

FCC Radio Test Report FCC ID: QIS-HG532D

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

Issued Date : Jan. 30, 2013 **Project No.** : 1301C202

Equipment: 1) 300Mbps Wireless ADSL2+ Router

2) Home Gateway

Model Name : HG532d

Applicant: Huawei Technologies Co., Ltd.

Address: Administration Building, Headquarters of Huawei

Technologies Co., Ltd., Bantian, Longgang District,

Shenzhen,518129,P.R.C

Manufacturer: Huawei Technologies Co., Ltd.

Address: Administration Building, Headquarters of Huawei

Technologies Co., Ltd., Bantian, Longgang District,

Shenzhen,518129,P.R.C

Tested by:

Neutron Engineering Inc. EMC Laboratory

Date of Receipt: Jan. 18, 2013

Date of Test:

Jan. 18, 2013 ~ Jan. 29, 2013

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Declaration

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1. CERTIFICATION

Equipment : 1) 300Mbps Wireless ADSL2+ Router

2) Home Gateway

Brand Name: HUAWEI Model Name: HG532d

Applicant : Huawei Technologies Co., Ltd. Date of Test : Jan. 18, 2013 ~ Jan. 29, 2013 Test Item : ENGINEERING SAMPLE

Standards : FCC Part15, Subpart C(15.247) / ANSI C63.4-2009

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-1-1301C202) 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).

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2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.247) , Subpart C						
Standard Section	Test Item	Judgment	Remark			
15.207	Conducted Emission	PASS				
15.247(d)	Antenna conducted Spurious Emission	PASS				
15.247(a)(2)	(2) 6dB Bandwidth					
15.247(b)(3)	Peak Output Power	PASS				
15.209/15.205	Radiated Spurious Emission	PASS				
15.247(e)	Power Spectral Density	PASS				
15.203	Antenna Requirement	PASS				

NOTE:

- (1)" N/A" denotes test is not applicable in this test report.
- (2) The test follows FCC KDB Publication No. 558074 D01 DTS Meas Guidance v02 (Measurement Guidelines of DTS)

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2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **DG-C02/DG-CB03** at the location of No.3, Jinshagang 1st Road, ShiXia, Dalang Town, Dong Guan, China.523792 Neutron's test firm number is 319330

2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

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 % ,

A. Conducted Measurement:

Test Site	Method	Measurement Frequency Range	U , (dB)	NOTE
DG-C02	CISPR	150 KHz ~ 30MHz	1.94	

B. Radiated Measurement:

Test Site	Method	Measurement Frequency Ant. Range Ant. H / V U , (dB) NOTE		NOTE	
		30MHz ~ 200MHz	V	3.82	
		30MHz ~ 200MHz	Н	3.60	
		200MHz ~ 1,000MHz	V	3.86	
DG-CB03	CISPR	200MHz ~ 1,000MHz	Н	3.94	
DG-CB03	CISER	1GHz~18GHz	V	3.12	
		1GHz~18GHz	Н	3.68	
		18GHz~40GHz	V	4.15	
		18GHz~40GHz	Н	4.14	

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3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	300Mbps Wireless ADSL2+ Router Home Gateway				
Brand Name	HUAWEI				
Model Name	HG532d				
Model Difference	N/A	N/A			
	The EUT is a 300Mbps \	Vireless ADSL2+ Router.			
	Operation Frequency	2412~2462 MHz			
Product Description	Modulation Technology	802.11b:DSSS 802.11g:OFDM 802.11n:OFDM			
	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 up to 300 Mbps (2T2R)			
	Number Of Channel	11 CH, Please see note 2.(Page 9)			
Froduct Description	Antenna Designation Antenna Gain(Peak)	Please see note 3.(Page 9)			
	Output Power	802.11b: 16.23 dBm 802.11g: 19.23 dBm 802.11n(20MHz): 19.27 dBm 802.11n(40MHz): 18.62 dBm			
Based on the application, features, or specification ex User's Manual, the EUT is considered as an ITE/Com Device. More details of EUT technical specification, p to the User's Manual.					
Power Source	DC voltage supplied from AC/DC adapter. Adapter Model: HW-120050U1W Adapter Manufacturer: UE / XQ / HK				
Power Rating	I/P AC 100-240V~50/60H	Hz 0.2A O/P DC 12.0V 0.5A			
Connecting I/O Port(s)	Please refer to the User's	s Manual			

Note:

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

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

3. Table for Filed Antenna

The product has 2 group antenna:

Group 1

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Function	Note
1	HONGLIN	G058-310003-A	Dipole	N/A	3.0	TX/RX	85mm
2	HONGLIN	G058-310004-A	Dipole	N/A	3.0	TX/RX	260mm

Group 2

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Function	Note
1	KEYBRAND	G009-20532-A	Dipole	N/A	3.0	TX/RX	85mm
2	KEYBRAND	G009-20533-A	Dipole	N/A	3.0	TX/RX	260mm

Note:

- (1) The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and two receivers (2T2R).
- (2) **Group 1** was found to be the worst case and recorded.

4.

Operating Mode TX Mode	1TX	2TX
802.11b	V (ANT1)	-
802.11g	V (ANT1)	-
802.11n(20MHz)	-	V (ANT1 & ANT2)
802.11n(40MHz)	-	V (ANT1 & ANT2)

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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 Mode	Description
Mode 1	TX B MODE CHANNEL 01/06/11
Mode 2	TX G MODE CHANNEL 01/06/11
Mode 3	TX N-20MHZ MODE CHANNEL 01/06/11
Mode 4	TX N-40MHZ MODE CHANNEL 03/06/09
Mode 5	WIFI

The EUT system operated these modes were found to be the worst case during the pre-scanning test as following:

For Conducted Test		
Final Test Mode	Description	
Mode 5	WIFI	

For Radiated Test				
Final Test Mode	Description			
Mode 1	TX B MODE CHANNEL 01/06/11			
Mode 2	TX G MODE CHANNEL 01/06/11			
Mode 3	TX N-20MHZ MODE CHANNEL 01/06/11			
Mode 4	TX N-40MHZ MODE CHANNEL 03/06/09			

Note:

(1) The measurements are performed at the high, middle, low available channels.

(2) 802.11b mode: DBPSK (1Mbps) 802.11g mode: OFDM (6Mbps)

802.11n HT20 mode : BPSK (6.5Mbps) 802.11n HT40 mode : BPSK (13.5Mbps)

For radiated emission tests, the highest output powers were set for final test.

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3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of WLAN

Test software version	N/A		
Frequency	2412 MHz	2437 MHz	2462 MHz
IEEE 802.11b DSSS	60	60	60
IEEE 802.11g OFDM	62	62	62

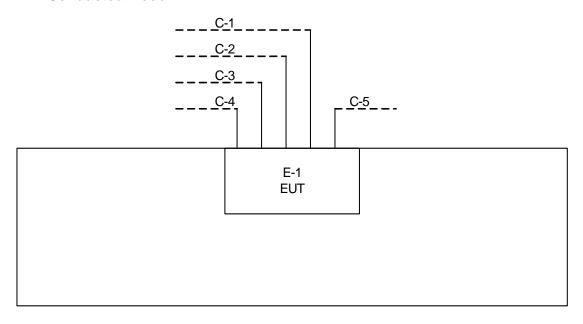
Test software version	N/A			
Frequency (MHz)	2412 MHz	2437 MHz	2462 MHz	
IEEE 802.11n (20MHz)	52	52	52	
Frequency (MHz)	2422 MHz	2437 MHz	2452 MHz	
IEEE 802.11n (40MHz)	32	34	32	

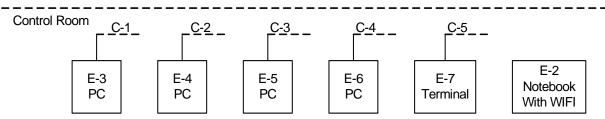
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3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Conducted Mode:



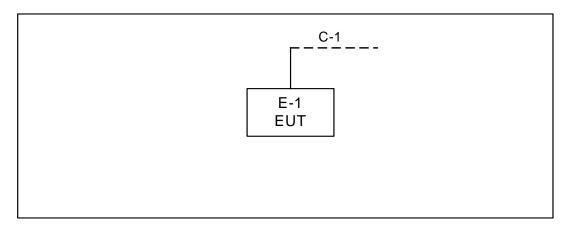


C-1: RJ45 Cable C-2: RJ45 Cable C-3: RJ45 Cable C-4: RJ45 Cable C-5: RJ11 Cable

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Radiated TX Mode:



C-1 E-2 Notebook

C-1: RJ45 Cable

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3.5 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	300Mbps Wireless ADSL2+ Router	HUAWEI	HG532d	QIS-HG532D	N/A	EUT
E-2	Notebook	DELL	INSPIRON 1420	DOC	JX193A01SDC2	
E-3	PC	Dell	745	DOC	G7K832X	
E-4	PC	HP	Dx7208	DOC	CNG7050PB7	
E-5	PC	HP	Dx7400	DOC	CNG7430PX0	
E-6	PC	HP	Dx7400	DOC	CNG7430PWL	
E-7	Terminal	BROADCOM	BCM96358M-30-A1	N/A	N/A	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	10m	
C-2	NO	NO	10m	
C-3	NO	NO	10m	
C-4	NO	NO	10m	
C-5	NO	NO	10m	

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in m in <code>[Length]</code> column.

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4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

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

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

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

4.1.2 MEASUREMENT INSTRUMENTS LIST AND SETTING

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	LISN	EMCO	3816/2	00052765	May.26.2012	May.04.2013
2	LISN	R&S	ENV216	100087	May.26.2012	May.04.2013
3	Test Cable	N/A	C_17	N/A	Mar.18.2012	Mar.28.2013
4	EMI TEST RECEIVER	R&S	ESCS30	826547/022	May.26.2012	May.04.2013
5	50Ω Terminator	SHX	TF2-3G-A	08122902	May.26.2012	May.04.2013

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of Equipment List is One Year.

The following table is the setting of the receiver

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

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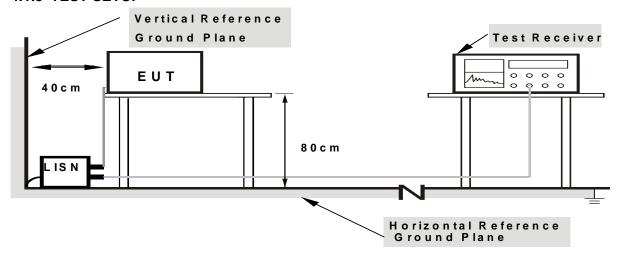
4.1.3 TEST PROCEDURE

- 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



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

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.

The EUT was programmed to be in continuously transmitting mode.

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4.1.7 TEST RESULTS

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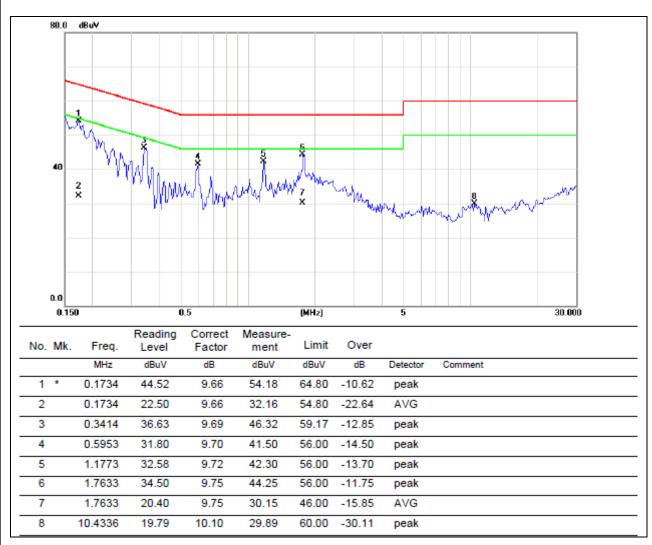
(1) All readings are QP Mode value unless otherwise stated AVG in column of Note I. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform In this case, a " * " marked in AVG Mode column of Interference Voltage Measured In the North AVG Mode column of Interference Voltage Measured In the North AVG Mode column of Interference Voltage Measured In the North AVG Mode column of Interference Voltage Measured In the North AVG Mode column of Interference Voltage Measured In the North AVG Mode column of Interference Voltage Measured In the North AVG Mode column of Interference Voltage Measured In the North AVG Mode column of Interference Voltage Measured In the North AVG Mode column of Interference Voltage Measured In the North AVG Mode column of Interference Voltage Measured Interfere

((2)	Measuring	frequency	range from	150KHz to	30MHz

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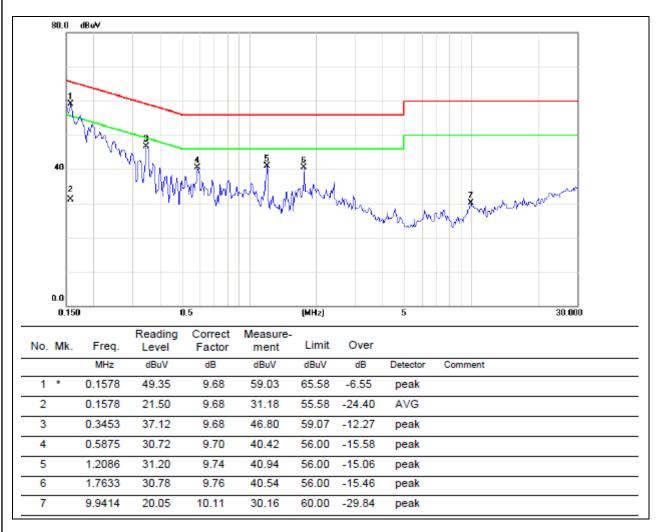
IFUI.	300Mbps Wireless ADSL2+ Router	Model Name:	HG532d
Temperature:	23 ℃	Relative Humidity:	53 %
Test Power:	AC 120V/60Hz	Phase:	Line
Test Mode:	WIFI - Adapter: UE		



