model and/or type reference :	JN7
Serial Model ..... :	NWC2, NW200, NW610, NW614, NWA2, NWB2, NW617, NW618, NWD2
DIFF ..... :	All model's the function, software and electric circuit are the same , only with a product color and model named different. Test sample model: JN7
Standards ..... :	FCC Part15.247
Test procedure	ANSI C63.4-2003

This device described above has been tested by BZT, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test ..... :	
Date (s) of performance of tests..... :	18 July. 2013 ~26 July. 2013
Date of Issue..... :	27 July. 2013
Test Result..... :	**Pass**

Testing Engineer **:** Apple Huang

(Apple Huang)

Technical Manager **:** Tom Zhang

(Tom Zhang)

Authorized Signatory **:** Bovey Yang

(Bovey Yang)

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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.247) , Subpart C			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	
15.247 (a)(2)	6dB Bandwidth	PASS	
15.247 (b)	Peak Output Power	PASS	
15.247 (c)	Radiated Spurious Emission	PASS	
15.247 (d)	Power Spectral Density	PASS	
15.205	Band Edge Emission	PASS	
15.203	Antenna Requirement	PASS	

NOTE:

(1)” N/A” denotes test is not applicable in this Test Report

1.1 TEST FACILITY

BZT Testing Technology Co., Ltd
Add.:1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen P.R. China.
FCC Registration No.: 701733

1.2 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** %。

No.	Item	Uncertainty
1	Conducted Emission Test	±1.38dB
2	RF power,conducted	±0.16dB
3	Spurious emissions,conducted	±0.21dB
4	All emissions,radiated(<1G)	±4.68dB
5	All emissions,radiated(>1G)	±4.89dB
6	Temperature	±0.5°C
7	Humidity	±2%

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

<table>
<tr><td>Equipment</td><td>Wireless USB Adapter</td></tr>
<tr><td>Trade Name</td><td>BearExtender</td></tr>
<tr><td>Model Name</td><td>JN7</td></tr>
<tr><td>Serial Model</td><td>NWC2, NW200, NW610, NW614, NWA2, NWB2, NW617, NW618, NWD2</td></tr>
<tr><td>Model Difference</td><td>All model’s the function, software and electric circuit are the same , only with a product color and model named different.
Test sample model: JN7</td></tr>
<tr><td>Product Description</td><td>The EUT is a Wireless USB Adapter
<table>
<tr><td>Operation Frequency:</td><td>802.11b/g/n 20:2412~2462 MHz
802.11n 40: 2422~2452MHz</td></tr>
<tr><td>Modulation Type:</td><td>CCK/OFDM/DBPSK/DAPSK</td></tr>
<tr><td>Bit Rate of Transmitter</td><td>802.11b:11/5.5/2/1 Mbps
802.11g:54/48/36/24/18/12/9/6Mbps
802.11n(20/40MHz):300/150/144.44/130/117/115.56/104/86.67/78/52/6.5 Mbps</td></tr>
<tr><td>Number Of Channel</td><td>802.11b/g/n20: 11CH
802.11n 40: 7CH</td></tr>
<tr><td>Antenna Designation:</td><td>Please see Note 3.</td></tr>
<tr><td>Peak Output Power(Conducted):</td><td>802.11b: 9.31 dBm (Max.)
802.11g: 8.43 dBm (Max.)
802.11n(20MHz): 8.21 dBm (Max.)
802.11n(40MHz): 7.04 dBm (Max.)</td></tr>
<tr><td>Antenna Gain (dBi)</td><td>1.5 dbi</td></tr>
</table>
Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.</td></tr>
<tr><td>Channel List</td><td>Please refer to the Note 2.</td></tr>
<tr><td>Ratings</td><td>DC 5V from PC with AC 120V/60Hz</td></tr>
<tr><td>Adapter</td><td>N/A</td></tr>
<tr><td>Battery</td><td>N/A</td></tr>
<tr><td>Connecting I/O Port(s)</td><td>Please refer to the User's Manual</td></tr>
</table>

Note:

1. For a more detailed features description, please refer to the manufacturer’s specifications or the User's Manual.

2.

Channel List for 802.11b/g/n(20MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452		

Channel List for 802.11n(40MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
03	2422	06	2437	09	2452		
04	2427	07	2442				
05	2432	08	2447				

3.

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
A	N/A	N/A	Reverse SMA connector	N/A	1.5	N/A

2.2 DESCRIPTION OF TEST MODES

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 above was evaluated respectively.

Pretest Mode	Description
Mode 1	802.11b CH1/ CH6/ CH11
Mode 2	802.11g CH1/ CH6/ CH11
Mode 3	802.11n(20)CH1/ CH6/ CH11
Mode 4	802.11n(40) CH3/ CH6/ CH9
Mode 5	Link Mode

For Conducted Emission	
Final Test Mode	Description
Mode 5	Link Mode

For Radiated Emission	
Final Test Mode	Description
Mode 1	802.11b CH1/ CH6/ CH11
Mode 2	802.11g CH1/ CH6/ CH11
Mode 3	802.11n CH1/ CH6/ CH11
Mode 4	802.11n(40) CH3/ CH6/ CH9
Mode 5	Link Mode

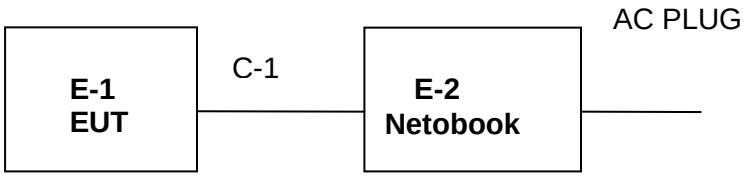
Note:

(1) The measurements are performed at the highest, middle, lowest available channels.

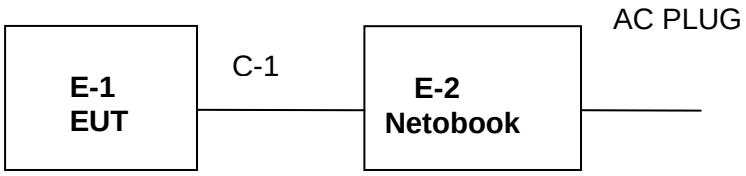
(2) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported

2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Conducted Measurement:



Radiated Measurement:



2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	Wireless USB Adapter	N/A	JN7	N/A	EUT
E-2	Notebook	Acer	455G	N/A	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	1.4m	Usb cable
		NO		

Note:

(1) The support equipment was authorized by Declaration of Confirmation.
(2) For detachable type I/O cable should be specified the length in cm in『Length』column.

2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	Agilent	E4407B	160400005	Jul. 06. 2014
2	Test Receiver	R&S	ESPI	101318	Jul. 06. 2014
3	Bilog Antenna	TESEQ	CBL6111D	31216	Jul. 06. 2014
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264416	Jul. 06. 2014
5	Spectrum Analyzer	ADVANTEST	R3132	150900201	Jul. 06. 2014
6	Horn Antenna	EM	EM-AH-10180	2011071402	Jul. 06. 2014
7	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	Jul. 06. 2014
8	Amplifier	EM	EM-30180	060538	Jul. 06. 2014
9	Loop Antenna	ARA	PLA-1030/B	1029	Jul. 06. 2014
10	Power Meter	R&S	NRVS	100696	Jul. 06. 2014
11	Power Sensor (Peak)	R&S	NRV-Z31	0396.0101.19	Jul. 06., 2014

Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Test Receiver	R&S	ESCI	101160	Jul. 06. 2014
2	LISN	R&S	ENV216	101313	Jul. 06. 2014
3	LISN	EMCO	3816/2	00042990	Jul. 06. 2014
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	Jul. 06. 2014
5	Passive Voltage Probe	R&S	ESH2-Z3	100196	Jul. 06. 2014
6	Absorbing clamp	R&S	MOS-21	100423	Jul. 06. 2014

3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)		Standard
	Quasi-peak	Average	Quasi-peak	Average	
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	73.00	60.00	56.00	46.00	CISPR
5.0 -30.0	73.00	60.00	60.00	50.00	CISPR

0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	73.00	60.00	56.00	46.00	FCC
5.0 -30.0	73.00	60.00	60.00	50.00	FCC

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

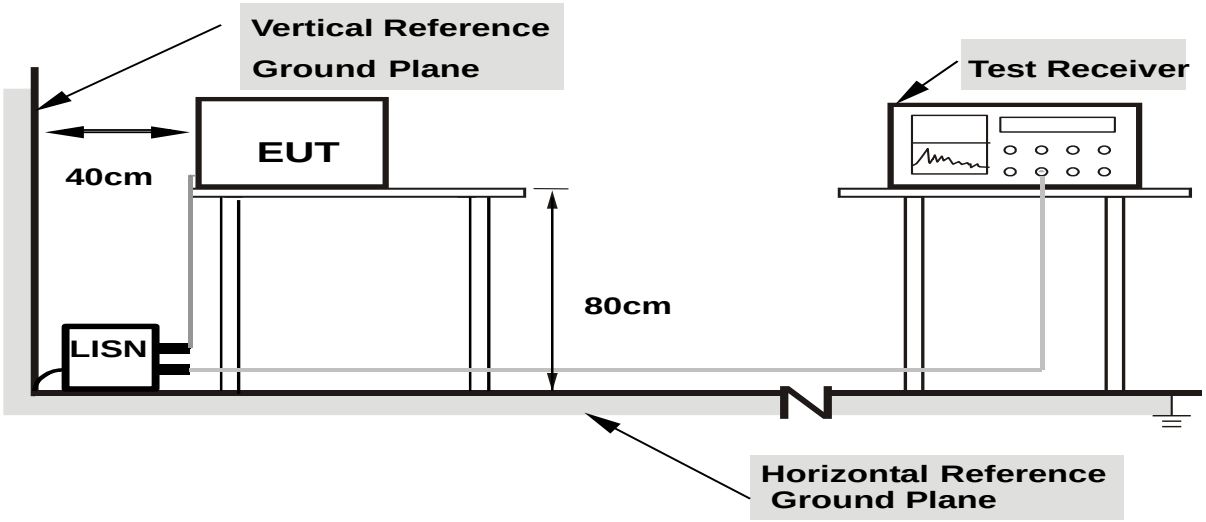
3.1.2 TEST PROCEDURE

a. The EUT was placed 0.4 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.
b. 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.
c. 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.
d. LISN at least 80 cm from nearest part of EUT chassis.
e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 DEVIATION FROM TEST STANDARD

No deviation

3.1.4 TEST SETUP



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

3.1.5 EUT OPERATING CONDITIONS

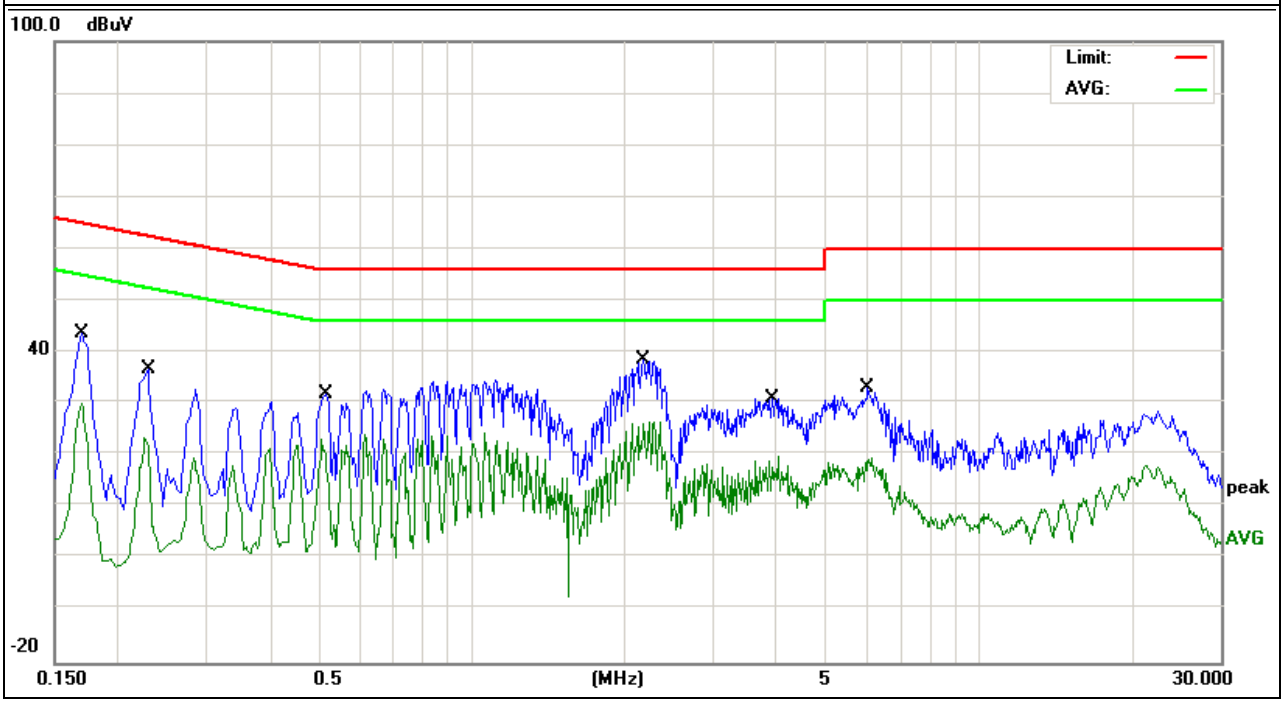
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

3.1.6 TEST RESULTS

EUT：	Wireless USB Adapter	Model Name. ：	JN7
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Phase：	L
Test Voltage ：	DC 5 V from PC with AC 120V/60Hz	Test Mode：	Mode 5

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
0.17	32.22	11.41	43.63	64.96	-21.33	QP
0.17	18.4	11.41	29.81	54.96	-25.15	AVG
0.23	25.81	11.02	36.83	62.45	-25.62	QP
0.23	12.35	11.02	23.37	52.45	-29.08	AVG
0.518	21.04	10.58	31.62	56	-24.38	QP
0.518	12.53	10.58	23.11	46	-22.89	AVG
2.186	28.21	10.52	38.73	56	-17.27	QP
2.186	15.86	10.52	26.38	46	-19.62	AVG
3.918	20.34	10.59	30.93	56	-25.07	QP
3.918	9.02	10.59	19.61	46	-26.39	AVG
6.0339	22.2	10.69	32.89	60	-27.11	QP
6.0339	8.88	10.69	19.57	50	-30.43	AVG

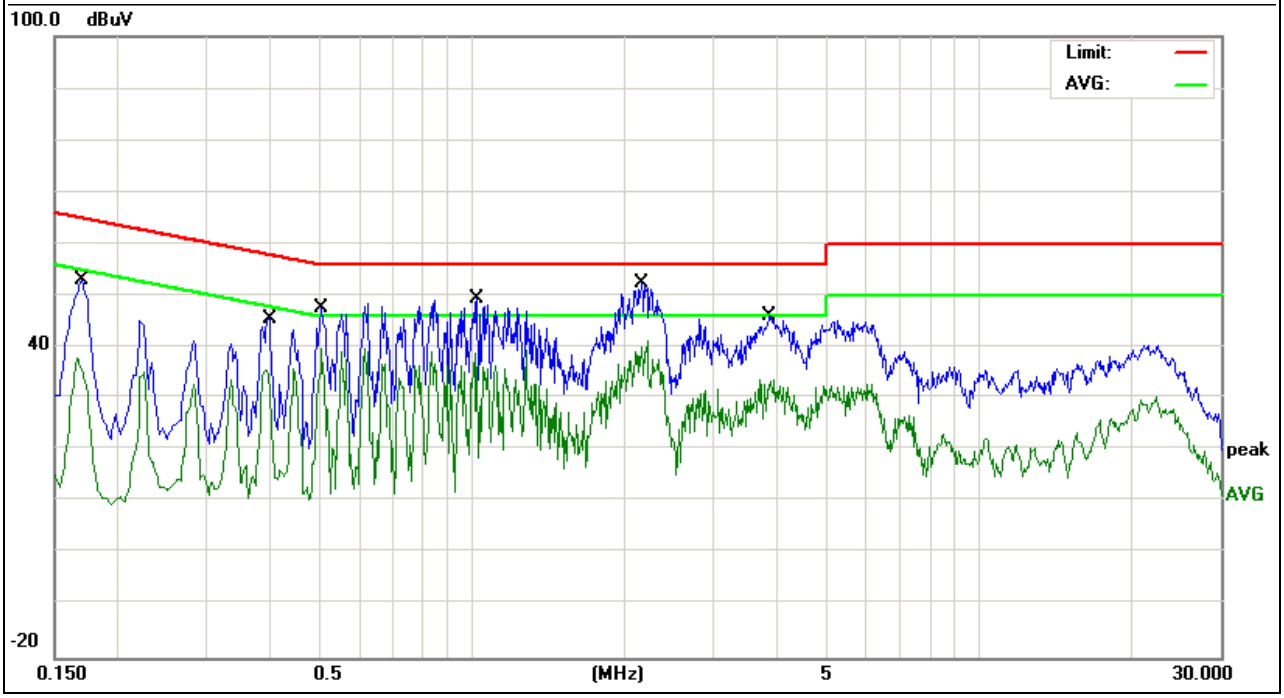
Remark:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	Wireless USB Adapter	Model Name. ：	JN7
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Phase：	N
Test Voltage ：	DC 5 V from PC with AC 120V/60Hz	Test Mode：	Mode 5

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
0.17	41.78	11.41	53.19	64.96	-11.77	QP
0.17	26.68	11.41	38.09	54.96	-16.87	AVG
0.398	34.92	10.69	45.61	57.89	-12.28	QP
0.398	24.9	10.69	35.59	47.89	-12.3	AVG
0.506	37	10.58	47.58	56	-8.42	QP
0.506	29.35	10.58	39.93	46	-6.07	AVG
1.026	38.87	10.52	49.39	56	-6.61	QP
1.026	28.33	10.52	38.85	46	-7.15	AVG
2.166	41.83	10.52	52.35	56	-3.65	QP
2.166	30.71	10.52	41.23	46	-4.77	AVG
3.866	35.56	10.59	46.15	56	-9.85	QP
3.866	22.97	10.59	33.56	46	-12.44	AVG

Remark:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	Class A (dBuV/m) (at 3M)		Class B (dBuV/m) (at 3M)	
	PEAK	AVERAGE	PEAK	AVERAGE
Above 1000	80	60	74	54

Notes:

(1) The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / *10Hz* for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.2.2 TEST PROCEDURE

a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. 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.
e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

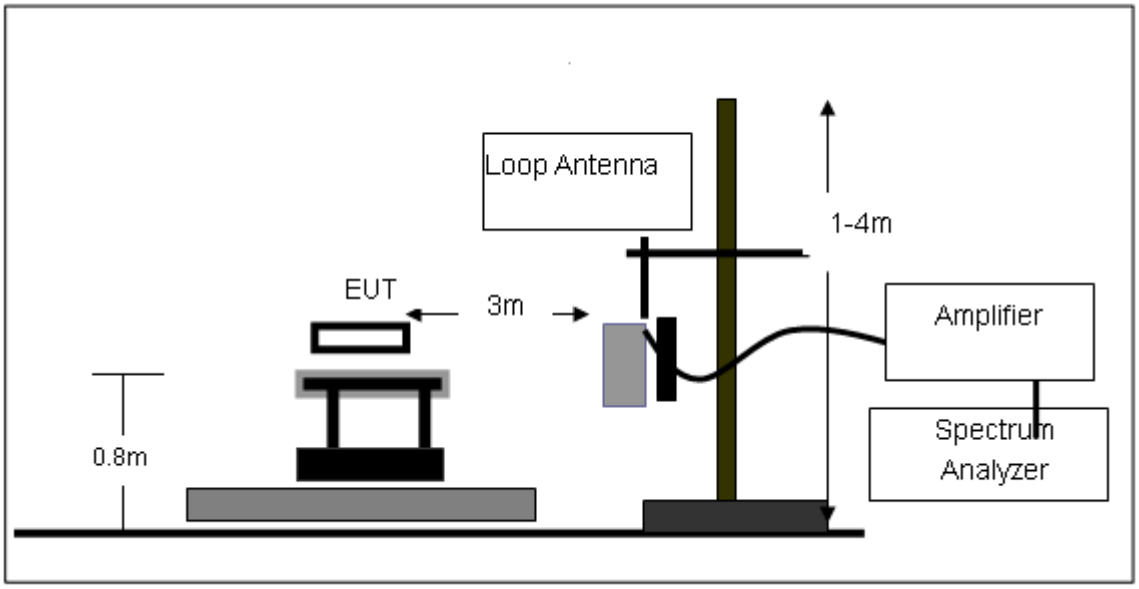
Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

