

Neutron Engineering Inc.=

FCC Radio Test Report

FCC ID: T5U-US302

This report concerns (check one) : Original Grant Class I Change

Issued Date	: Jan. 22, 2009
Project No.	: R0812007
Equipment	: IEEE 802.11n WLAN USB 2.0 module
Model Name	: US302
Applicant	: Quanta Microsystems, Inc.
Address	: 188 WenHwa 2nd Rd., Kueishan Hsiang Taoyuan 333, Taiwan, R.O.C.

Tested by: Neutron Engineering Inc. EMC Laboratory Date of Test: Dec. 10, 2008 ~ Jan. 21, 2009

Testing Engineer

Technical Manager

Authorized Signatory

: Rush Kao (Rush Kao) : John March (Jeff Yang) : (Andy Chiu)

Neutron Engineering Inc.

B1, No. 37, Lane 365, YangGuang St., NeiHu District 114, Taipei, Taiwan. TEL: +886-2-2657-3299 FAX: +886-2-2657-3331





Declaration

Neutron represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C**., or National Institute of Standards and Technology (**NIST**) of **U.S.A**.

Neutron's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **Neutron** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **Neutron** issued reports.

Neutron's reports must not be used by the client to claim product endorsement by the authorities or any agency of the Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and **Neutron-self**, extracts from the test report shall not be reproduced except in full with **Neutron**'s authorized written approval.

Neutron's laboratory quality assurance procedures are in compliance with the **ISO Guide 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.



Table of Contents	Page
1. CERTIFICATION	6
2 . SUMMARY OF TEST RESULTS	7
2.1 TEST FACILITY	8
2.2 MEASUREMENT UNCERTAINTY	8
3 . GENERAL INFORMATION	9
3.1 GENERAL DESCRIPTION OF EUT	9
3.2 DESCRIPTION OF TEST MODES	11
3.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TEST	ED 12
3.4 DESCRIPTION OF SUPPORT UNITS	13
4 . EMC EMISSION TEST	14
4.1 CONDUCTED EMISSION MEASUREMENT	14
4.1.1 POWER LINE CONDUCTED EMISSION	14
4.1.2 MEASUREMENT INSTRUMENTS LIST	14
4.1.3 TEST PROCEDURE 4.1.4 DEVIATION FROM TEST STANDARD	15 15
4.1.5 TEST SETUP	15
4.1.6 EUT OPERATING CONDITIONS	16
4.1.7 TEST RESULTS	17
4.2 RADIATED EMISSION MEASUREMENT	19
4.2.1 RADIATED EMISSION LIMITS	19
4.2.2 MEASUREMENT INSTRUMENTS LIST 4.2.3 TEST PROCEDURE	20 20
4.2.3 TEST PROCEDURE 4.2.4 DEVIATION FROM TEST STANDARD	20 20
4.2.5 TEST SETUP	21
4.2.6 EUT OPERATING CONDITIONS	21
4.2.7 TEST RESULTS-BETWEEN 30MHZ - 1000MHZ	22
4.2.8 TEST RESULTS - ABOVE 1000MHZ - CHIP	28
4.2.9 TEST RESULTS - ABOVE 1000MHZ - PIFA 4.2.10 TEST RESULTS - ABOVE 1000MHZ - DIPOLE	76 124
4.2.11 TEST RESULTS-RESTRICTED BANDS REQUIREMENTS - CHIP	172
4.2.12 TEST RESULTS-RESTRICTED BANDS REQUIREMENTS - PIFA	188
4.2.13 TEST RESULTS-RESTRICTED BANDS REQUIREMENTS - DIPOL	E 204
5 . BANDWITH TEST	220
5.1 APPLIED PROCEDURES / LIMIT	220
5.1.1 MEASUREMENT INSTRUMENTS LIST	220
5.1.2 TEST PROCEDURE	220

Neutron Engineering Inc.—

Table of Contents	Page
5.1.3 DEVIATION FROM STANDARD	220
5.1.4 TEST SETUP	220
5.1.5 EUT OPERATION CONDITIONS	220
5.1.6 TEST RESULTS	221
6 . PEAK OUTPUT POWER TEST	229
6.1 APPLIED PROCEDURES / LIMIT	229
6.1.1 MEASUREMENT INSTRUMENTS LIST	229
6.1.2 TEST PROCEDURE	229
6.1.3 DEVIATION FROM STANDARD	229
6.1.4 TEST SETUP 6.1.5 EUT OPERATION CONDITIONS	229 229
6.1.6 TEST RESULTS	229
7 . ANTENNA CONDUCTED SPURIOUS EMISSION	232
7.1 APPLIED PROCEDURES / LIMIT	232
7.1.1 MEASUREMENT INSTRUMENTS LIST	232
7.1.2 TEST PROCEDURE	232
7.1.3 DEVIATION FROM STANDARD	232
7.1.4 TEST SETUP 7.1.5 EUT OPERATION CONDITIONS	232 232
7.1.6 TEST RESULTS	232
8 . POWER SPECTRAL DENSITY TEST	241
8.1 APPLIED PROCEDURES / LIMIT	241
8.1.1 MEASUREMENT INSTRUMENTS LIST	241
8.1.2 TEST PROCEDURE	241
8.1.3 DEVIATION FROM STANDARD	241
8.1.4 TEST SETUP	241
8.1.5 EUT OPERATION CONDITIONS	241
8.1.6 TEST RESULTS	242
9 . RF EXPOSURE TEST	250
9.1 APPLIED PROCEDURES / LIMIT	250
9.1.1 MEASUREMENT INSTRUMENTS LIST	250
9.1.2 MPE CALCULATION METHOD	250
9.1.3 DEVIATION FROM STANDARD	251
9.1.4 TEST SETUP	251
9.1.5 EUT OPERATION CONDITIONS	251
9.1.6 TEST RESULTS - CHIP 9.1.7 TEST RESULTS - PIFA	252 254
9.1.7 TEST RESULTS - PIFA 9.1.8 TEST RESULTS - DIPOLE	254 256
10 . EUT TEST PHOTO	258



Table of Contents

Page



1. CERTIFICATION

Equipment: IEEE 802.11n WLAN USB 2.0 module Brand Name: QMI Model Name: US302 Applicant: Quanta Microsystems, Inc. Date of Test: Dec. 10, 2008 ~ Jan. 21, 2009 Standards: FCC Part15, Subpart C / ANCI C63.4 : 2003

The above equipment has been tested and found compliance with the requirement of the relative standards by Neutron Engineering Inc. EMC Laboratory.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. NEI-FCCP-1-R0812007) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP and TAF according to the ISO-17025 quality assessment standard and technical standard(s).

Neutron Engineering Inc.

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

	FCC Part15, Subpart C						
Standard Section	Test Item	Judgment	Remark				
15.207	Conducted Emission	PASS					
15.247 (c)	Antenna conducted Spurious 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					
15.203	Antenna Requirement	PASS					
1.1307 1.1310 2.1091 2.1093	RF Exposure Compliance	PASS					

NOTE:

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



2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **C01/OS02 (FCC Test Firm Number: 95335)**at the location of No.132-1, Lane 329, Sec. 2, Palian Road, Shijr City, Taipei, Taiwan.

2.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, 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** % \circ

A. Conducted Measurement :

Test Site	Method	Measurement Frequency Range	U , (dB)	NOTE
C01	ANSI	150 KHz ~ 30MHz	1.94	

B. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)	NOTE
OS-01	ANSI	30MHz ~ 200MHz	V	3.82	
		30MHz ~ 200MHz	Н	3.60	
		200MHz ~ 1,000MHz	V	3.86	
		200MHz ~ 1,000MHz	Н	3.94	
OS-02	ANSI	30MHz ~ 200MHz	V	2.48	
		30MHz ~ 200MHz	Н	2.16	
		200MHz ~ 1,000MHz V 2.50			
		200MHz ~ 1,000MHz	Н	2.66	



3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	IEEE 802.11n WLAN U	JSB 2.0 module		
Brand Name	QMI			
Model Name	US302			
OEM Brand/Model Name	N/A			
Model Difference	The EUT has four optional antennas. All optional antennas were tested, and the EUT with DPLP112-00XX, 341AEWA0701000D0 and DPLP148-00001-H were found to be the worst case during the pr-scanning test. These combinations of the worst case were used for final testing and collecting test data included in this report.			
		02.11n WLAN USB 2.0 module.		
	Operation Frequency: Modulation Type:	802.11b:CCK, DQPSK, DBPSK 802.11g:OFDM 802.11n:OFDM		
Product Description	Bit Rate of Transmitter:	802.11b: 11/5.5/2/1 Mbps 802.11g: 54/48/36/24/18/12/9/6 Mbps 802.11n(20MHz): 150+ Mbps 802.11n(40MHz): 150+ Mbps		
	Number Of Channel:	11CH .Please see Note 2.		
	Antenna Designation:	Please see Note 3.		
	Antenna Gain(Peak): Output Power(Max):	Please see Note 3. 802.11b:18.95 dBm (Max.) 802.11g:22.71 dBm (Max.) 802.11n(20MHz):22.85 dBm (Max.) 802.11n(40MHz):21.88 dBm (Max.)		
	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.			
Channel List	Please refer to the Note 2.			
Power Source	DC Voltage supplied from DC source.			
Power Rating	N/A			
Connecting I/O Port(s)	Please refer to the Use	er's Manual		
Products Covered	Antenna (Optional):			

Note:

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

Neutron Engineering Inc.—

2. CH 01 – CH 11 for 802.11b, 802.11g, 802.11n(20MHz) CH 03 – CH 09 for 802.11n(40MHz)

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

3. Table for Filed Antenna

(The gain value including the loss of the short antenna cable.)

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
1	SPEEDTECH	DPLP112-00XX	Dipole	UFL	2.13	
2	COXOC	341AEWA0701000D0	CHIP	UFL	2.70	
3	COXOC	341AEWAA7A1300D0	CHIP	UFL	1.43	
4	SPEEDTECH	DPLP148-00001-H	PIFA	UFL	1.81	
Note	Note The Ant.2 and Ant.3 are same types, the one with highest gain will be the					
	worst case, the	refore only Ant.1, 2 and	3. were used to	o final test		

4 The EUT incorporates SISO function. Physically, the EUT provides two completed transmitters and three receivers (1T1R)

Modulated type	TX Function
802.11b	1TX
802.11g	1TX
Draft 802.11n(20MHz)	1TX
Draft 802.11n(40MHz)	1TX

Neutron Engineering Inc.

3.2 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.

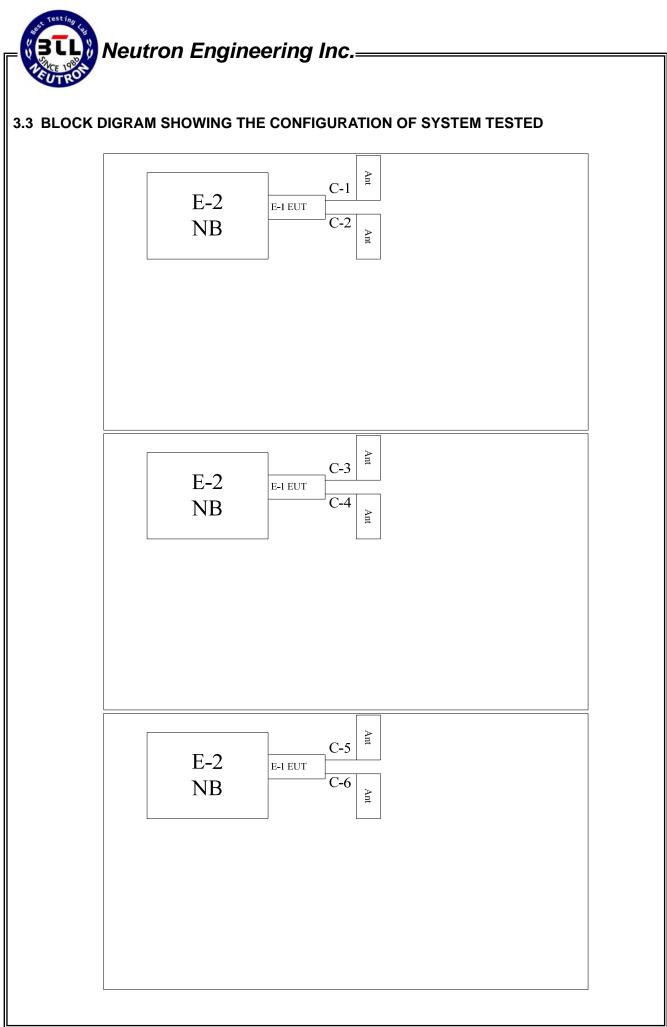
Pretest Test Mode	ΤХ	RX	Description
Mode 1	v		802.11b/CH01, CH06, CH11
Mode 2	v		802.11g/CH01, CH06, CH11
Mode 3	v		802.11n/20M/CH01, CH06, CH11
Mode 4	v		802.11n/40M/CH03, CH6, CH9

For Conducted Test			
Final Test Mode	ΤХ	RX	Description
Mode 1	v		802.11b/CH06

For Radiated Test < 1GHz					
Final Test Mode	ТΧ	RX	Description		
Mode 1	v		802.11b/CH06		

For Radiated Test > 1GHz						
Final Test Mode	ΤХ	RX	Description			
Mode 1	v		802.11b/CH01, CH06, CH11			
Mode 2	v		802.11g/CH01, CH06, CH11			
Mode 3	v		802.11n/20M/CH01, CH06, CH11			
Mode 4	v		802.11n/40M/CH03, CH6, CH9			

For Antenna Port Conducted Measurement						
Final Test Mode	ΤХ	RX	Description			
Mode 1	v		802.11b/CH01, CH06, CH11			
Mode 2	v		802.11g/CH01, CH06, CH11			
Mode 3	v		802.11n/20M/CH01, CH06, CH11			
Mode 4	v		802.11n/40M/CH03, CH6, CH9			





3.4 DESCRIPTION OF SUPPORT UNITS

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.	FCC ID	Series No.	Note
E-1	IEEE 802.11n WLAN USB 2.0 module	QMI	US302	T5U-US302	N/A	EUT
E-2	Notebook PC	DELL	D600	DOC	7T390 A03	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	No	No	7CM	(Chip Ant.)Main ANT
C-2	No	No	7CM	(Chip Ant.)AUX ANT
C-3	No	No	12CM	(PIFA Ant.)Main ANT
C-4	No	No	12CM	(PIFA Ant.)AUX ANT
C-5	No	No	12CM	(Dipole Ant.)Main ANT
C-6	No	No	12CM	(Dipole Ant.)AUX ANT

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.



4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

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

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.

4.1.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Test Cable	N/A	SR03_C_01 &02	N/A	Oct. 19, 2009
2	LISN (SR03)	EMCO	3816/2	00042991	Jan. 29, 2009
3	Pulse Limiter	Electro-Metrics	EM-7600	112647	Dec. 15, 2009
4	50Ω Terminator	N/A	N/A	N/A	May 13, 2009
5	EMI Test Receiver	R&S	ESCI	100082	Mar. 23, 2009
6	LISN	EMCO	4825/2	00028234	Jul. 09, 2009

Remark: " N/A" denotes No Model Name , Serial No. or No Calibration specified.



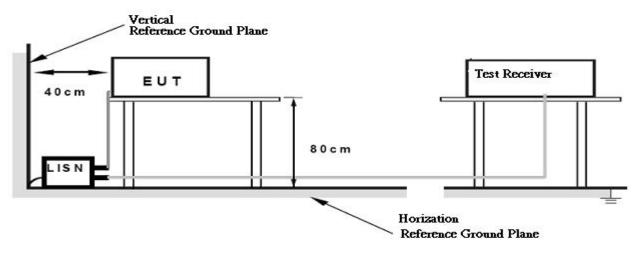
4.1.3 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- 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.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP





4.1.6 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.

Neutron Engineering Inc.=

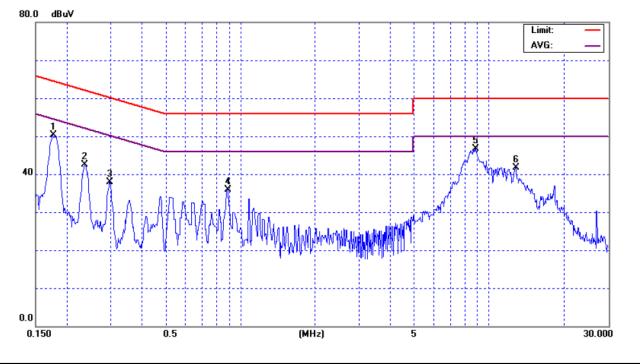
4.1.7 TEST RESULTS

EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302		
Temperature :	26°C	Relative Humidity :	60%		
Test Voltage :	AC 120V/60Hz				
Test Mode :	802.11b/CH06 (DIPOLE)				

Freq.	Terminal	Measured(dBuV)		Limits(dBuV)		Margin	Note
(MHz)	L/N	QP-Mode	AV-Mode	QP-Mode	AV-Mode	(dB)	NOLE
0.18	Line	50.27	*	64.68	54.68	-14.41	(QP)
0.24	Line	42.48	*	62.23	52.23	-19.75	(QP)
0.30	Line	37.81	*	60.31	50.31	-22.50	(QP)
0.89	Line	35.94	*	56.00	46.00	-20.06	(QP)
8.85	Line	46.75	*	60.00	50.00	-13.25	(QP)
12.80	Line	41.78	*	60.00	50.00	-18.22	(QP)

Remark

- (1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9KHz;SPA setting in RBW=10KHz,VBW =10KHz, Swp. Time = 0.3 sec./MHz ∘ Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=1MHz,VBW=10Hz, Swp. Time =0.3 sec./MHz ∘
- (2) All readings are QP Mode value unless otherwise stated AVG in column of Note ... If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform ∘ In this case, a "*" marked in AVG Mode column of Interference Voltage Measured ∘
- (3) Measuring frequency range from 150KHz to 30MHz \circ



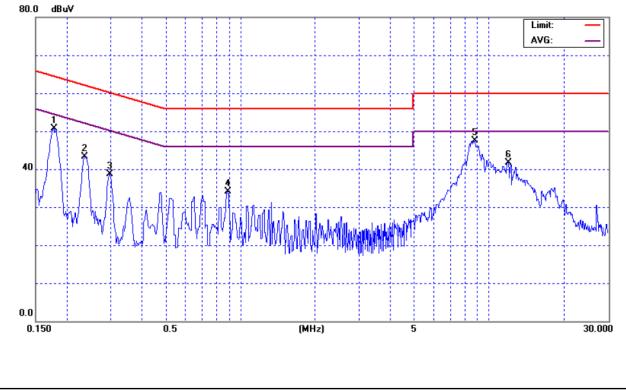


EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	26°C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11b/CH06 (DIPOLE)		

Freq.	Terminal	Measured(dBuV)		Limits(dBuV)		Margin	Note
(MHz)	L/N	QP-Mode	AV-Mode	QP-Mode	AV-Mode	(dB)	NOLE
0.18	Neutral	50.69	*	64.58	54.58	-13.89	(QP)
0.24	Neutral	43.26	*	62.26	52.26	-19.00	(QP)
0.30	Neutral	38.68	*	60.31	50.31	-21.63	(QP)
0.89	Neutral	34.09	*	56.00	46.00	-21.91	(QP)
8.80	Neutral	47.48	*	60.00	50.00	-12.52	(QP)
11.95	Neutral	41.62	*	60.00	50.00	-18.38	(QP)

Remark

- (1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9KHz;SPA setting in RBW=10KHz,VBW =10KHz, Swp. Time = 0.3 sec./MHz ° Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=1MHz,VBW=10Hz, Swp. Time =0.3 sec./MHz °
- (2) All readings are QP Mode value unless otherwise stated AVG in column of ^ℂNote_□. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform ∘ In this case, a "*" marked in AVG Mode column of Interference Voltage Measured ∘
- (3) Measuring frequency range from 150KHz to 30MHz \circ





4.2 RADIATED EMISSION MEASUREMENT

4.2.1 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 on15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies	Field Strength	Measurement Distance
(MHz)	(micorvolts/meter)	(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 (dBu	V/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 15B.