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IFUI.	300Mbps Wireless ADSL2+ Router	Model Name:	HG532d
Temperature:	23 ℃	Relative Humidity:	53 %
Test Power:	AC 120V/60Hz	Phase:	Neutral
Test Mode:	WIFI - Adapter: UE		



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16.1680

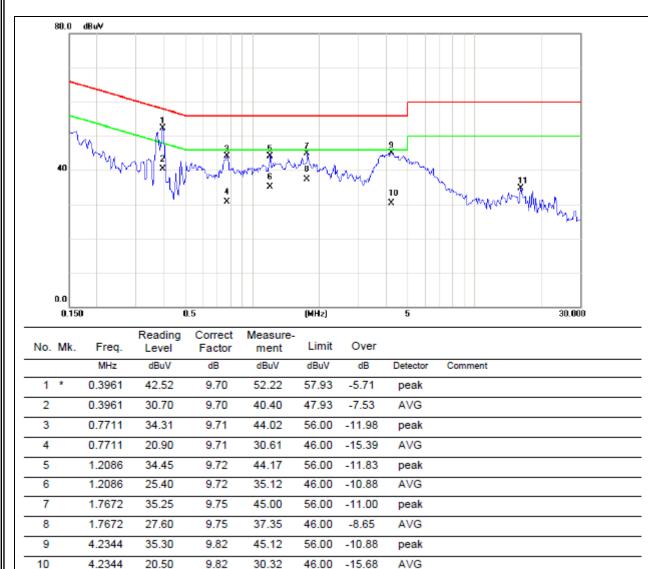
11

24.54

10.26

34.80

IFUI.	300Mbps Wireless ADSL2+ Router	Model Name:	HG532d
Temperature:	23 ℃	Relative Humidity:	53 %
Test Power:	AC 120V/60Hz	Phase:	Line
Test Mode:	WIFI - Adapter: XQ		



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60.00 -25.20

peak



4.2422

10

21.60

9.82

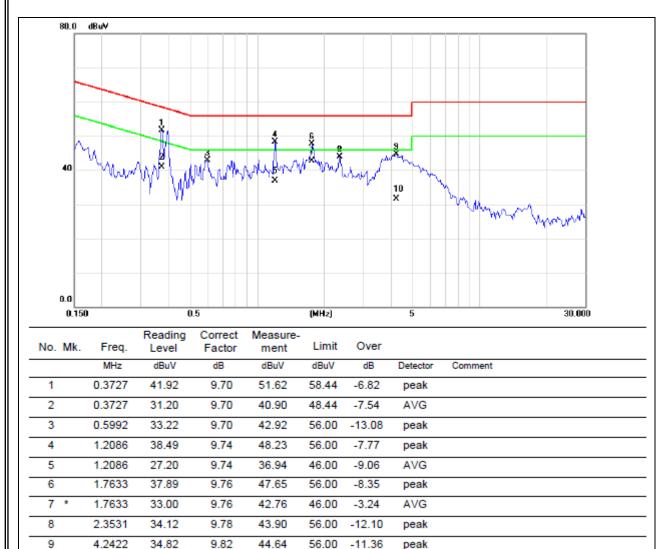
31.42

46.00

-14.58

AVG

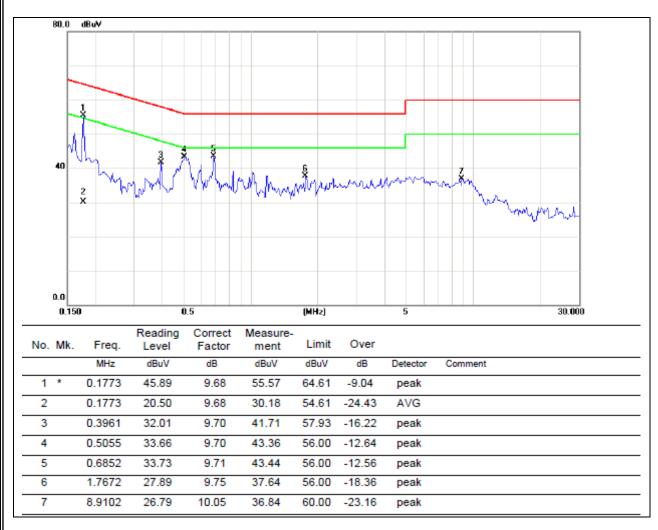
IFUI.	300Mbps Wireless ADSL2+ Router	Model Name:	HG532d
Temperature:	23 ℃	Relative Humidity:	53 %
Test Power:	AC 120V/60Hz	Phase:	Neutral
Test Mode:	WIFI - Adapter: XQ		



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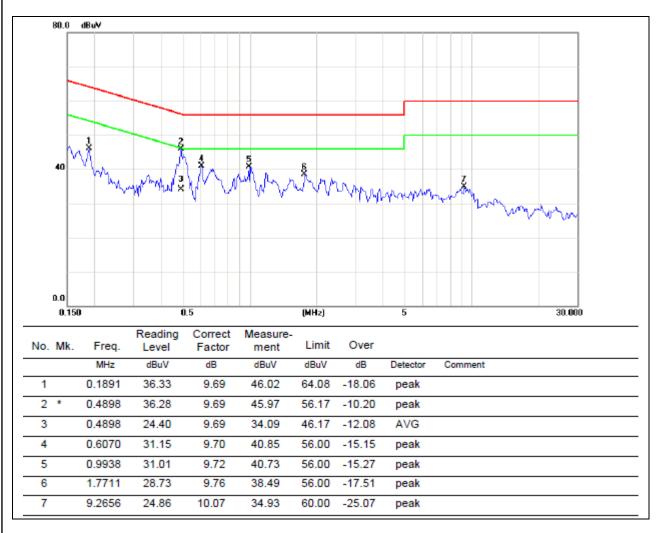
IFUI.	300Mbps Wireless ADSL2+ Router	Model Name:	HG532d
Temperature:	23 ℃	Relative Humidity:	53 %
Test Power:	AC 120V/60Hz	Phase:	Line
Test Mode:	WIFI - Adapter: HK		



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HUII.	300Mbps Wireless ADSL2+ Router	Model Name:	HG532d
Temperature:	23 ℃	Relative Humidity:	53 %
Test Power:	AC 120V/60Hz	Phase:	Neutral
Test Mode:	WIFI - Adapter: HK		



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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 on 15.205(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
960~1000	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	(dBuV/m) (at 3m)	
FREQUENCT (MITZ)	PEAK	AVERAGE
Above 1000	74	54

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 – 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5 th harmonic of the highest frequency or 40 GHz, whichever is lower

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4.2.2 MEASUREMENT INSTRUMENTS LIST ANS SETTING

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Antenna	Schwarbeck	VULB9160	9160-3232	Jun .04.2012	May.25.2013
2	Amplifier	HP	8447D	2944A09673	May.26.2012	May.04.2013
3	Test Receiver	R&S	ESCI	100382	May.26.2012	May.04.2013
4	Test Cable	N/A	C-01_CB03	N/A	Jul.01.2012	Jul.01.2013
5	Antenna	ETS	3115	00075789	May.25.2012	May.25.2013
6	Amplifier	Agilent	8449B	3008A02274	May.25.2012	May.04.2013
7	Spectrum	Agilent	E4408B	US39240143	Nov.24.2012	Nov.24.2013
8	Test Cable	HUBER+SUH NER	C-45	N/A	May.04.2012	May.02.2013
9	Controller	СТ	SC100	N/A	N/A	N/A
10	Horn Antenna	EMCO	3115	9605-4803	May.26.2012	May.25.2013
11	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Oct.13.2012	May.04.2013
12	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Oct.13.2012	Oct.12.2013

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of Equipment List is One Year.

Spectrum Parameter	Setting	
Attenuation	Auto	
Start Frequency	1000 MHz	
Stop Frequency	10th carrier harmonic	
RB / VB	AND - / AND - for Dook A MULE / ADD - for Average	
(Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average	

Receiver Parameter	Setting	
Attenuation	Auto	
Start ~ Stop Frequency	9kHz~90kHz for PK/AVG detector	
Start ~ Stop Frequency	90kHz~110kHz for QP detector	
Start ~ Stop Frequency	110kHz~490kHz for PK/AVG detector	
Start ~ Stop Frequency	490kHz~30MHz for QP detector	
Start ~ Stop Frequency	30MHz~1000MHz for QP detector	

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4.2.3 TEST PROCEDURE

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- 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

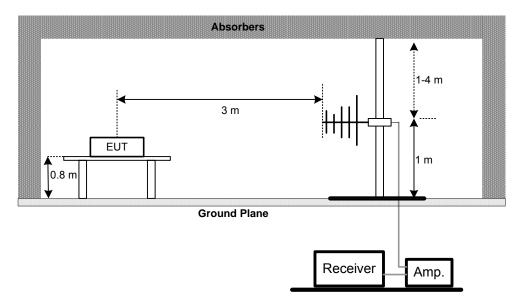
No deviation

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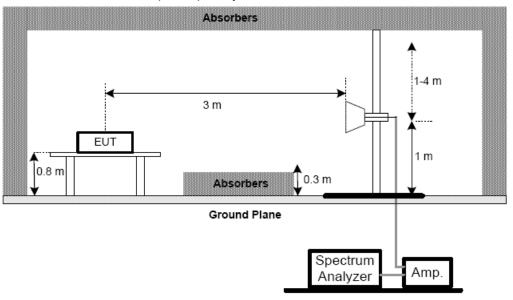


4.2.5 TEST SETUP

(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



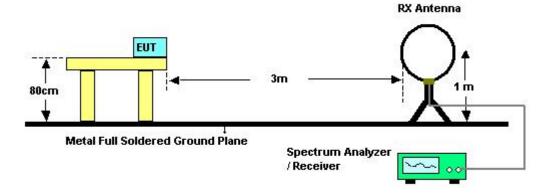
(B) Radiated Emission Test Set-Up Frequency Above 1 GHz



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(C) For radiated emissions below 30MHz



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.

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4.2.7 TEST RESULTS (9K~ 30MHZ)

IEU I ·	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	23 ℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX Mode		

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	Note
(MHz)	0°/90°	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	NOLE
0.009	0°	16.54	24.30	40.84	128.10	-87.26	AV
0.009	0°	19.84	24.30	44.14	148.10	-103.96	PK
0.017	0°	17.16	24.30	41.46	123.25	-81.79	AV
0.017	0°	20.42	24.30	44.72	143.25	-98.53	PK
0.026	0°	17.43	23.89	41.32	119.17	-77.85	AV
0.026	0°	20.59	23.89	44.48	139.17	-94.69	PK
0.037	0°	16.47	23.21	39.68	116.19	-76.51	AV
0.037	0°	19.68	23.21	42.89	136.19	-93.30	PK
0.467	0°	17.01	19.88	36.89	94.21	-57.32	AV
0.467	0°	20.13	19.88	40.01	114.21	-74.20	PK
1.575	0°	18.76	19.54	38.30	63.66	-25.36	QP

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	Note
(MHz)	0°/90°	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	NOLE
0.009	90°	17.20	24.30	41.50	128.19	-86.69	AV
0.009	90°	20.36	24.30	44.66	148.19	-103.53	PK
0.026	90°	16.58	23.95	40.53	119.44	-78.91	AV
0.026	90°	19.65	23.95	43.60	139.44	-95.84	PK
0.038	90°	17.24	23.15	40.39	115.96	-75.58	AV
0.038	90°	20.50	23.15	43.65	135.96	-92.32	PK
0.052	90°	17.17	22.37	39.54	113.37	-73.83	AV
0.052	90°	20.49	22.37	42.86	133.37	-90.51	PK
0.243	90°	17.37	20.42	37.79	99.91	-62.12	AV
0.243	90°	20.29	20.42	40.71	119.91	-79.20	PK
1.852	90°	18.73	19.51	38.24	69.54	-31.30	QP

Remark:

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

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4.2.8 TEST RESULTS (BETWEEN 30 – 1000 MHZ)

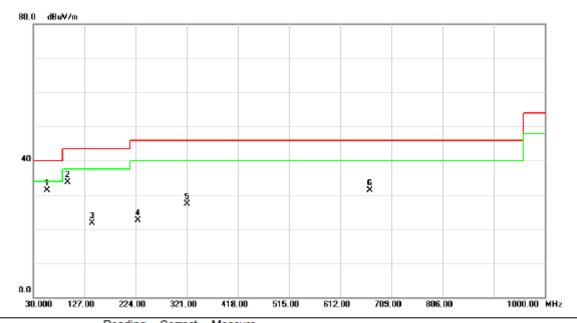
Remark:

- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz
- (2) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{J}}$. 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 •
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table ${}^{\circ}$