3.2.3 DEVIATION FROM TEST STANDARD

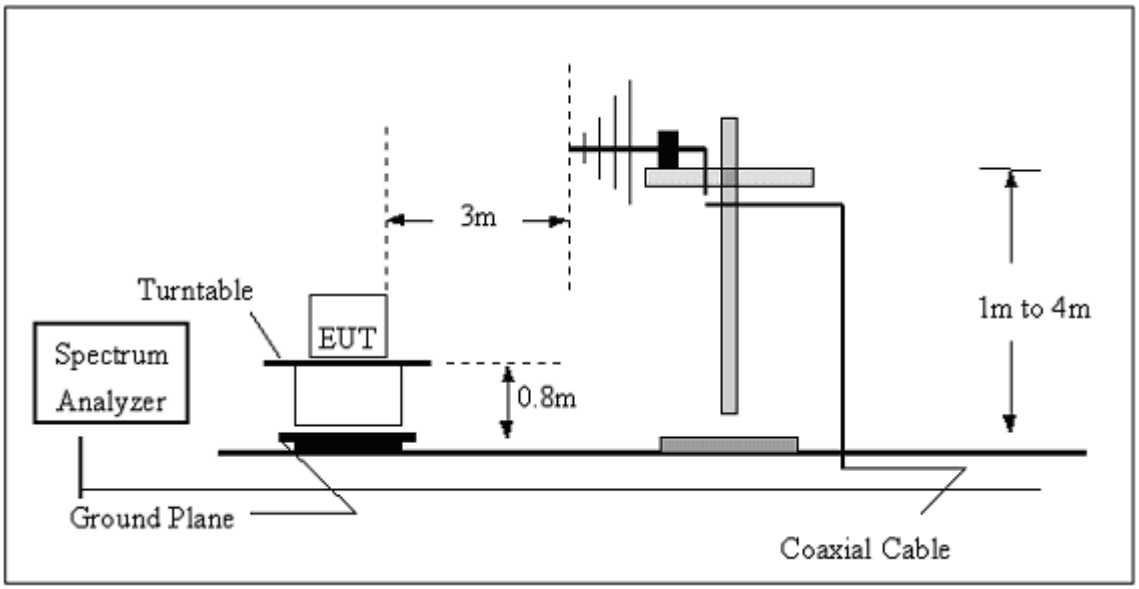
No deviation

3.2.4 TEST SETUP

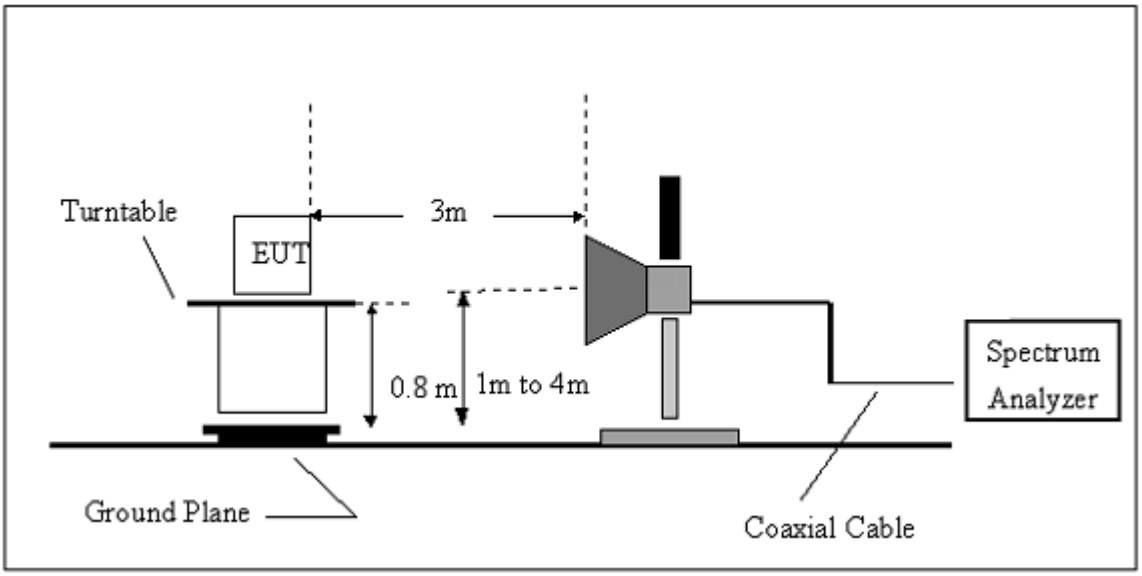
（A）Radiated Emission Test-Up Frequency Below 30MHz



（B）Radiated Emission Test-Up Frequency 30MHz~1GHz



（C）Radiated Emission Test-Up Frequency Above 1GHz



3.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

3.2.6 TEST RESULTS (BETWEEN 9KHZ – 30 MHZ)

EUT：	Wireless USB Adapter	Model Name. ：	JN7
Temperature：	20 ℃	Relative Humidtity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	Link mode	Polarization :	--

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

NOTE:

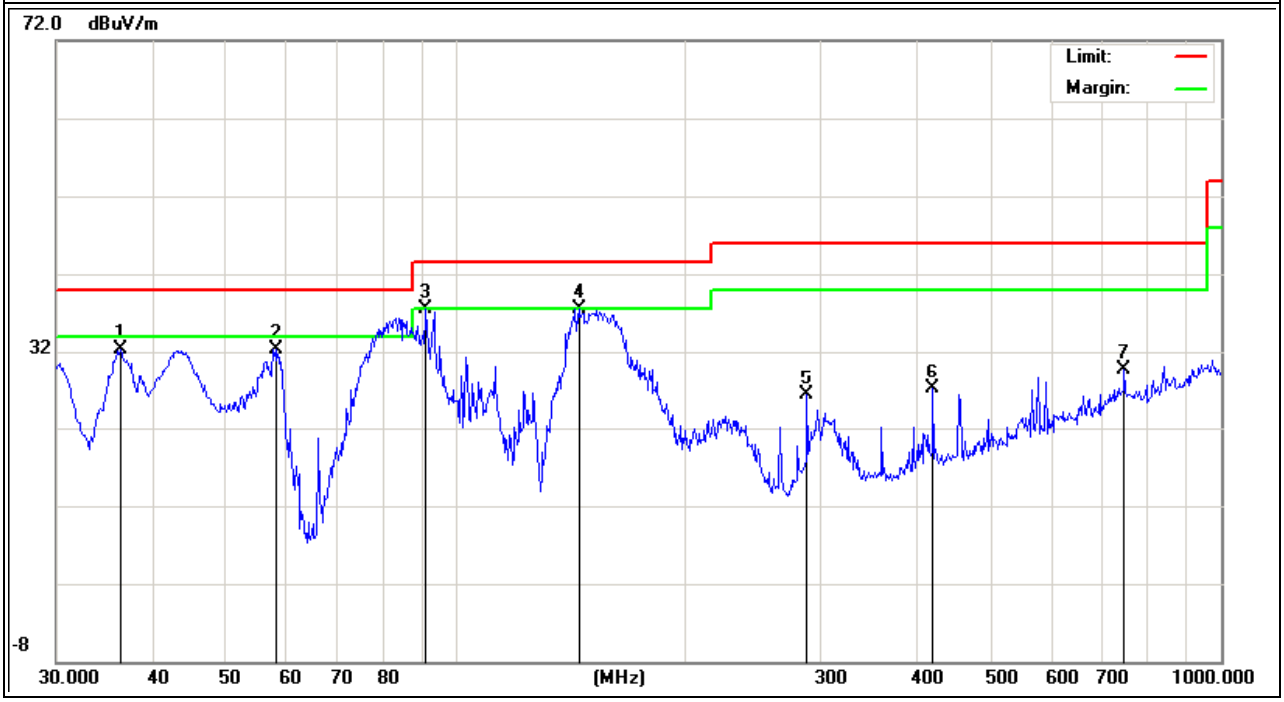
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
Distance extrapolation factor =40 log (specific distance/test distance)(dB);
Limit line = specific limits(dBuv) + distance extrapolation factor.

3.2.7 TEST RESULTS (BETWEEN 30MHZ – 1GHZ)

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	Link mode	Polarization：	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
36.3813	17.11	15.19	32.3	40	-7.7	QP
58.203	26.74	5.56	32.3	40	-7.7	QP
91.1744	27.86	9.63	37.49	43.5	-6.01	QP
144.3348	25.5	12.04	37.54	43.5	-5.96	QP
287.9904	12.07	14.3	26.37	46	-19.63	QP
420.5803	8.08	19.02	27.1	46	-18.9	QP
747.4825	3.38	26.42	29.8	46	-16.2	QP

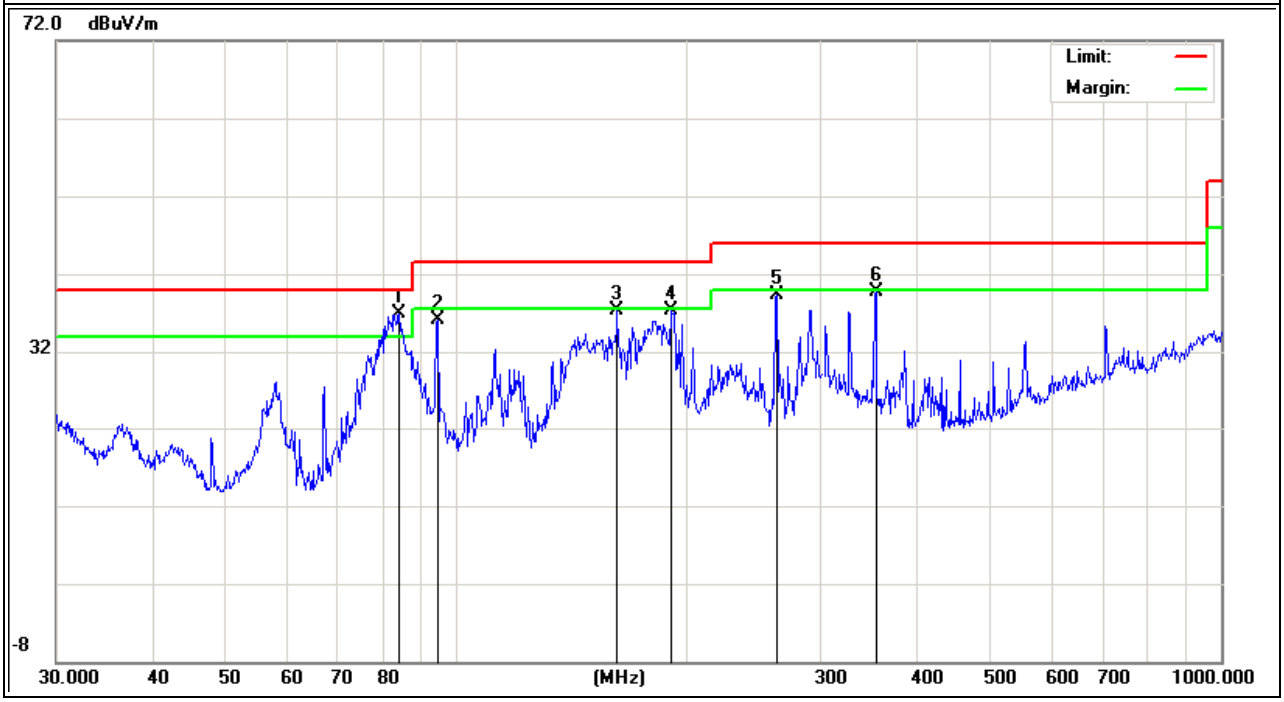
Remark:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	Link mode	Polarization：	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
84.1098	28.41	8.53	36.94	40	-3.06	QP
94.4282	26.01	10.09	36.1	43.5	-7.4	QP
162.0414	26.48	10.92	37.4	43.5	-6.1	QP
191.745	28.33	8.99	37.32	43.5	-6.18	QP
262.8955	24.61	14.69	39.3	46	-6.7	QP
354.1831	23.31	16.39	39.7	46	-6.3	QP

Remark:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.



3.2.8 TEST RESULTS (ABOVE 1000 MHZ)

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH1 (802.11b Mode)/2412	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4824.15	43.18	10.44	53.62	74	-20.38	peak
4824.15	31.15	10.44	41.59	54	-12.41	AVG
7236.149	38.94	12.39	51.33	74	-22.67	peak
7236.149	29.02	12.39	41.41	54	-12.59	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH1 (802.11b Mode)/2412	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874.145	43.97	10.4	54.37	74	-19.63	peak
4874.145	32.03	10.4	42.43	54	-11.57	AVG
7311.163	41.27	12.75	54.02	74	-19.98	peak
7311.163	28.96	12.75	41.71	54	-12.29	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH6 (802.11b Mode)/2437	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874.159	42.84	10.4	53.24	74	-20.76	peak
4874.159	32.12	10.4	42.52	54	-11.48	AVG
7311.136	38.52	12.75	51.27	74	-22.73	peak
7311.136	27.31	12.75	40.06	54	-13.94	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH6 (802.11b Mode)/2437	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924.146	41.74	10.39	52.13	74	-21.87	peak
4934.146	30.98	10.44	41.42	54	-12.58	AVG
7386.143	40.48	12.68	53.16	74	-20.84	peak
7386.143	27.67	12.68	40.35	54	-13.65	AVG
Remark: 1. Factor = Antenna Factor + Cable Loss – Pre-amplifier. 2. No emission detected above 18GHz						

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH11 (802.11b Mode)/2462	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924.145	42.04	10.39	52.43	74	-21.57	peak
4924.145	33.32	10.39	43.71	54	-10.29	AVG
7386.142	37.8	12.68	50.48	74	-23.52	peak
7386.142	28.66	12.68	41.34	54	-12.66	AVG

Remark:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. No emission detected above 18GHz

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH11 (802.11b Mode)/2462	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924.122	44.14	10.39	54.53	74	-19.47	peak
4924.122	31.68	10.39	42.07	54	-11.93	AVG
7386.143	40.58	12.68	53.26	74	-20.74	peak
7386.143	28.91	12.68	41.59	54	-12.41	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH1 (802.11g Mode)/2412	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4824.17	43.8	10.44	54.24	74	-19.76	peak
4824.17	31.7	10.44	42.14	54	-11.86	AVG
7236.224	40.03	12.39	52.42	74	-21.58	peak
7236.224	27.87	12.39	40.26	54	-13.74	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH1 (802.11g Mode)/2412	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4824.155	43.13	10.44	53.57	74	-20.43	peak
4824.155	31.99	10.44	42.43	54	-11.57	AVG
7236.142	38.67	12.39	51.06	74	-22.94	peak
7236.142	28.93	12.39	41.32	54	-12.68	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH6 (802.11g Mode)/2437	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874.14	44.25	10.4	54.65	74	-19.35	peak
4874.14	31.76	10.4	42.16	54	-11.84	AVG
7311.17	40.49	12.75	53.24	74	-20.76	peak
7311.17	27.56	12.75	40.31	54	-13.69	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH6 (802.11g Mode)/2437	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874.158	43.86	10.4	54.26	74	-19.74	peak
4874.158	31.32	10.4	41.72	54	-12.28	AVG
7311.137	39.6	12.75	52.35	74	-21.65	peak
7311.137	28.08	12.75	40.83	54	-13.17	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH11 (802.11g Mode)/2462	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924.138	40.65	10.39	51.04	74	-22.96	peak
4924.138	31.23	10.39	41.62	54	-12.38	AVG
7386.149	35.59	12.68	48.27	74	-25.73	peak
7386.149	27.38	12.68	40.06	54	-13.94	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH11(802.11g Mode)/2462	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924.148	43.76	10.39	54.15	74	-19.85	peak
4924.148	31.17	10.39	41.56	54	-12.44	AVG
7386.13	41.56	12.68	54.24	74	-19.76	peak
7386.13	29.94	12.68	42.62	54	-11.38	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH1(802.11n Mode)/20MHz	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4824.14	45.54	10.44	55.98	74	-18.02	peak
4824.14	33.82	10.44	44.26	54	-9.74	AVG
7236.122	41.22	12.39	53.61	74	-20.39	peak
7236.122	30.04	12.39	42.43	54	-11.57	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH1(802.11n Mode)/20MHz	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4824.141	43.83	10.44	54.27	74	-19.73	peak
4824.141	31.29	10.44	41.73	54	-12.27	AVG
7236.145	41.13	12.39	53.52	74	-20.48	peak
7236.145	29.72	12.39	42.11	54	-11.89	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH6(802.11n Mode)/20MHz	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874.16	43.77	10.4	54.17	74	-19.83	peak
4874.16	31.02	10.4	41.42	54	-12.58	AVG
7311.128	40.53	12.75	53.28	74	-20.72	peak
7311.128	29.56	12.75	42.31	54	-11.69	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH6(802.11n Mode)/20MHz	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874.161	43.46	10.4	53.86	74	-20.14	peak
4874.161	31.07	10.4	41.47	54	-12.53	AVG
7311.166	39.61	12.75	52.36	74	-21.64	peak
7311.166	29.36	12.75	42.11	54	-11.89	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH11(802.11n Mode)/20MHz	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924.14	39.89	10.39	50.28	74	-23.72	peak
4924.14	30.03	10.39	40.42	54	-13.58	AVG
7386.183	36.64	12.68	49.32	74	-24.68	peak
7386.183	26.75	12.68	39.43	54	-14.57	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH11(802.11n Mode)/20MHz	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924.15	43.05	10.39	53.44	74	-20.56	peak
4924.15	31.15	10.39	41.54	54	-12.46	AVG
7386.167	41.43	12.68	54.11	74	-19.89	peak
7386.167	28.89	12.68	41.57	54	-12.43	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH3(802.11n Mode)/40MHz	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4844.156	43.33	10.5	53.83	74	-20.17	peak
4844.156	31.16	10.5	41.66	54	-12.34	AVG
7266.319	41.76	12.5	54.26	74	-19.74	peak
7266.319	29.92	12.5	42.42	54	-11.58	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH3(802.11n Mode)/40MHz	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4844.325	43.64	10.5	54.14	74	-19.86	peak
4844.325	30.76	10.5	41.26	54	-12.74	AVG
7266.258	41.25	12.5	53.75	74	-20.25	peak
7266.258	29.67	12.5	42.17	54	-11.83	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH6(802.11n Mode)/40MHz	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874.238	43.92	10.4	54.32	74	-19.68	peak
4874.238	31.19	10.4	41.59	54	-12.41	AVG
7311.159	38.72	12.75	51.47	74	-22.53	peak
7311.159	29.41	12.75	42.16	54	-11.84	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH6(802.11n Mode)/40MHz	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874.535	43.86	10.4	54.26	74	-19.74	peak
4874.535	31.96	10.4	42.36	54	-11.64	AVG
7311.633	40.47	12.75	53.22	74	-20.78	peak
7311.633	29.41	12.75	42.16	54	-11.84	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH9(802.11n Mode)/40MHz	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4904.345	44.26	10.29	54.55	74	-19.45	peak
4904.345	32.24	10.29	42.53	54	-11.47	AVG
7356.247	39.59	12.79	52.38	74	-21.62	peak
7356.247	29.14	12.79	41.93	54	-12.07	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

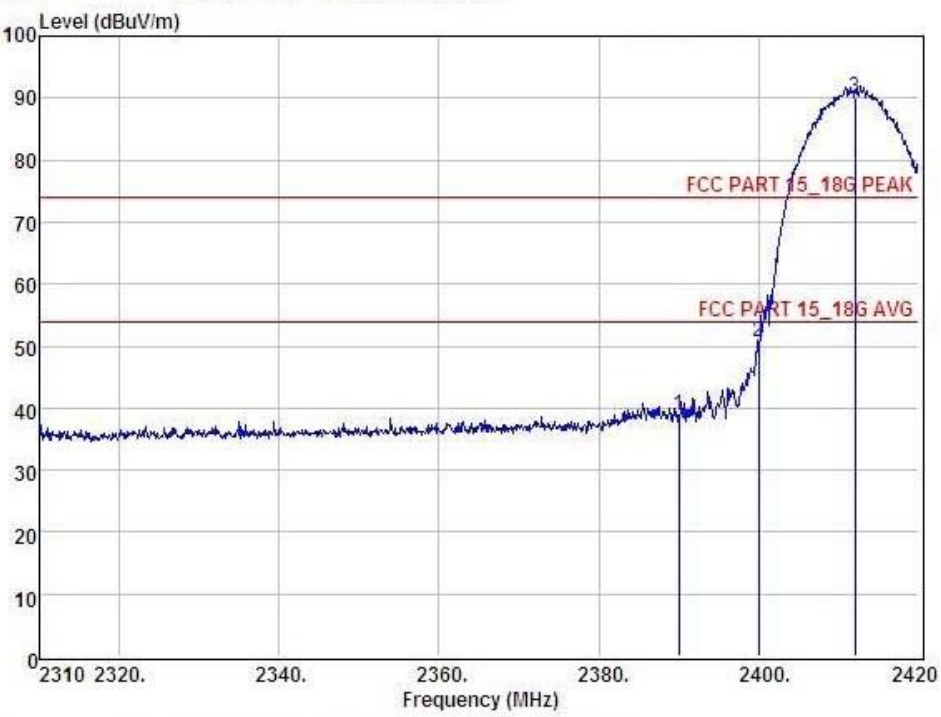
EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH9(802.11n Mode)/40MHz	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4904.16	44.18	10.29	54.47	74	-19.53	peak
4904.16	32.35	10.29	42.64	54	-11.36	AVG
7356.423	39.48	12.79	52.27	74	-21.73	peak
7356.423	28.64	12.79	41.43	54	-12.57	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