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

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

Neutron Engineering Inc.—

4.2.2 MEASUREMENT INSTRUMENTS LIST

			1		
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Log-Bicon Antenna	Schwarzbeck	VULB 9160	3176	Jul. 24, 2009
2	Test Cable	N/A	10M_OS01	N/A	Oct. 20, 2009
3	Test Cable	N/A	3M_OS01	N/A	Oct. 08, 2009
4	Test Cable	N/A	OS01-1/-2	N/A	Oct. 08, 2009
5	Pre-Amplifier	Anritsu	MH648A(OS01)	M09961	Oct. 08, 2009
6	Positioning Controller (OS01)	MF	MF7802	N/A	N/A
7	Turn Table	Chance Most	CMTB-1.5	N/A	N/A
8	Spectrum Analyzer	HP	8591EM	3536A006810 10	Mar. 13, 2009
9	EMI Measuring Receiver	SHCAFFNER	SCR 3501	408	Nov.24.2009
10	Spectrum Analyzer	R&S	FSP-30	100854	Apr. 14, 2009
11	Horn Antenna	Schwarzbeck	BBHA 9120 D	9120D-546	May 27, 2009
12	Microwave Pre_amplifier	Agilent	8449B	3008A02331	Jan. 14, 2010
13	Microflex Cable	NA	NA	1m	Sep. 15, 2009
14	Microflex Cable	NA	NA	10M	Feb. 20, 2009

Remark: " N/A" denotes No Model Name / Serial No. and No Calibration specified.

4.2.3 TEST PROCEDURE

- a. The measuring distance of at 10 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 3m or 10 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.

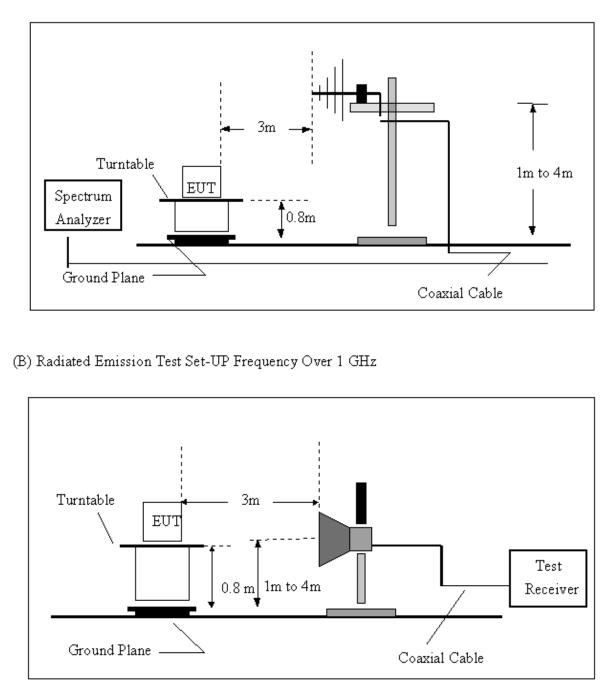
4.2.4 DEVIATION FROM TEST STANDARD

No deviation



4.2.5 TEST SETUP

(A) Radiated Emission Test Set-Up, Frequency Below 1000MHz



4.2.6 EUT OPERATING CONDITIONS

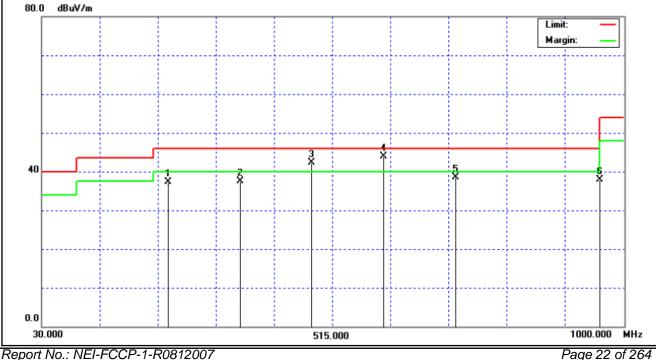
The EUT tested system was configured as the statements of **4.1.6** Unless otherwise a special operating condition is specified in the follows during the testing.

Neutron Engineering Inc.

4.2.7 TEST RESULTS-BETWEEN 30MHZ - 1000MHZ

EUT :		IEEE 802.11n V module	VLAN USB 2.0	Model Name : US302			
Temperatur	e:	14°C		Relative Humidi	ity : 57%		
Test Voltage	e:	AC 120V/60Hz			<u>.</u>		
Test Mode	:	802.11b/CH06 ((CHIP)				
Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	Note
(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	NOLE
239.98	V	51.35	-13.96	37.39	46.00	- 8.61	(QP)
360.00	V	46.68	-9.19	37.49	46.00	- 8.51	(QP)
479.98	V	48.21	-5.86	42.35	46.00	- 3.65	(QP)
599.98	V	47.02	-3.09	43.93	46.00	- 2.07	(QP)
719.99	V	39.46	-1.00	38.46	46.00	- 7.54	(QP)
960.00	V	34.21	3.77	37.98	46.00	- 8.02	(QP)

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of "Note". Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform °
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency • "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (4) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode or QP detector mode of the emission .
- (5) Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

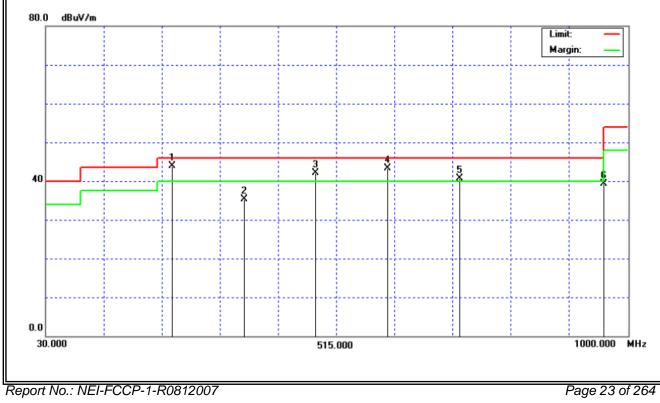




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11b/CH06 (CHIP)		

_								
	Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	Note
	(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	NOLC
	239.98	Н	57.89	-13.96	43.93	46.00	- 2.07	(QP)
	360.00	Н	44.46	-9.19	35.27	46.00	- 10.73	(QP)
	479.98	Н	47.98	-5.86	42.12	46.00	- 3.88	(QP)
	599.98	Н	46.34	-3.09	43.25	46.00	- 2.75	(QP)
	719.99	Н	41.66	-1.00	40.66	46.00	- 5.34	(QP)
í	960.00	Н	35.47	3.77	39.24	46.00	- 6.76	(QP)

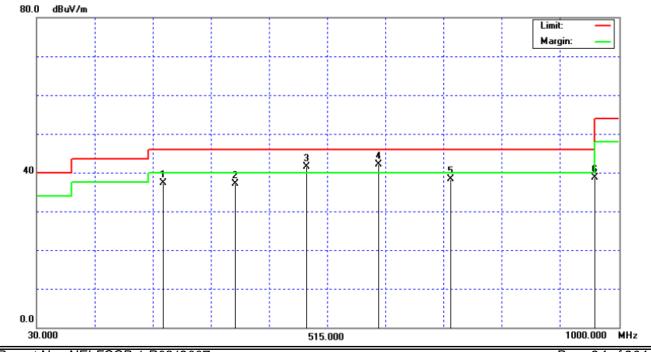
- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of "Note ... Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency ° "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (4) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode or QP detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.





EUT :		IEEE 802.11n V module	VLAN USB 2.0	Model Name :	US302		
Temperature	e:	21°C		Relative Humid	ity : 66%		
Test Voltage	e:	AC 120V/60Hz					
Test Mode	:	802.11b/CH06 ((PIFA)				
Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	Note
(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	NOLC
239.98	V	51.32	-13.96	37.36	46.00	- 8.64	(QP)
360.00	V	46.37	-9.19	37.18	46.00	- 8.82	(QP)
479.98	V	47.33	-5.86	41.47	46.00	- 4.53	(QP)
599.98	V	45.23	-3.09	42.14	46.00	- 3.86	(QP)
719.99	V	39.33	-1.00	38.33	46.00	- 7.67	(QP)
960.00	V	34.85	3.77	38.62	46.00	- 7.38	(QP)

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency o "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (4) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode or QP detector mode of the emission •
- (5) Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

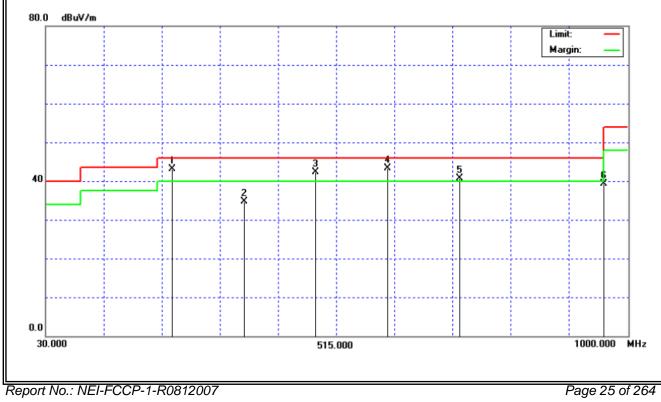




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11b/CH06 (PIFA)		

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	Note
(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	NOLC
239.97	Н	57.07	-13.96	43.11	46.00	- 2.89	(QP)
360.00	Н	43.99	-9.19	34.80	46.00	- 11.20	(QP)
479.98	Н	48.08	-5.86	42.22	46.00	- 3.78	(QP)
599.98	Н	46.49	-3.09	43.40	46.00	- 2.60	(QP)
719.99	Н	41.73	-1.00	40.73	46.00	- 5.27	(QP)
960.00	Н	35.45	3.77	39.22	46.00	- 6.78	(QP)

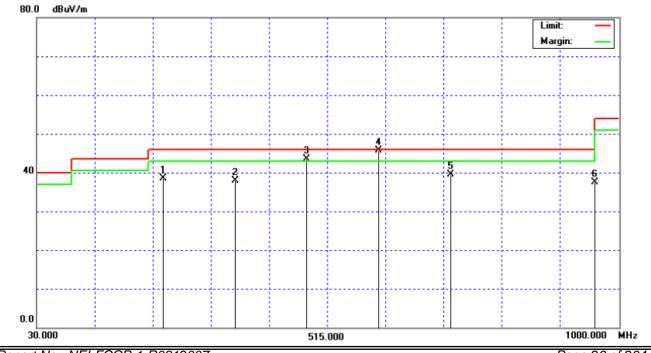
- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of "Note ... Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency ° "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (4) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode or QP detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.





EUT :		IEEE 802.11n V module	/LAN USB 2.0	Nodel Name :	US302		
Temperatur	e:	16°C		Relative Humidi	ity : 57%		
Test Voltage	e:	AC 120V/60Hz					
Test Mode	:	802.11b/CH06 (DIPOLE)				
Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	Note
(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	Note
239.98	V	42.50	-3.98	38.52	46.00	- 7.48	(QP)
360.00	V	37.02	0.79	37.81	46.00	- 8.19	(QP)
479.98	V	39.60	3.97	43.57	46.00	- 2.43	(QP)
599.99	V	38.90	6.75	45.65	46.00	- 0.35	(QP)
719.99	V	30.30	9.17	39.47	46.00	- 6.53	(QP)
960.00	V	24.00	13.46	37.46	46.00	- 8.54	(QP)

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency o "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (4) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode or QP detector mode of the emission •
- (5) Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

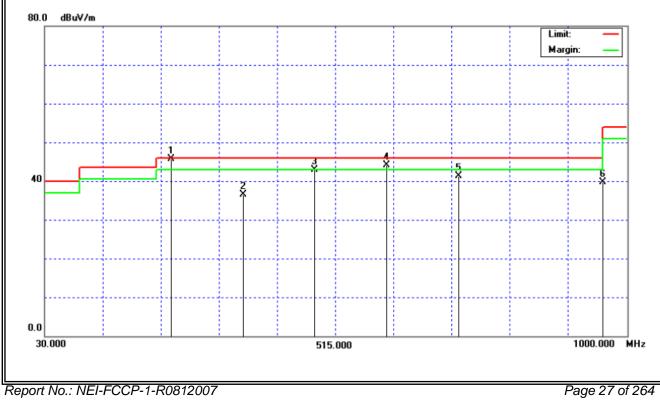




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	16°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11b/CH06 (DIPOLE)		

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	N. 4
(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	Note
239.98	Н	49.65	-3.98	45.67	46.00	- 0.33	(QP)
360.00	Н	35.70	0.79	36.49	46.00	- 9.51	(QP)
479.99	Н	39.00	3.97	42.97	46.00	- 3.03	(QP)
599.98	Н	37.40	6.75	44.15	46.00	- 1.85	(QP)
719.98	Н	32.20	9.17	41.37	46.00	- 4.63	(QP)
960.00	Н	26.27	13.46	39.73	46.00	- 6.27	(QP)

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of "Note ... Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency ° "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (4) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode or QP detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.



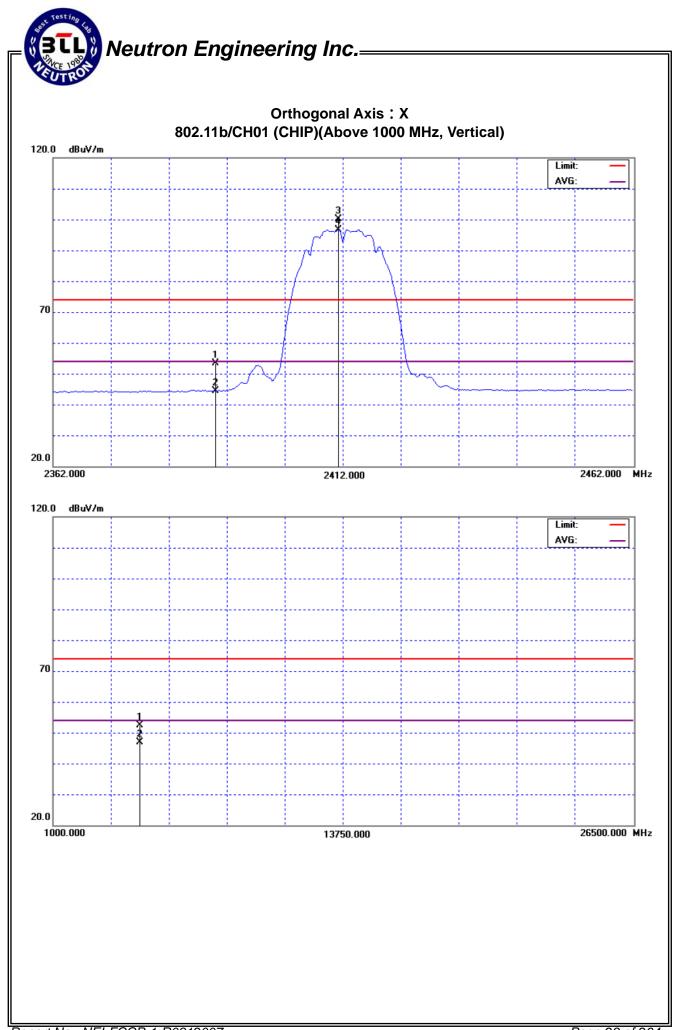
Neutron Engineering Inc.=

4.2.8 TEST RESULTS - ABOVE 1000MHZ - CHIP

EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11b/CH01 (CHIP)		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	20.80	11.81	32.57	53.37	44.38	74.00	54.00	X/H
2411.20	V	67.55	63.94	32.69	100.24	96.63			X/F
4823.96	V	48.23	42.89	4.04	52.27	46.93	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table ; "Y" denotes Vertical Stand ; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.





EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11b/CH01 (CHIP)		

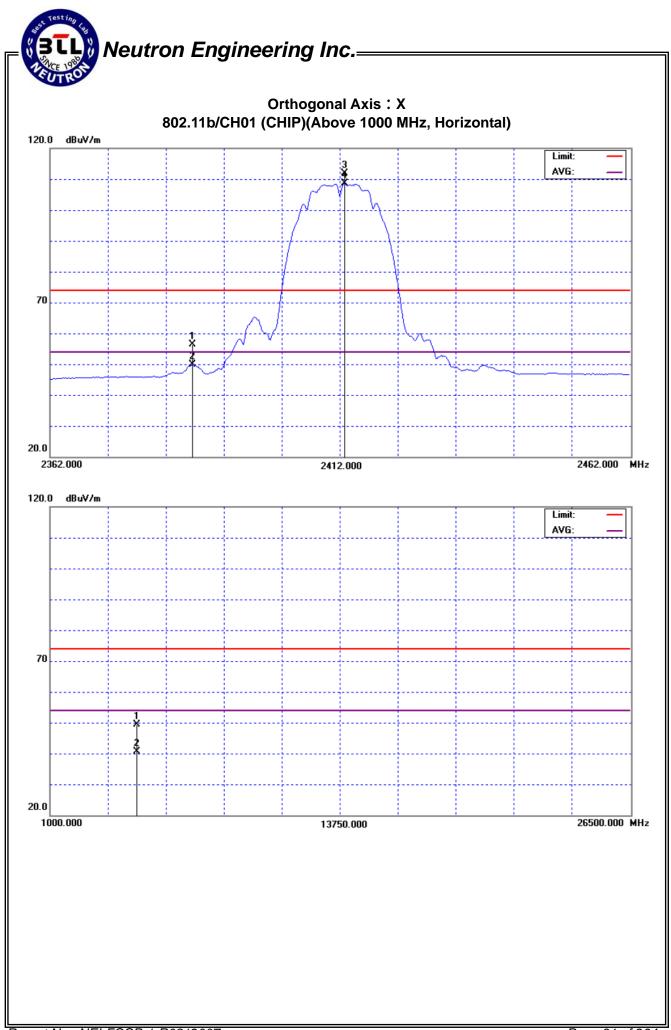
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2386.60	Н	23.79	17.25	32.55	56.34	49.80	74.00	54.00	X/H
2412.80	Н	79.20	75.83	32.70	111.90	108.53			X/F
4823.97	Н	45.39	36.60	4.04	49.43	40.64	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:

"X" - denotes Laid on Table; "Y" - denotes Vertical Stand; "Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