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FUI:	300Mbps Wireless ADSL2+ Router	Model Name:	HG532d	
Temperature:	23 ℃	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical	
Test Mode:				

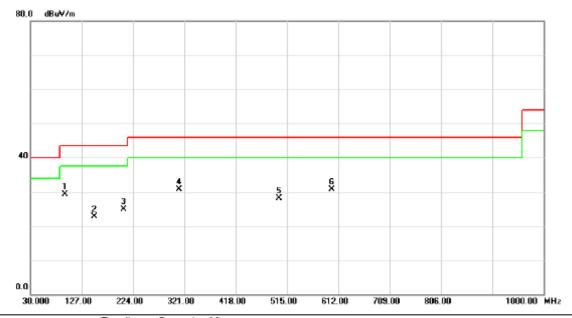


No.	Mk.	Freq.	Reading Level	Factor Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	56.6750	49.08	-17.70	31.38	40.00	-8.62	peak	
2		95.4750	52.37	-18.70	33.67	43.50	-9.83	peak	
3	1	141.5500	39.77	-17.97	21.80	43.50	-21.70	peak	
4	2	228.8500	38.53	-16.07	22.46	46.00	-23.54	peak	
5	3	321.0000	39.48	-12.18	27.30	46.00	-18.70	peak	
6	(67.7750	36.05	-4.67	31.38	46.00	-14.62	peak	

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	300Mbps Wireless ADSL2+ Router	Model Name:	HG532d				
Temperature:	23 ℃	Relative Humidity:	58 %				
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal				
Test Mode:	TX B MODE CHANNEL 01 - Adapter: UE						

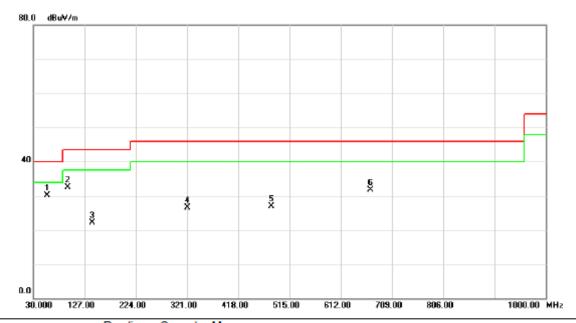


	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
_			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
_	1	*	95.4750	47.94	-18.70	29.24	43.50	-14.26	peak	
-	2	1	151.2500	40.57	-17.85	22.72	43.50	-20.78	peak	
_	3	2	207.0250	41.69	-16.82	24.87	43.50	-18.63	peak	
-	4	3	311.3000	43.11	-12.39	30.72	46.00	-15.28	peak	
_	5		500.4500	36.46	-8.37	28.09	46.00	-17.91	peak	
_	6	Ę	599.8750	36.13	-5.50	30.63	46.00	-15.37	peak	
_										

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F() [300Mbps Wireless ADSL2+ Router	Model Name:	HG532d				
Temperature:	23 ℃	Relative Humidity:	58 %				
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical				
Test Mode:	TX B MODE CHANNEL 06 - Adapter: UE						

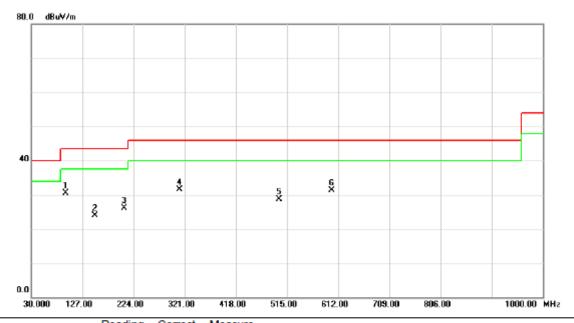


	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
_			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
_	1	*	56.6750	47.88	-17.70	30.18	40.00	-9.82	peak	
_	2		95.4750	51.17	-18.70	32.47	43.50	-11.03	peak	
_	3	1	141.5500	40.07	-17.97	22.10	43.50	-21.40	peak	
	4	3	321.0000	38.78	-12.18	26.60	46.00	-19.40	peak	
_	5	4	181.0500	35.49	-8.63	26.86	46.00	-19.14	peak	
_	6	6	67.7750	36.35	-4.67	31.68	46.00	-14.32	peak	
_										

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F() [300Mbps Wireless ADSL2+ Router	Model Name:	HG532d				
Temperature:	23 ℃	Relative Humidity:	58 %				
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal				
Test Mode:	TX B MODE CHANNEL 06 - Adapter: UE						

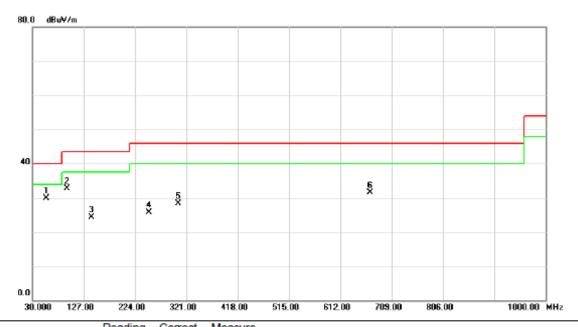


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	95.4750	49.15	-18.70	30.45	43.50	-13.05	peak	
2		151.2500	41.78	-17.85	23.93	43.50	-19.57	peak	
3	- 2	207.0250	42.90	-16.82	26.08	43.50	-17.42	peak	
4	;	311.3000	43.82	-12.39	31.43	46.00	-14.57	peak	
5		500.4500	37.17	-8.37	28.80	46.00	-17.20	peak	
6		599.8750	36.84	-5.50	31.34	46.00	-14.66	peak	

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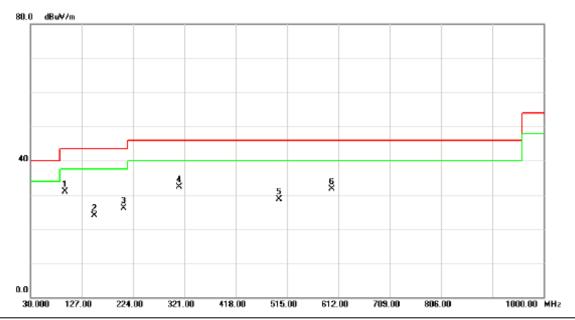
F() [300Mbps Wireless ADSL2+ Router	Model Name:	HG532d				
Temperature:	23 ℃	Relative Humidity:	58 %				
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical				
Test Mode:	TX B MODE CHANNEL 11 - Adapter: UE						



No.	Mk.	Freq.	Level	Factor	ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	56.6750	47.67	-17.70	29.97	40.00	-10.03	peak	
2		95.4750	51.46	-18.70	32.76	43.50	-10.74	peak	
3	1	141.5500	42.36	-17.97	24.39	43.50	-19.11	peak	
4	2	250.6750	40.70	-14.99	25.71	46.00	-20.29	peak	
5	3	306.4500	40.83	-12.51	28.32	46.00	-17.68	peak	
6	6	67.7750	36.14	-4.67	31.47	46.00	-14.53	peak	

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F() [300Mbps Wireless ADSL2+ Router	Model Name:	HG532d				
Temperature:	23 ℃	Relative Humidity:	58 %				
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal				
Test Mode:	TX B MODE CHANNEL 11 - Adapter: UE						

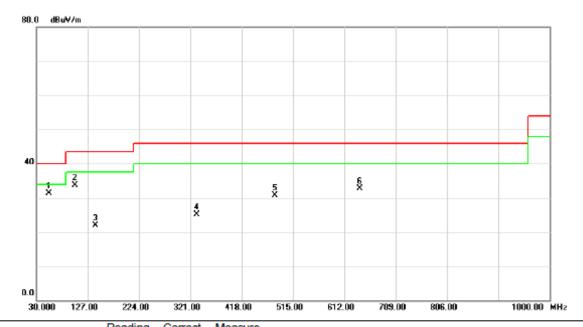


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	95.4750	49.62	-18.70	30.92	43.50	-12.58	peak	
2		151.2500	41.75	-17.85	23.90	43.50	-19.60	peak	
3		207.0250	42.87	-16.82	26.05	43.50	-17.45	peak	
4		311.3000	44.79	-12.39	32.40	46.00	-13.60	peak	
5		500.4500	37.14	-8.37	28.77	46.00	-17.23	peak	
6		599.8750	37.30	-5.50	31.80	46.00	-14.20	peak	

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F() [300Mbps Wireless ADSL2+ Router	Model Name:	HG532d				
Temperature:	23 ℃	Relative Humidity:	58 %				
Test Voltage:	AC 120V/60Hz	Polarization: Vertical					
Test Mode:	TX B MODE CHANNEL 01 - Adapter: XQ						

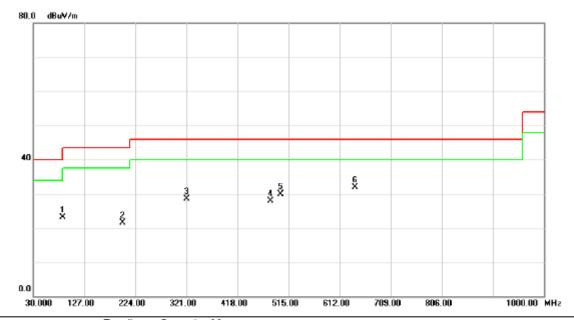


				Factor	ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	54.2500	48.96	-17.63	31.33	40.00	-8.67	peak	
2		102.7500	52.40	-18.65	33.75	43.50	-9.75	peak	
3		141.5500	39.88	-17.97	21.91	43.50	-21.59	peak	
4		333.1250	37.07	-11.91	25.16	46.00	-20.84	peak	
5		481.0500	39.30	-8.63	30.67	46.00	-15.33	peak	
6		641.1000	37.53	-4.82	32.71	46.00	-13.29	peak	

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F() [300Mbps Wireless ADSL2+ Router	Model Name:	HG532d				
Temperature:	23 ℃	Relative Humidity:	58 %				
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal				
Test Mode:	TX B MODE CHANNEL 01 - Adapter: XQ						

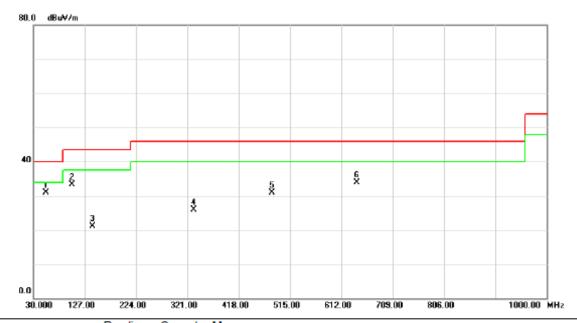


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		85.7750	42.35	-19.27	23.08	40.00	-16.92	peak	
2	1	199.7500	38.50	-16.93	21.57	43.50	-21.93	peak	
3	3	321.0000	40.61	-12.18	28.43	46.00	-17.57	peak	
4	4	181.0500	36.56	-8.63	27.93	46.00	-18.07	peak	
5	5	00.4500	38.36	-8.37	29.99	46.00	-16.01	peak	
6	* 6	341.1000	36.63	-4.82	31.81	46.00	-14.19	peak	

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F() [300Mbps Wireless ADSL2+ Router	Model Name:	HG532d				
Temperature:	23 ℃	Relative Humidity:	58 %				
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical				
Test Mode:	TX B MODE CHANNEL 06 - Adapter: XQ						

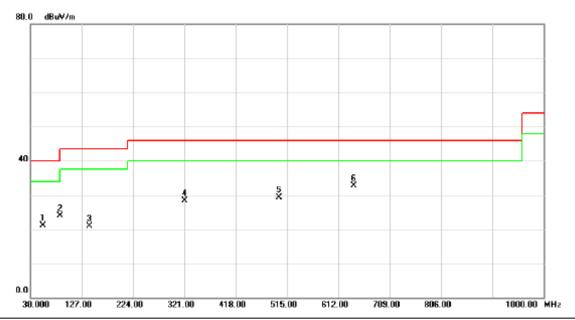


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	54.2500	48.61	-17.63	30.98	40.00	-9.02	peak	
2	•	102.7500	52.05	-18.65	33.40	43.50	-10.10	peak	
3	•	141.5500	39.03	-17.97	21.06	43.50	-22.44	peak	
4	3	333.1250	37.72	-11.91	25.81	46.00	-20.19	peak	
5	4	481.0500	39.45	-8.63	30.82	46.00	-15.18	peak	
6	(641.1000	38.68	-4.82	33.86	46.00	-12.14	peak	

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I CUIT	300Mbps Wireless ADSL2+ Router	Model Name:	HG532d					
Temperature:	23 ℃	Relative Humidity:	58 %					
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal					
Test Mode:	TX B MODE CHANNEL 06 - Adapter: XQ							

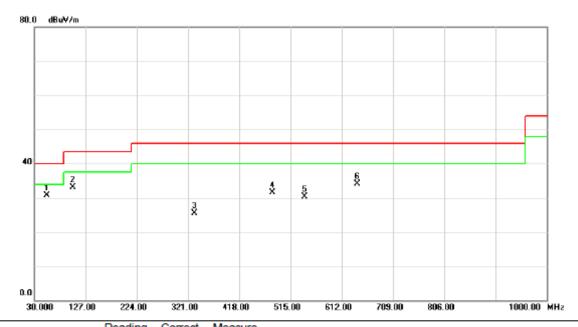


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		54.2500	38.69	-17.63	21.06	40.00	-18.94	peak	
2		85.7750	43.19	-19.27	23.92	40.00	-16.08	peak	
3		141.5500	38.94	-17.97	20.97	43.50	-22.53	peak	
4	,	321.0000	40.45	-12.18	28.27	46.00	-17.73	peak	
5		500.4500	37.70	-8.37	29.33	46.00	-16.67	peak	
6	*	641.1000	37.47	-4.82	32.65	46.00	-13.35	peak	