3.2.9 TEST RESULTS (RESTRICTED BANDS REQUIREMENTS)

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH1(802.11b Mode)	Polarization :	Horizontal

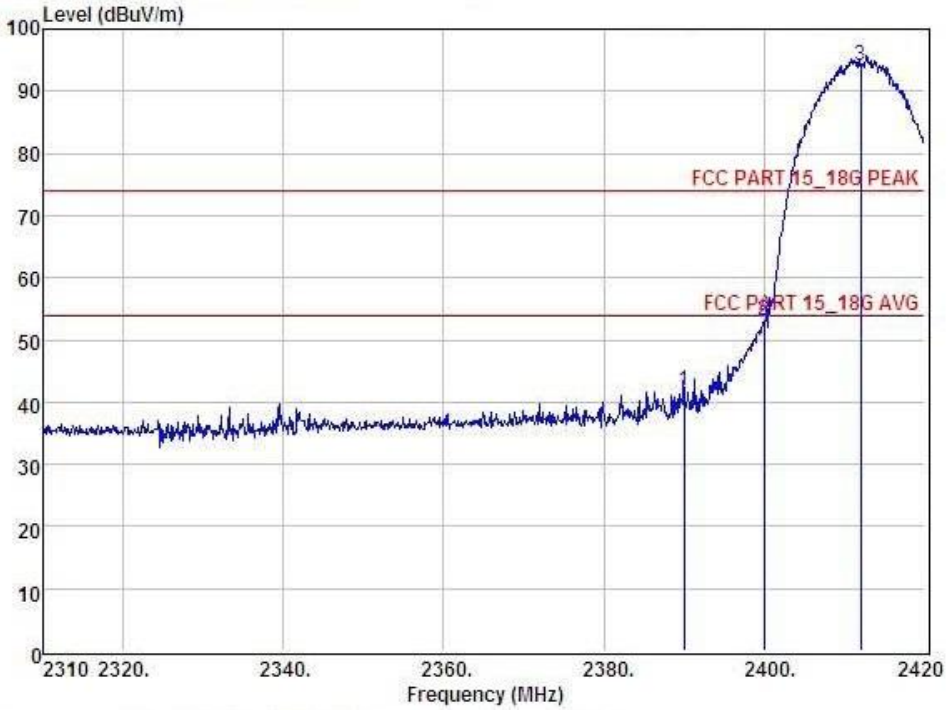


Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390.00	42.24	27.62	34.97	3.92	38.81	74.00	-35.19	Peak
2	2400.00	54.13	27.62	34.97	3.94	50.72	74.00	-23.28	Peak
3	2412.00	93.49	27.61	34.97	3.95	90.08	74.00	16.08	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH1(802.11b Mode)	Polarization :	Vertical

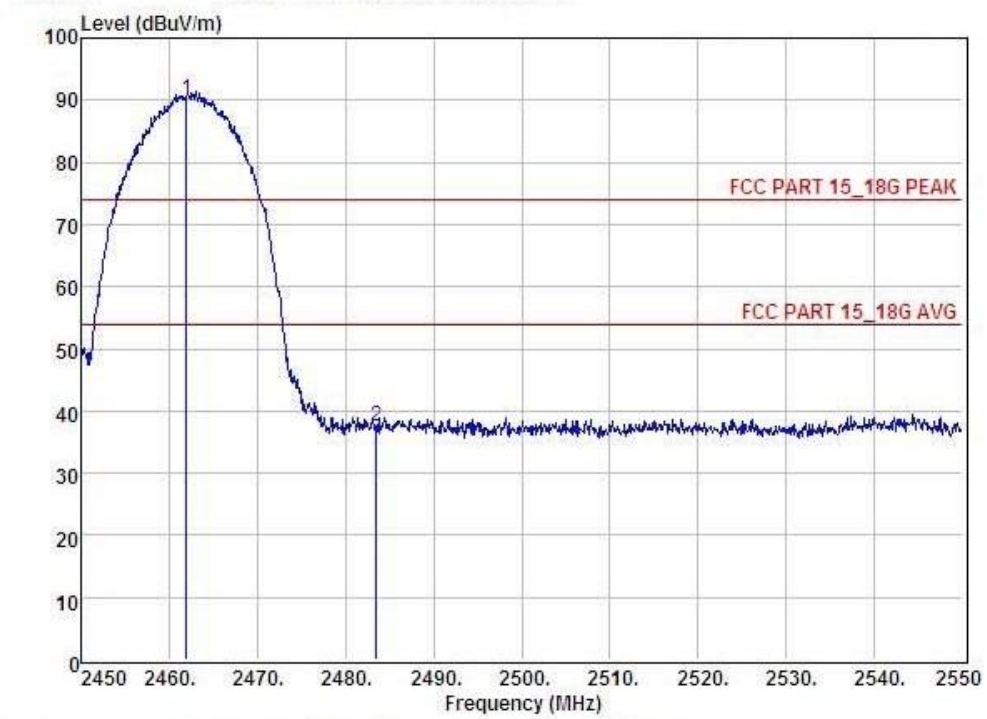


Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390.00	45.21	27.62	34.97	3.92	41.78	74.00	-32.22	Peak
2	2400.00	56.52	27.62	34.97	3.94	53.11	74.00	-20.89	Peak
3	2412.00	97.48	27.61	34.97	3.95	94.07	74.00	20.07	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH11(802.11b Mode)	Polarization :	Horizontal

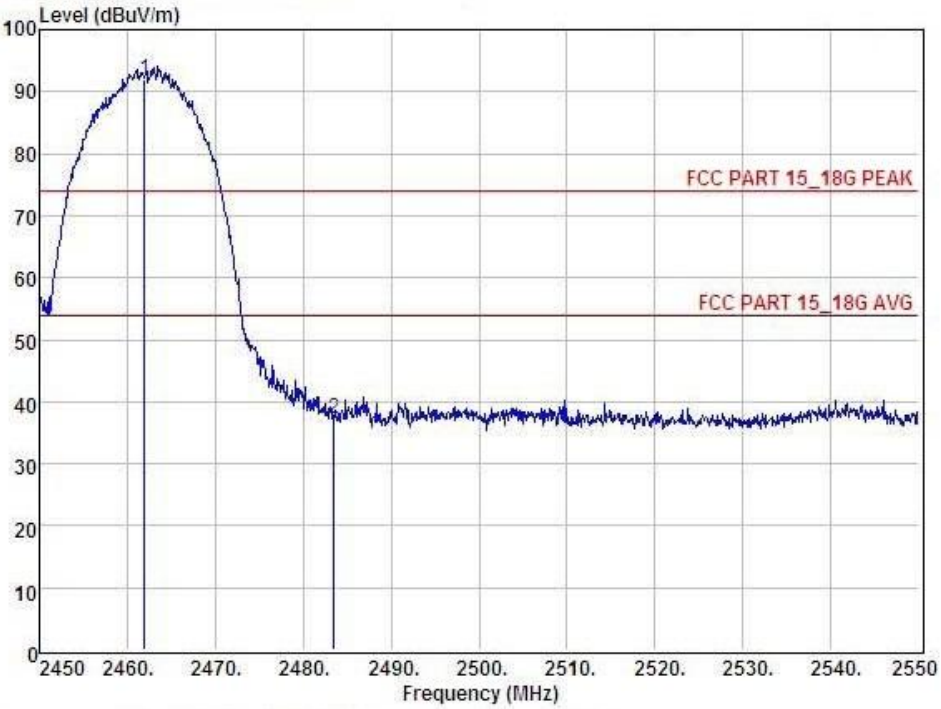


Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2462.00	93.43	27.59	34.97	3.98	90.03	74.00	16.03	Peak
2	2483.50	40.79	27.59	34.97	4.00	37.41	74.00	-36.59	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH11(802.11b Mode)	Polarization :	Vertical

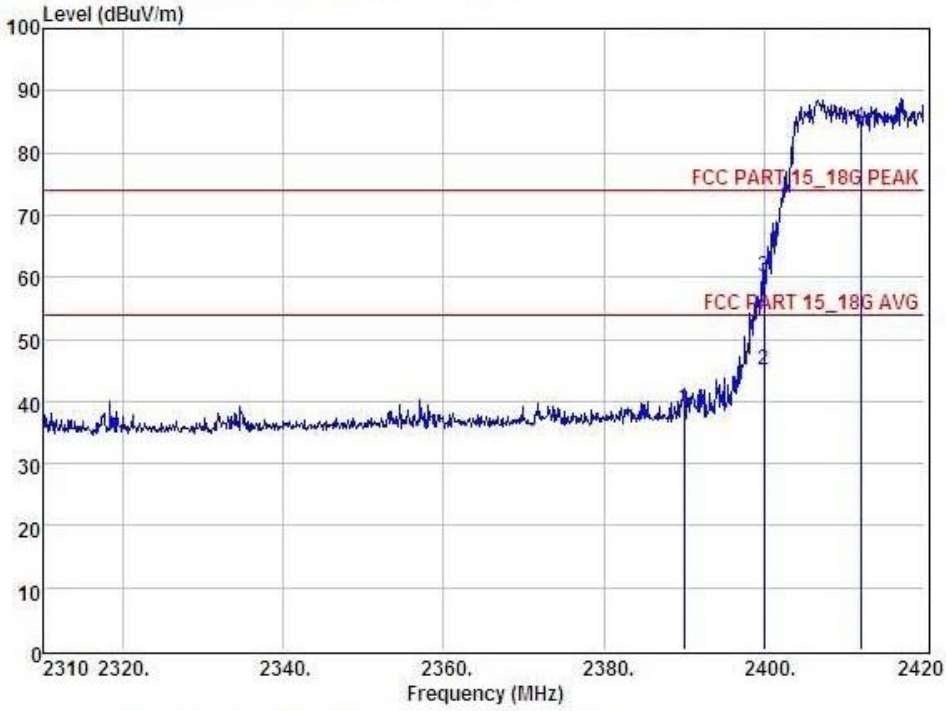


Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2462.00	95.47	27.59	34.97	3.98	92.07	74.00	18.07	Peak
2	2483.50	40.73	27.59	34.97	4.00	37.35	74.00	-36.65	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH1(802.11g Mode)	Polarization :	Horizontal

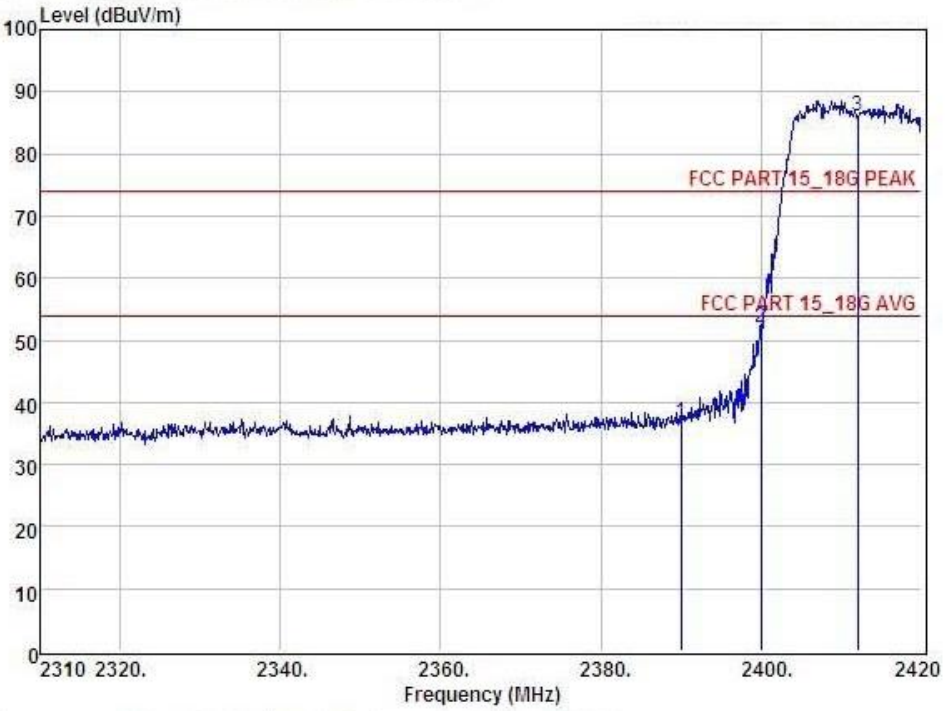


Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390.00	42.28	27.62	34.97	3.92	38.85	74.00	-35.15	Peak
2	2400.00	48.39	27.62	34.97	3.94	44.98	54.00	-9.02	Average
3	2400.00	63.48	27.62	34.97	3.94	60.07	74.00	-13.93	Peak
4	2412.00	87.48	27.61	34.97	3.95	84.07	74.00	10.07	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH1(802.11gMode)	Polarization :	Vertical

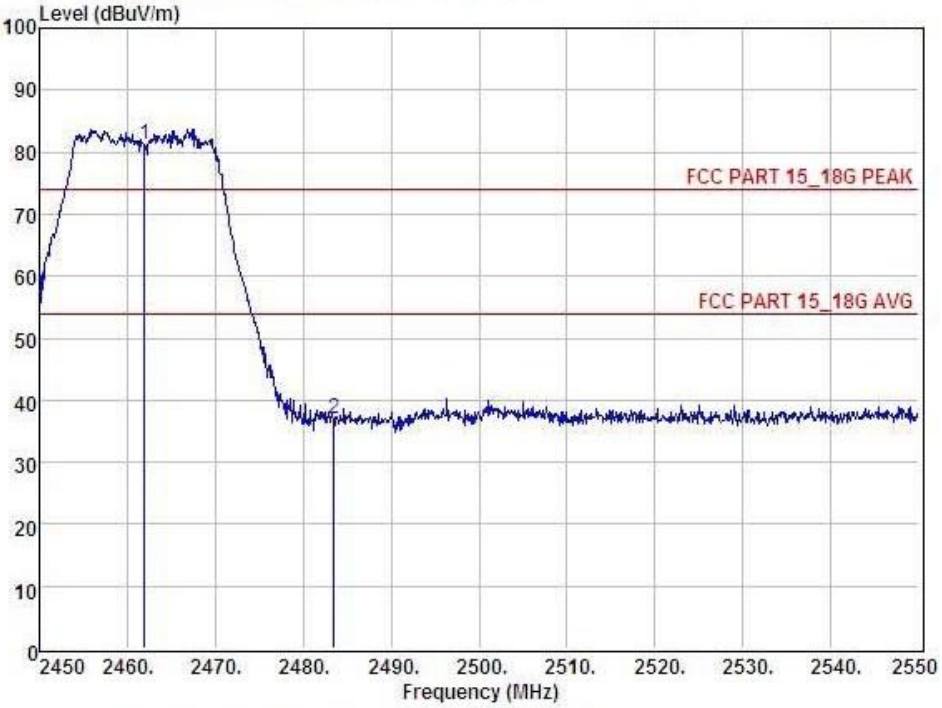


Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390.00	40.18	27.62	34.97	3.92	36.75	74.00	-37.25	Peak
2	2400.00	55.43	27.62	34.97	3.94	52.02	74.00	-21.98	Peak
3	2412.00	89.45	27.61	34.97	3.95	86.04	74.00	12.04	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH11(802.11g Mode)	Polarization :	Horizontal

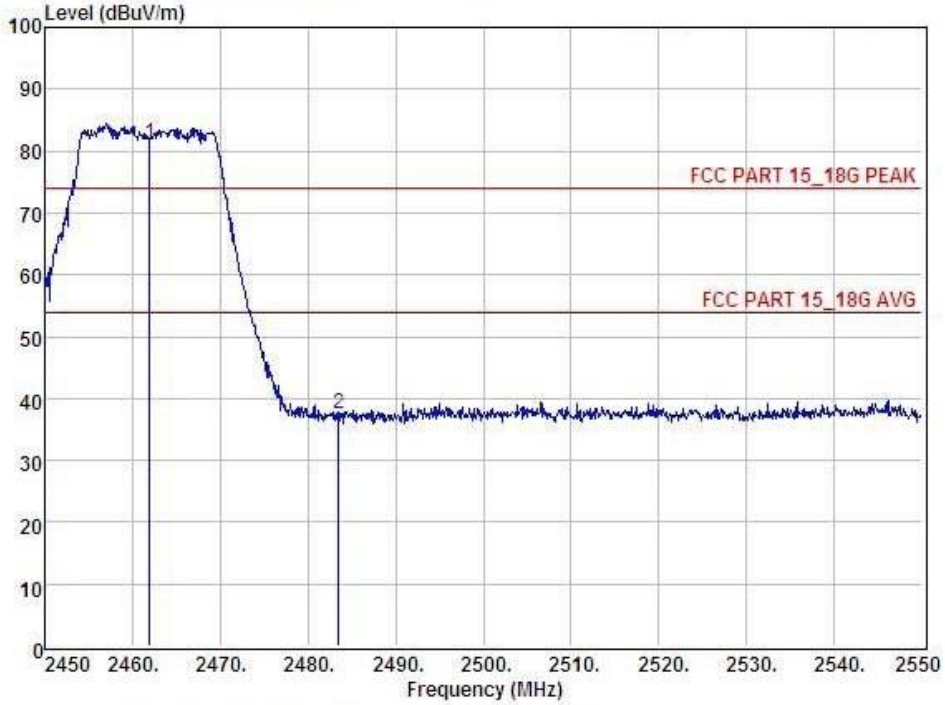


Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2462.00	84.68	27.59	34.97	3.98	81.28	74.00	7.28	Peak
2	2483.50	40.31	27.59	34.97	4.00	36.93	74.00	-37.07	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH11(802.11g Mode)	Polarization :	Vertical

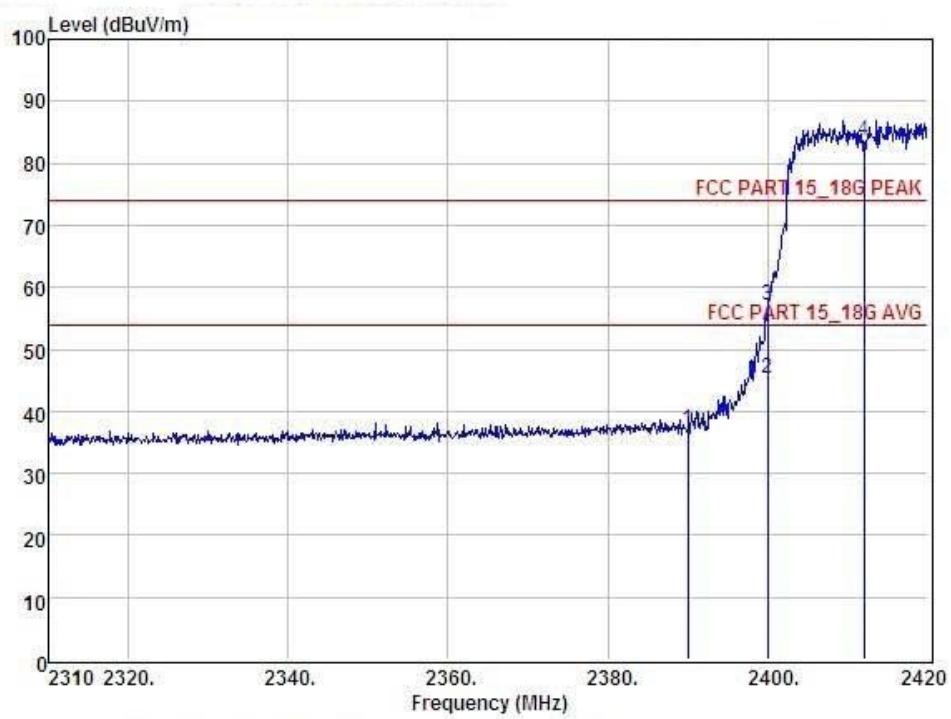


Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2462.00	84.54	27.59	34.97	3.98	81.14	74.00	7.14	Peak
2	2483.50	41.05	27.59	34.97	4.00	37.67	74.00	-36.33	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH1(802.11n Mode)/20MHz	Polarization :	Horizontal