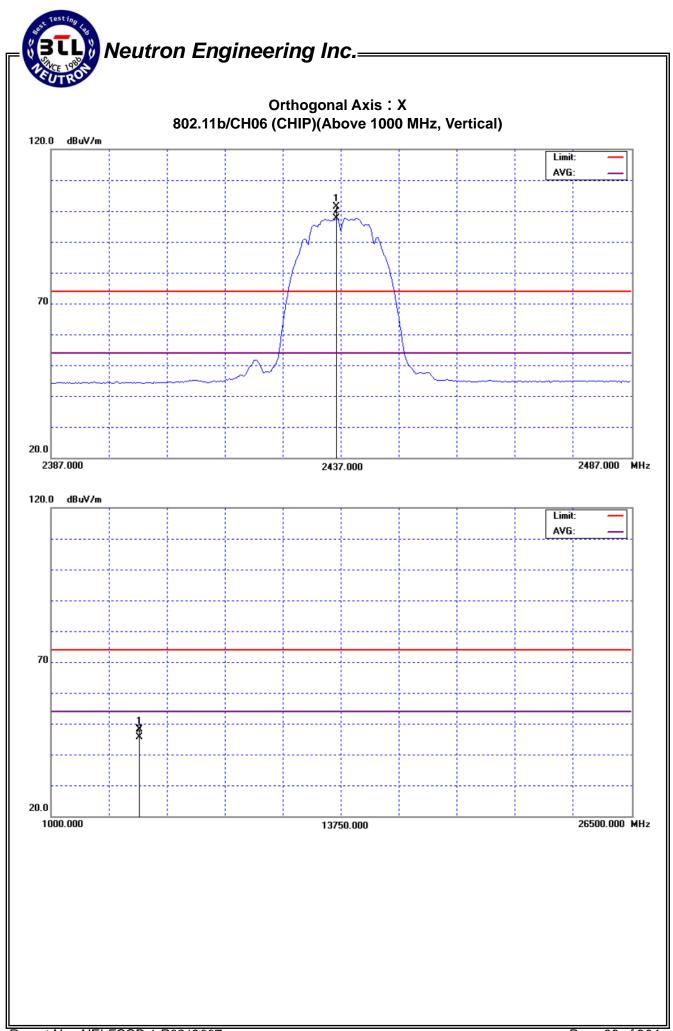




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz	·	
Test Mode :	802.11b/CH06 (CHIP)		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2436.20	V	68.49	64.69	32.83	101.32	97.52			X/F
4874.02	V	43.76	41.32	4.29	48.05	45.61	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of <code>"Note_"</code>. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

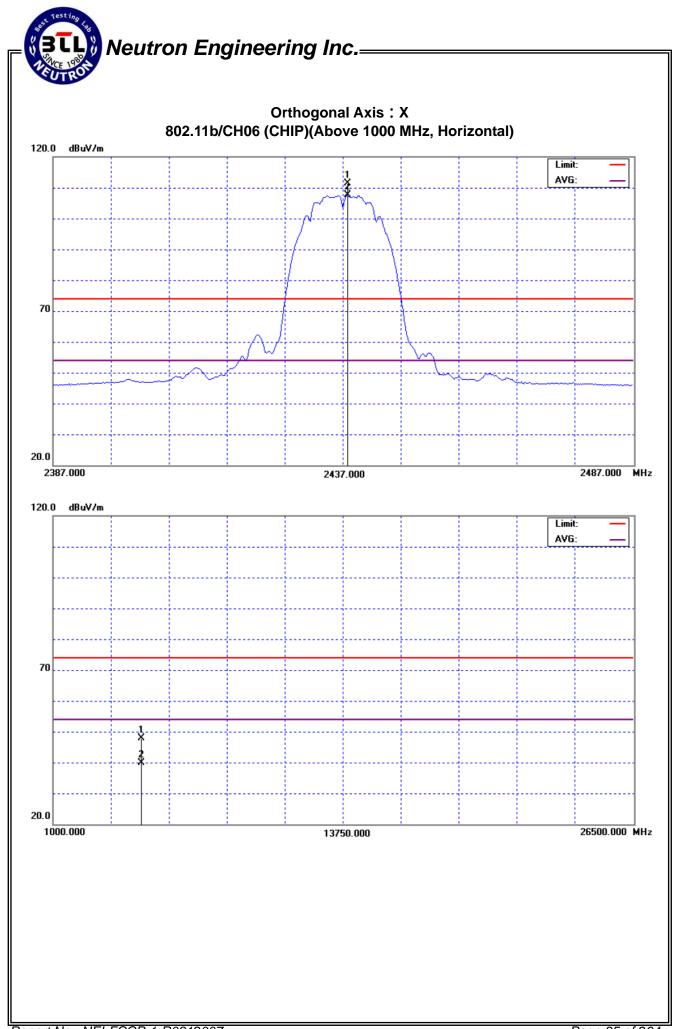




module		Model Name :	US302
Temperature : 14°C		Relative Humidity :	57%
Test Voltage : AC 120V/6	0Hz		
Test Mode : 802.11b/CH	H06 (CHIP)		

F	req.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
			Peak	AV		Peak	AV	Peak	AV	Note
(N	ИHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
243	37.80	Н	78.43	74.68	32.84	111.27	107.52			X/F
487	73.95	Н	43.64	35.64	4.29	47.93	39.93	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

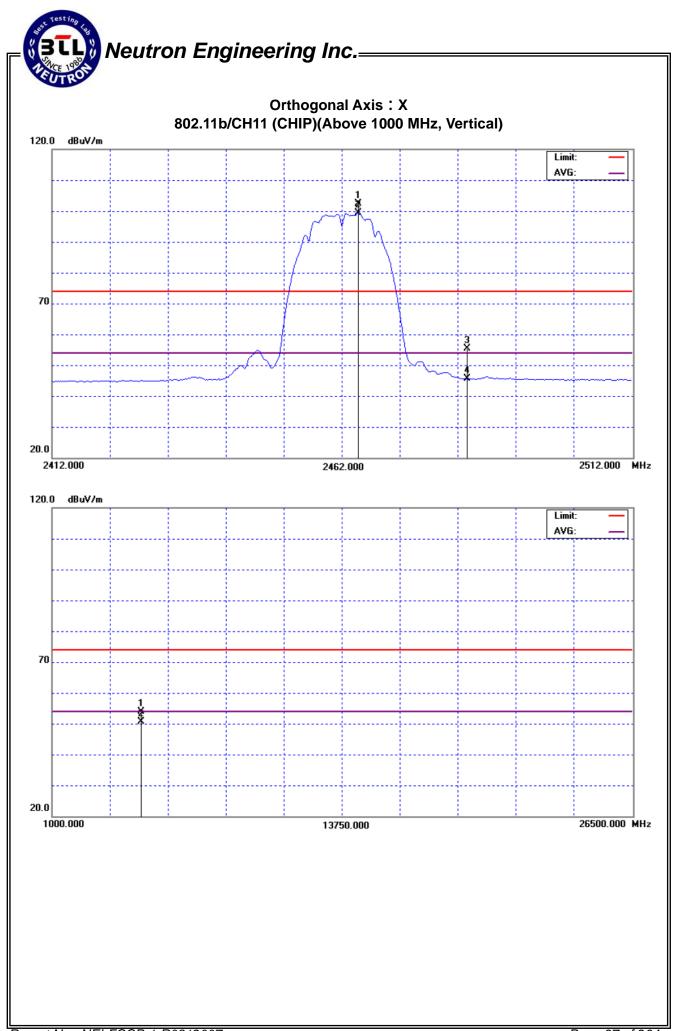




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11b/CH11 (CHIP)		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2464.80	V	69.49	66.31	32.99	102.48	99.30			X/F
2483.50	V	22.26	12.53	33.10	55.36	45.63	74.00	54.00	X/H
4923.94	V	49.36	45.99	4.53	53.89	50.52	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table ; "Y" denotes Vertical Stand ; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.





EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature : 1	14°C	Relative Humidity :	57%
Test Voltage : A	AC 120V/60Hz		
Test Mode : 8	802.11b/CH11 (CHIP)		

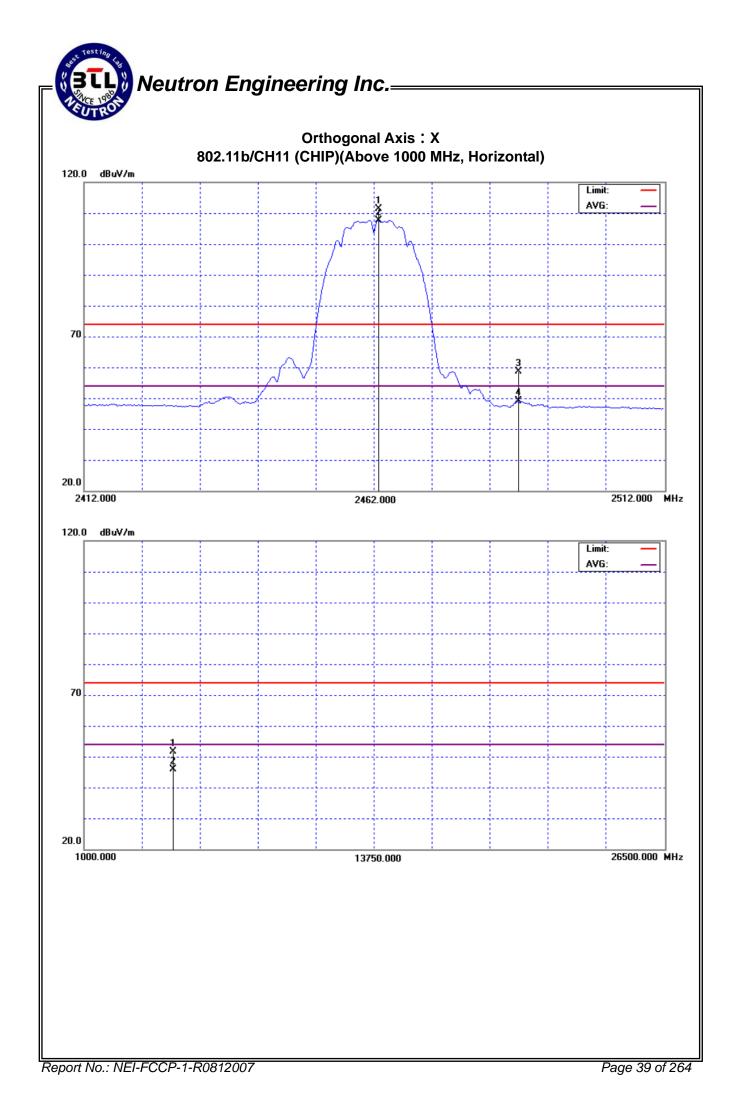
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2462.80	Н	78.34	74.76	32.98	111.32	107.74			X/F
2486.90	Н	25.57	15.95	33.12	58.69	49.07	74.00	54.00	X/H
4923.98	Н	47.19	41.36	4.54	51.73	45.90	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:

"X" - denotes Laid on Table; "Y" - denotes Vertical Stand; "Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

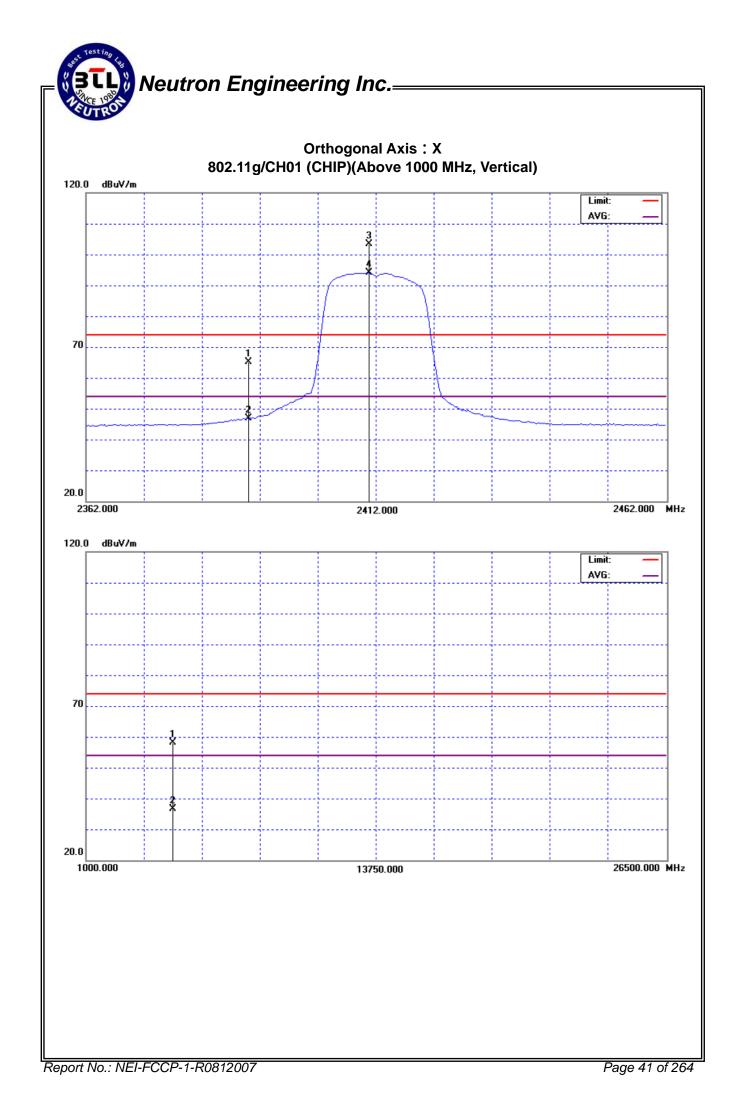




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11g/CH01 (CHIP)		

Freq.	Ant.Pol.	Read	Reading /		Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	32.52	14.20	32.57	65.09	46.77	74.00	54.00	X/H
2410.80	V	70.60	61.40	32.69	103.29	94.09			X/F
4820.00	V	54.00	32.63	4.03	58.03	36.66	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.





Temperature : 14°C Relative Humidity : 57% Test Voltage : AC 120V/60Hz 57%	EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
	Temperature :	14°C	Relative Humidity :	57%
	Test Voltage :	AC 120V/60Hz		
lest mode . [802.11g/CH01 (CHIP)	Test Mode :	802.11g/CH01 (CHIP)		

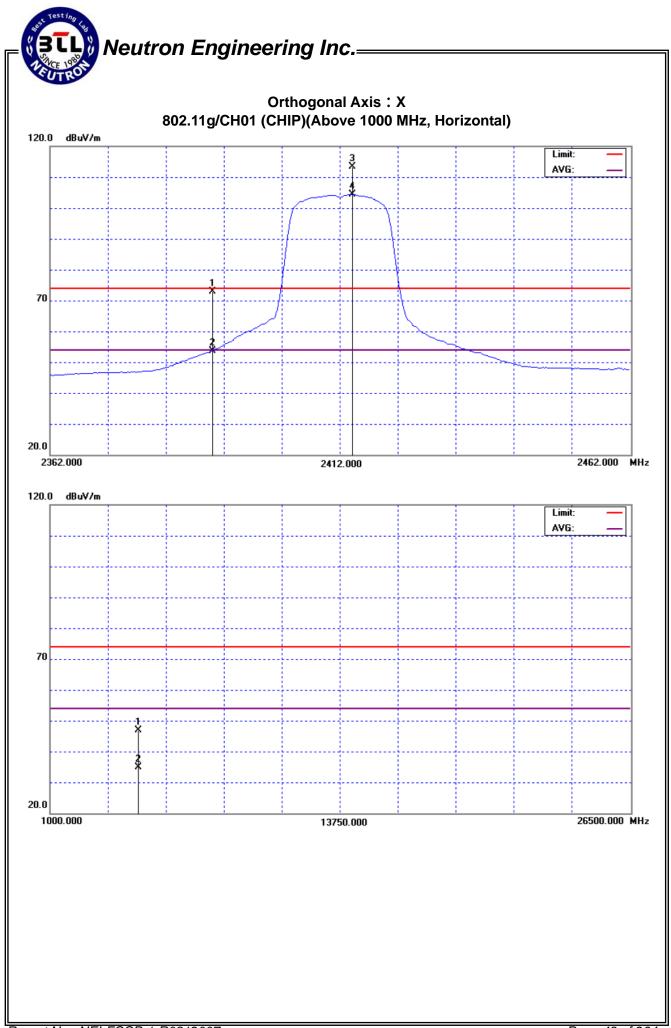
Γ	Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
			Peak	AV		Peak	AV	Peak	AV	Note
	(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
	2390.00	Н	40.24	21.10	32.57	72.81	53.67	74.00	54.00	X/H
	2414.20	Н	80.60	71.65	32.71	113.31	104.36			X/F
	4827.60	Н	42.75	30.76	4.06	46.81	34.82	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of $\[\]$ Note $\]$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $\[\circ\]$
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:

"X" - denotes Laid on Table; "Y" - denotes Vertical Stand; "Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

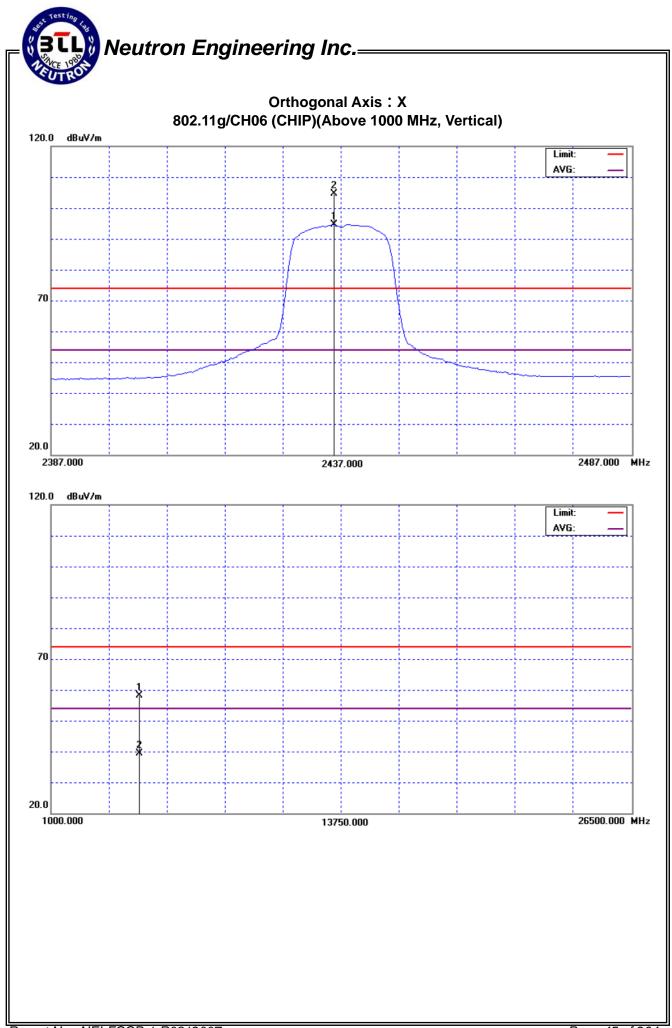




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11g/CH06 (CHIP)		

Freq.	Ant.Pol.	Rea	Reading		Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2435.80	V	71.68	61.79	32.83	104.51	94.62			X/F
4872.40	V	53.95	35.00	4.28	58.23	39.28	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

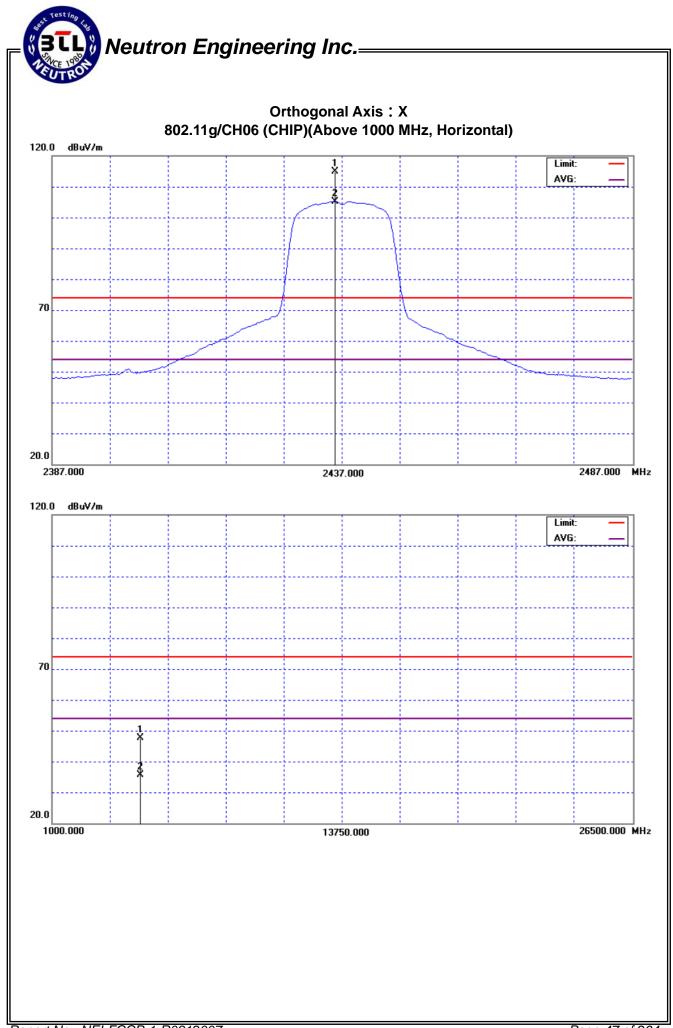




Temperature : 14°C Relative Humidity : 57	7%
Test Voltage : AC 120V/60Hz	
Test Mode : 802.11g/CH06 (CHIP)	