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F() [300Mbps Wireless ADSL2+ Router	Model Name:	HG532d				
Temperature:	23 ℃	Relative Humidity:	58 %				
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical				
Test Mode:	TX B MODE CHANNEL 11 - Adapter: XQ						

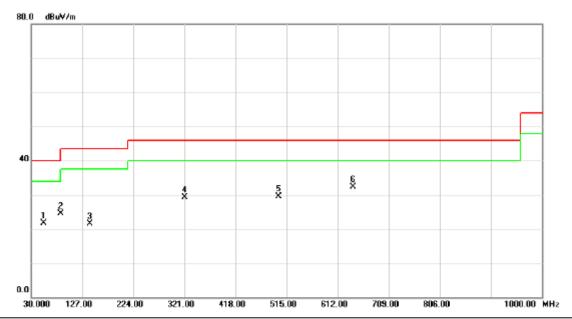


No.	Mk.	Freq.	Level	Factor	ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	54.2500	48.38	-17.63	30.75	40.00	-9.25	peak	
2		102.7500	51.82	-18.65	33.17	43.50	-10.33	peak	
3	;	333.1250	37.49	-11.91	25.58	46.00	-20.42	peak	
4	4	481.0500	40.22	-8.63	31.59	46.00	-14.41	peak	
5		541.6750	37.27	-6.90	30.37	46.00	-15.63	peak	
6	(641.1000	38.95	-4.82	34.13	46.00	-11.87	peak	

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HUI!	300Mbps Wireless ADSL2+ Router	Model Name:	HG532d				
Temperature:	23 ℃	Relative Humidity:	58 %				
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal				
Test Mode:	TX B MODE CHANNEL 11 - Adapter: XQ						

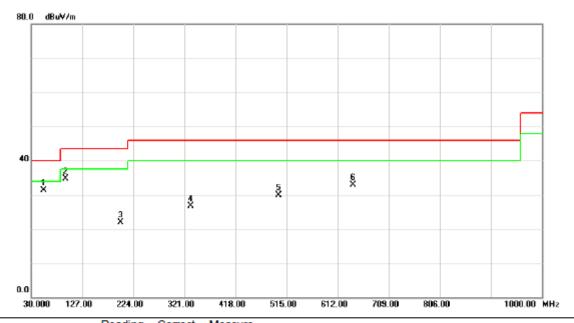


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		54.2500	39.31	-17.63	21.68	40.00	-18.32	peak	
2		85.7750	43.81	-19.27	24.54	40.00	-15.46	peak	
3		141.5500	39.56	-17.97	21.59	43.50	-21.91	peak	
4		321.0000	41.57	-12.18	29.39	46.00	-16.61	peak	
5		500.4500	37.82	-8.37	29.45	46.00	-16.55	peak	
6	*	641.1000	37.09	-4.82	32.27	46.00	-13.73	peak	

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F() [300Mbps Wireless ADSL2+ Router	Model Name:	HG532d					
Temperature:	23 ℃	Relative Humidity:	58 %					
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical					
Test Mode:	TX B MODE CHANNEL 01 - Adapter: HK							

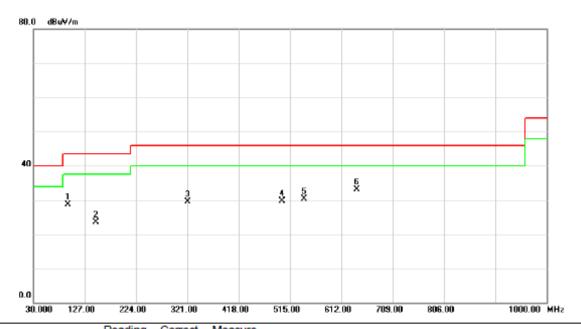


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	54.2500	48.99	-17.63	31.36	40.00	-8.64	peak	
2		95.4750	53.36	-18.70	34.66	43.50	-8.84	peak	
3	1	199.7500	38.89	-16.93	21.96	43.50	-21.54	peak	
4	3	333.1250	38.58	-11.91	26.67	46.00	-19.33	peak	
5	5	500.4500	38.23	-8.37	29.86	46.00	-16.14	peak	
6	6	641.1000	37.64	-4.82	32.82	46.00	-13.18	peak	

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F() [300Mbps Wireless ADSL2+ Router	Model Name:	HG532d						
Temperature:	23 ℃	Relative Humidity:	58 %						
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal						
Test Mode:	TX B MODE CHANNEL 01 - Adapter: HK								

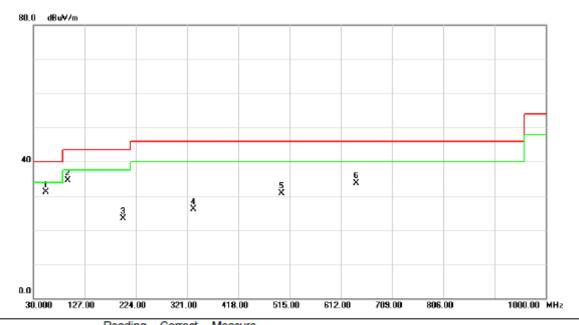


	No.	Mk.	Freq.	Level	Factor	ment	Limit	Over		
-			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
-	1		95.4750	47.48	-18.70	28.78	43.50	-14.72	peak	
-	2		148.8250	41.41	-17.85	23.56	43.50	-19.94	peak	
_	3	;	321.0000	41.62	-12.18	29.44	46.00	-16.56	peak	
-	4	,	500.4500	38.13	-8.37	29.76	46.00	-16.24	peak	
_	5	į	541.6750	37.21	-6.90	30.31	46.00	-15.69	peak	
-	6	* (641.1000	37.97	-4.82	33.15	46.00	-12.85	peak	
_										

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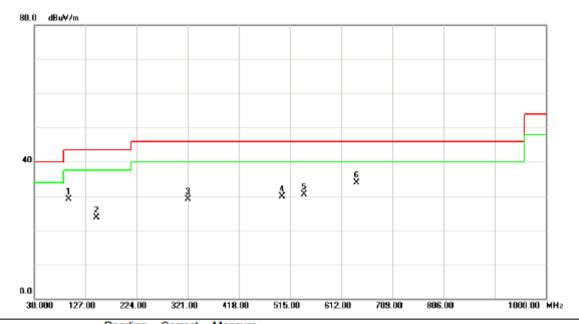
I CUIT	300Mbps Wireless ADSL2+ Router	Model Name:	HG532d					
Temperature:	23 ℃	Relative Humidity:	58 %					
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical					
Test Mode:	TX B MODE CHANNEL 06 - Adapter: HK							



No.	Mk.	Freq.	Level Level	Factor	ment ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	54.2500	48.83	-17.63	31.20	40.00	-8.80	peak	
2		95.4750	53.20	-18.70	34.50	43.50	-9.00	peak	
3	1	199.7500	40.23	-16.93	23.30	43.50	-20.20	peak	
4	3	333.1250	37.92	-11.91	26.01	46.00	-19.99	peak	
5		500.4500	39.07	-8.37	30.70	46.00	-15.30	peak	
6	6	641.1000	38.48	-4.82	33.66	46.00	-12.34	peak	

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I CUIT	300Mbps Wireless ADSL2+ Router	Model Name:	HG532d					
Temperature:	23 ℃	Relative Humidity:	58 %					
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal					
Test Mode:	TX B MODE CHANNEL 06 - Adapter: HK							

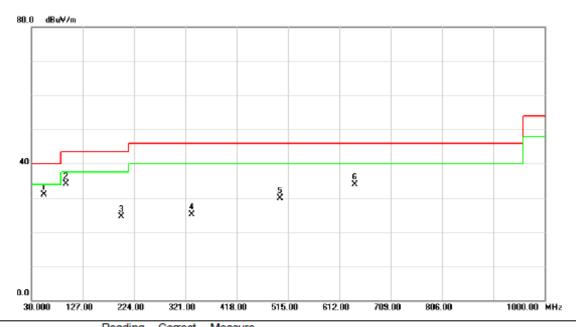


No.	Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		95.4750	47.71	-18.70	29.01	43.50	-14.49	peak	
2		148.8250	41.65	-17.85	23.80	43.50	-19.70	peak	
3		321.0000	41.35	-12.18	29.17	46.00	-16.83	peak	
4		500.4500	38.36	-8.37	29.99	46.00	-16.01	peak	
5		541.6750	37.45	-6.90	30.55	46.00	-15.45	peak	
6	*	641.1000	38.71	-4.82	33.89	46.00	-12.11	peak	

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F() [300Mbps Wireless ADSL2+ Router	Model Name:	HG532d					
Temperature:	23 ℃	Relative Humidity:	58 %					
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical					
Test Mode:	TX B MODE CHANNEL 11 - Adapter: HK							

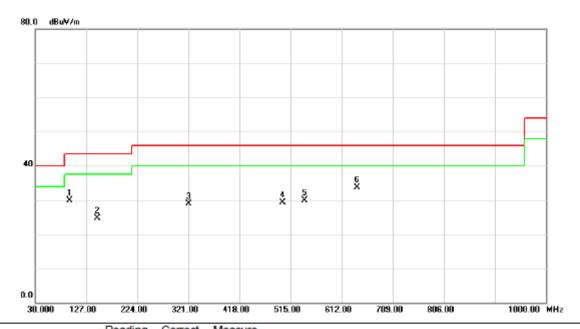


No.	Mk.	Freq.	Level	Factor	ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	54.2500	48.52	-17.63	30.89	40.00	-9.11	peak	
2		95.4750	52.89	-18.70	34.19	43.50	-9.31	peak	
3	1	199.7500	41.42	-16.93	24.49	43.50	-19.01	peak	
4	3	333.1250	37.11	-11.91	25.20	46.00	-20.80	peak	
5	5	00.4500	38.26	-8.37	29.89	46.00	-16.11	peak	
6	6	641.1000	38.67	-4.82	33.85	46.00	-12.15	peak	

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EUT:	300Mbps Wireless ADSL2+ Router	Model Name:	HG532d					
Temperature:	23 ℃	Relative Humidity:	58 %					
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal					
Test Mode:	TX B MODE CHANNEL 11 - Adapter: HK							



	No.	Mk.	Freq.	Level	Factor	ment	Limit	Over		
_			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
_	1		95.4750	48.54	-18.70	29.84	43.50	-13.66	peak	
_	2		148.8250	42.48	-17.85	24.63	43.50	-18.87	peak	
_	3		321.0000	41.18	-12.18	29.00	46.00	-17.00	peak	
_	4		500.4500	37.69	-8.37	29.32	46.00	-16.68	peak	
_	5		541.6750	36.78	-6.90	29.88	46.00	-16.12	peak	
_	6	*	641.1000	38.54	-4.82	33.72	46.00	-12.28	peak	
_										

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4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

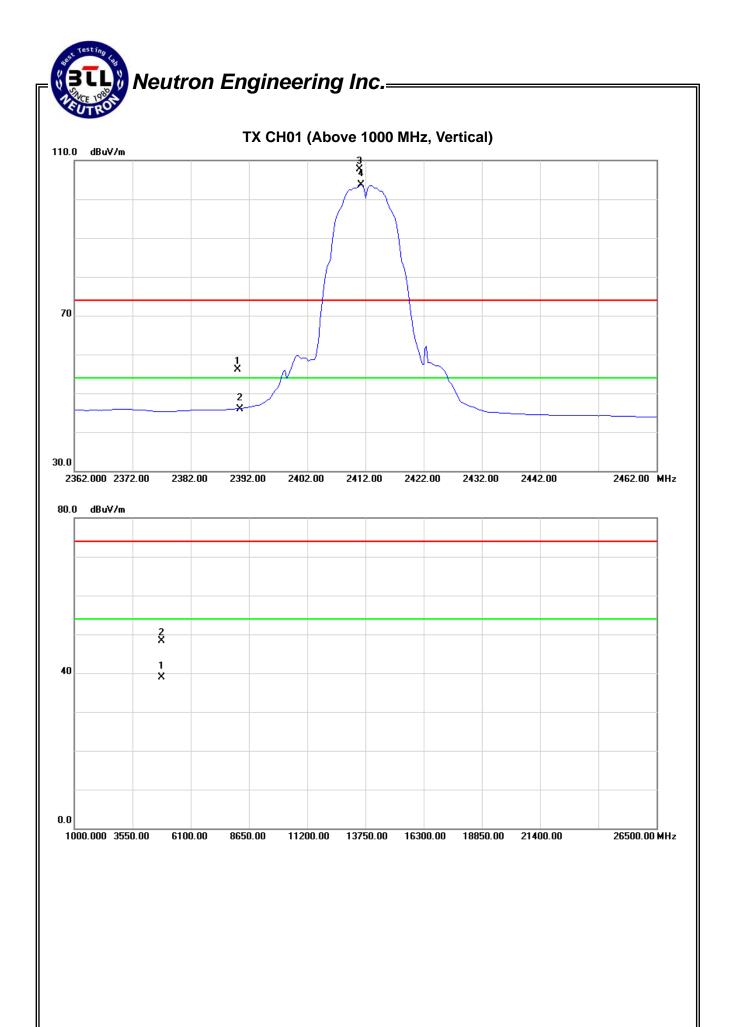
IEU I •	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	23 ℃	Relative Humidity:	51 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz		