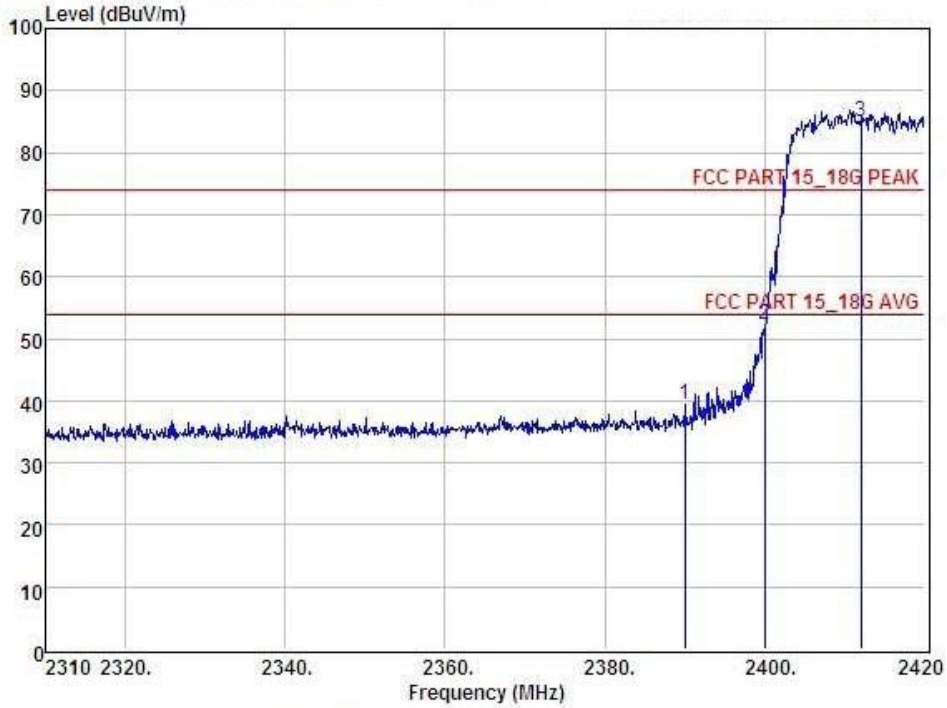


Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390.00	40.47	27.62	34.97	3.92	37.04	74.00	-36.96	Peak
2	2400.00	48.66	27.62	34.97	3.94	45.25	54.00	-8.75	Average
3	2400.00	60.60	27.62	34.97	3.94	57.19	74.00	-16.81	Peak
4	2412.00	86.96	27.61	34.97	3.95	83.55	74.00	9.55	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH1(802.11n Mode)/20M	Polarization :	Vertical

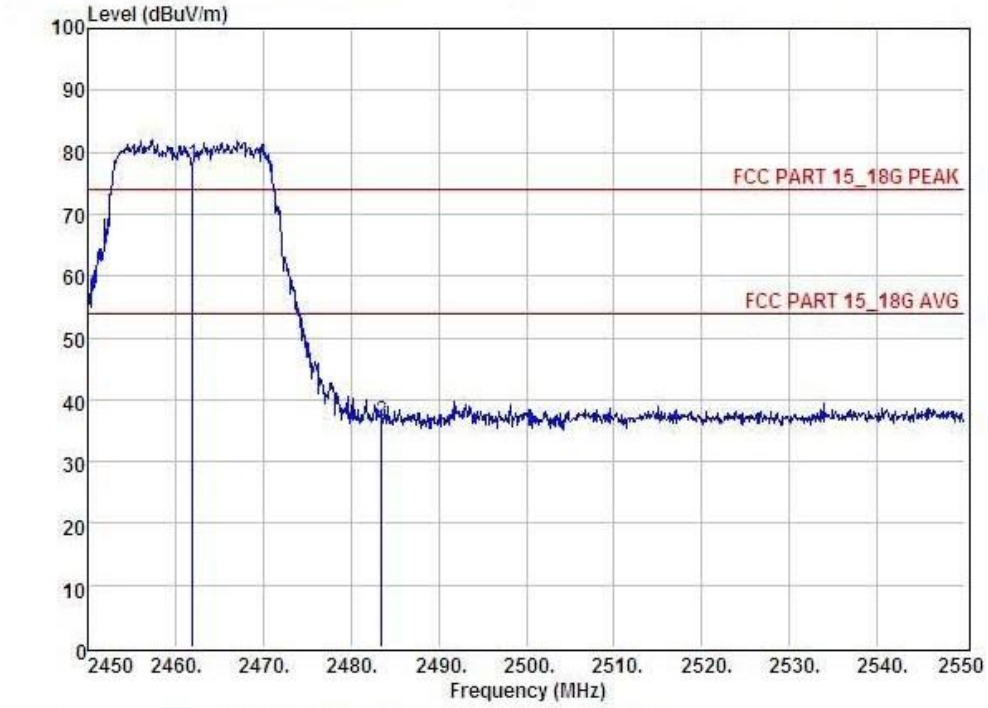


Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390.00	42.82	27.62	34.97	3.92	39.39	74.00	-34.61	Peak
2	2400.00	55.66	27.62	34.97	3.94	52.25	74.00	-21.75	Peak
3	2412.00	88.32	27.61	34.97	3.95	84.91	74.00	10.91	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH11(802.11n Mode)/20MHz	Polarization :	Horizontal

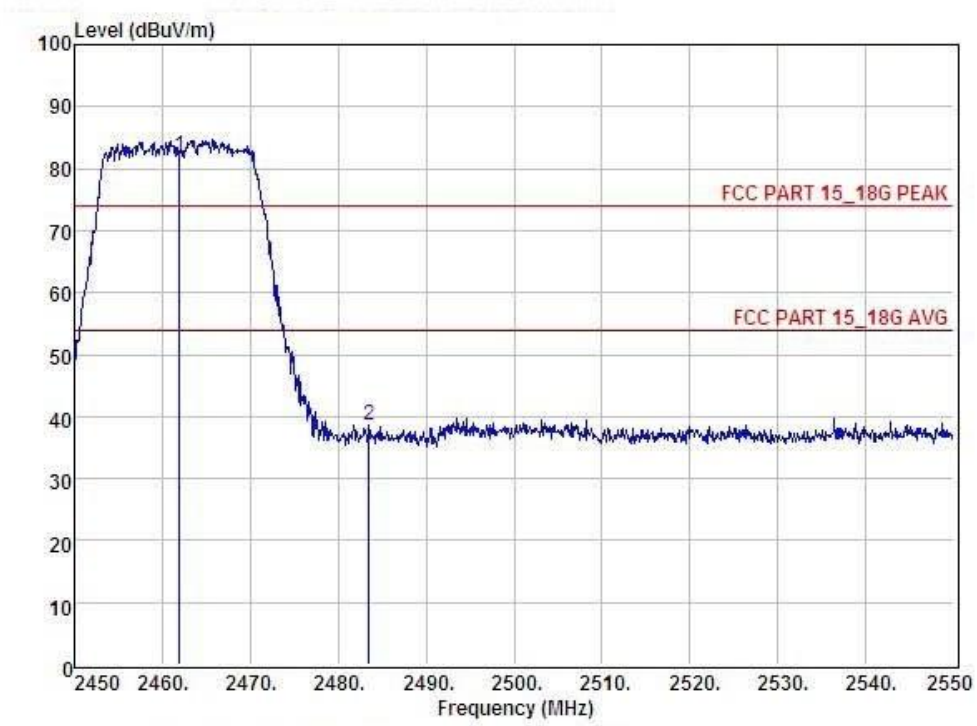


Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2462.00	81.47	27.59	34.97	3.98	78.07	74.00	4.07	Peak
2	2483.50	39.90	27.59	34.97	4.00	36.52	74.00	-37.48	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH11(802.11n Mode)/20MHz	Polarization :	Vertical

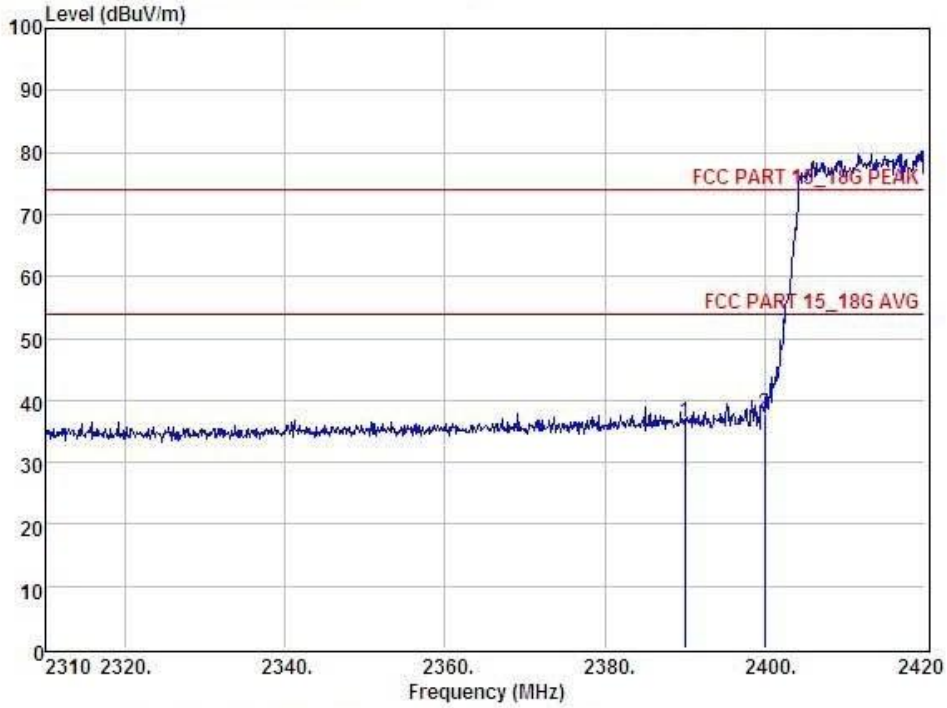


Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2462.00	85.49	27.59	34.97	3.98	82.09	74.00	8.09	Peak
2	2483.50	42.05	27.59	34.97	4.00	38.67	74.00	-35.33	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH3(802.11n Mode)/40M	Polarization :	Horizontal

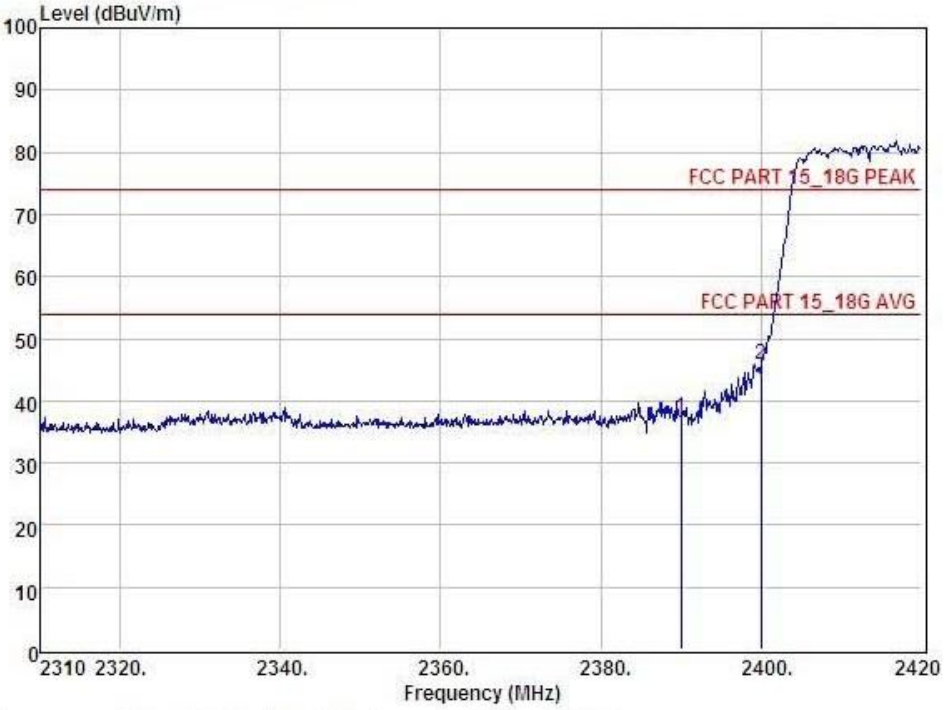


Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390.00	39.88	27.62	34.97	3.92	36.45	74.00	-37.55	Peak
2	2400.00	41.33	27.62	34.97	3.94	37.92	74.00	-36.08	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH3(802.11n Mode)/40MHz	Polarization :	Vertical

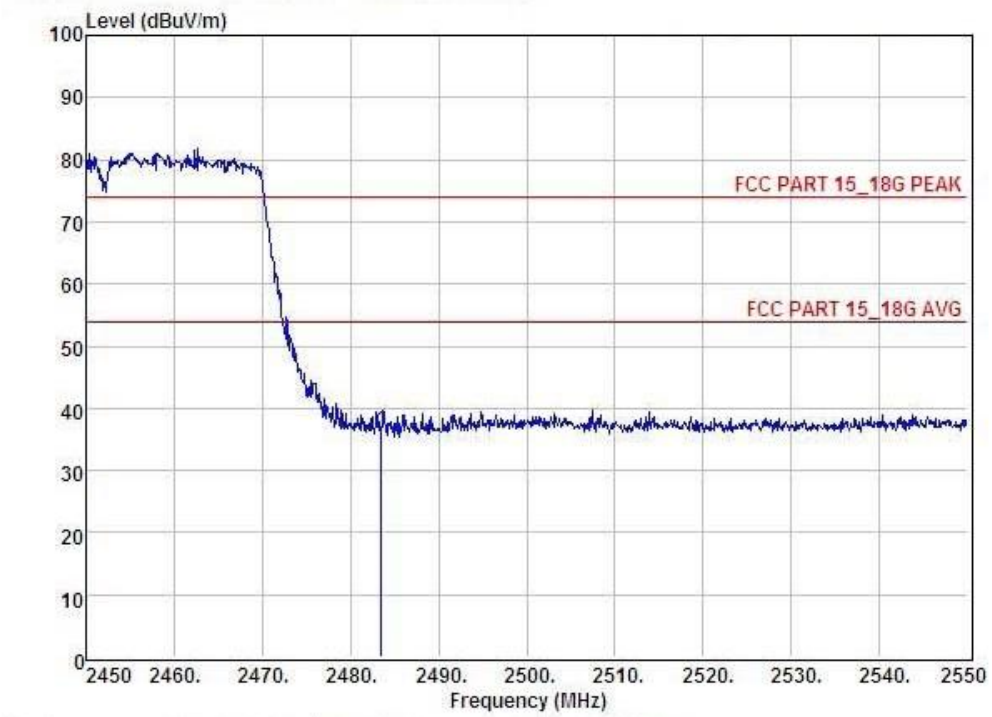


Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390.00	40.71	27.62	34.97	3.92	37.28	74.00	-36.72	Peak
2	2400.00	49.13	27.62	34.97	3.94	45.72	74.00	-28.28	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH9(802.11n Mode)/40MHz	Polarization :	Horizontal

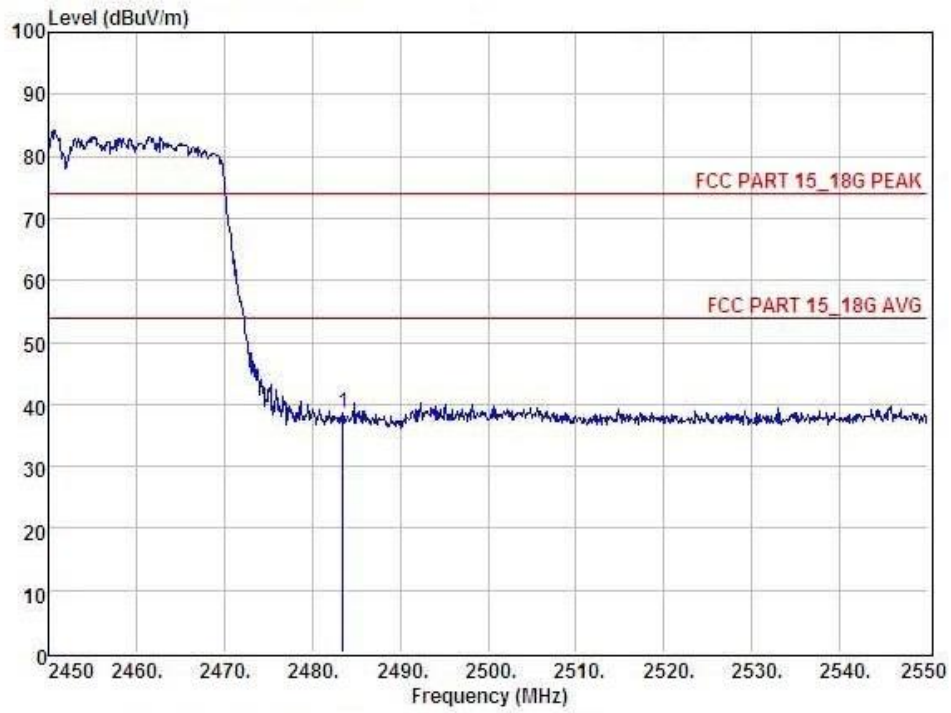


Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2483.50	39.92	27.59	34.97	4.00	36.54	74.00	-37.46	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	CH9(802.11n Mode)/40MHz	Polarization :	Vertical



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2483.50	41.95	27.59	34.97	4.00	38.57	74.00	-35.43	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

4. POWER SPECTRAL DENSITY TEST

4.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS

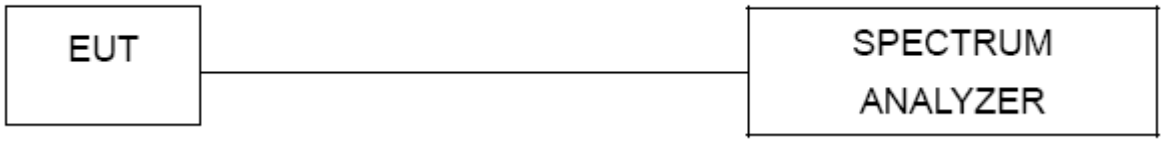
4.1.1 TEST PROCEDURE

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS channel bandwidth.
3. Set the RBW ≥ 3 kHz.
4. Set the VBW ≥ 3 x RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

4.1.2 DEVIATION FROM STANDARD

No deviation.