Freq.	Ant.Pol.	Rea	Reading		Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2435.80	Н	82.15	72.37	32.83	114.98	105.20			X/F
4871.60	Н	43.34	31.27	4.28	47.62	35.55	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

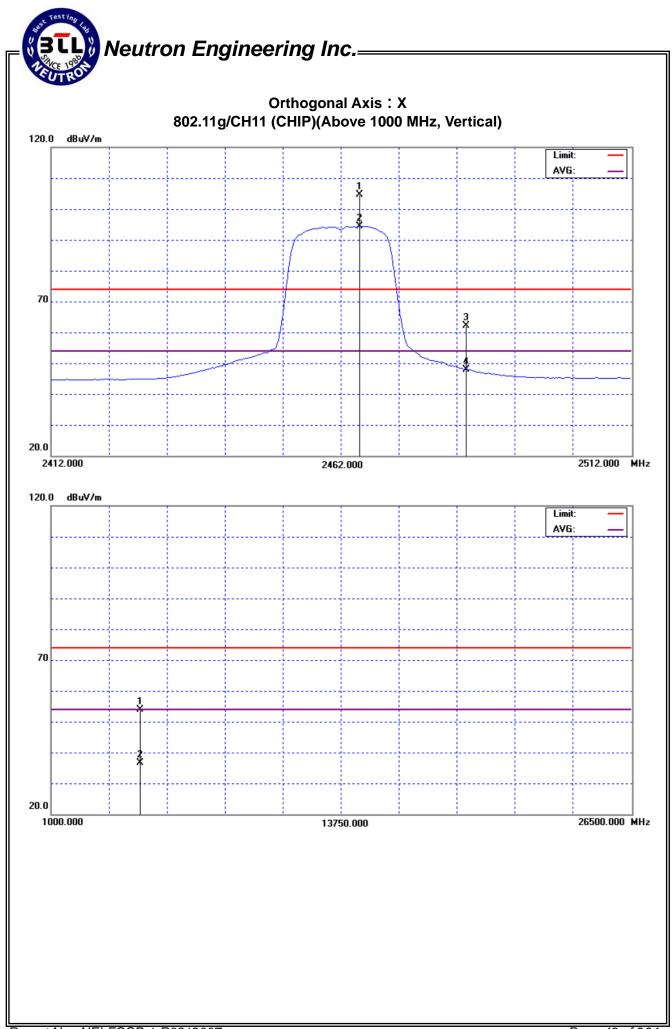




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11g/CH11 (CHIP)		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2465.20) V	71.74	61.38	33.00	104.74	94.38			X/F
2483.50) V	28.93	14.89	33.10	62.03	47.99	74.00	54.00	X/H
4919.60) V	49.29	32.22	4.51	53.80	36.73	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table ; "Y" denotes Vertical Stand ; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

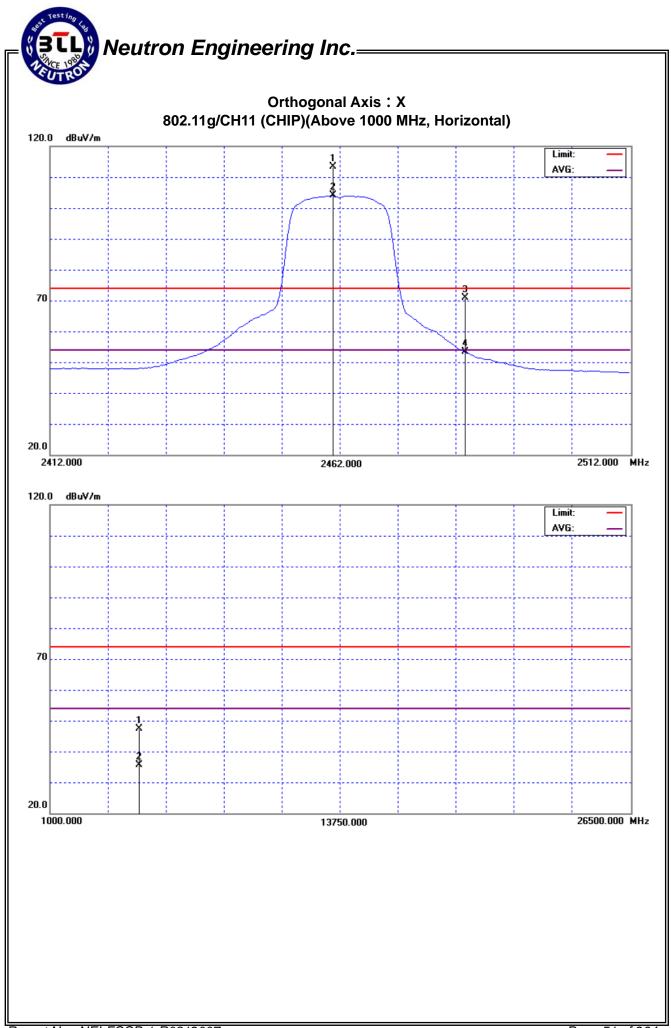




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11g/CH11 (CHIP)		

Freq.	Ant.Pol.	Rea	Reading		Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2460.80	Н	80.32	71.04	32.97	113.29	104.01			X/F
2483.50	Н	37.78	20.21	33.10	70.88	53.31	74.00	54.00	X/H
4925.60	Н	42.86	30.98	4.54	47.40	35.52	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

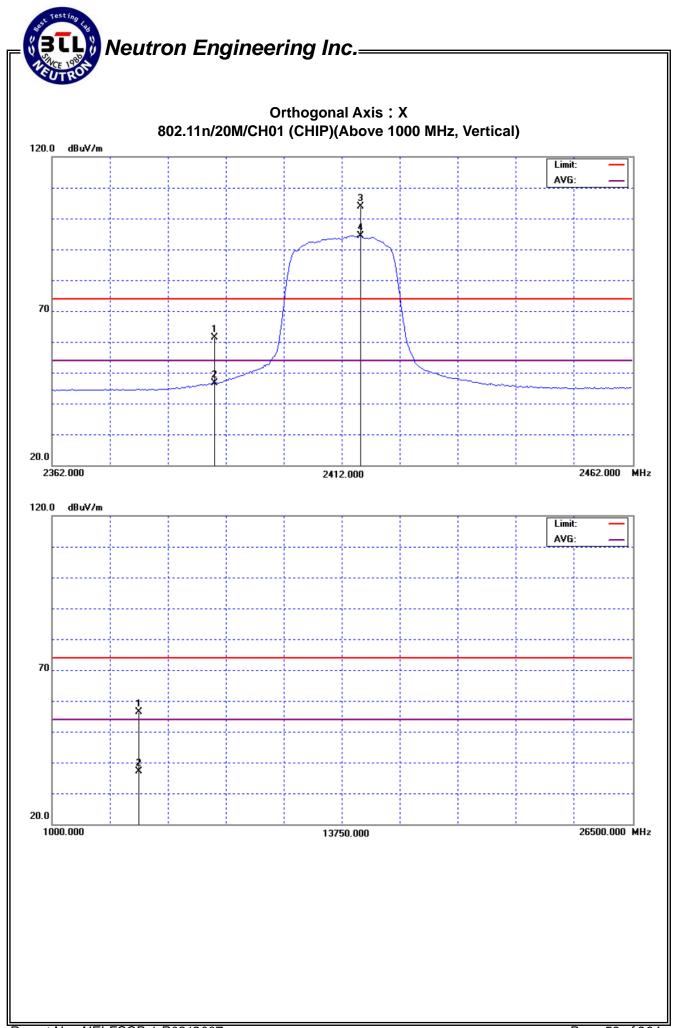




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH01 (CHIP)		

Freq.	Ant.Pol.	Read	ling	Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	28.83	14.01	32.57	61.40	46.58	74.00	54.00	X/H
2415.20	V	71.22	61.76	32.72	103.94	94.48			X/F
4823.60	V	52.41	32.99	4.04	56.45	37.03	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.





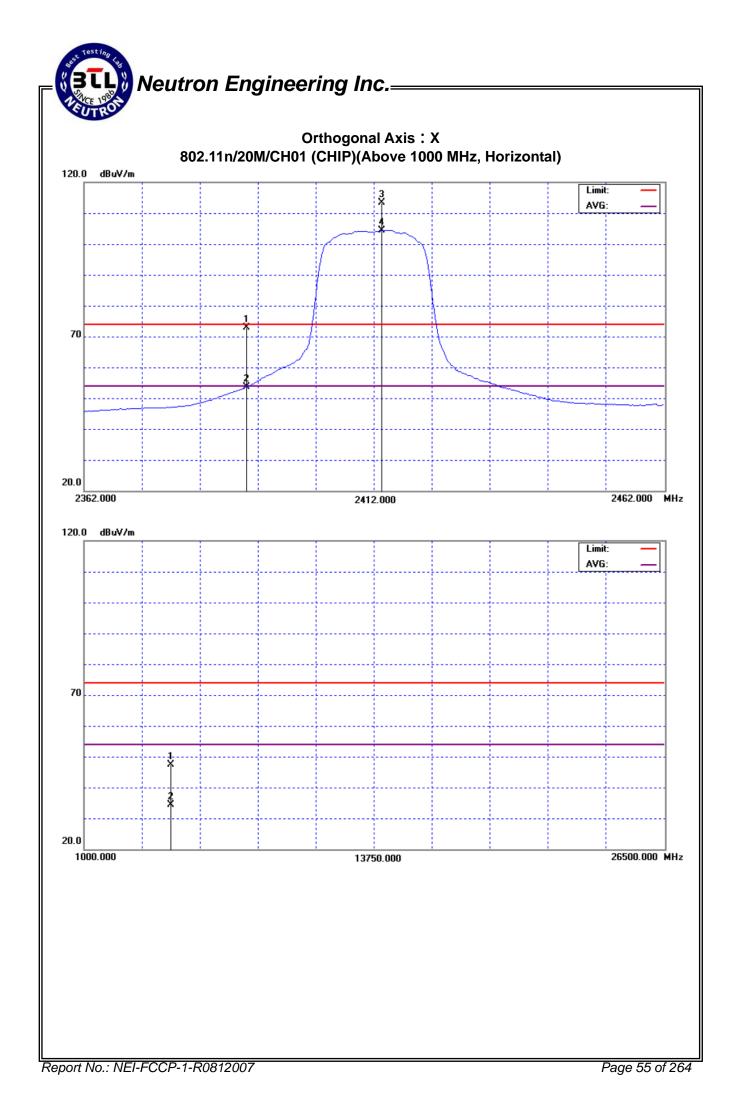
EUT : mo	EE 802.11n WLAN USB 2.0 odule	Model Name :	US302
Temperature : 14°	↓°C	Relative Humidity :	57%
Test Voltage : AC	C 120V/60Hz		
Test Mode : 802	02.11n/20M/CH01 (CHIP)		

Freq.	Ant.Pol.	Rea	Reading		A	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)		
2390.00	Н	40.31	21.13	32.57	72.88	53.70	74.00	54.00	X/H	
2413.40	Н	80.77	71.75	32.71	113.48	104.46			X/F	
4823.20	Н	43.22	30.24	4.04	47.26	34.28	74.00	54.00	X/H	

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of $\[\]$ Note $\]$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $\[\circ\]$
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:

- "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

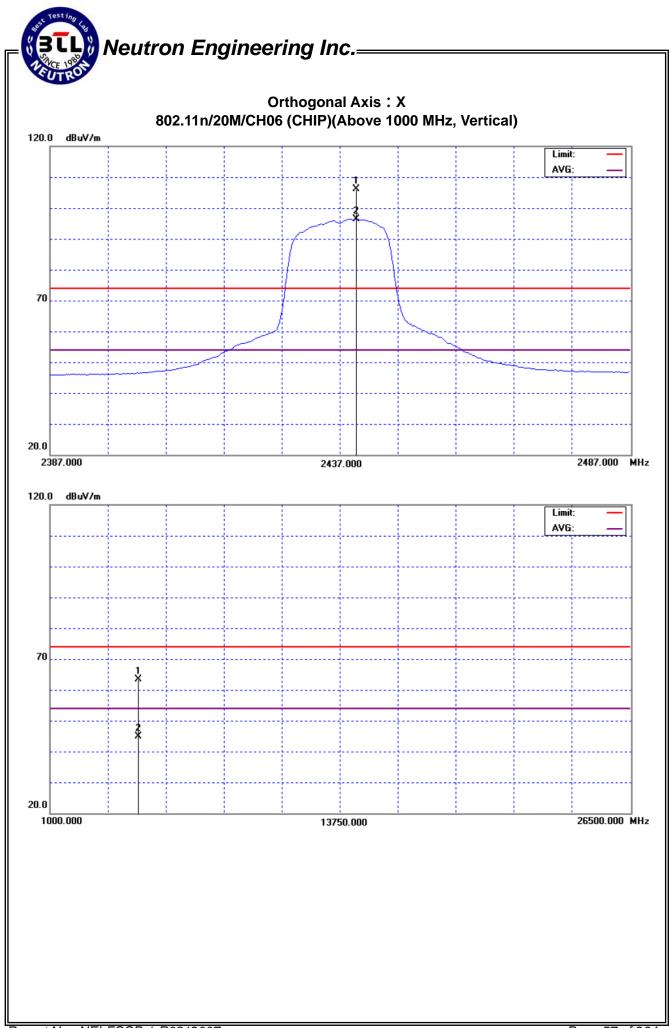




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH06 (CHIP)		

ſ	Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
			Peak	AV		Peak	AV	Peak	AV	Note
	(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
	2439.80	V	73.31	63.54	32.85	106.16	96.39			X/F
	4872.20	V	59.00	40.69	4.29	63.29	44.98	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of <code>"Note_"</code>. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

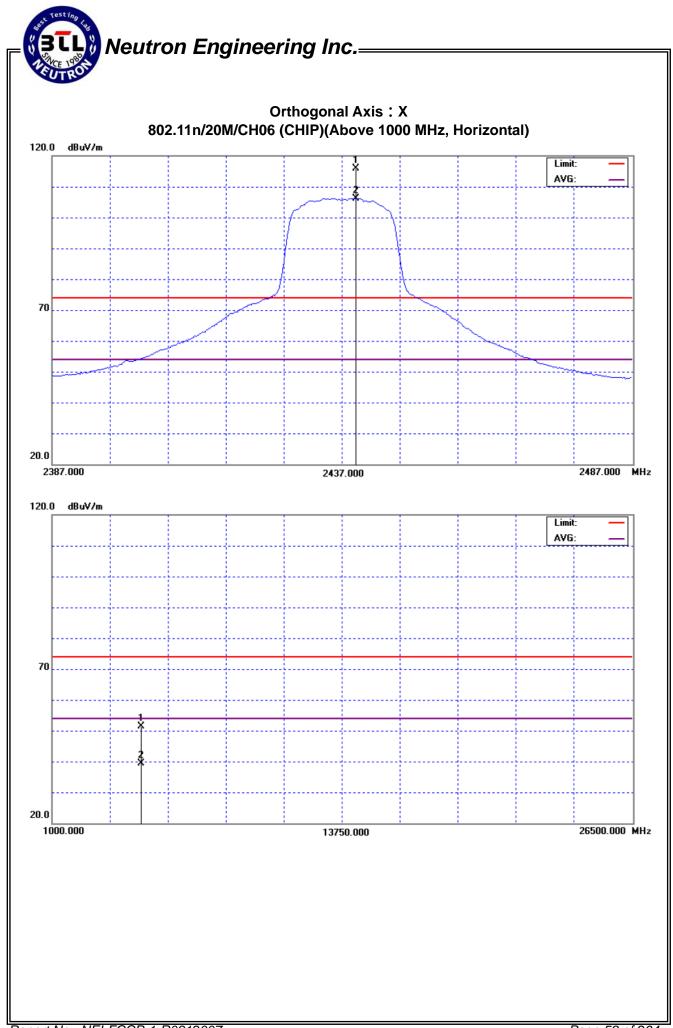




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH06 (CHIP)		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2439.40	Н	82.97	73.38	32.85	115.82	106.23			X/F
4878.40	Н	46.96	35.06	4.31	51.27	39.37	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

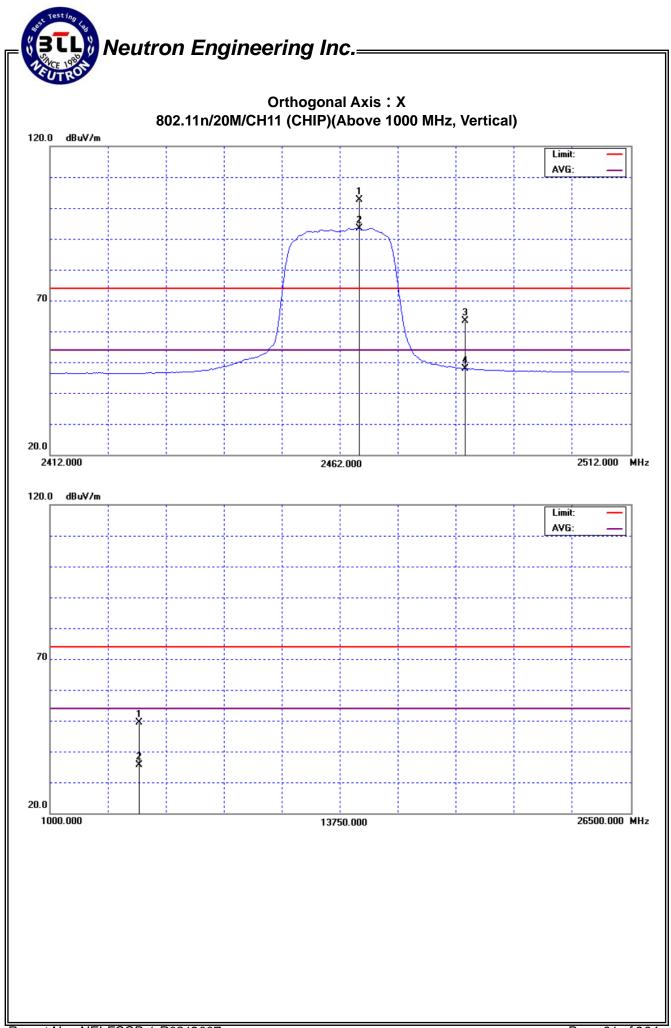




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH11 (CHIP)		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2465.40	V	69.57	60.46	33.00	102.57	93.46			X/F
2483.50	V	30.25	14.78	33.10	63.35	47.88	74.00	54.00	X/H
4923.40	V	44.81	31.13	4.53	49.34	35.66	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of $\[\]$ Note $\]$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $\[\circ\]$
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table ; "Y" denotes Vertical Stand ; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