Freq. Ant.Pol.	Reading		Ant./CF	A	Act.		Limit		
1 164.	AIII.I OI.	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	23.92	13.72	32.28	56.20	46.00	74.00	54.00	X/E
2411.00	V	75.53	71.54	32.26	107.79	103.80			X/F
4824.15	V	42.18	32.78	6.19	48.37	38.97	74.00	54.00	X/H

Remark:

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ${}_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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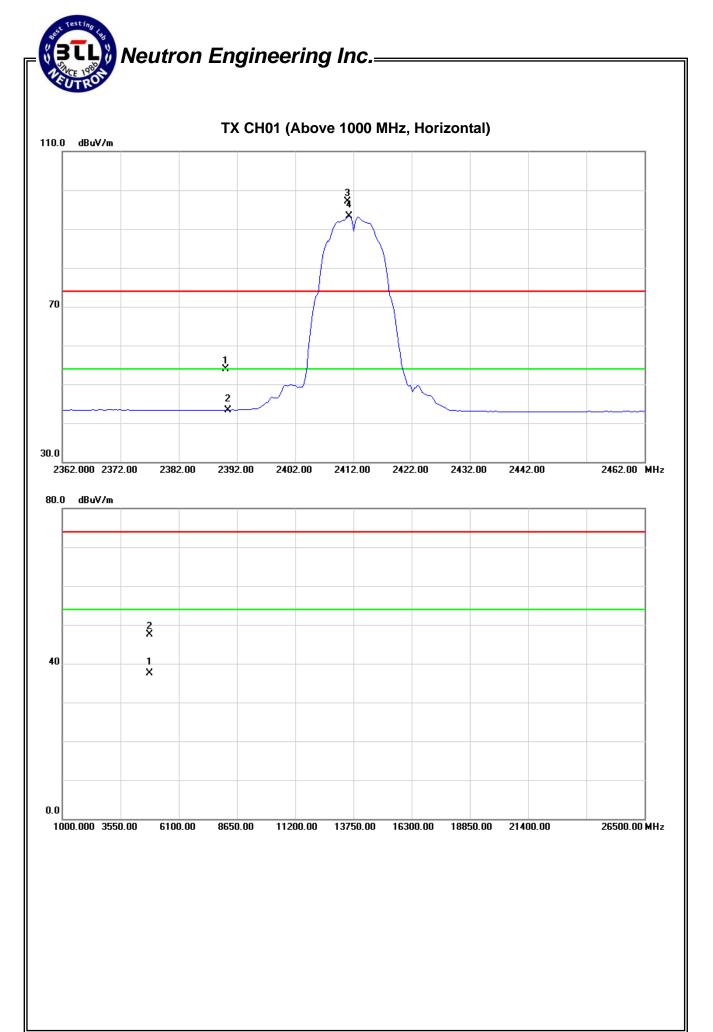


EUT:	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	23 ℃	Relative Humidity:	51 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz		

Freq. Ant.Pol.	Reading		Ant./CF	Act.		Lir			
1 164.	AIILI OI.	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	21.56	11.04	32.28	53.84	43.32	74.00	54.00	X/E
2411.00	Н	64.90	61.04	32.26	97.16	93.30			X/F
4824.04	Н	41.36	31.28	6.19	47.55	37.47	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ${}_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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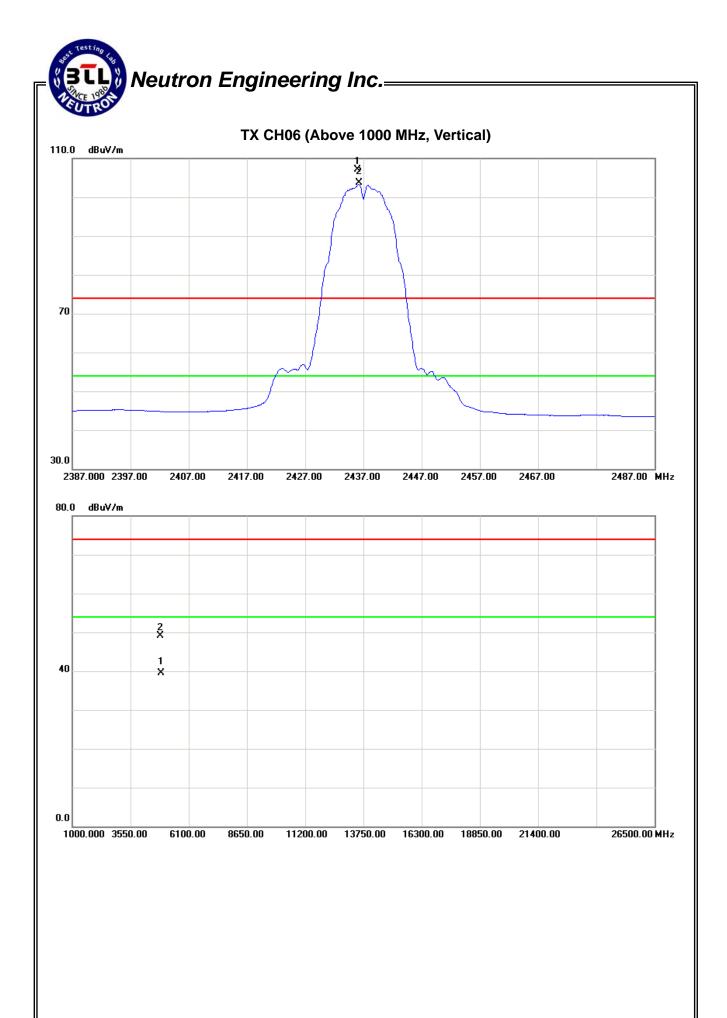
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EUT:	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature:	23 ℃	Relative Humidity:	51 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2437MHz		

Freq. Ant.Pol.	Reading		Ant./CF	Act.		Lir			
i icq.	AILI OI.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2436.00	V	74.80	71.40	32.23	107.03	103.63			X/F
4874.23	V	42.65	33.08	6.39	49.04	39.47	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ${}_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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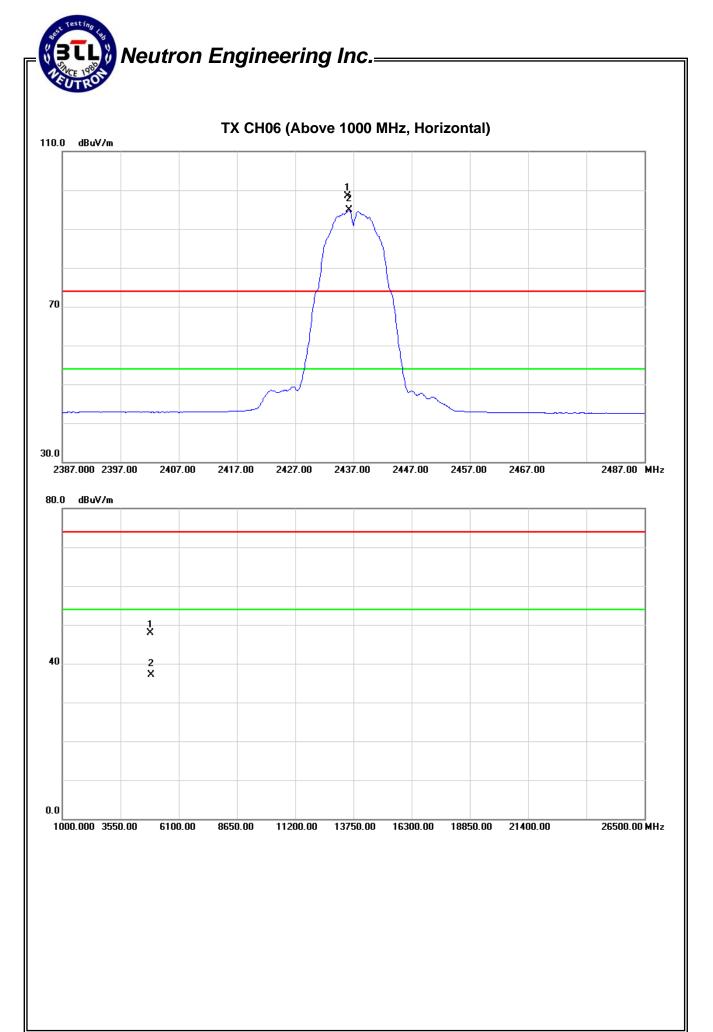


EUT:	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature:	23 ℃	Relative Humidity:	51 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2437MHz		

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)	
2436.00	Н	66.34	62.62	32.23	98.57	94.85			X/F
4873.84	Н	41.58	30.74	6.39	47.97	37.13	74.00	54.00	X/E

- (1) All readings are Peak unless otherwise stated QP in column of $^{\mathbb{F}}$ Note $_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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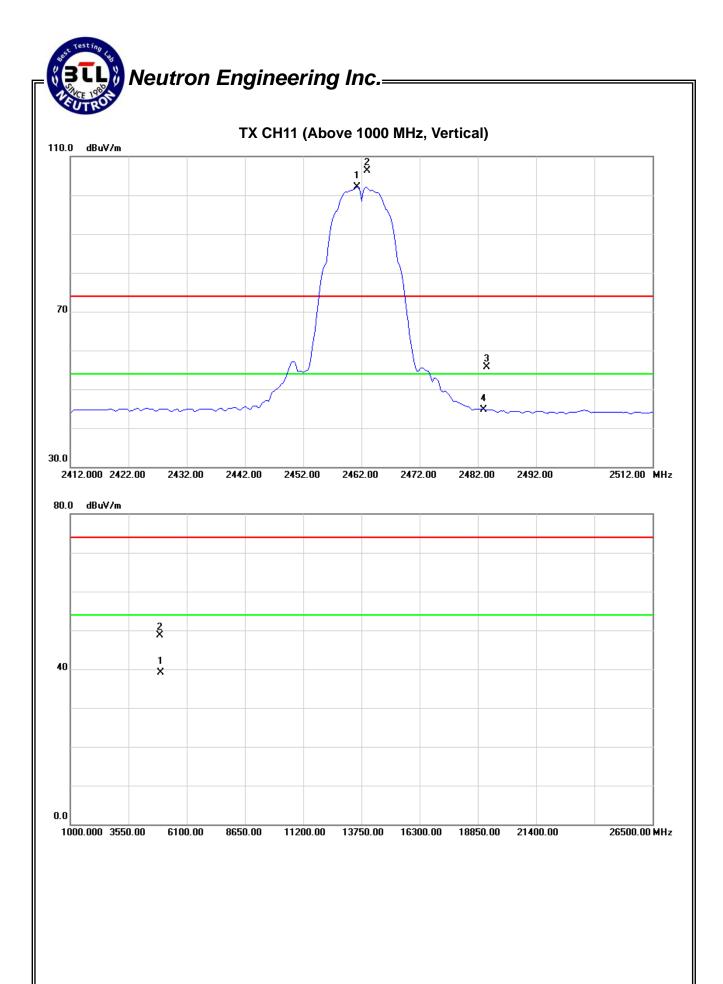


EUT:	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	23 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2462MHz		

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)	
2463.00	V	74.01	70.00	32.20	106.21	102.20			X/F
2483.50	V	23.45	12.59	32.17	55.62	44.76	74.00	54.00	X/H
4924.32	V	42.19	32.48	6.59	48.78	39.07	74.00	54.00	X/E

- (1) All readings are Peak unless otherwise stated QP in column of $^{\mathbb{F}}$ Note $_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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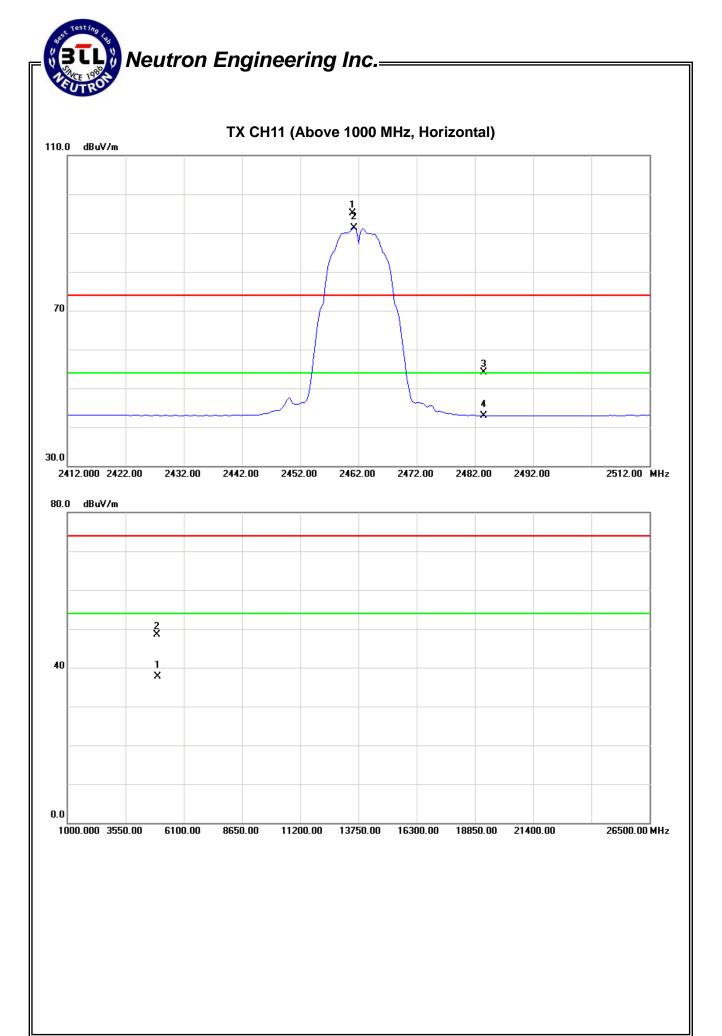