4.1.3 TEST SETUP



4.1.4 EUT OPERATION CONDITIONS

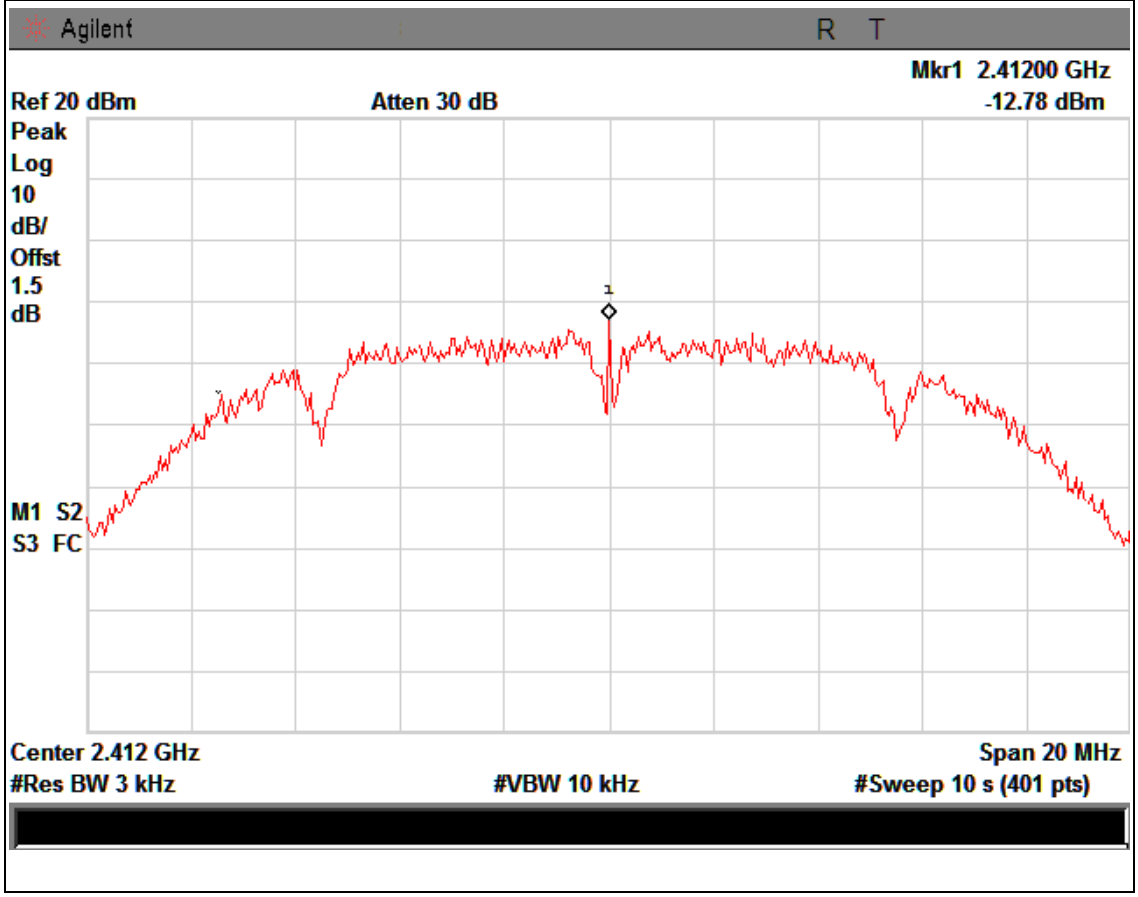
The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

4.1.5 TEST RESULTS

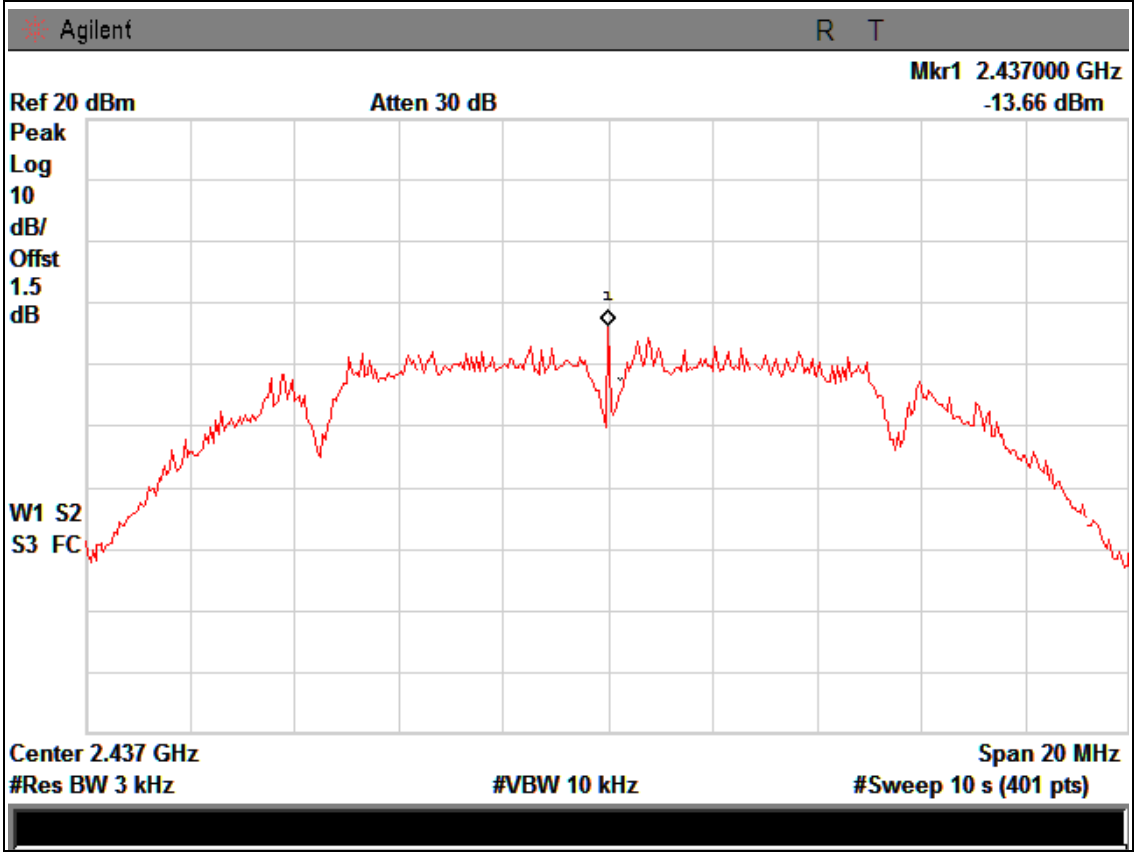
EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1015 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	TX b Mode /CH01, CH06, CH11		

Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-12.78	8	**PASS**
2437 MHz	-13.66	8	**PASS**
2462 MHz	-13.73	8	**PASS**

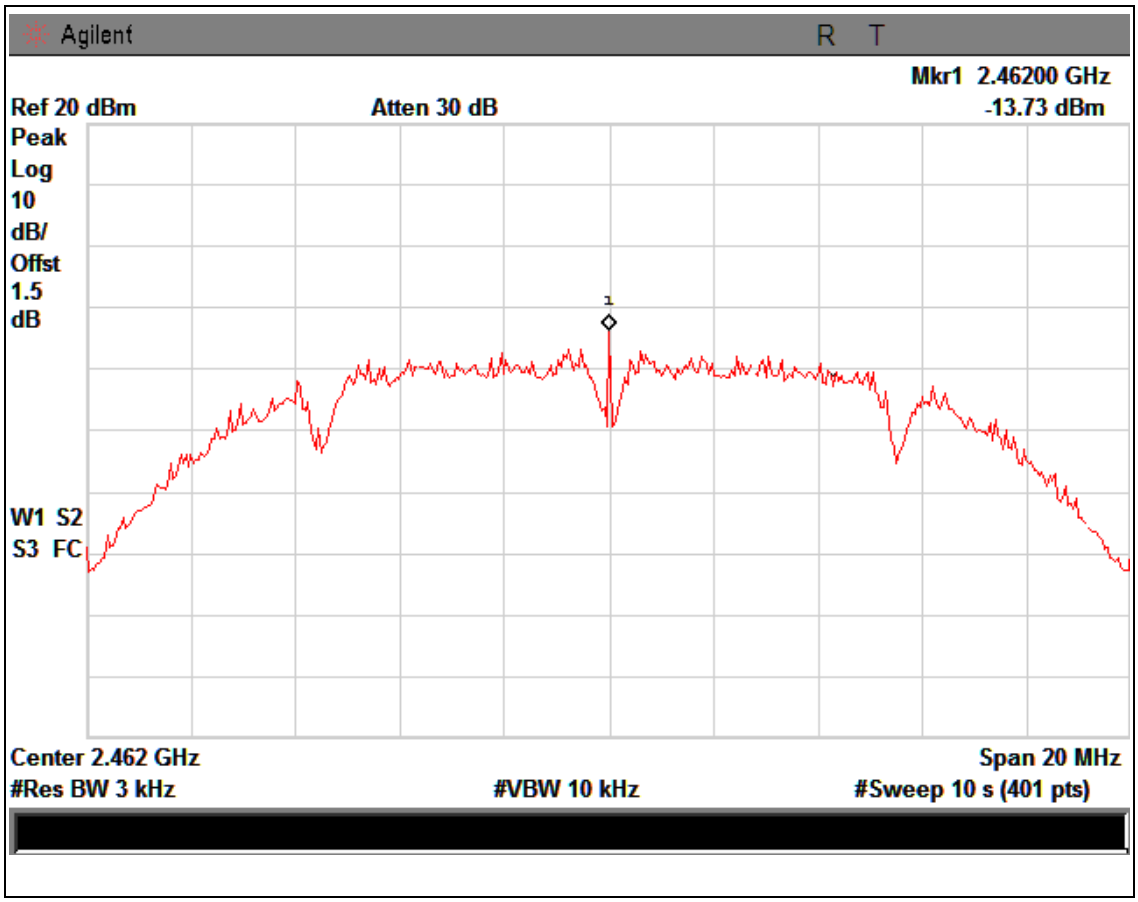
TX CH01



TX CH06



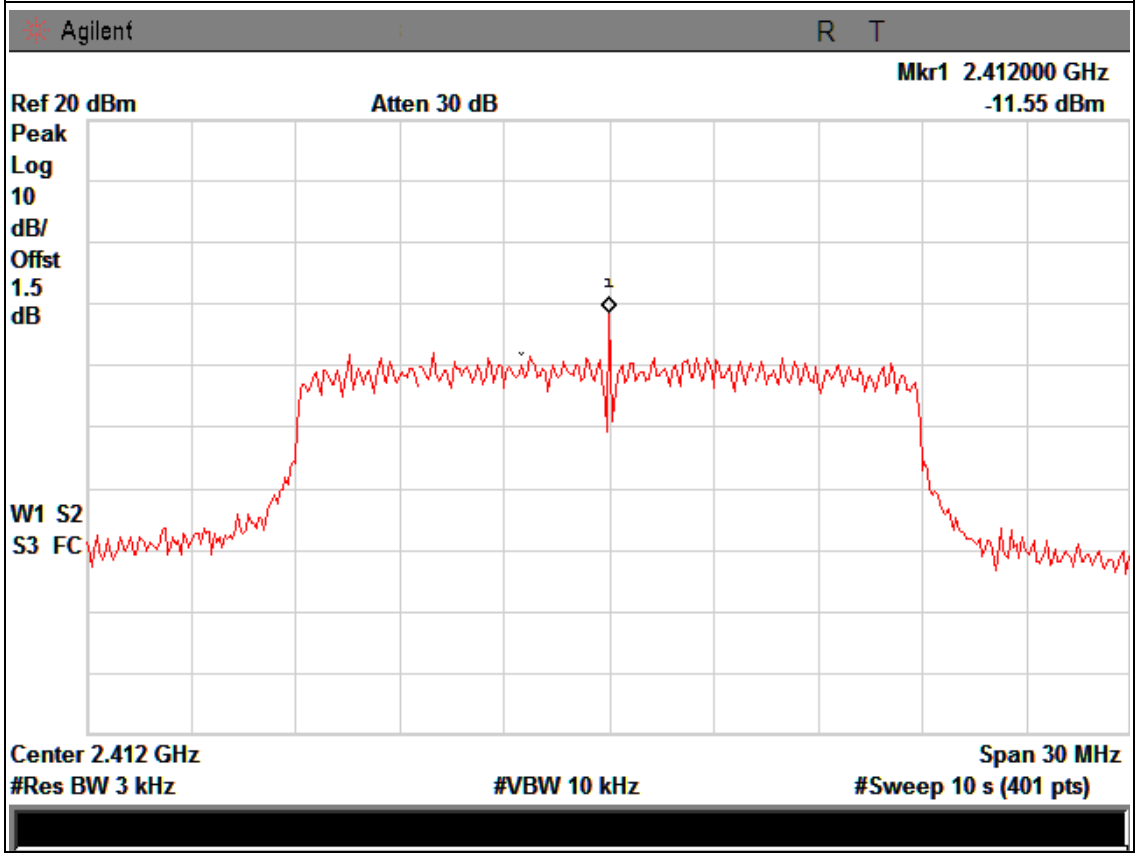
TX CH11


Agilent
R T
Mkr1 2.46200 GHz
Ref 20 dBm
Atten 30 dB
-13.73 dBm
Peak
Log
10
dB/
Offst
1.5
dB
1
W1 S2
S3 FC
Center 2.462 GHz
Span 20 MHz
#Res BW 3 kHz
#VBW 10 kHz
#Sweep 10 s (401 pts)

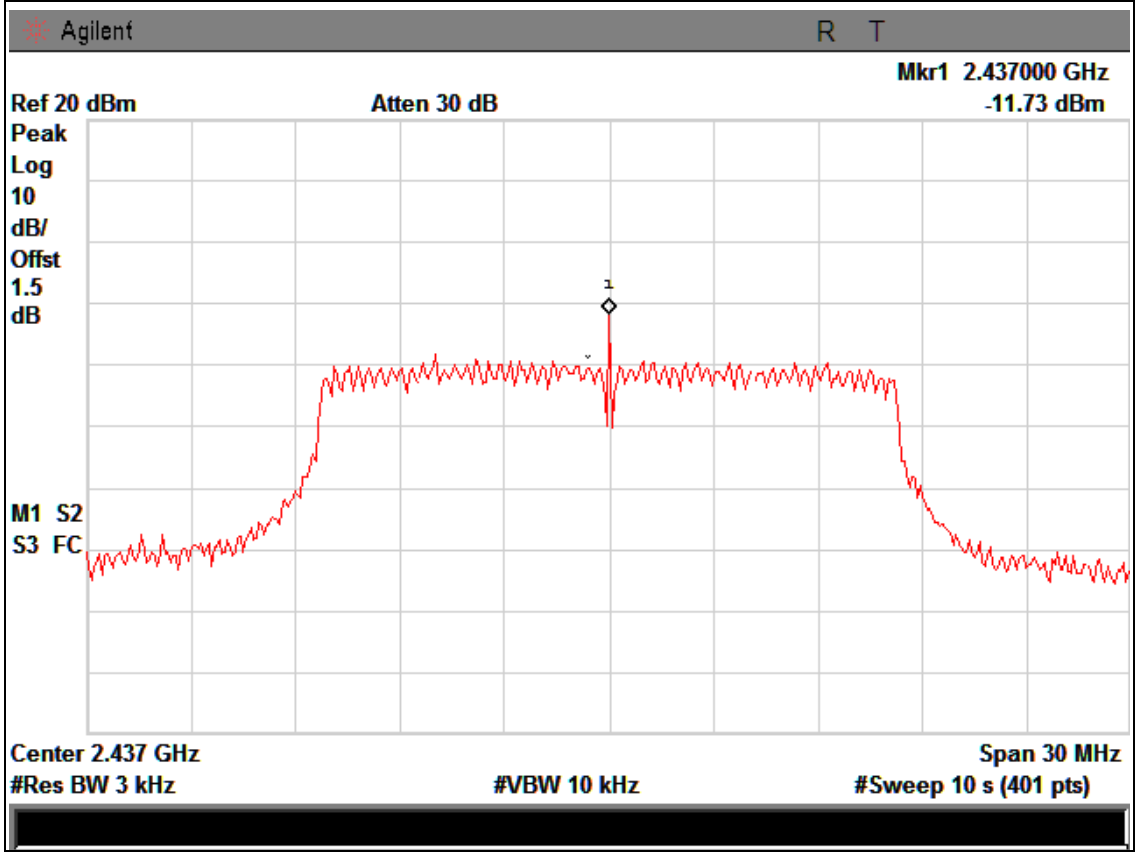
EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1015 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	TX g Mode /CH01, CH06, CH11		

Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-11.55	8	**PASS**
2437 MHz	-11.73	8	**PASS**
2462 MHz	-12.54	8	**PASS**

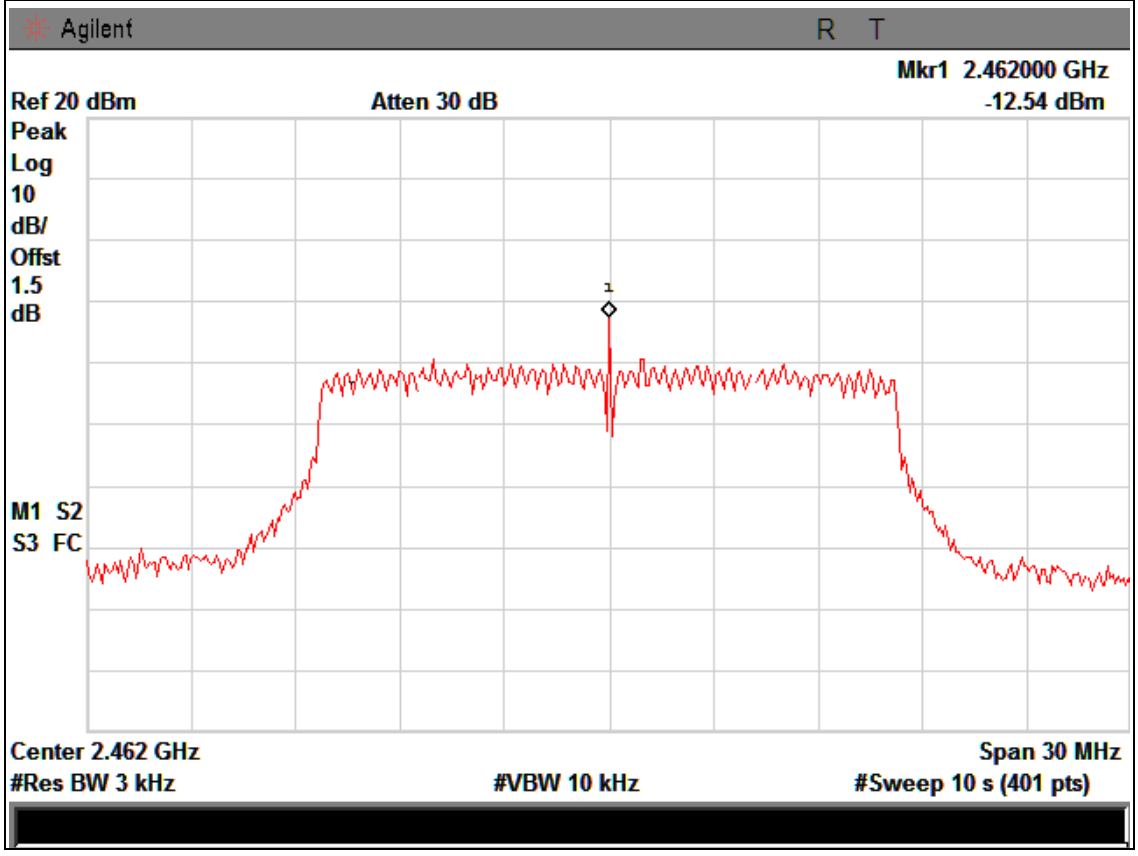
TX CH01



TX CH06



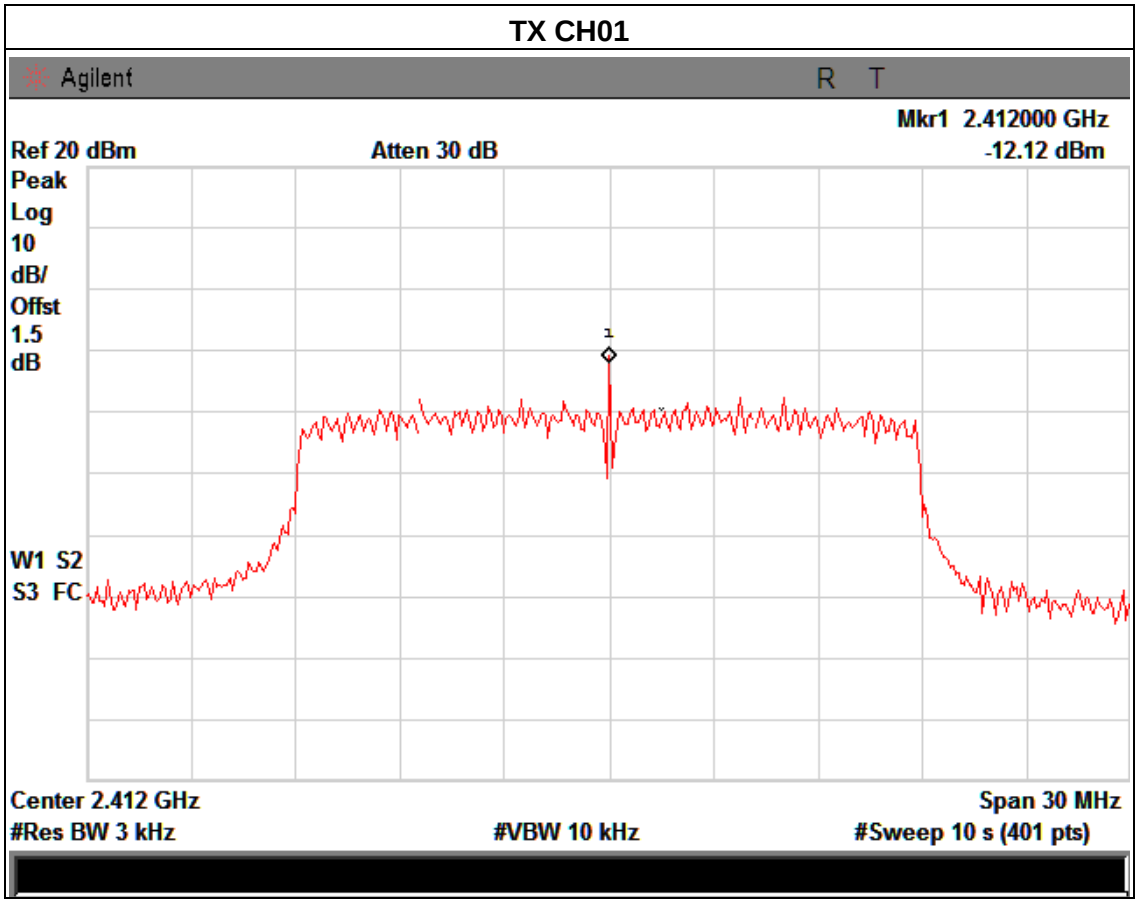
TX CH11



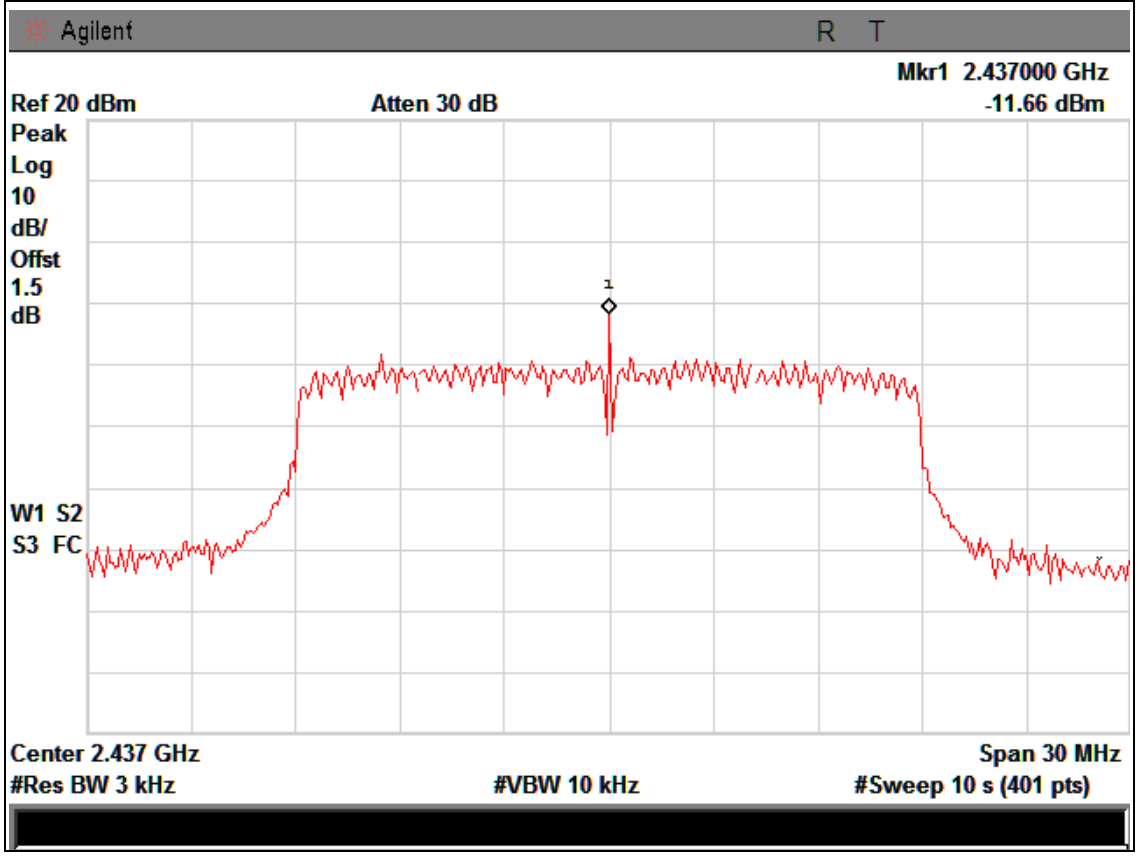
EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1015 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	TX n Mode(20M) /CH01, CH06, CH11		

Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-12.12	8	**PASS**
2437 MHz	-11.66	8	**PASS**
2462 MHz	-12.10	8	**PASS**

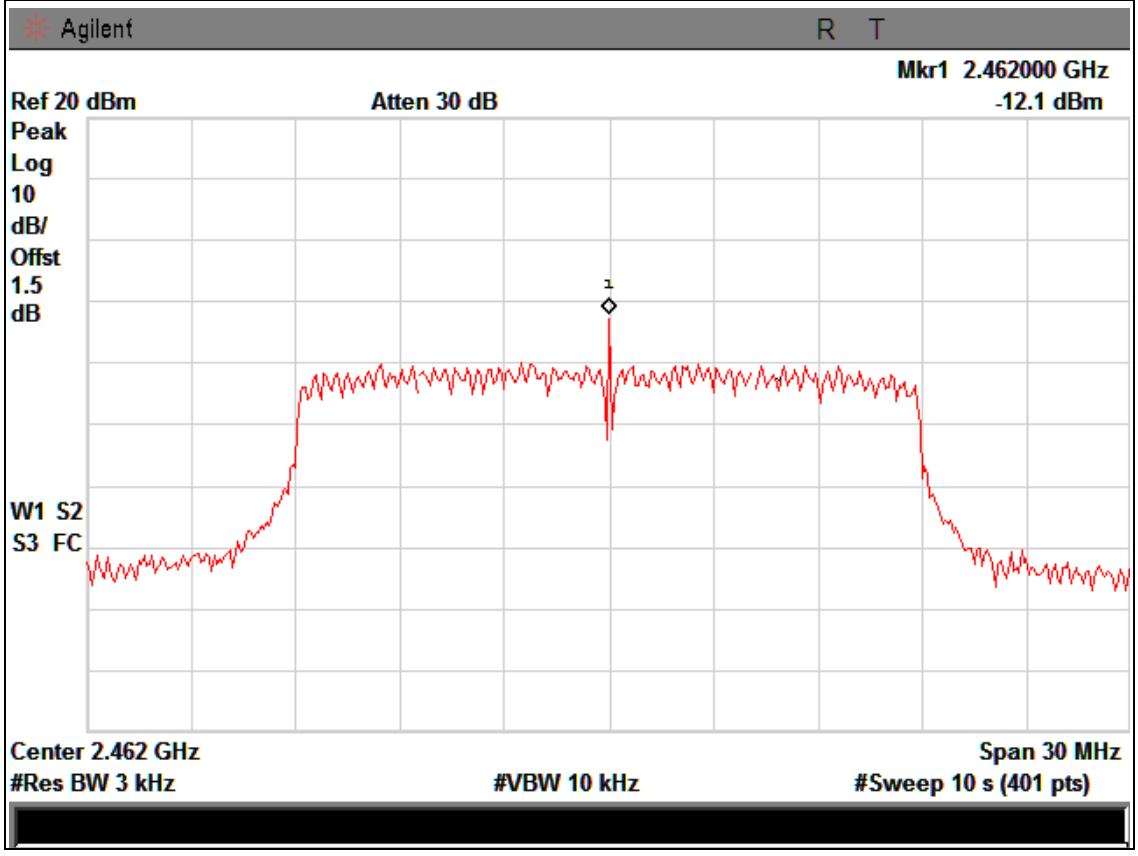
TX CH01



TX CH06



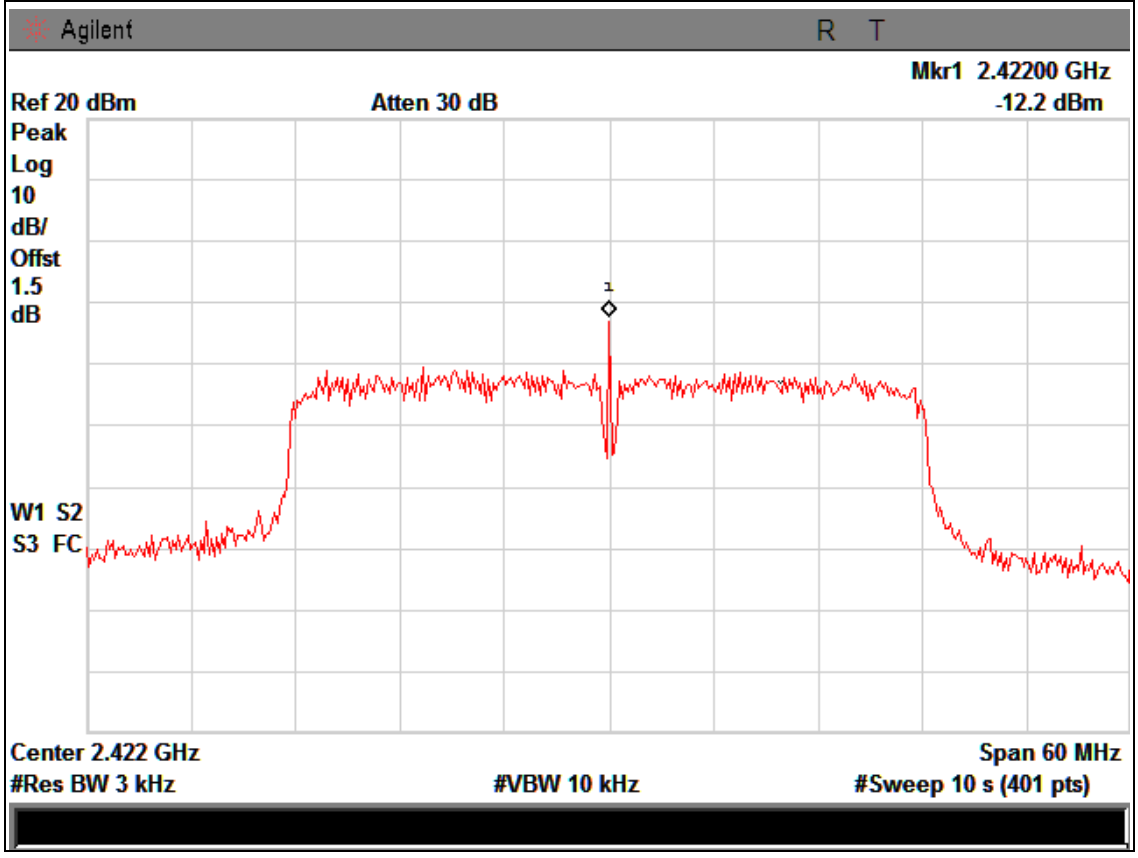
TX CH11



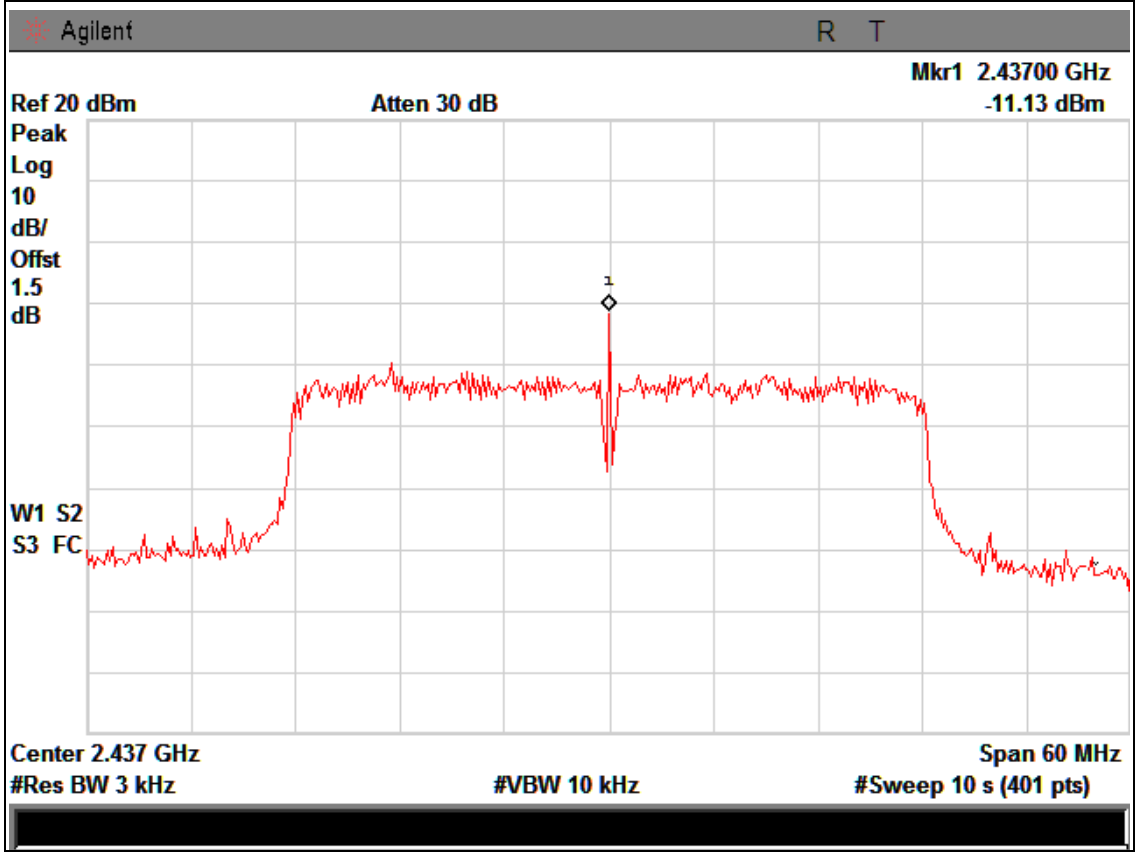
EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1015 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	TX n Mode(40M) /CH03, CH06, CH09		

Frequency	Power Density (dBm)	Limit (dBm)	Result
2422 MHz	-12.20	8	PASS
2437 MHz	-11.13	8	PASS
2452 MHz	-12.95	8	PASS

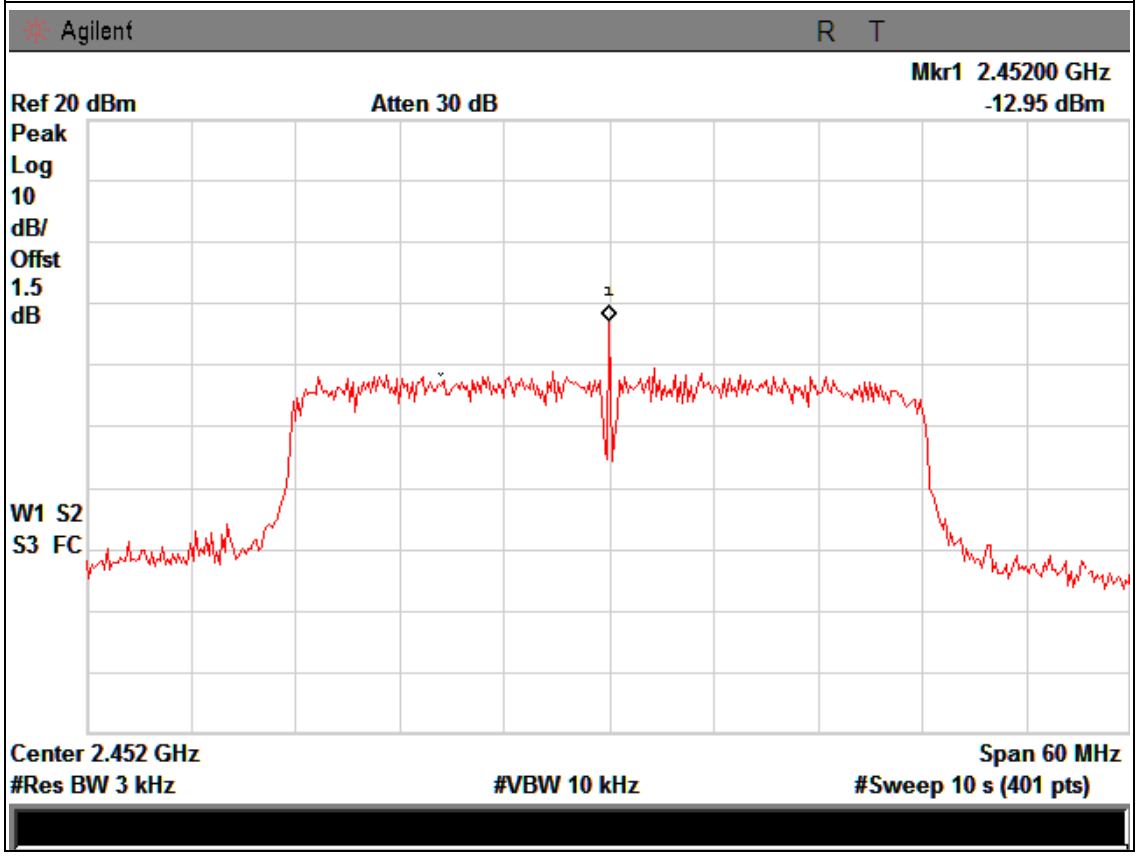
TX CH03



TX CH06



TX CH09



5. BANDWIDTH TEST

5.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	>= 500KHz (6dB bandwidth)	2400-2483.5	PASS

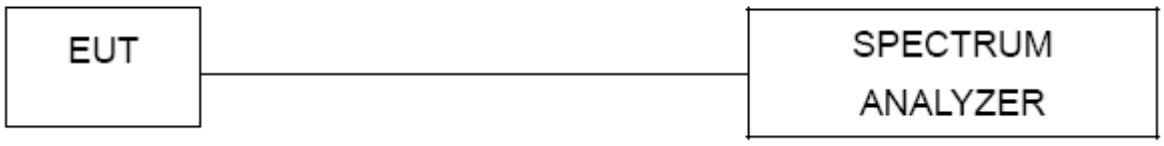
5.1.1 TEST PROCEDURE

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 ´ RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7.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 d B relative to the maximum level measured in the fundamental emission.

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP



5.1.4 EUT OPERATION CONDITIONS

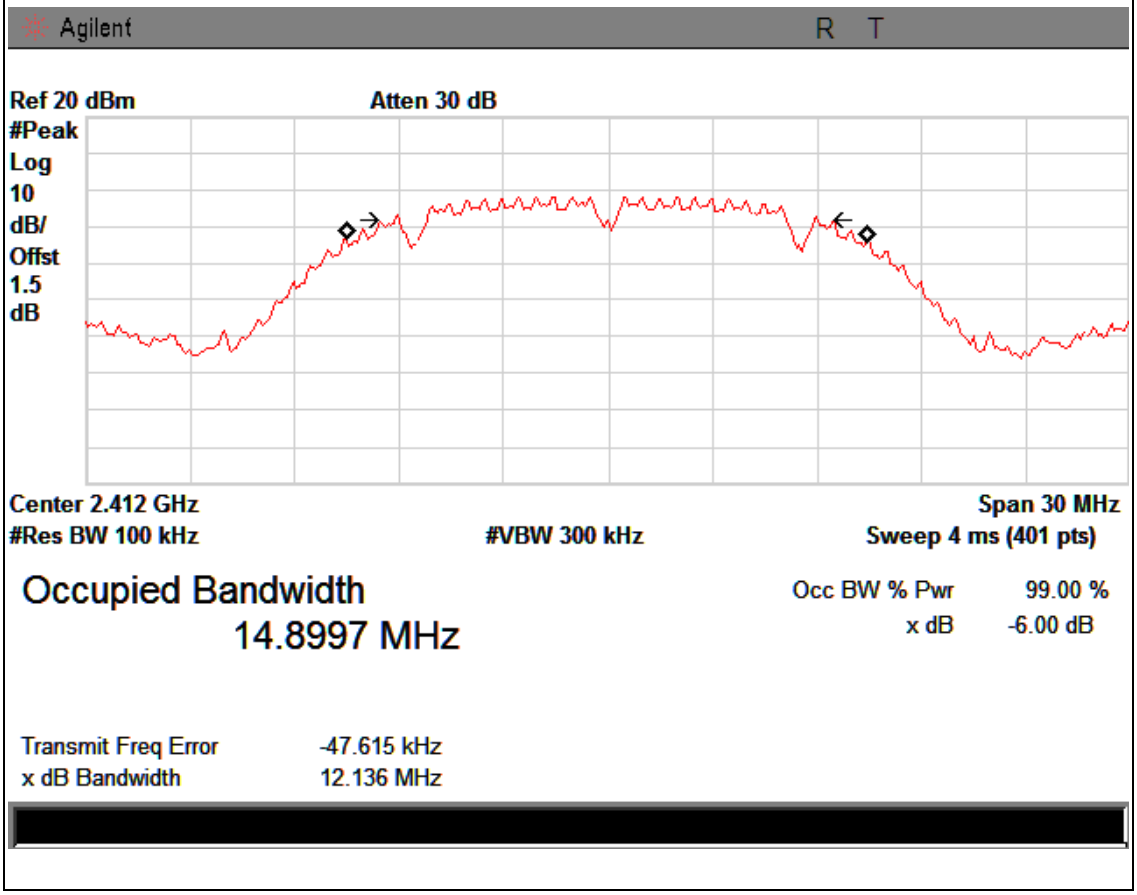
The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