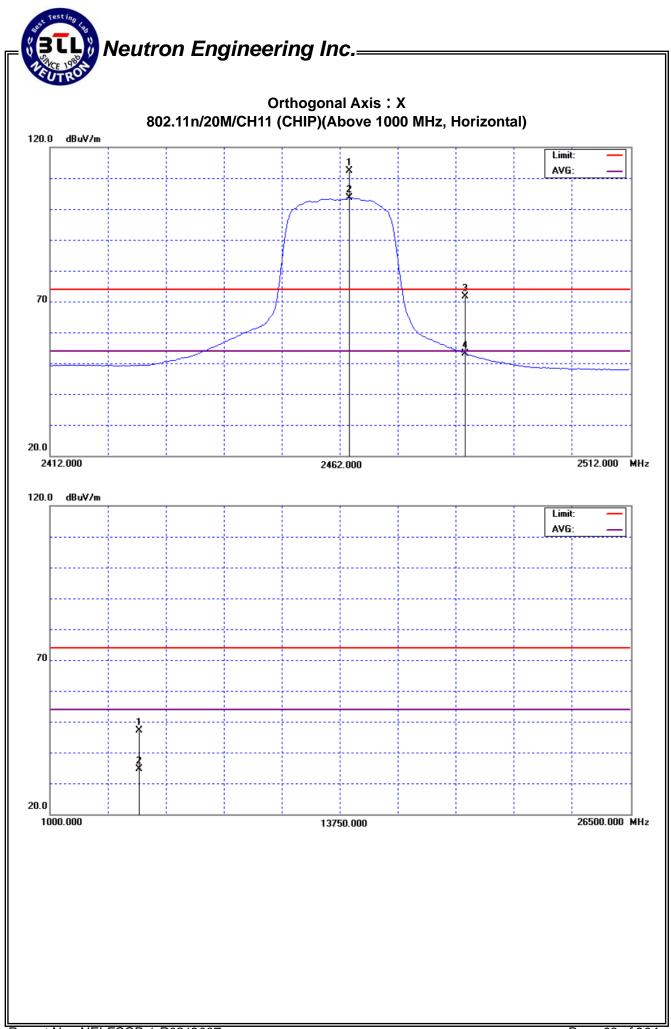




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH11 (CHIP)		

Freq.	Ant.Pol.	Rea	Reading		Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2463.60	Н	79.48	70.71	32.99	112.47	103.70			X/F
2483.50	Н	38.63	20.12	33.10	71.73	53.22	74.00	54.00	X/H
4924.50	Н	42.50	30.09	4.54	47.04	34.63	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

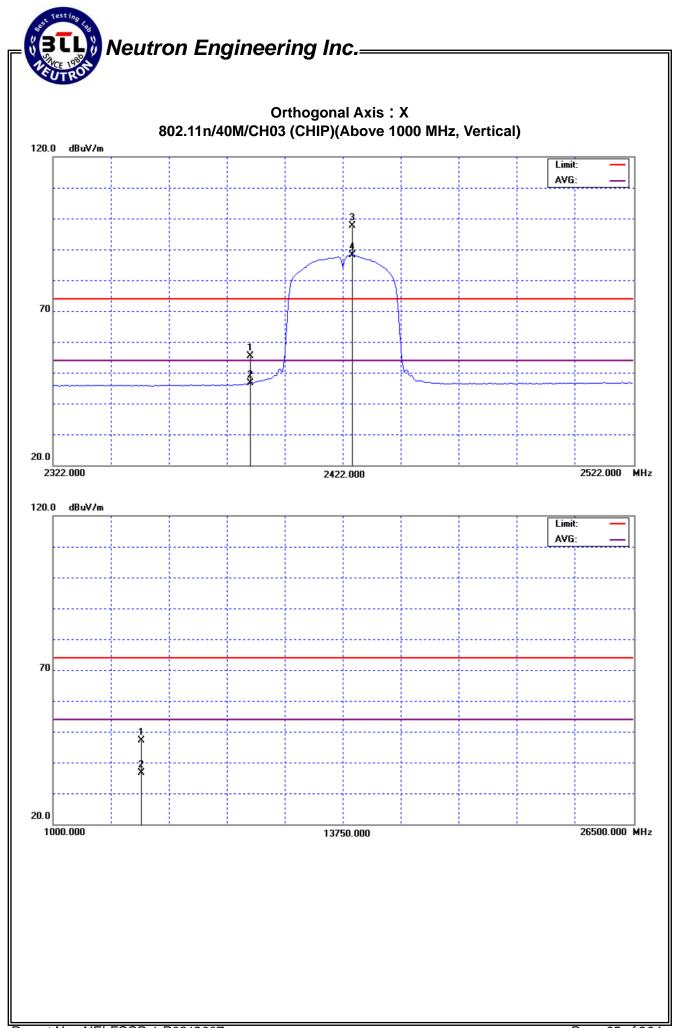




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH03 (CHIP)		

Freq.	Ant.Pol.	Read	ling	Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	22.83	14.01	32.57	55.40	46.58	74.00	54.00	X/H
2425.20	V	64.84	55.42	32.77	97.61	88.19			X/F
4842.00	V	42.95	32.45	4.13	47.08	36.58	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table ; "Y" denotes Vertical Stand ; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

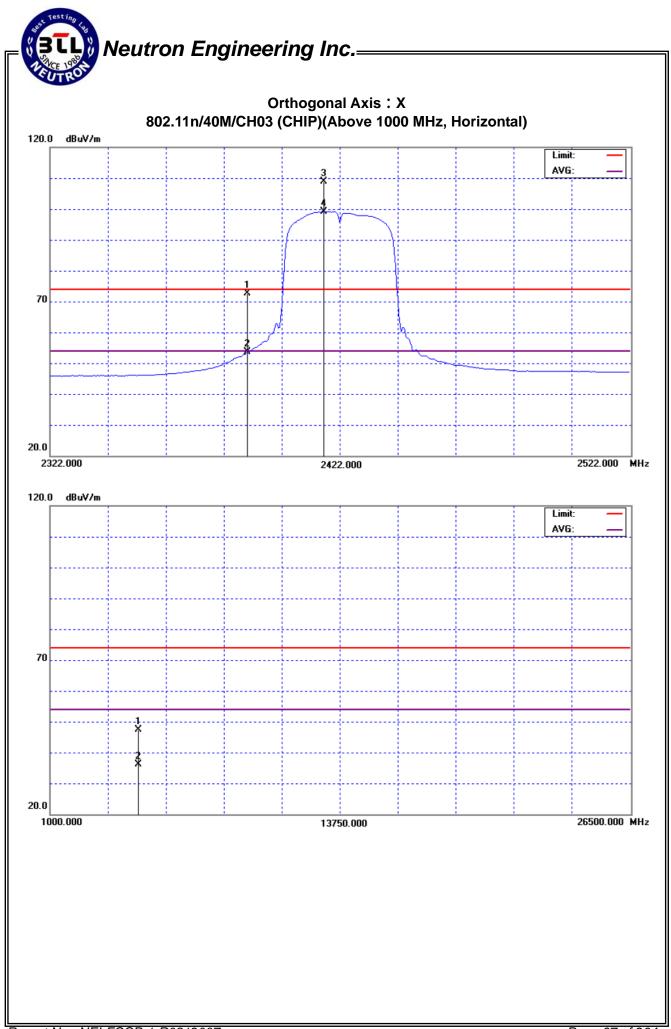




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode : 8	802.11n/40M/CH03 (CHIP)		

Freq.	Ant.Pol.	Rea	Reading		Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	Н	40.15	21.12	32.57	72.72	53.69	74.00	54.00	X/H
2416.40	Н	76.13	66.36	32.72	108.85	99.08			X/F
4843.20	Н	43.24	31.94	4.14	47.38	36.08	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

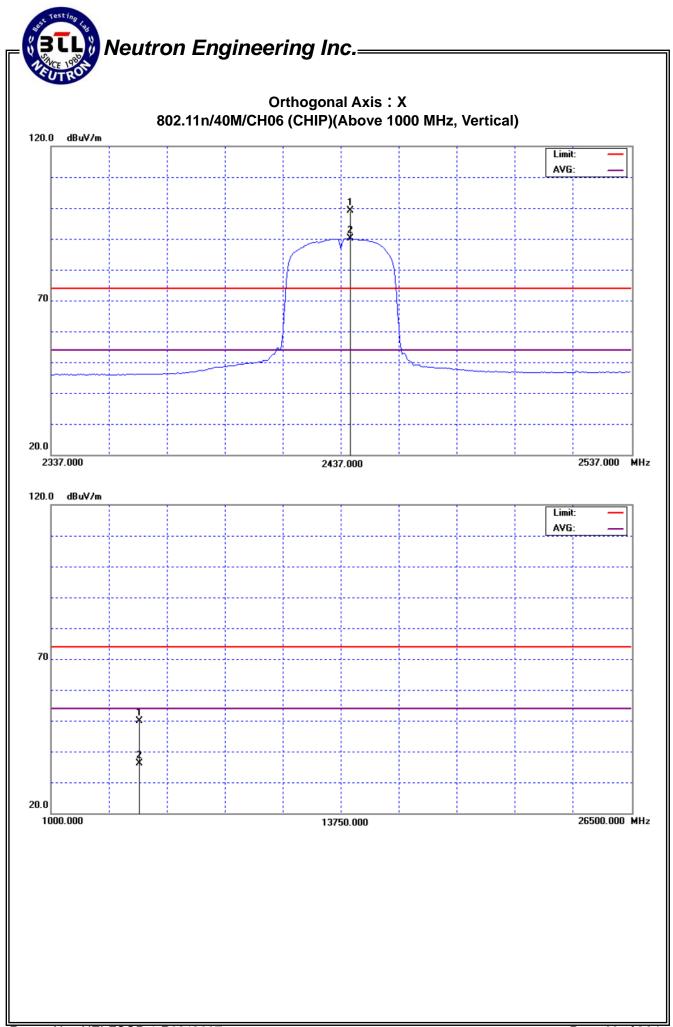




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH06 (CHIP)		

ſ	Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
			Peak	AV		Peak	AV	Peak	AV	Note
	(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
	2440.20	V	66.26	57.36	32.86	99.12	90.22			X/F
	4874.20	V	45.71	31.84	4.29	50.00	36.13	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

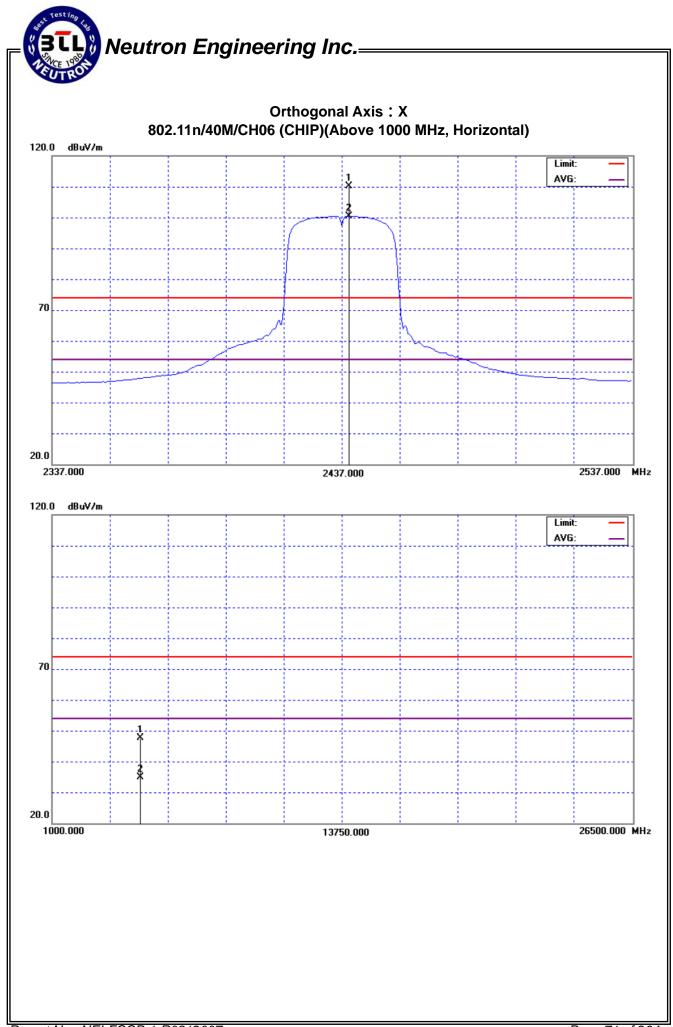




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH06 (CHIP)		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2439.40	H	77.31	67.65	32.85	110.16	100.50			X/F
4873.20	Н	43.25	30.66	4.29	47.54	34.95	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

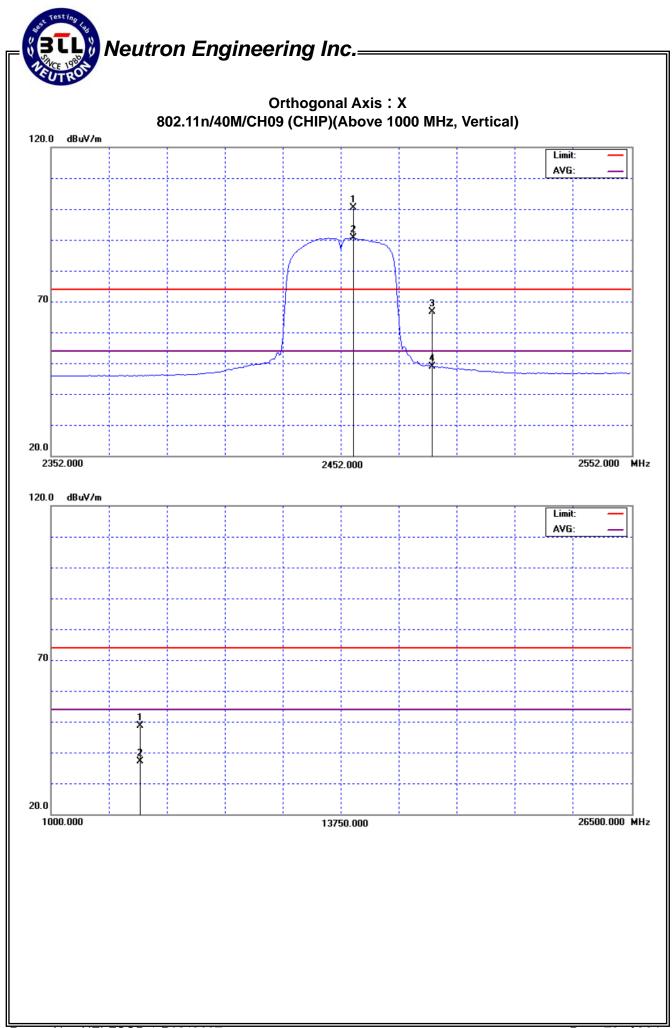




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH09 (CHIP)		

Freq.	Ant.Pol.	Rea	Reading		Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2456.40	V	67.40	57.72	32.95	100.35	90.67			X/F
2483.50	V	33.59	15.86	33.10	66.69	48.96	74.00	54.00	X/H
4924.60	V	44.15	32.50	4.54	48.69	37.04	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table ; "Y" denotes Vertical Stand ; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

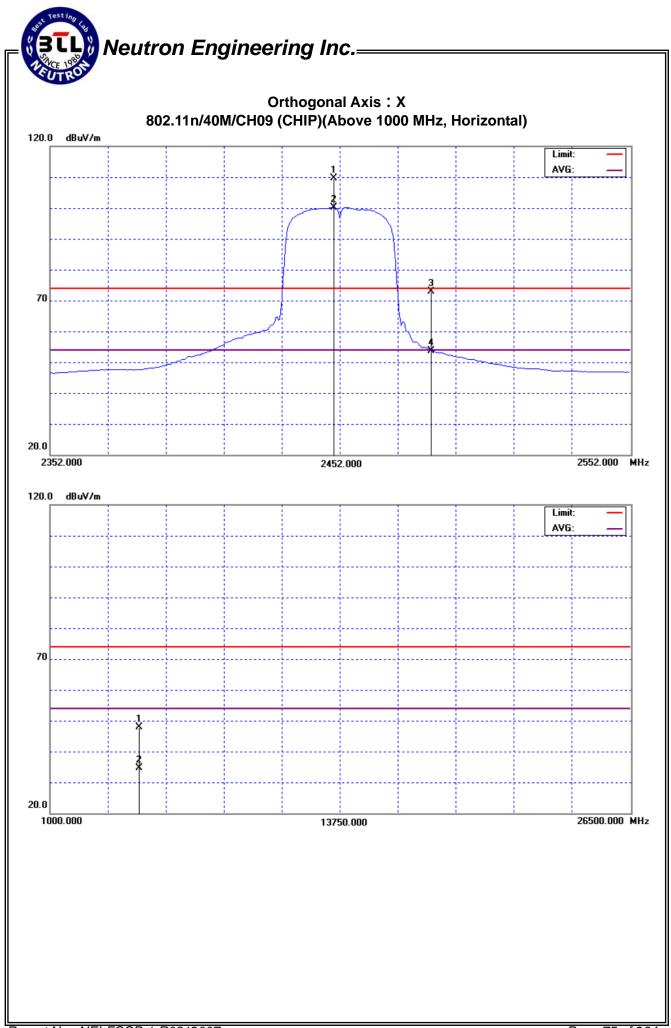




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	14°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH09 (CHIP)		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2450.00	Н	76.65	67.25	32.91	109.56	100.16			X/F
2483.50	Н	39.77	20.58	33.10	72.87	53.68	74.00	54.00	X/H
4923.40	Н	43.44	30.02	4.53	47.97	34.55	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.



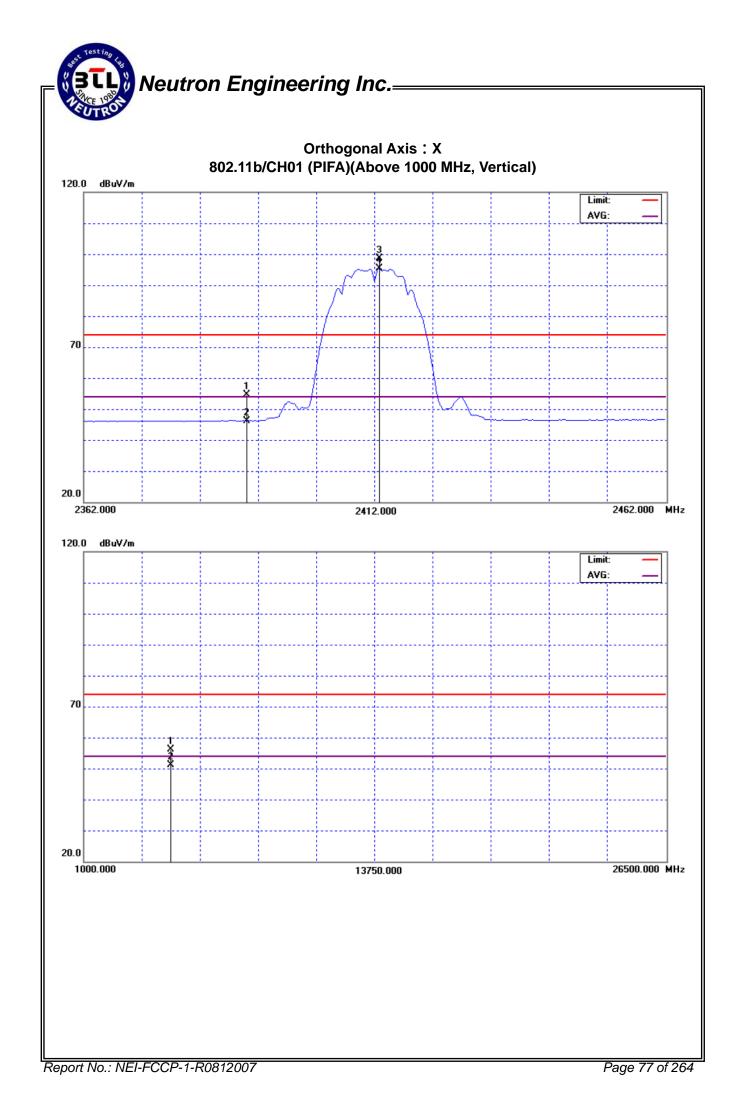
Neutron Engineering Inc.=

4.2.9 TEST RESULTS - ABOVE 1000MHZ - PIFA

EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11b/CH01 (PIFA)		

Freq.	Ant.Pol.	Read	Reading		Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	22.00	13.64	32.57	54.57	46.21	74.00	54.00	X/H
2412.80	V	66.03	62.63	32.70	98.73	95.33			X/F
4823.97	V	51.52	46.54	4.57	56.09	51.11	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table ; "Y" denotes Vertical Stand ; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.