IEU I •	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	23 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2462MHz		

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)	
2461.00	Н	62.86	59.13	32.20	95.06	91.33			X/F
2483.50	Н	22.02	10.80	32.17	54.19	42.97	74.00	54.00	X/H
4924.25	Н	41.85	31.05	6.59	48.44	37.64	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ${}_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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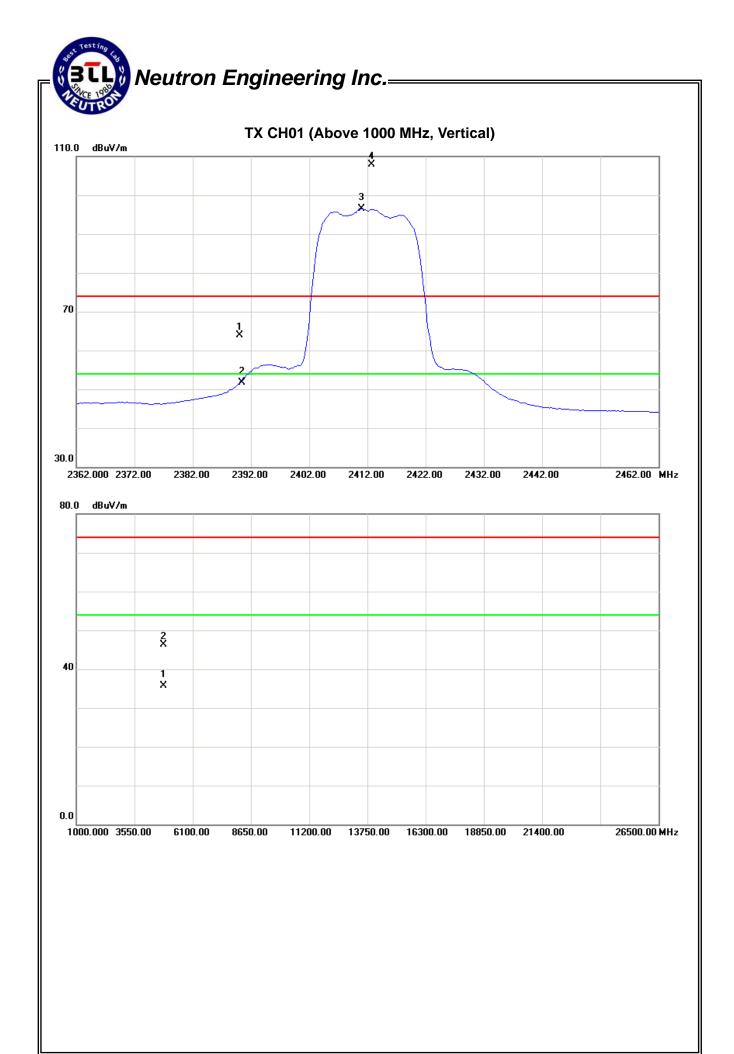


EUT:	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	23 ℃	Relative Humidity:	51 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2412MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	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	V	31.70	19.43	32.28	63.98	51.71	74.00	54.00	X/E	
2412.75	V	75.75	64.20	32.25	108.00	96.45			X/F	
4824.36	V	40.20	29.54	6.19	46.39	35.73	74.00	54.00	X/H	

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ${}_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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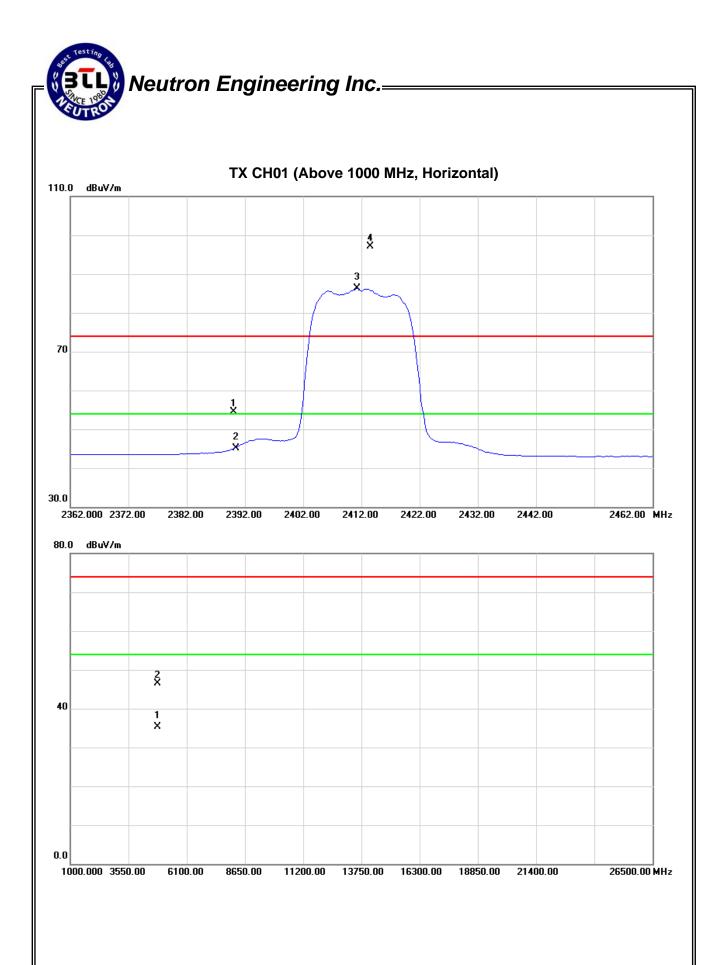


EUT:	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	23 ℃	Relative Humidity:	51 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2412MHz		

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	22.19	12.79	32.28	54.47	45.07	74.00	54.00	X/E
2413.50	Н	64.81	53.96	32.25	97.06	86.21			X/F
4824.40	Н	40.29	29.20	6.19	46.48	35.39	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ${}_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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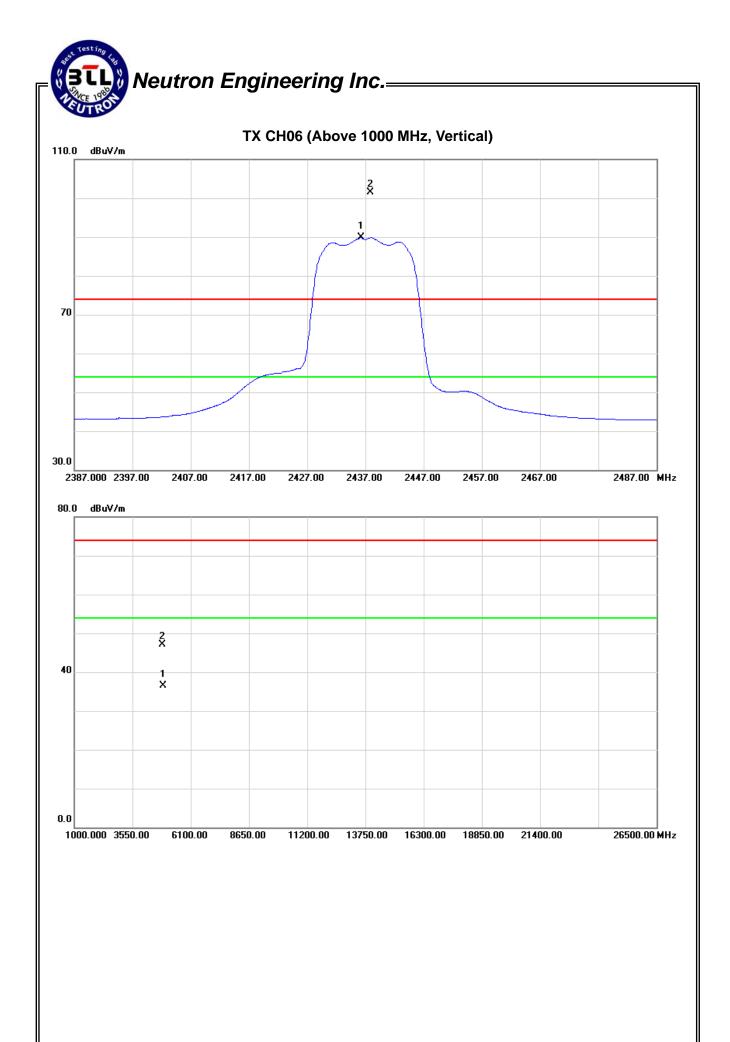


EUT:	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature:	23 ℃	Relative Humidity:	51 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2437MHz		

Freg. Ant.Pol.		Reading		Ant./CF	Act.		Limit		
i ieq.	Ant.r oi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2437.80	V	69.38	57.62	32.22	101.60	89.84			X/F
4873.74	V	40.68	30.15	6.39	47.07	36.54	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of $^{\mathbb{F}}$ Note $_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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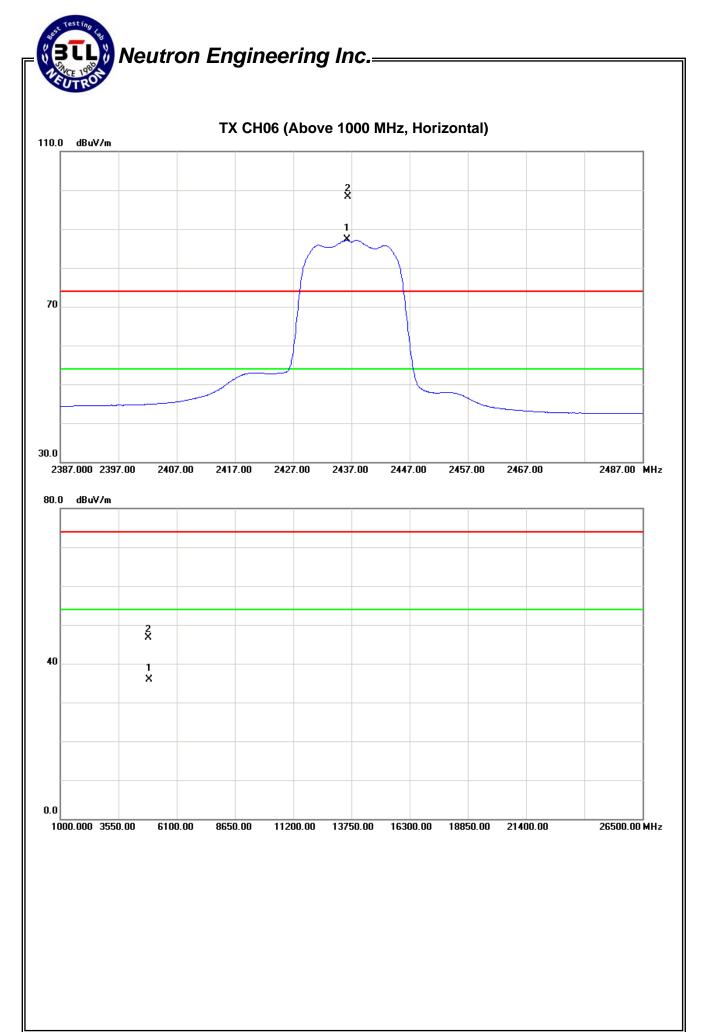


EUT:	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature:	23 ℃	Relative Humidity:	51 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2437MHz		

Freq. Ant.Pol.	Reading		Ant./CF	Act.		Limit			
i ieq.	Ant.i oi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2436.40	Н	66.06	54.99	32.23	98.29	87.22			X/F
4873.87	Н	40.29	29.56	6.39	46.68	35.95	74.00	54.00	X/H