5.1.5 TEST RESULTS

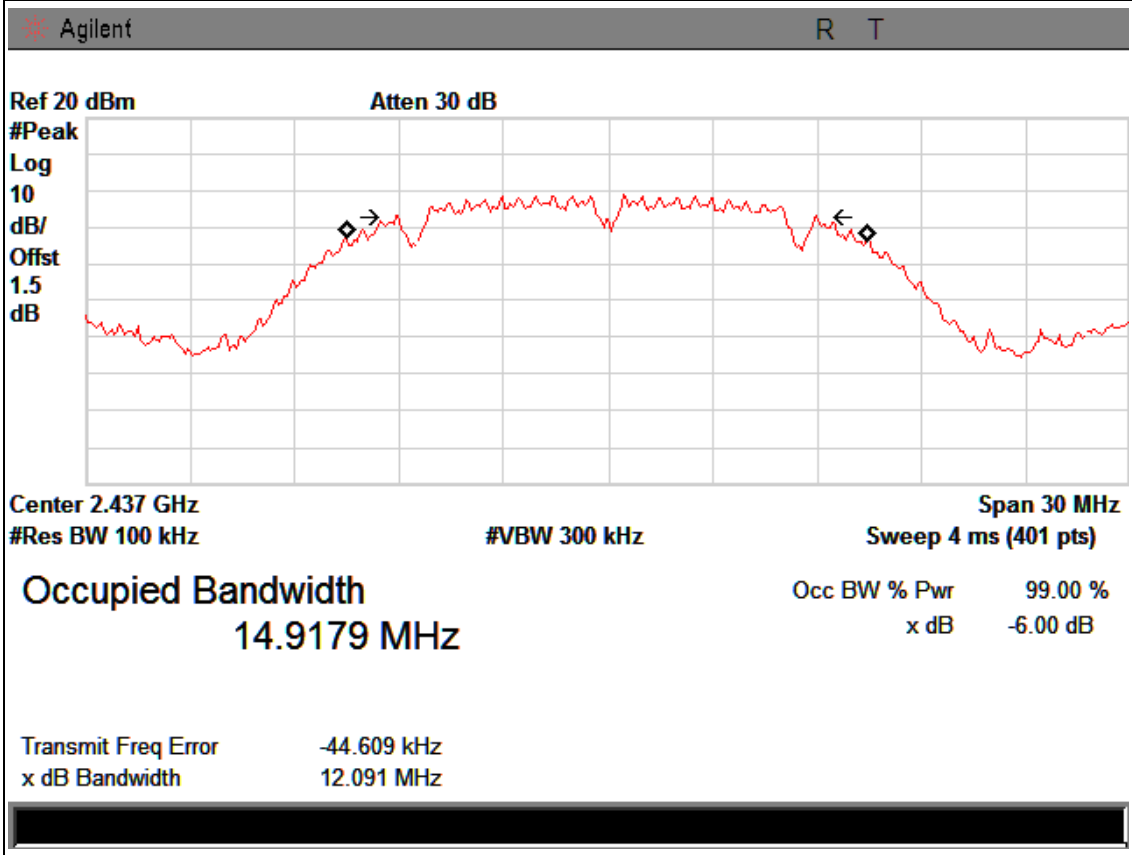
EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	TX b Mode /CH01, CH06, CH11		

Frequency	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Channel Separation (MHz)	Result
2412 MHz	12.14	14.90	>=500KHz	**PASS**
2437 MHz	12.09	14.92	>=500KHz	**PASS**
2462 MHz	12.13	14.85	>=500KHz	**PASS**

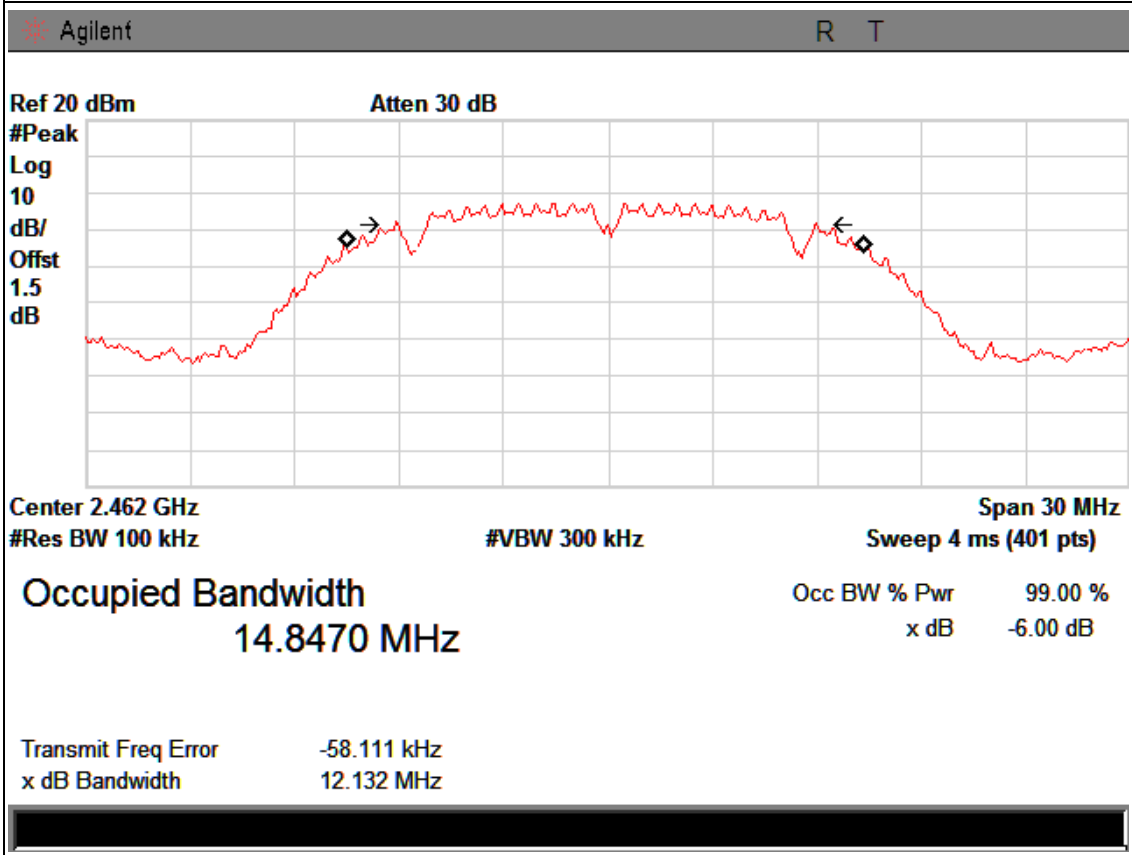
TX CH 01



TX CH 06



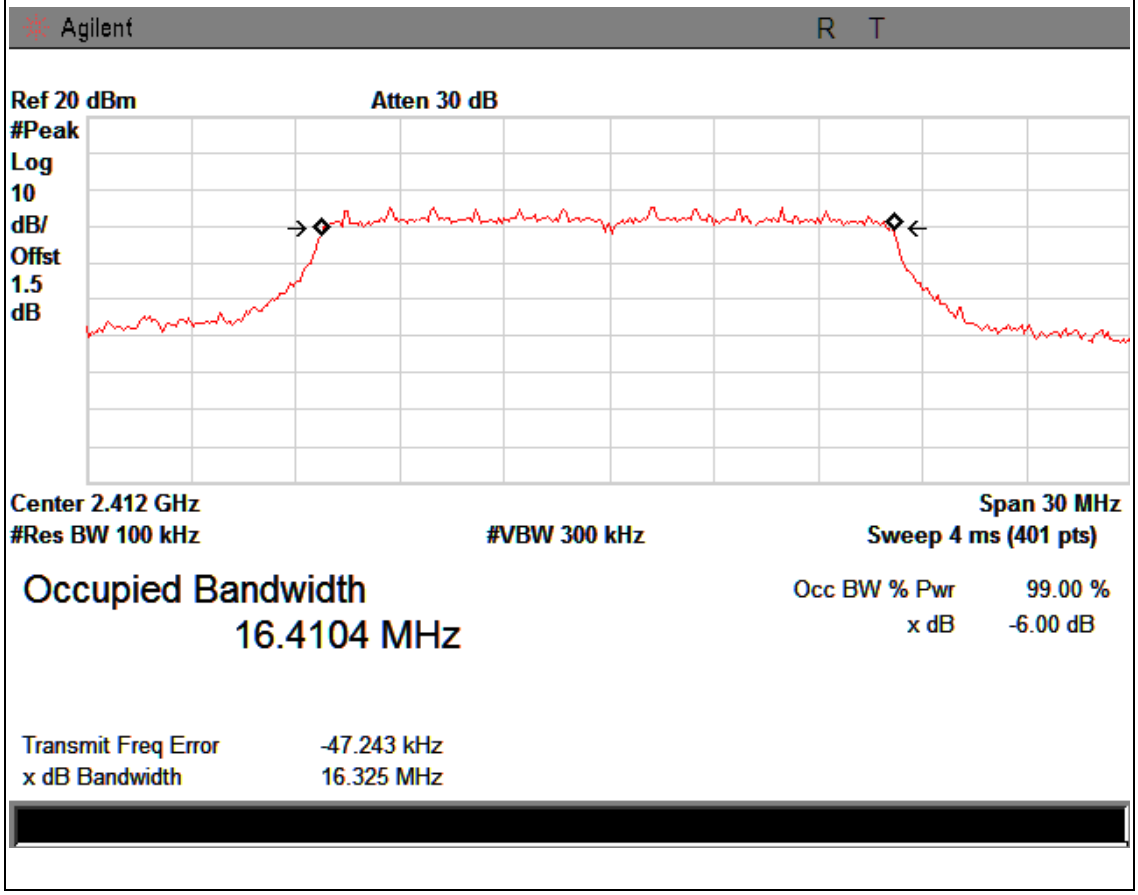
TX CH 11



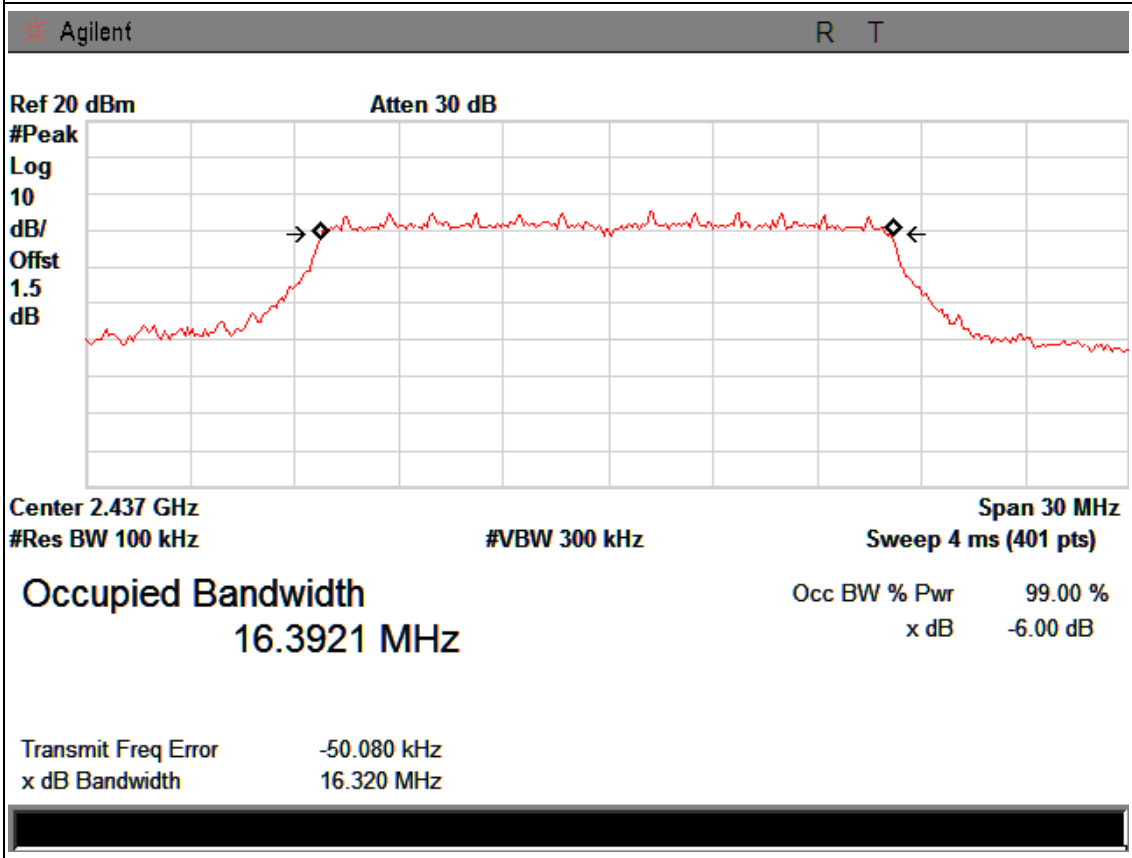
EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	TX g Mode /CH01, CH06, CH11		

Frequency	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Channel Separation (MHz)	Result
2412 MHz	16.33	16.41	>=500KHz	**PASS**
2437 MHz	16.32	16.39	>=500KHz	**PASS**
2462 MHz	16.32	16.40	>=500KHz	**PASS**

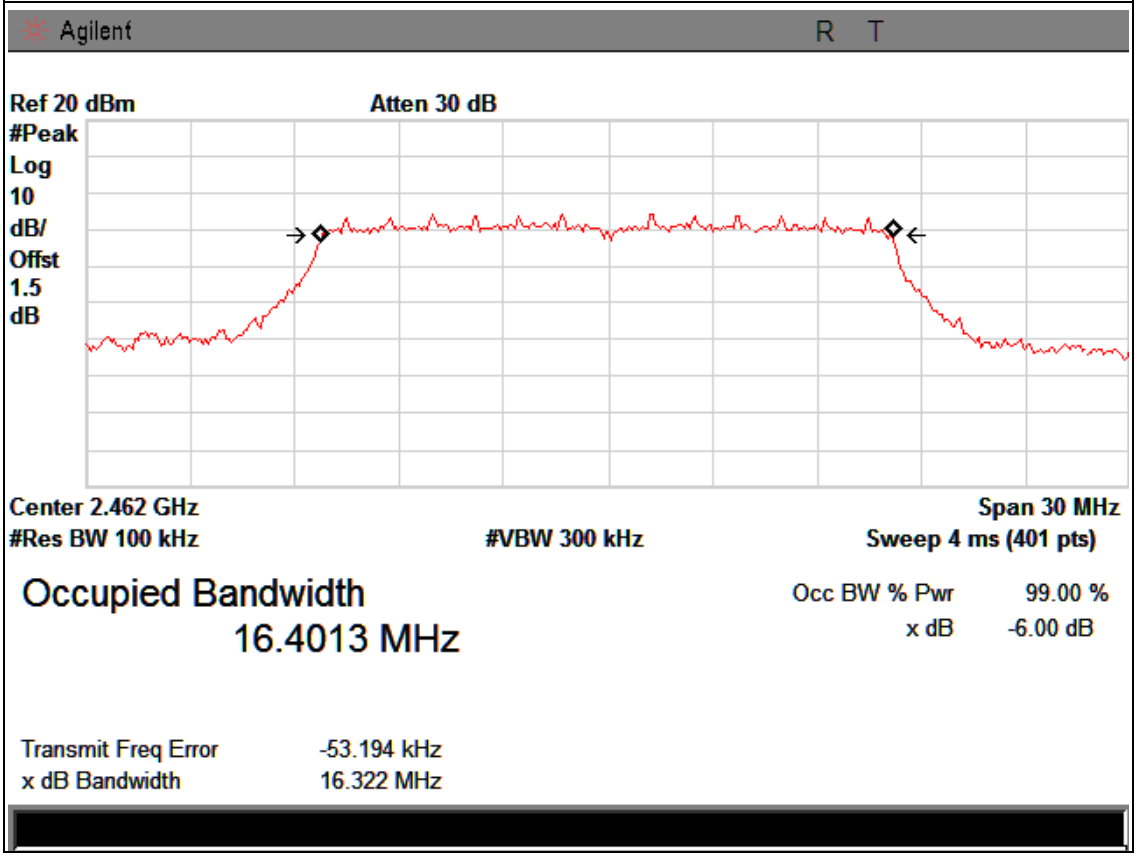
TX CH 01



TX CH 06



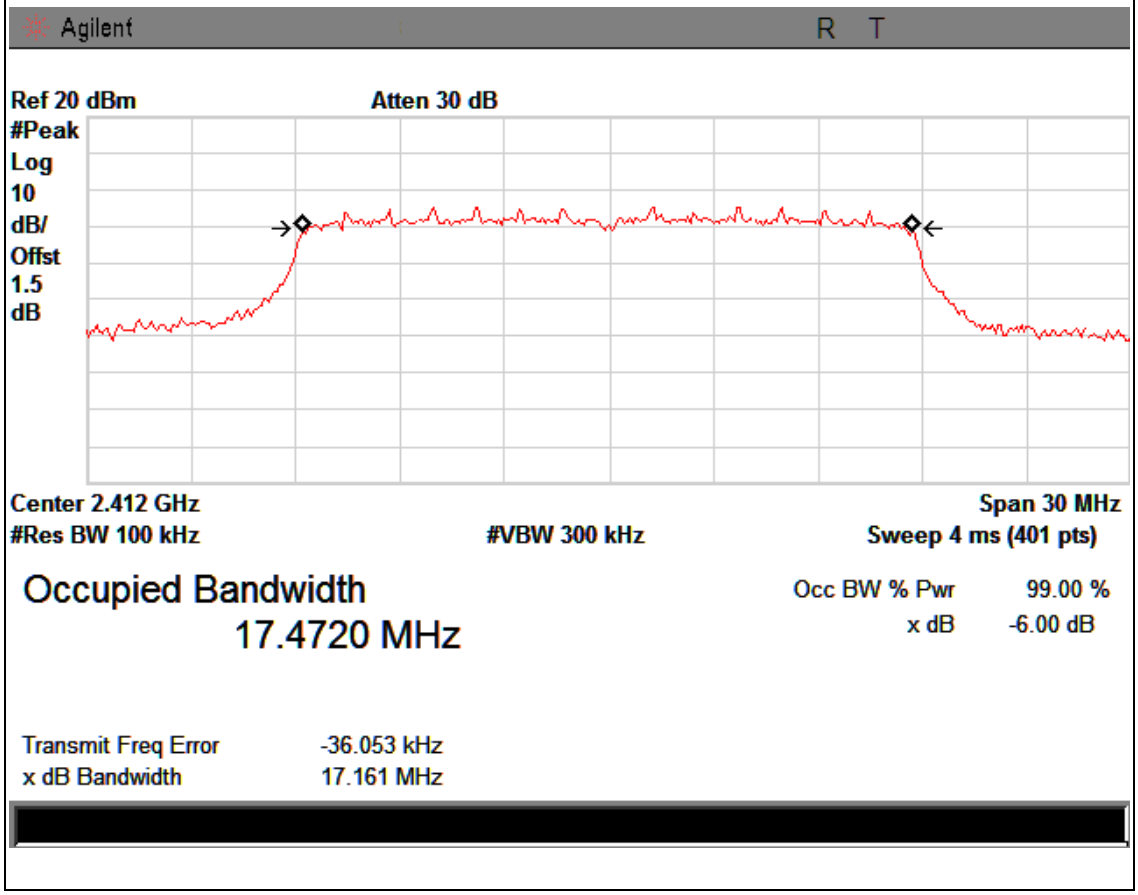
TX CH 11



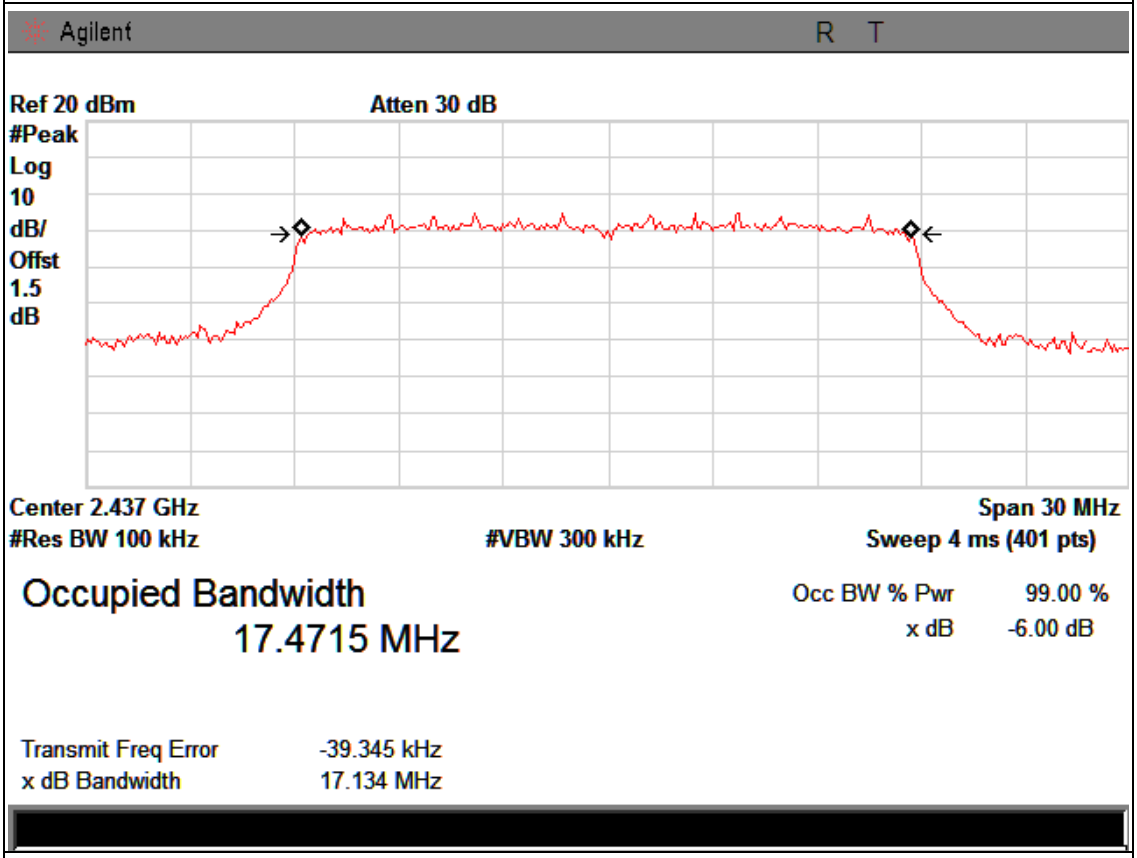
EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	TX n Mode(20M) /CH01, CH06, CH11		