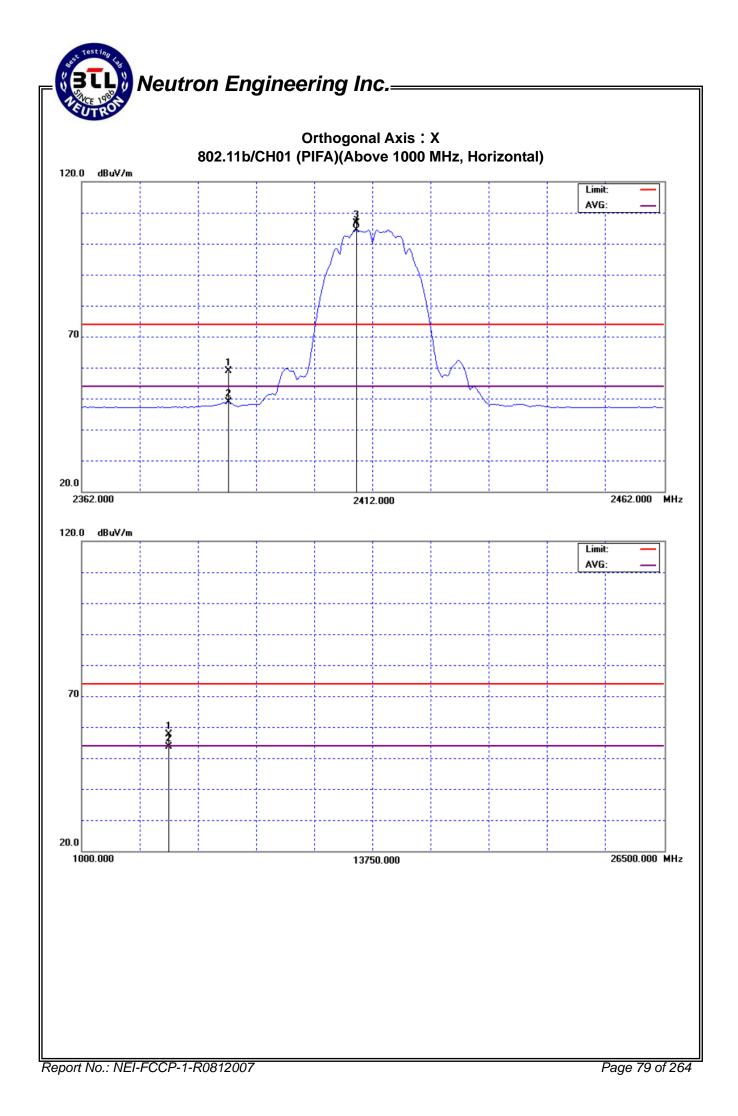
Temperature : 21°C Relative Humidity : 66%	
Test Voltage : AC 120V/60Hz	
Test Mode : 802.11b/CH01 (PIFA)	

Γ	Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
			Peak	AV		Peak	AV	Peak	AV	Note
	(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
	2387.20	Н	26.21	16.42	32.56	58.77	48.98	74.00	54.00	X/H
	2409.20	Н	74.04	71.79	32.68	106.72	104.47			X/F
	4824.00	Н	53.04	49.13	4.57	57.61	53.70	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of $\[\]$ Note $\]$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $\[\circ\]$
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:

"X" - denotes Laid on Table; "Y" - denotes Vertical Stand; "Z" - denotes Side Stand

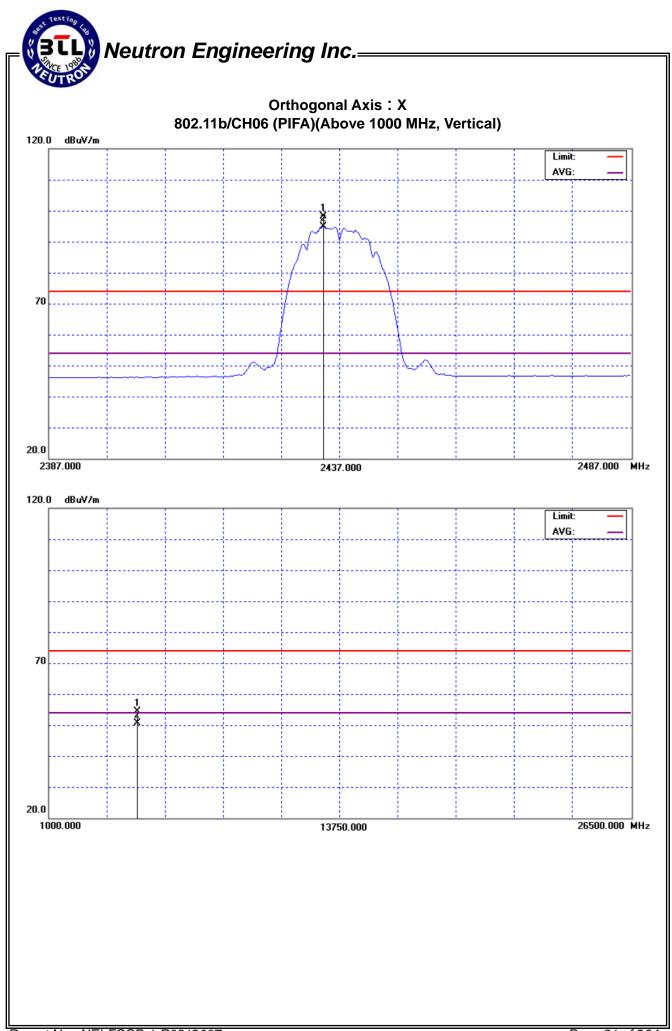




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11b/CH06 (PIFA)		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2434.20	V	65.37	62.11	32.82	98.19	94.93			X/F
4873.93	V	49.71	45.85	4.73	54.44	50.58	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

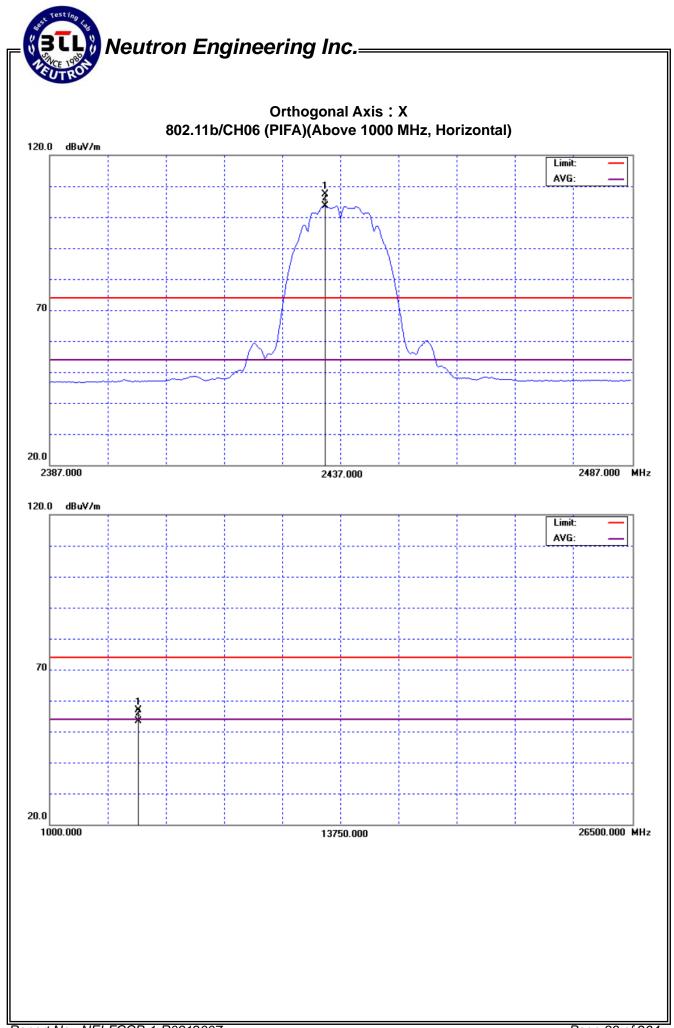




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11b/CH06 (PIFA)		
	L		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2434.40	Н	74.56	70.72	32.82	107.38	103.54			X/F
4874.01	Н	52.23	48.71	4.73	56.96	53.44	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

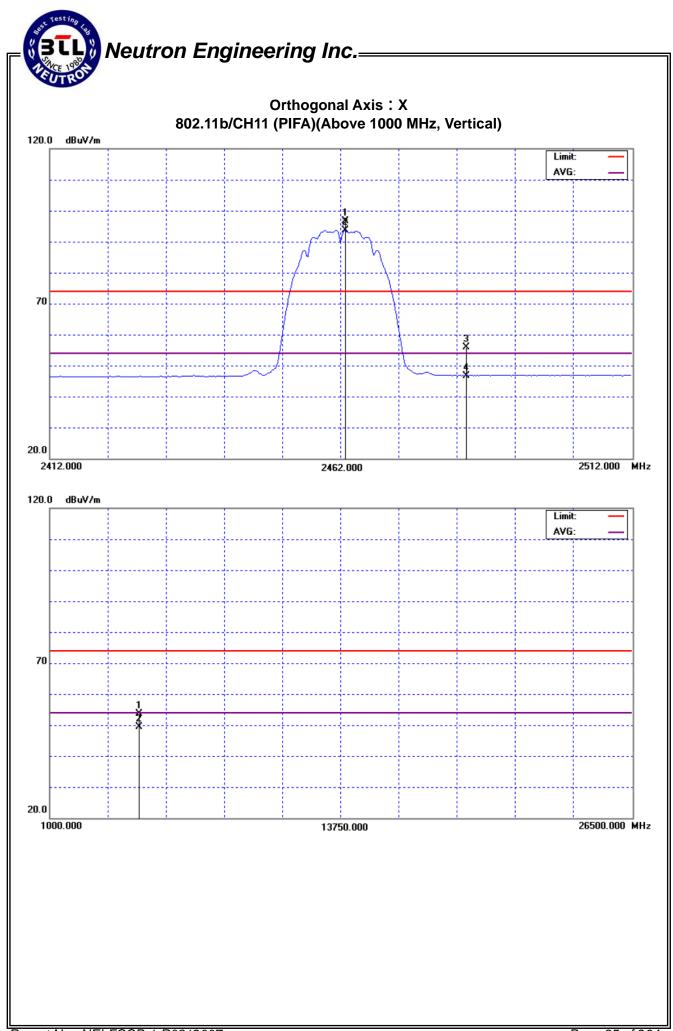




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11b/CH11 (PIFA)		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2462.80	V	63.53	60.77	32.98	96.51	93.75			X/F
2483.50	V	22.74	13.65	33.10	55.84	46.75	74.00	54.00	X/H
4924.03	V	48.71	44.56	4.89	53.60	49.45	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table ; "Y" denotes Vertical Stand ; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.





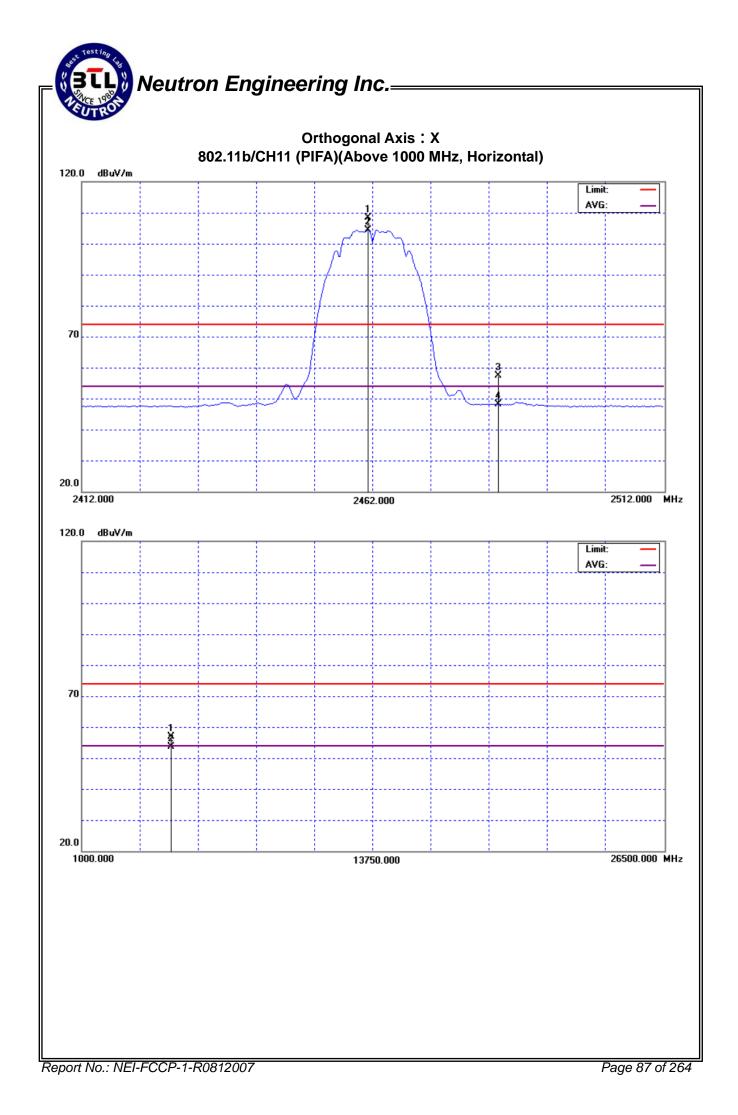
Temperature : 21°C Relative Humidity : 66%	
Test Voltage : AC 120V/60Hz	
Test Mode : 802.11b/CH11 (PIFA)	

Freq.	Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Lir	nit	
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2461.20	Н	75.31	71.43	32.97	108.28	104.40			X/F
2483.50	Н	24.35	15.02	33.10	57.45	48.12	74.00	54.00	X/H
4923.98	Н	51.98	48.68	4.89	56.87	53.57	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:

"X" - denotes Laid on Table; "Y" - denotes Vertical Stand; "Z" - denotes Side Stand

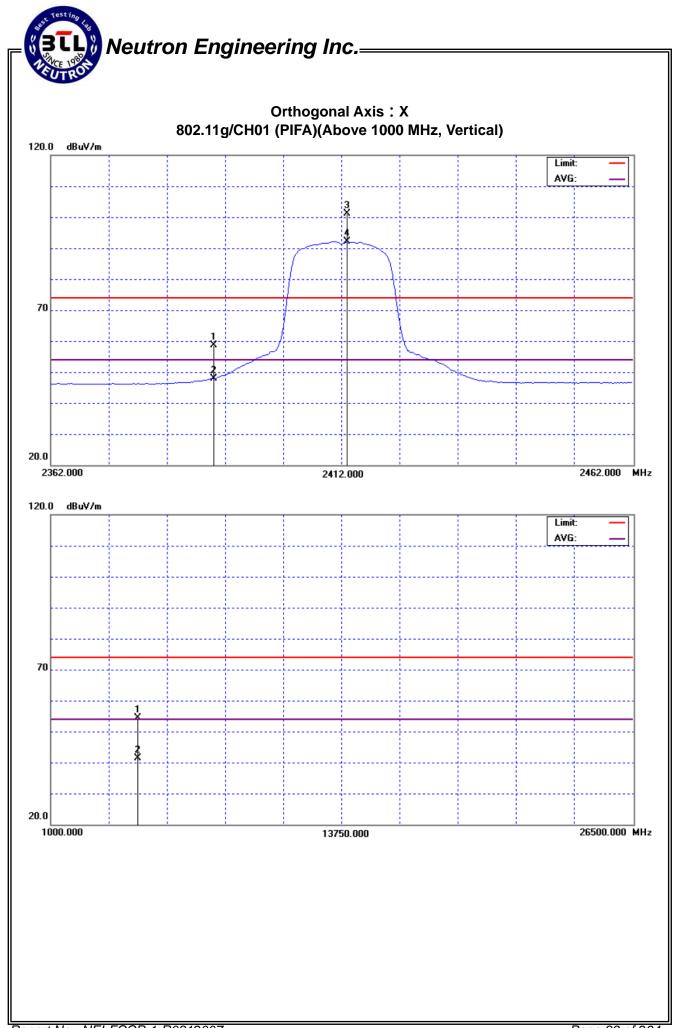




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11g/CH01 (PIFA)		

Freq.	Ant.Pol.	Read	ling	Ant./CF	A	ct.	Lir	nit	
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	26.08	15.29	32.57	58.65	47.86	74.00	54.00	X/H
2413.00	V	68.32	59.45	32.70	101.02	92.15			X/F
4822.40	V	49.87	36.93	4.56	54.43	41.49	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table ; "Y" denotes Vertical Stand ; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.