- (1) 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。
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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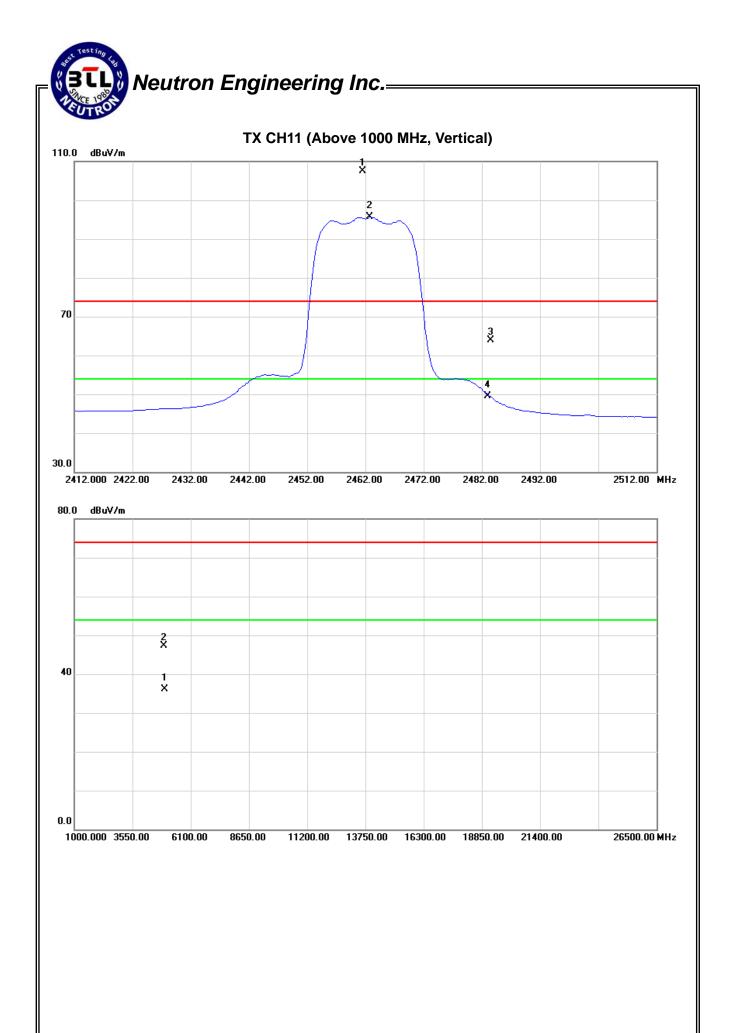


IFUI.	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	23 ℃	Relative Humidity:	51 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2462MHz		

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)	
2461.50	V	75.40	63.44	32.20	107.60	95.64			X/F
2483.50	V	31.73	17.24	32.17	63.90	49.41	74.00	54.00	X/E
4924.50	V	40.79	29.46	6.59	47.38	36.05	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of $^{\mathbb{F}}$ Note $_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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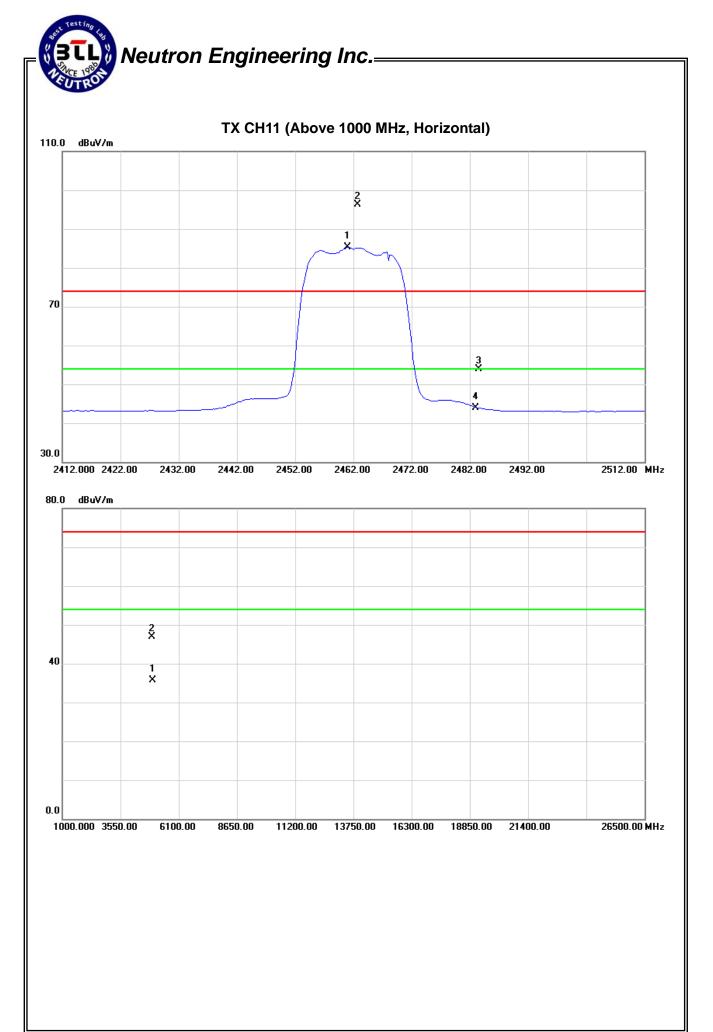


IFUI .	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	23 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2462MHz		

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)	
2462.75	Н	64.12	53.12	32.20	96.32	85.32			X/F
2483.50	Н	21.76	11.76	32.17	53.93	43.93	74.00	54.00	X/E
4924.26	Η	40.28	29.04	6.59	46.87	35.63	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of $^{\mathbb{F}}$ Note $_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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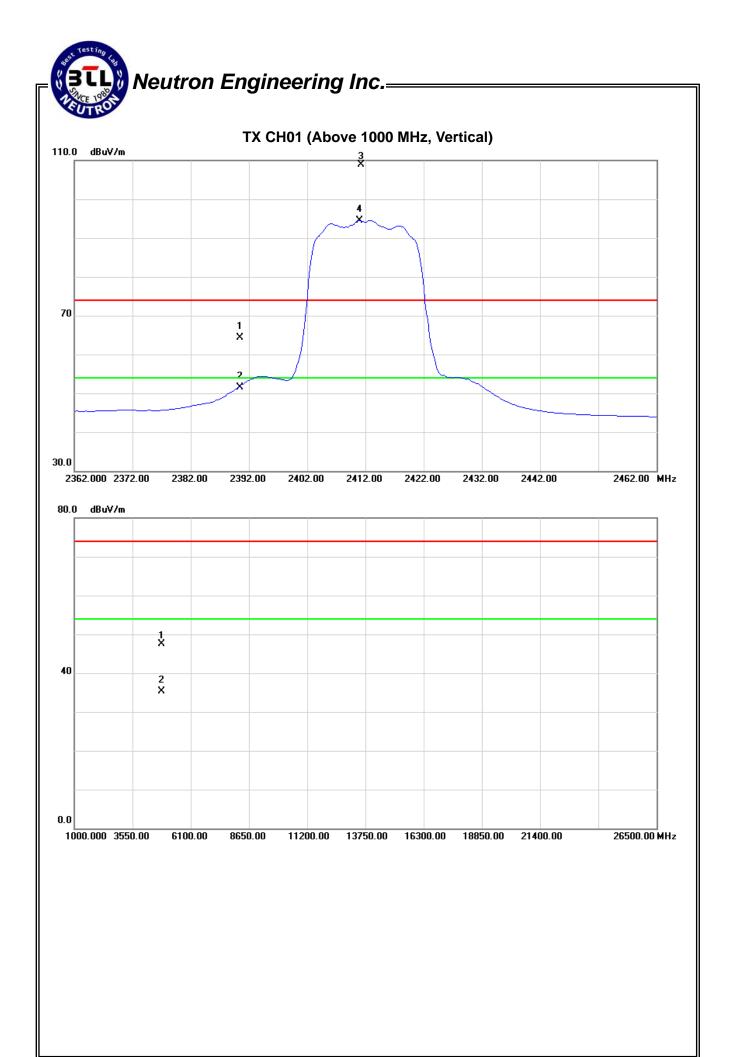
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IF() .	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	23 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2412MHz		

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	V	32.11	19.21	32.28	64.39	51.49	74.00	54.00	X/E
2411.25	V	76.60	62.15	32.26	108.86	94.41			X/F
4823.64	V	41.39	29.12	6.19	47.58	35.31	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ${}_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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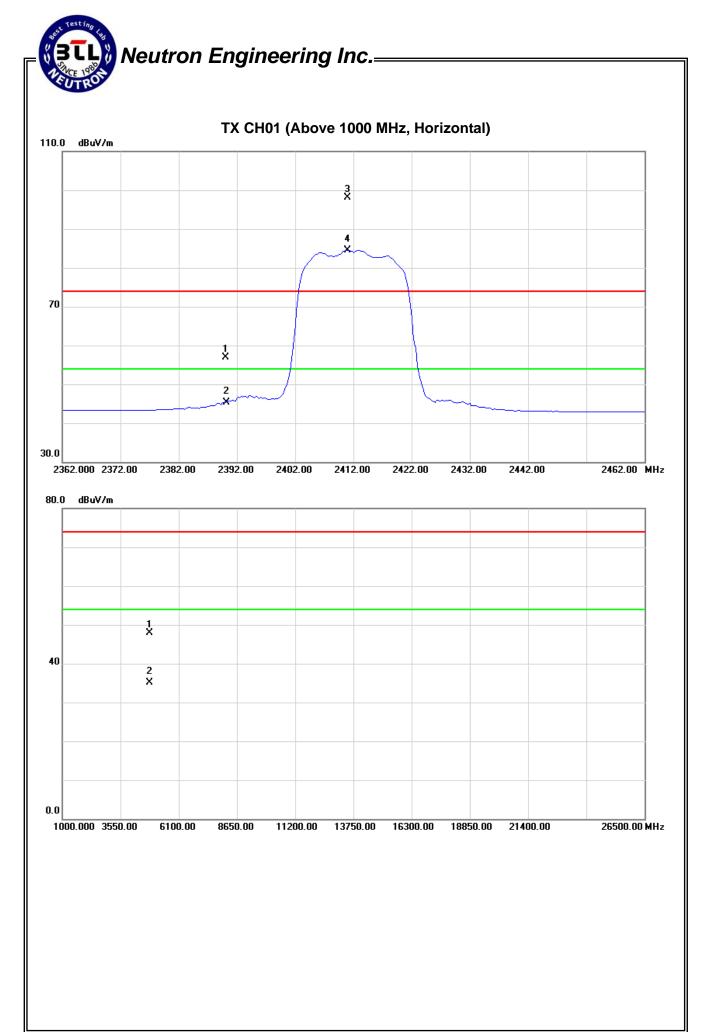


IFUI .	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	23 ℃	Relative Humidity:	51 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2412MHz		

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	24.67	13.12	32.28	56.95	45.40	74.00	54.00	X/E
2411.00	Н	65.79	52.30	32.26	98.05	84.56			X/F
4823.75	Н	41.78	29.01	6.19	47.97	35.20	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of $^{\mathbb{F}}$ Note $_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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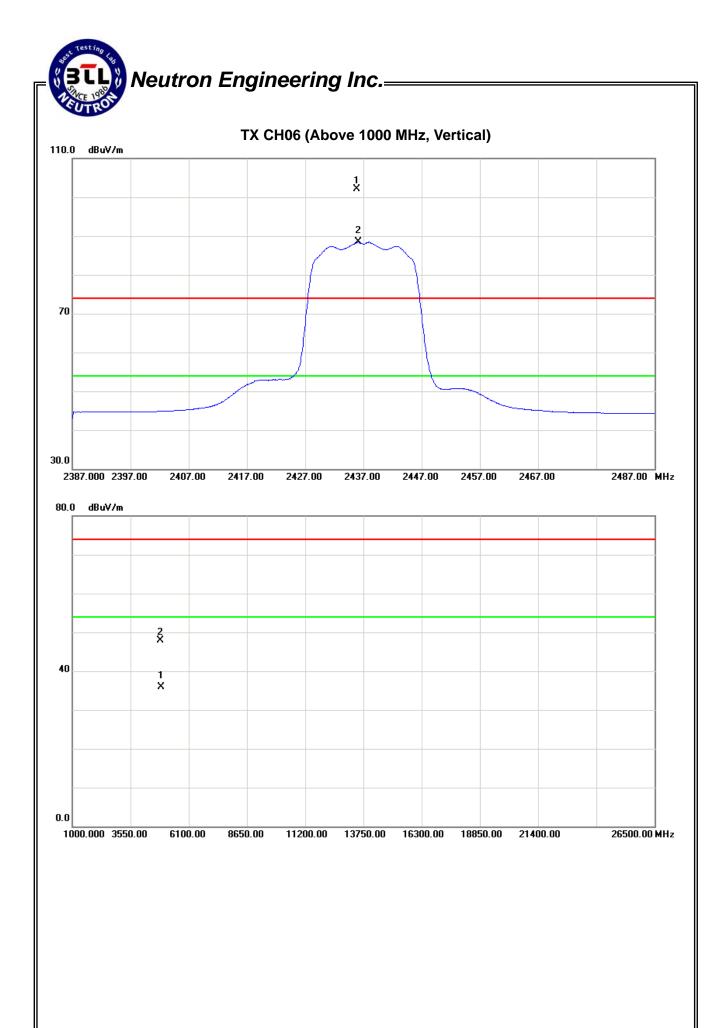
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EUT:	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature:	23 ℃	Relative Humidity:	51 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2437MHz		