Frequency	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Channel Separation (MHz)	Result
2412 MHz	17.16	17.47	>=500KHz	**PASS**
2437 MHz	17.13	17.47	>=500KHz	**PASS**
2462 MHz	17.16	17.46	>=500KHz	**PASS**

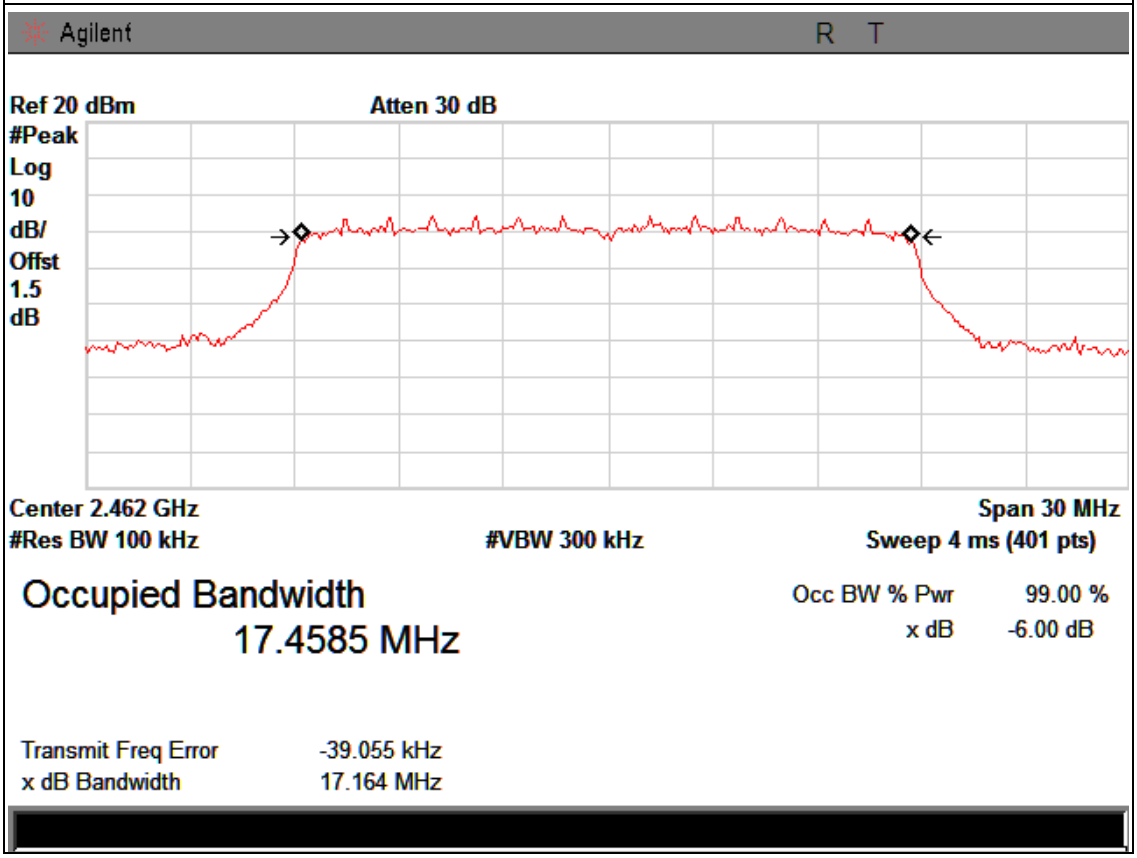
TX CH 01



TX CH 06



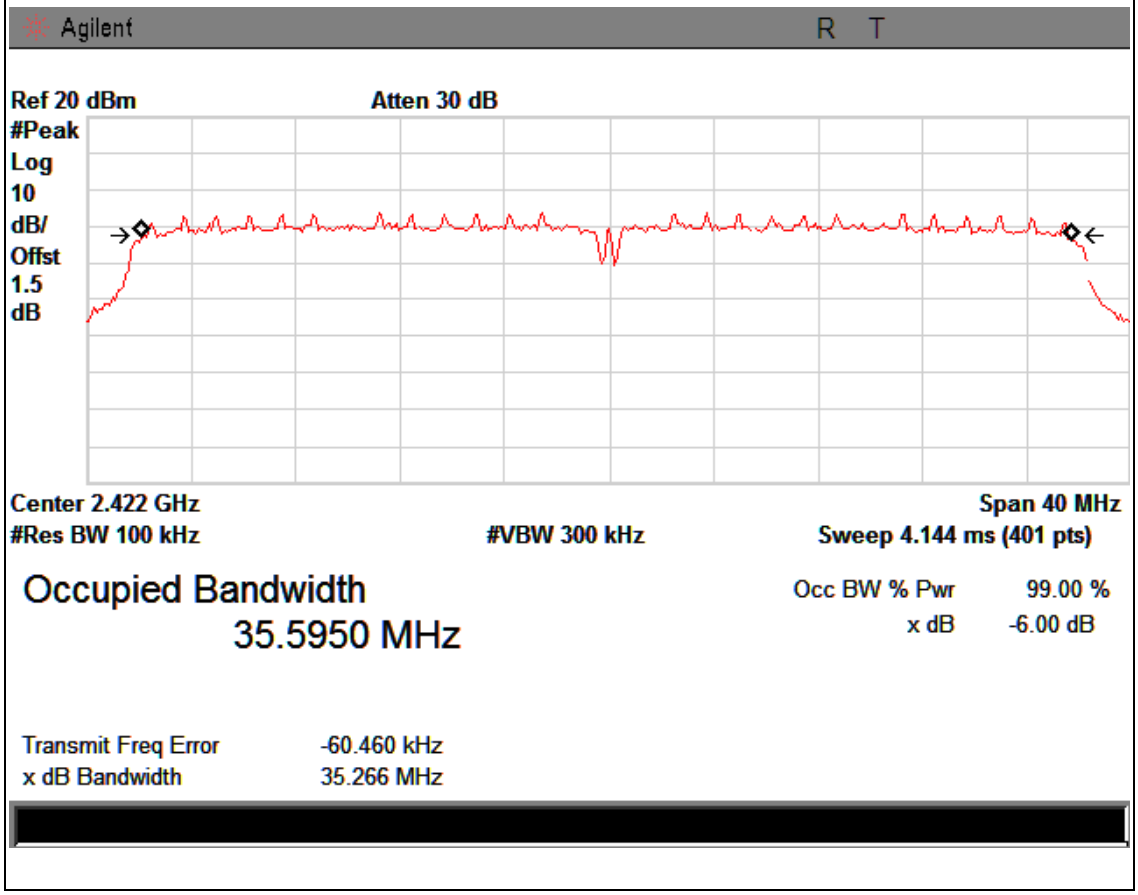
TX CH 11



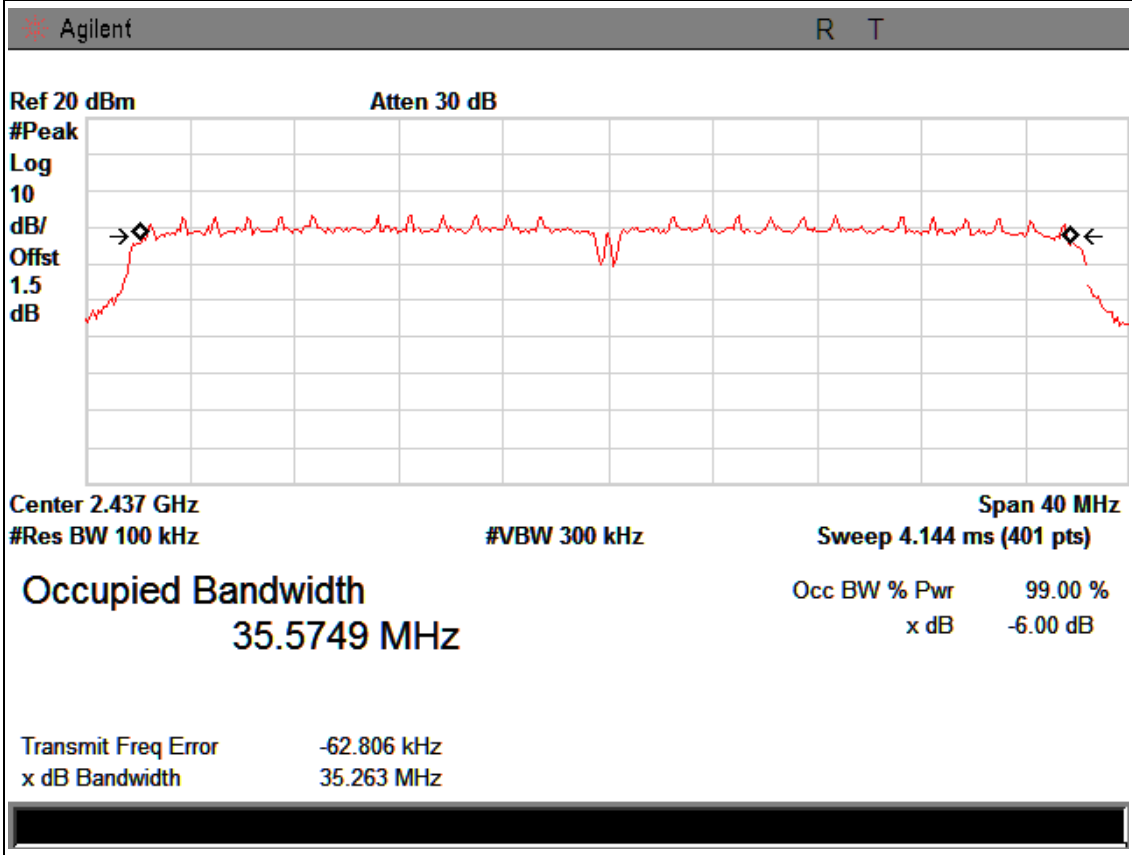
EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	TX n Mode(40M) /CH03, CH06, CH09		

Frequency	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Channel Separation (MHz)	Result
2422 MHz	35.27	35.60	>=500KHz	**PASS**
2437 MHz	35.26	35.57	>=500KHz	**PASS**
2452 MHz	35.26	35.58	>=500KHz	**PASS**

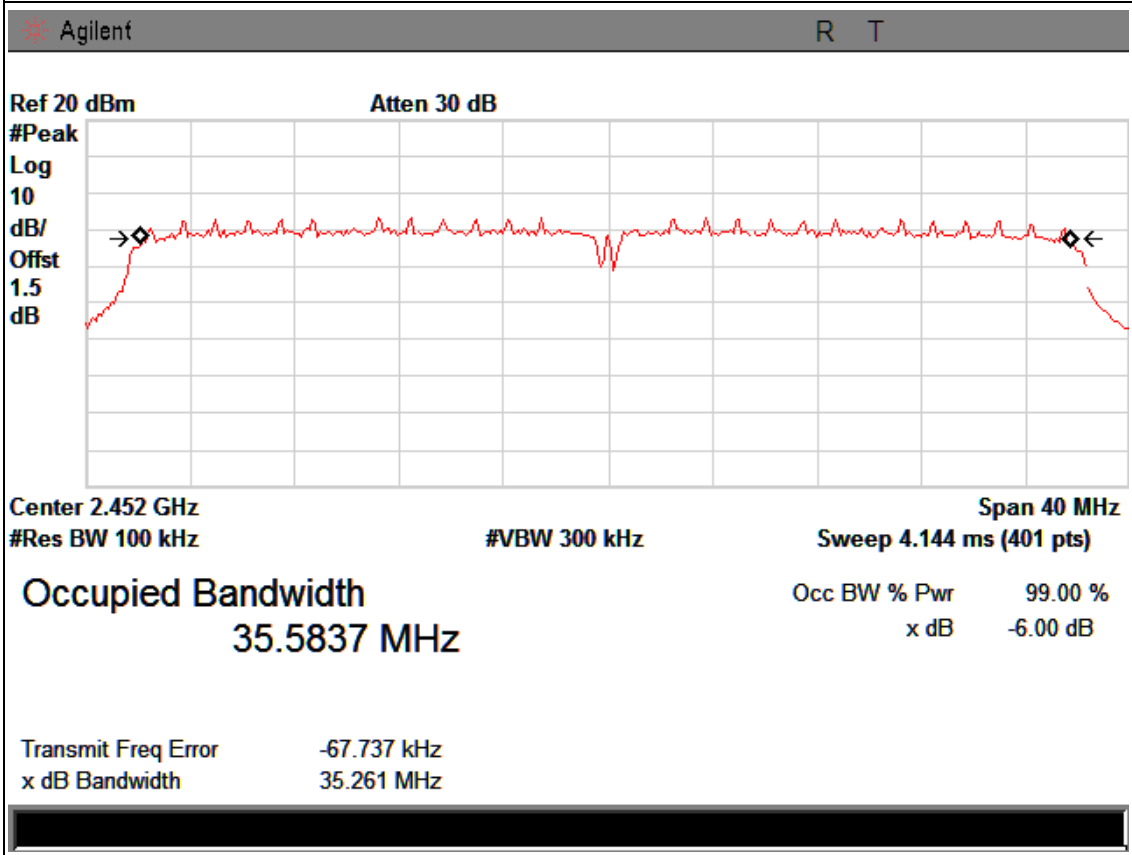
TX CH 03



TX CH 06



TX CH 09



6. PEAK OUTPUT POWER TEST

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Peak Output Power	1 watt or 30dBm	2400-2483.5	PASS

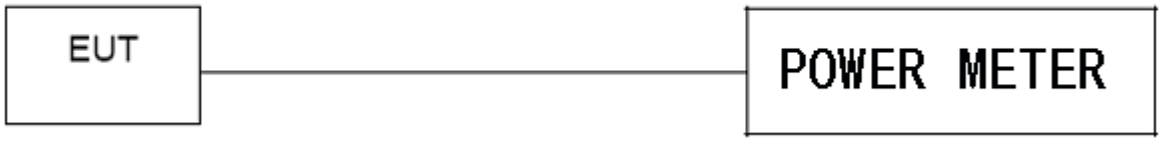
6.1.1 TEST PROCEDURE

a. The EUT was directly connected to the Power meter

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



6.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

6.1.5 TEST RESULTS

EUT：	Wireless USB Adapter	Model Name ：	JN7
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 5 V from PC with AC 120V/60Hz
Test Mode ：	TX b/g/n(20M,40M) Mode /CH01, CH06, CH11		

TX 802.11b Mode			
Test Channe	Frequency (MHz)	Peak Conducted Output Power (dBm)	LIMIT dBm
CH01	2412	9.31	30
CH06	2437	9.25	30
CH11	2462	9.28	30
TX 802.11g Mode			
CH01	2412	8.43	30
CH06	2437	8.38	30
CH11	2462	8.41	30
TX 802.11n20 Mode			
CH01	2412	8.21	30
CH06	2437	8.15	30
CH11	2462	8.17	30
TX 802.11n40 Mode			
CH03	2422	7.04	30
CH06	2437	6.98	30
CH09	2452	7.01	30

7. ANTENNA REQUIREMENT

7.1 STANDARD REQUIREMENT

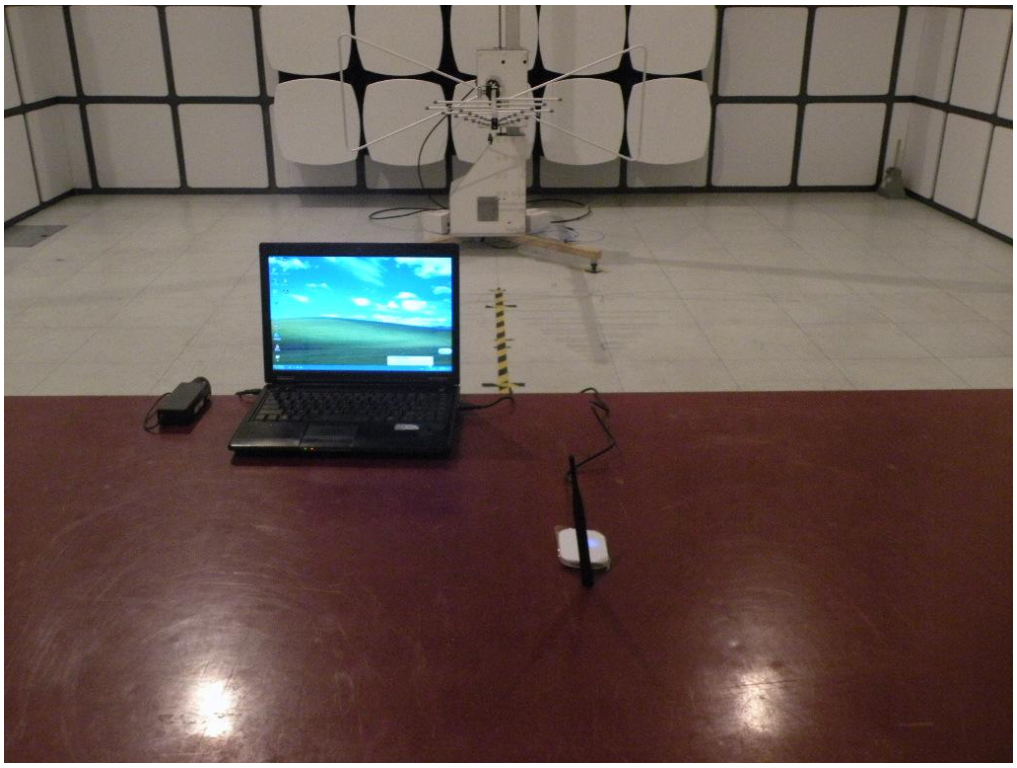
15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

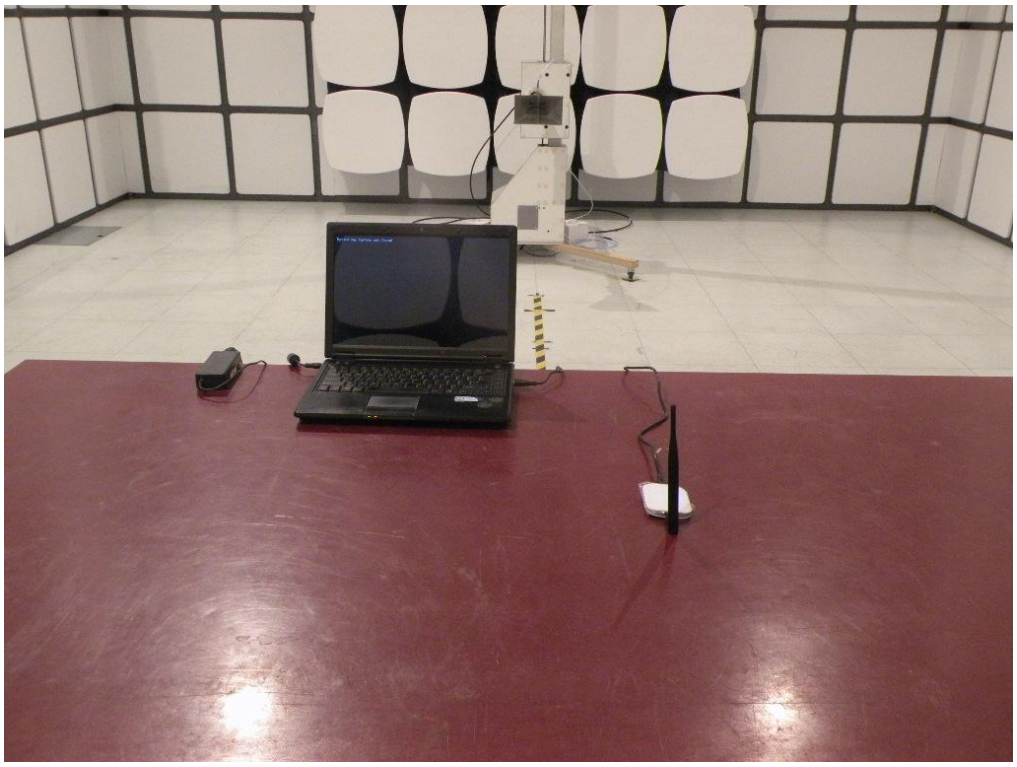
7.2 EUT ANTENNA

The EUT antenna is Reverse SMA connector antenna . It comply with the standard requirement.

8. EUT TEST PHOTO

Radiated Measurement Photos





Conducted Measurement Photos