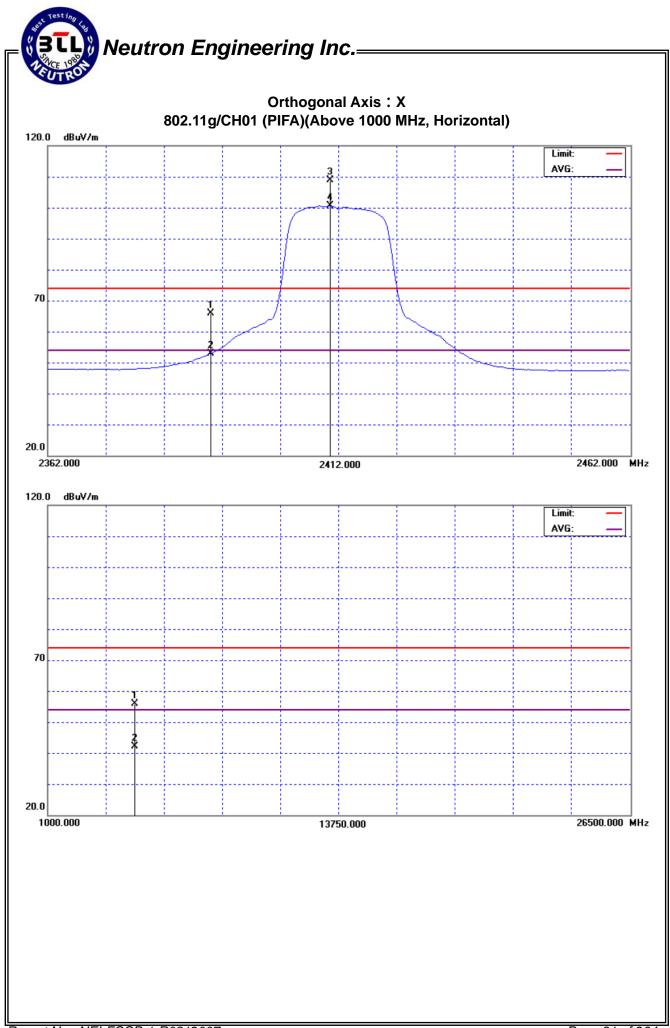
EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11g/CH01 (PIFA)		

	Freq.	Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Lir	nit	
			Peak	AV		Peak	AV	Peak	AV	Note
	(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
	2390.00	Н	33.36	20.35	32.57	65.93	52.92	74.00	54.00	X/H
	2410.60	Н	76.19	67.84	32.69	108.88	100.53			X/F
ſ	4818.00	Н	51.22	37.70	4.55	55.77	42.25	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of $\[\]$ Note $\]$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $\[\circ\]$
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:

"X" - denotes Laid on Table; "Y" - denotes Vertical Stand; "Z" - denotes Side Stand

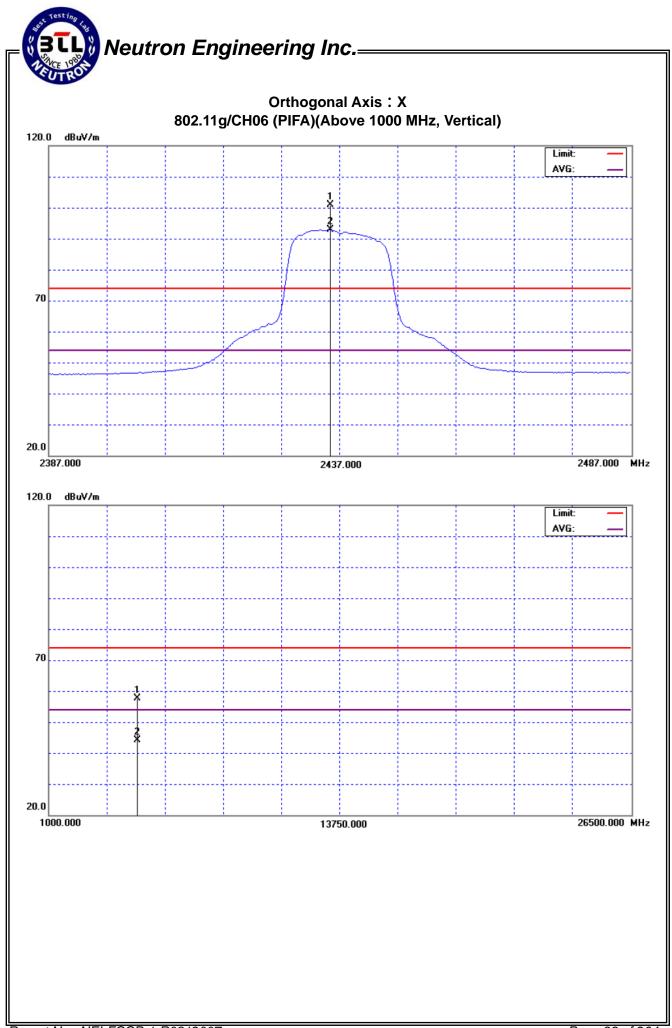




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11g/CH06 (PIFA)		

Freq.	Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Lir	nit	
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2435.40	V	68.17	60.15	32.83	101.00	92.98			X/F
4874.40	V	53.00	39.32	4.73	57.73	44.05	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

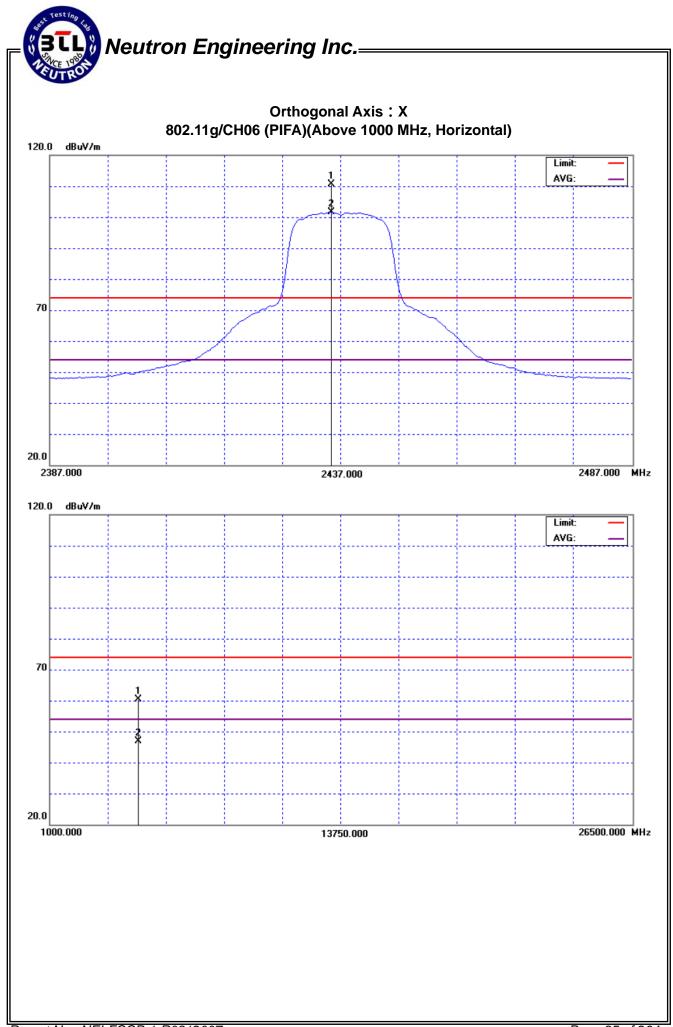




Temperature : 21°C Relative Humidity : 66% Test Voltage : AC 120V/60Hz 60%	EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
	Temperature :	21°C	Relative Humidity :	66%
	Test Voltage :	AC 120V/60Hz		
Test Mode . [802.11g/CH06 (PIFA)	Test Mode :	802.11g/CH06 (PIFA)		

Freq.	Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Lir	nit	
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2435.40	Н	77.75	68.80	32.83	110.58	101.63			X/F
4874.20	Н	55.74	42.23	4.73	60.47	46.96	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

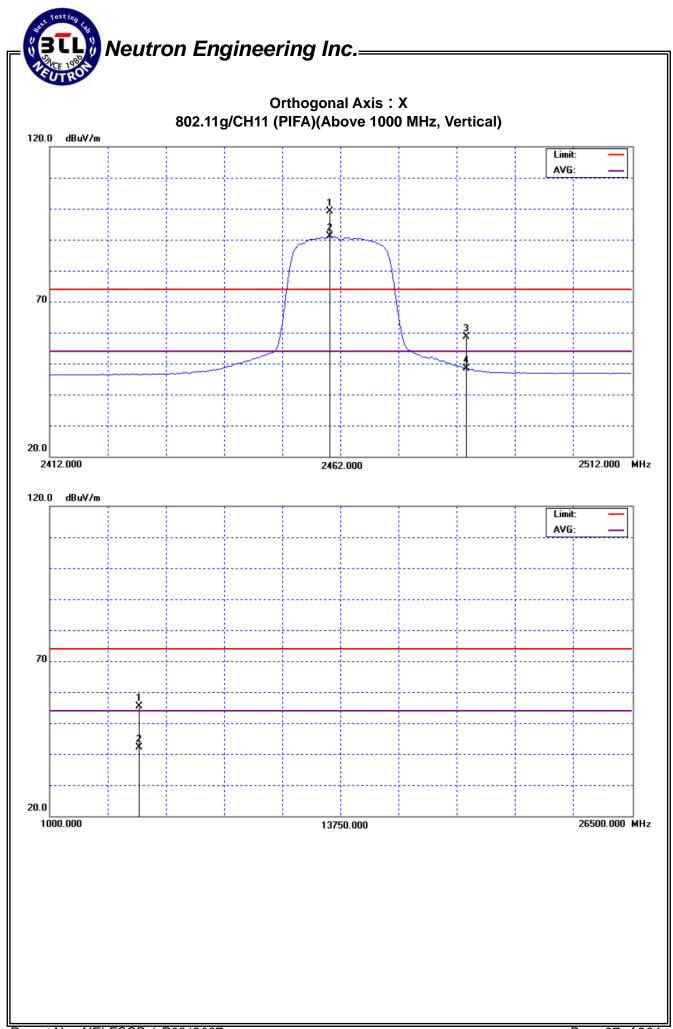




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11g/CH11 (PIFA)		

Γ	Freq.	Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Lir	nit	
			Peak	AV		Peak	AV	Peak	AV	Note
	(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
	2460.20	V	66.19	58.06	32.97	99.16	91.03			X/F
	2483.50	V	25.45	15.32	33.10	58.55	48.42	74.00	54.00	X/H
	4920.60	V	50.39	37.23	4.88	55.27	42.11	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table ; "Y" denotes Vertical Stand ; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.





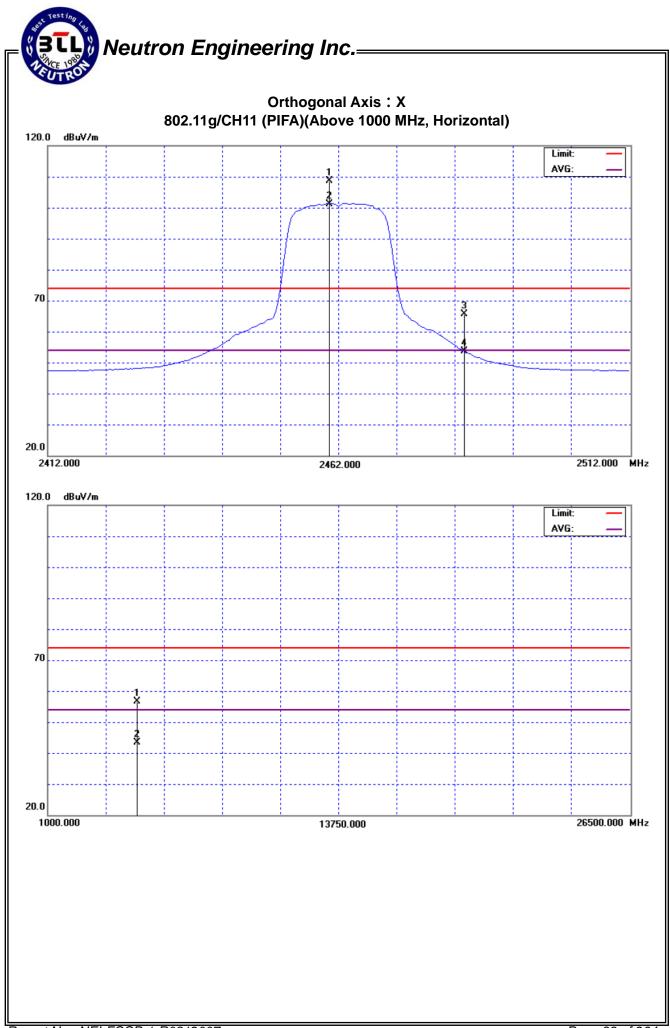
EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11g/CH11 (PIFA)		

Freq.	Ant.Pol.	Rea	Reading		Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2460.40	Н	75.54	68.27	32.97	108.51	101.24			X/F
2483.50	Н	32.62	20.57	33.10	65.72	53.67	74.00	54.00	X/H
4926.40	Н	51.69	38.43	4.90	56.59	43.33	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:

"X" - denotes Laid on Table; "Y" - denotes Vertical Stand; "Z" - denotes Side Stand

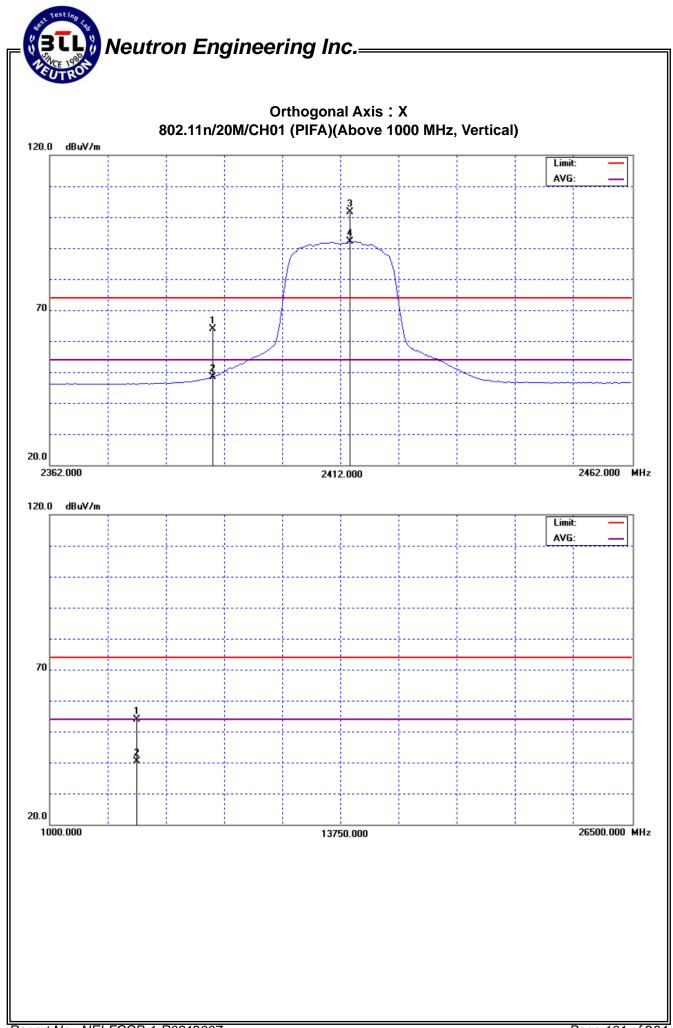




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH01 (PIFA)		

Freq.	Ant.Pol.	Rea	Reading		Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	31.33	15.72	32.57	63.90	48.29	74.00	54.00	X/H
2413.60	V	68.87	59.52	32.71	101.58	92.23			X/F
4823.80	V	49.88	36.46	4.04	53.92	40.50	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of $\[\]$ Note $\]$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $\[\circ\]$
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table ; "Y" denotes Vertical Stand ; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.





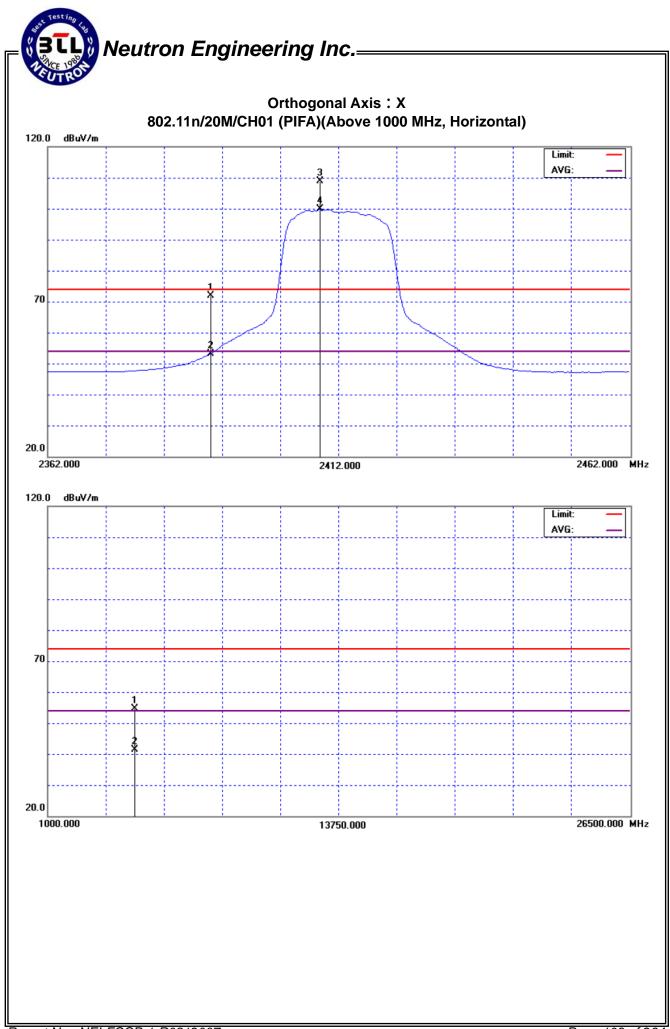
EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH01 (PIFA)		

Freq.	Ant.Pol.	Rea	Reading		Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	Н	39.20	20.65	32.57	71.77	53.22	74.00	54.00	X/H
2408.80	Н	76.32	67.10	32.68	109.00	99.78			X/F
4822.80	Н	50.60	37.29	4.04	54.64	41.33	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:

- "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

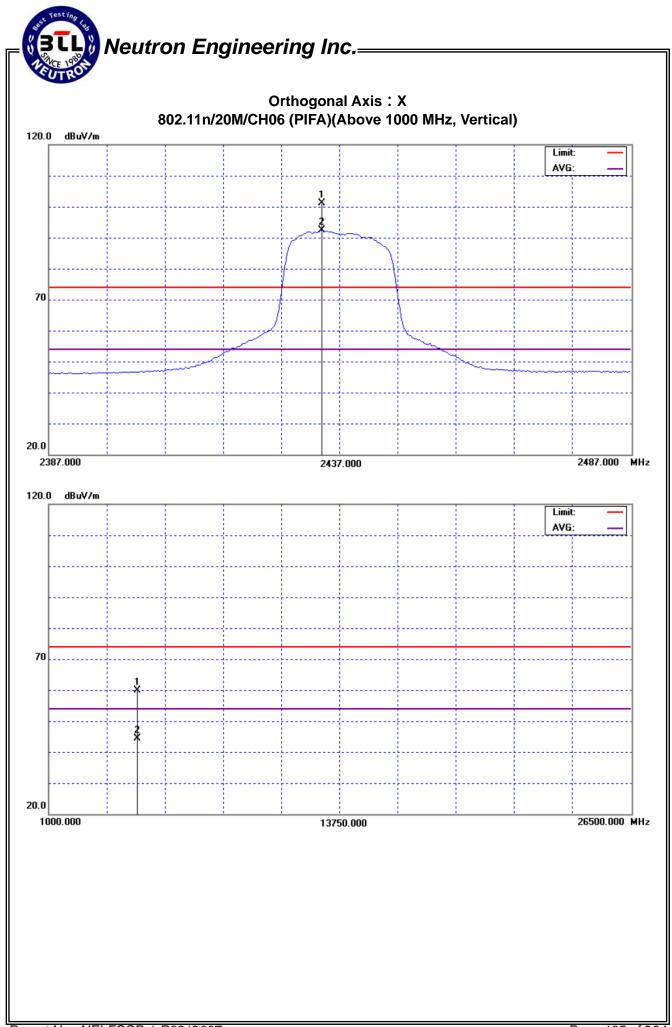




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH06 (PIFA)		

[Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
			Peak	AV		Peak	AV	Peak	AV	Note
	(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
	2434.00	V	68.26	59.57	32.82	101.08	92.39			X/F
	4874.00	V	55.27	39.63	4.73	60.00	44.36	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of <code>"Note_"</code>. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

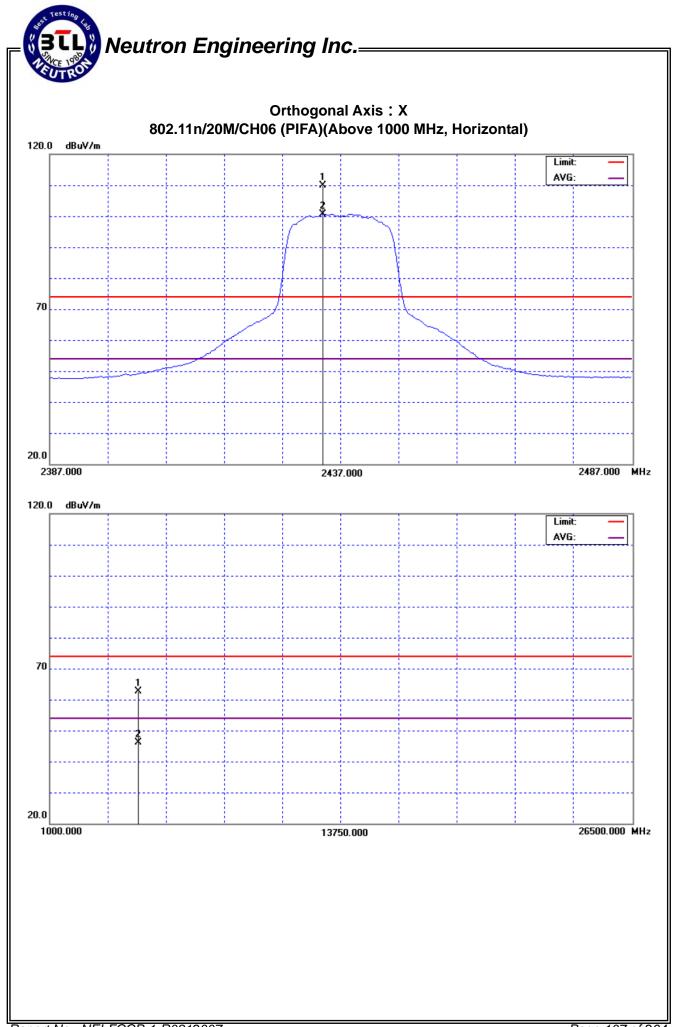




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH06 (PIFA)		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2434.00	H	77.10	67.85	32.82	109.92	100.67			X/F
4874.00	Н	57.78	41.46	4.73	62.51	46.19	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

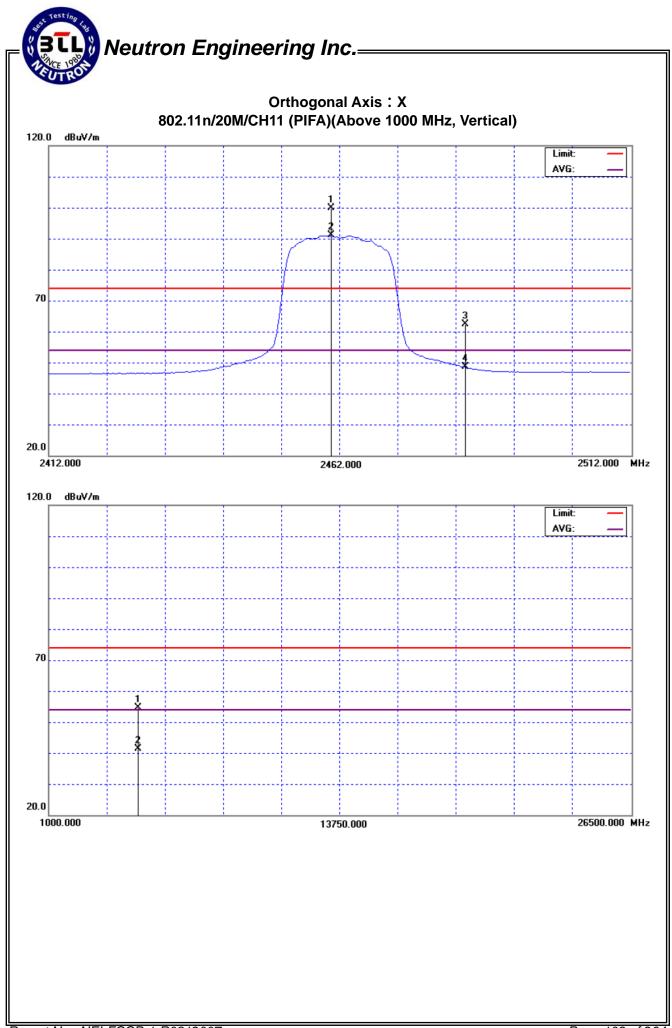




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz	·	
Test Mode :	802.11n/20M/CH11 (PIFA)		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2460.60	V	66.83	58.06	32.97	99.80	91.03			X/F
2483.50	V	29.24	15.53	33.10	62.34	48.63	74.00	54.00	X/H
4922.20	V	49.77	36.58	4.88	54.65	41.46	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table ; "Y" denotes Vertical Stand ; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

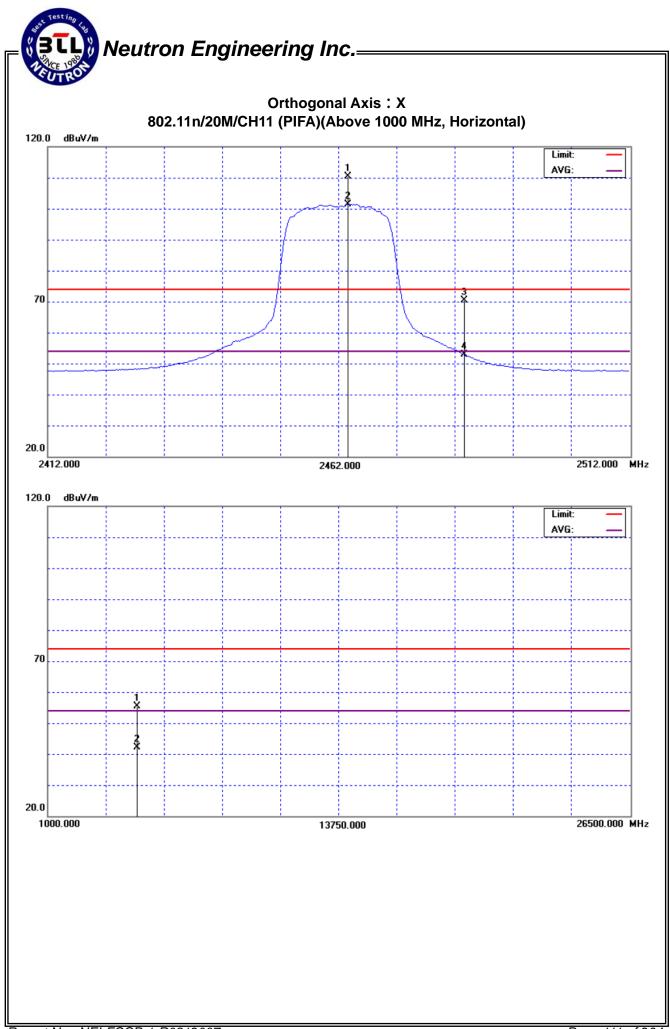




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH11 (PIFA)		

Freq.	Ant.Pol.	Rea	Reading		Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2463.60	Н	77.47	68.50	32.99	110.46	101.49			X/F
2483.50	Н	37.31	19.87	33.10	70.41	52.97	74.00	54.00	X/H
4923.60	Н	50.49	37.34	4.89	55.38	42.23	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

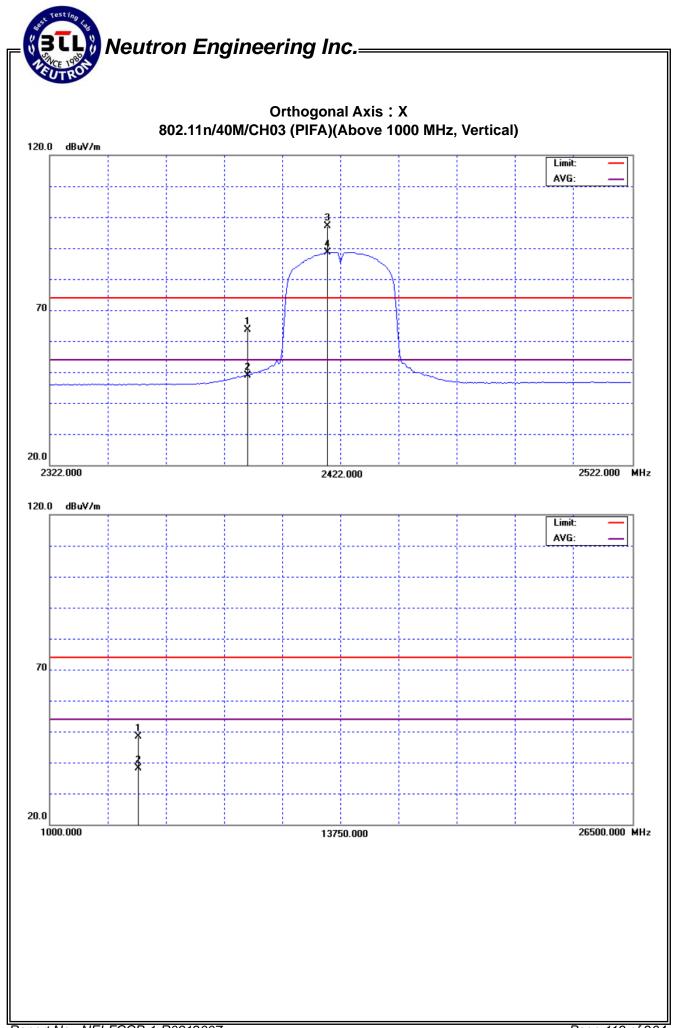




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH03 (PIFA)		

Freq.	Ant.Pol.	Read	Reading		Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	31.00	16.32	32.57	63.57	48.89	74.00	54.00	X/H
2417.60	V	64.49	56.00	32.73	97.22	88.73			X/F
4844.00	V	44.19	33.93	4.14	48.33	38.07	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.





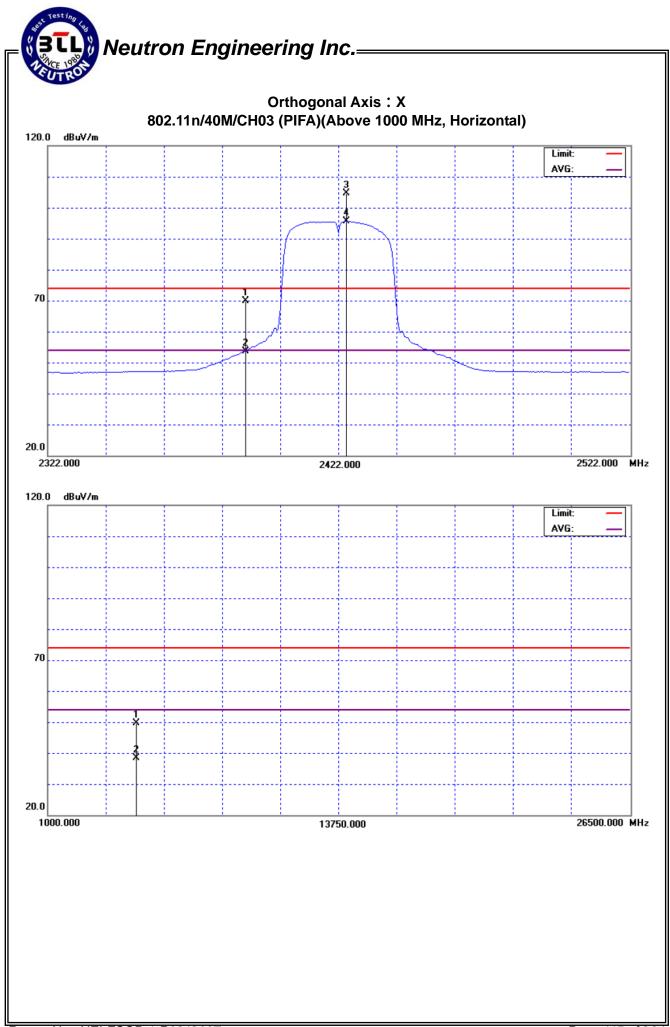
module		Model Name :	US302
Temperature : 21°C		Relative Humidity :	66%
Test Voltage : AC 120V/60	OHz		
Test Mode : 802.11n/40	M/CH03 (PIFA)		

Freq.	Ant.Pol.	Rea	Reading		Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	Н	37.42	21.14	32.57	69.99	53.71	74.00	54.00	X/H
2424.80	Н	71.76	62.85	32.77	104.53	95.62			X/F
4848.40	Н	45.37	34.34	4.16	49.53	38.50	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:

- "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

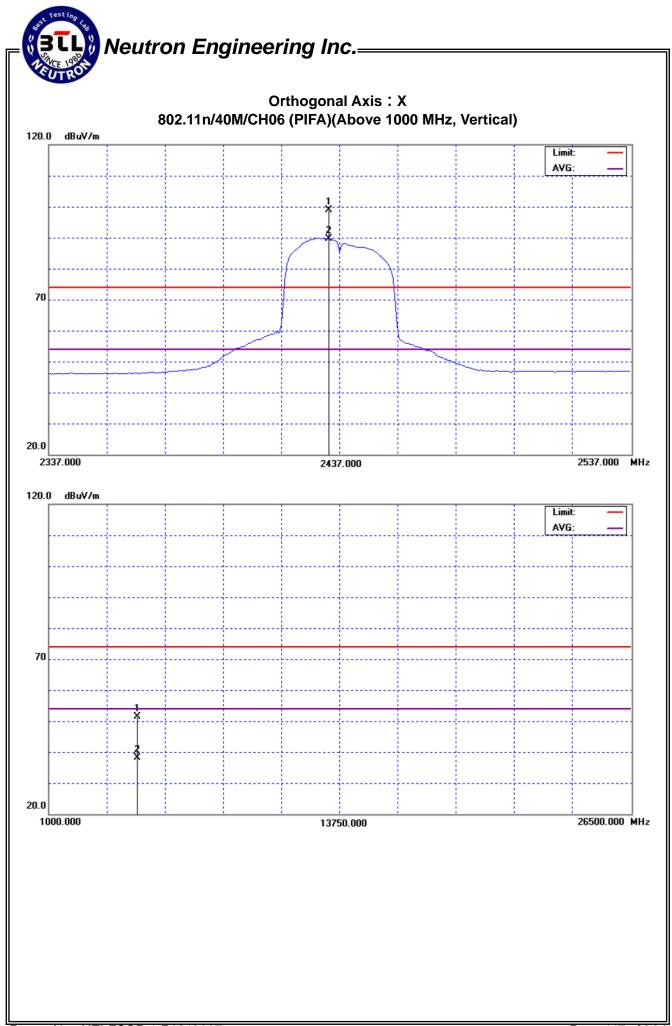




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH06 (PIFA)		

ſ	Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
			Peak	AV		Peak	AV	Peak	AV	Note
	(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
	2433.40	V	65.94	56.79	32.82	98.76	89.61			X/F
	4874.00	V	46.76	33.32	4.73	51.49	38.05	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

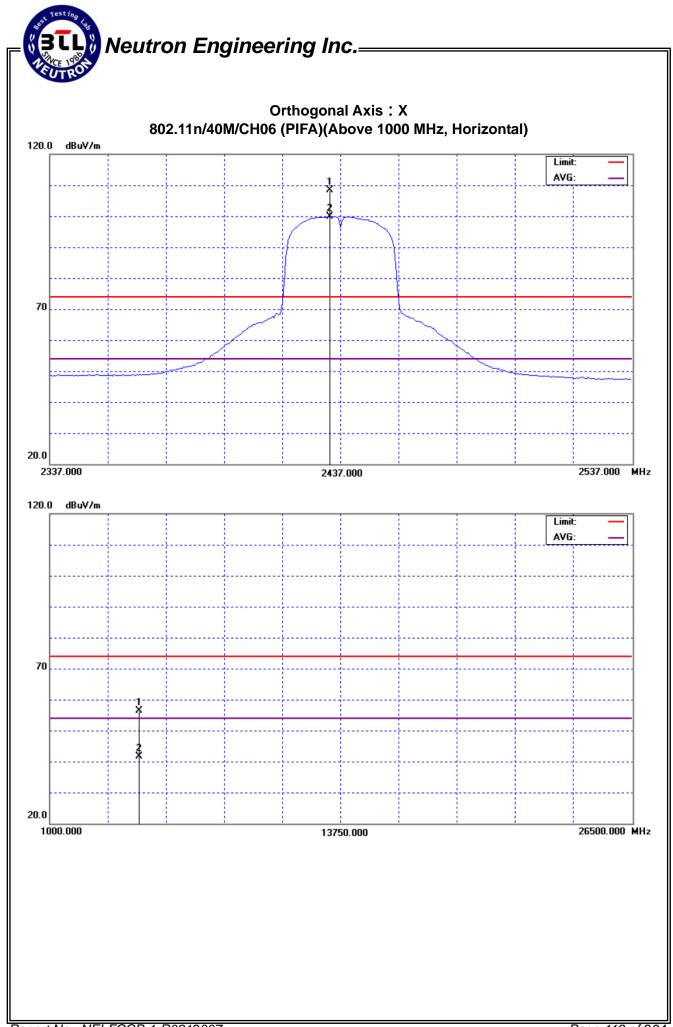




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH06 (PIFA)		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2433.40	Н	75.64	67.03	32.82	108.46	99.85			X/F
4878.40	Н	51.63	36.94	4.75	56.38	41.69	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

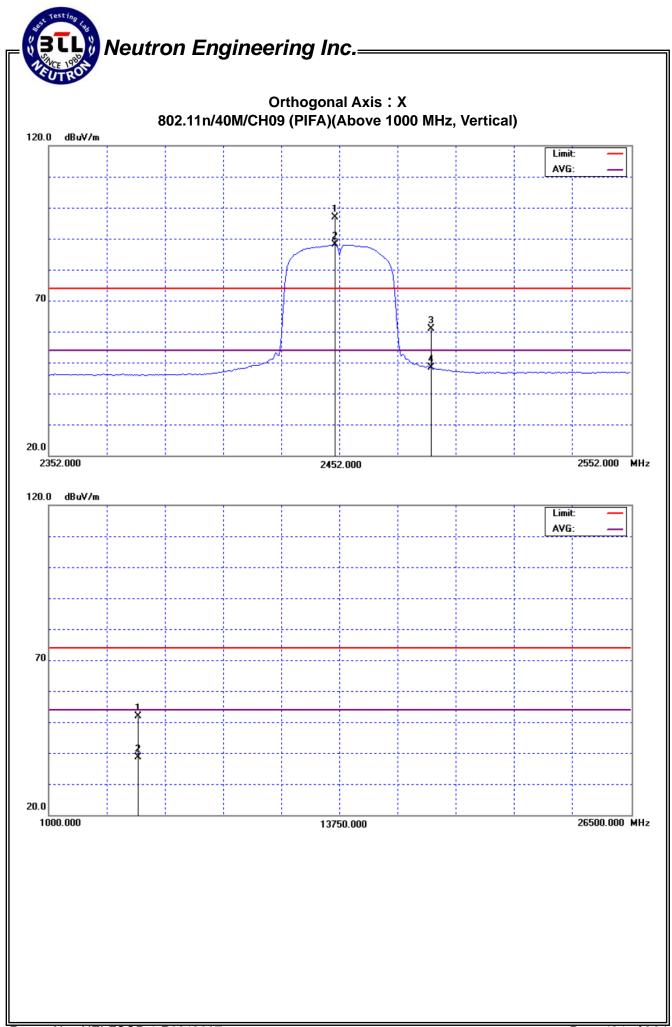




EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH09 (PIFA)		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2450.40	V	63.85	55.11	32.91	96.76	88.02			X/F
2483.50	V	27.72	15.26	33.10	60.82	48.36	74.00	54.00	X/H
4903.40	V	46.98	33.76	4.83	51.81	38.59	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table ; "Y" denotes Vertical Stand ; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.





EUT :	IEEE 802.11n WLAN USB 2.0 module	Model Name :	US302
Temperature :	21°C	Relative Humidity :	66%
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH09 (PIFA)		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2455.20	Н	70.74	62.58	32.94	103.68	95.52			X/F
2483.50	Н	35.07	19.27	33.10	68.17	52.37	74.00	54.00	X/H
4904.20	Н	47.92	34.79	4.83	52.75	39.62	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency^o"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:

- "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