	Freq. An	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
ı		Ant.r oi.	Peak	AV		Peak	AV	Peak	AV	Note
	(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
	2435.80	٧	69.81	56.22	32.23	102.04	88.45			X/F
ı	4873.72	V	41.54	29.48	6.39	47.93	35.87	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of $^{\mathbb{F}}$ Note $_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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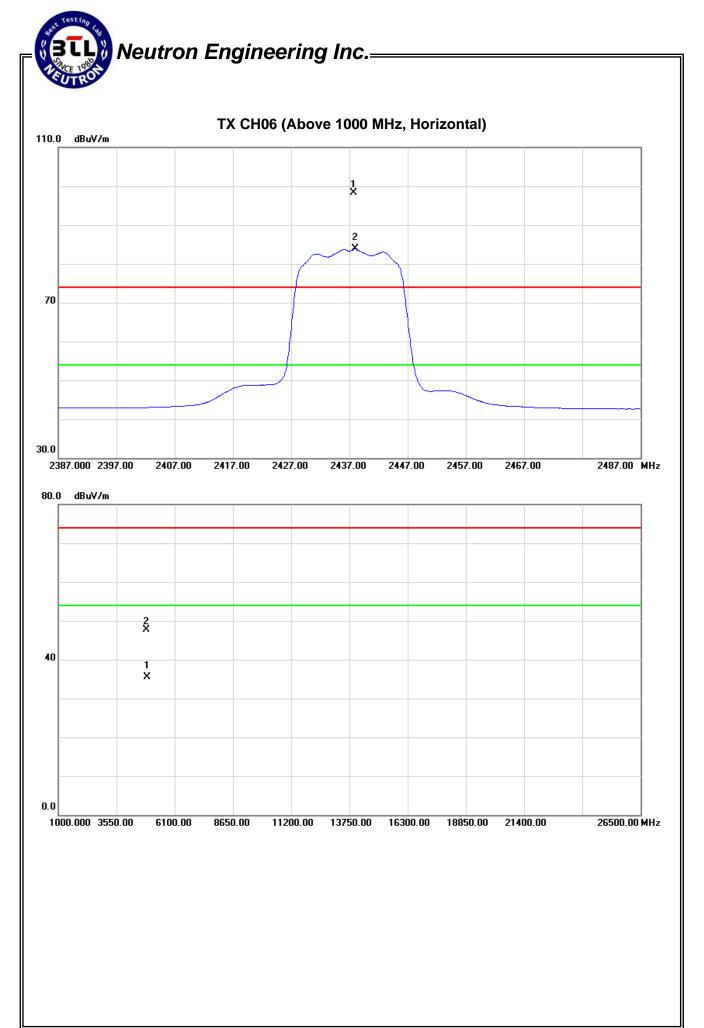


HUI.	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	23 ℃	Relative Humidity:	51 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2437MHz		

Freq. Ant.Po	Ant Pol	Reading		Ant./CF	Act.		Limit		
	Ant.i oi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2437.70	Н	66.14	51.61	32.22	98.36	83.83			X/F
4873.78	Н	41.22	29.08	6.39	47.61	35.47	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ${}_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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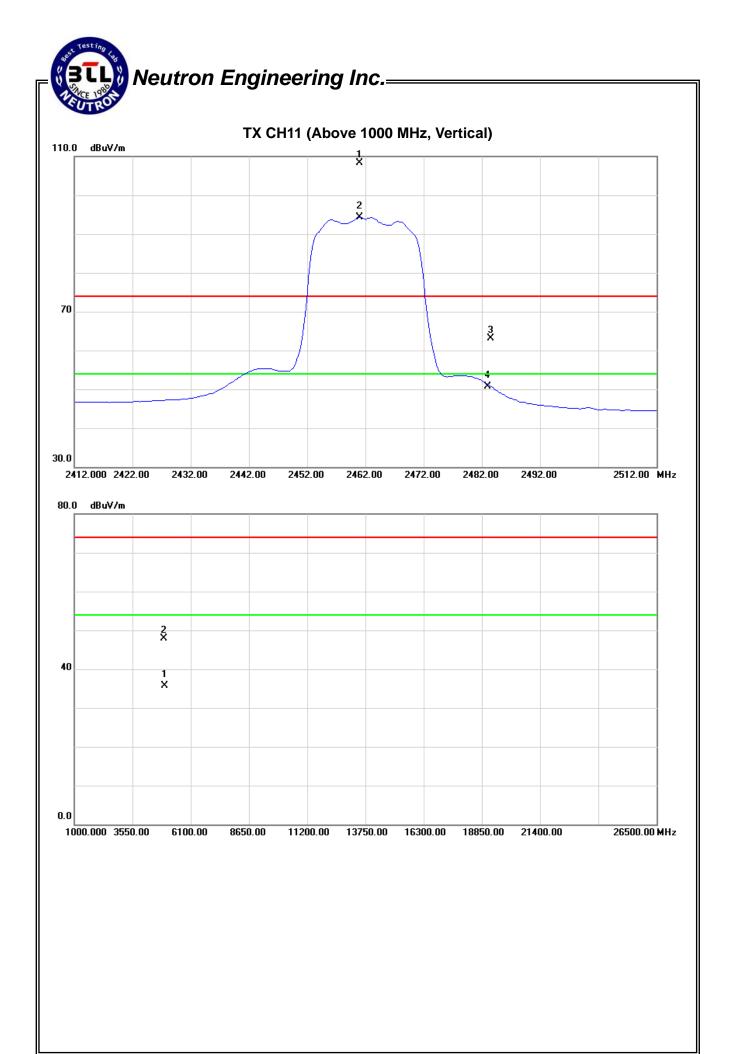


HUI.	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	23 ℃	Relative Humidity:	51 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2462MHz		

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)	
2461.00	V	76.18	62.07	32.20	108.38	94.27			X/F
2483.50	V	31.02	18.50	32.17	63.19	50.67	74.00	54.00	X/E
4924.45	V	41.34	29.04	6.59	47.93	35.63	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of $^{\mathbb{F}}$ Note $_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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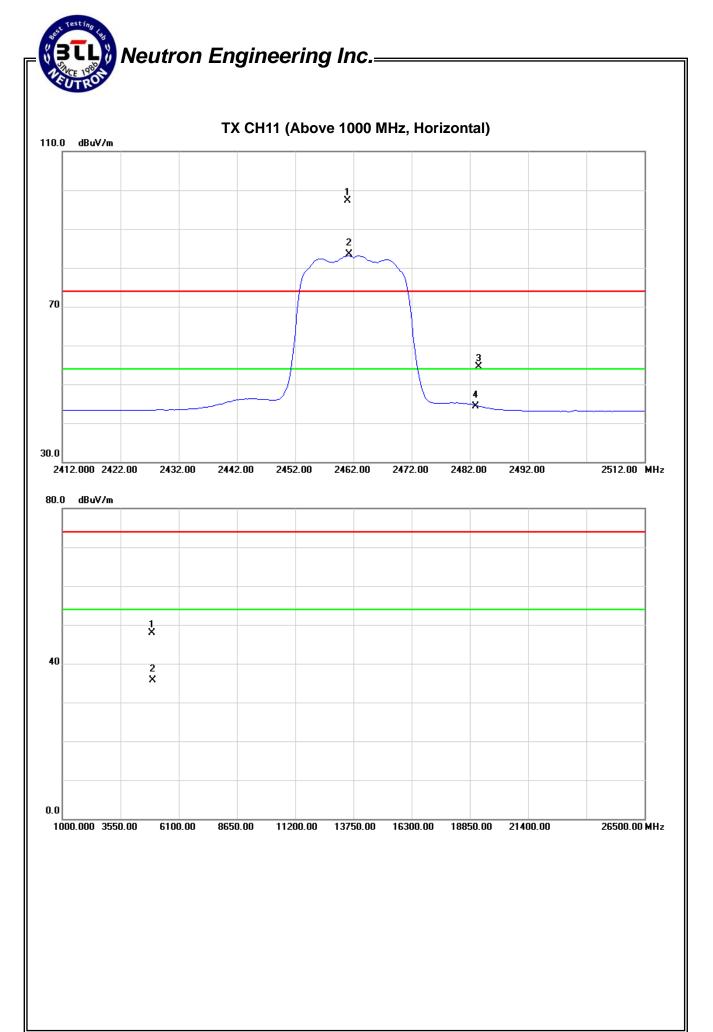


IEU I •	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	23 ℃	Relative Humidity:	51 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2462MHz		

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)	
2461.00	Н	65.10	51.23	32.20	97.30	83.43			X/F
2483.50	Н	22.26	12.22	32.17	54.43	44.39	74.00	54.00	X/E
4923.58	Н	41.30	29.09	6.59	47.89	35.68	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ${}_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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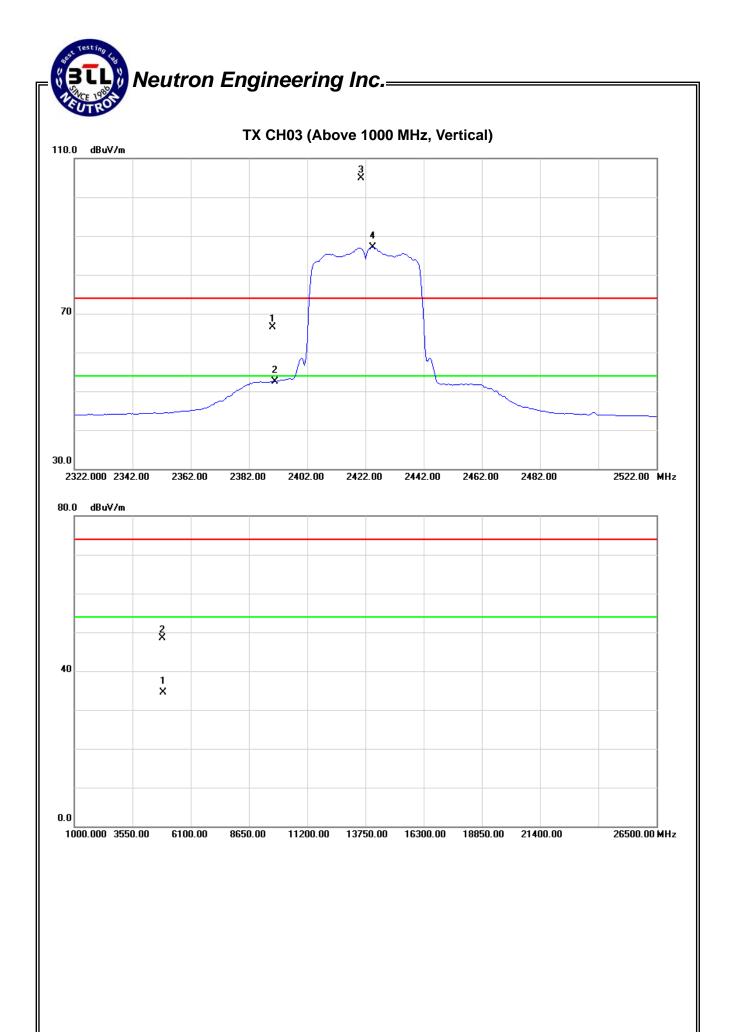
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IEU I •	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	23 ℃	Relative Humidity:	51 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2422MHz		

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	V	34.27	20.16	32.28	66.55	52.44	74.00	54.00	X/E
2420.50	V	72.67	54.90	32.25	104.92	87.15			X/F
4844.52	V	42.32	28.27	6.27	48.59	34.54	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ${}_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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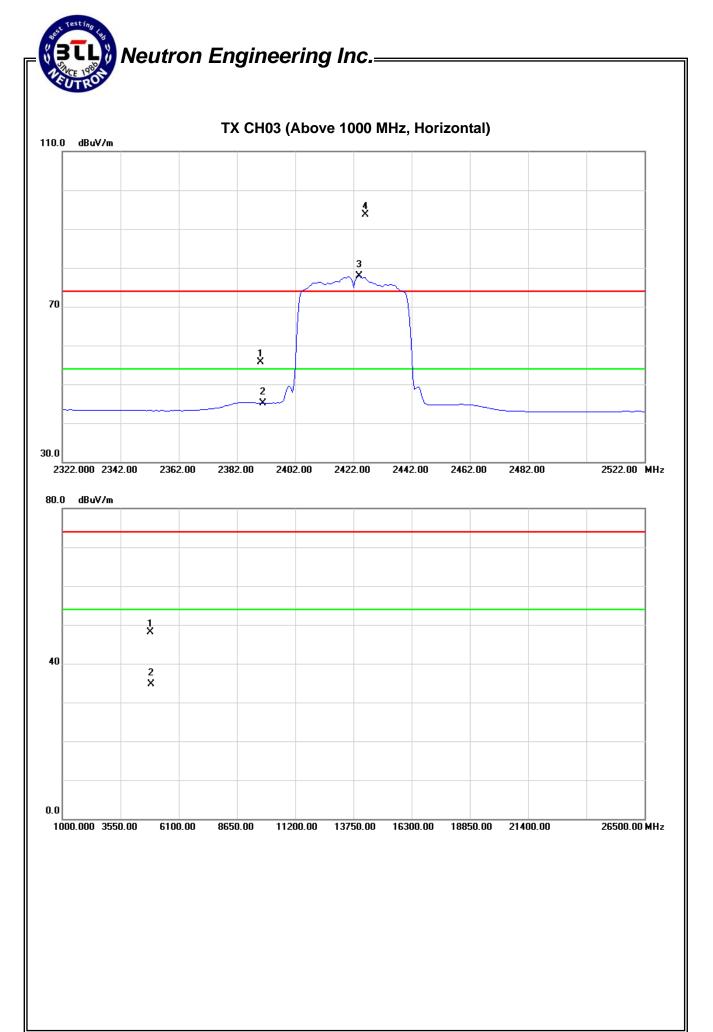


EUT:	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature:	23 ℃	Relative Humidity:	51 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2422MHz		

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	23.33	12.81	32.28	55.61	45.09	74.00	54.00	X/E
2426.00	Н	61.45	45.73	32.24	93.69	77.97			X/F
4843.57	Н	41.88	28.40	6.26	48.14	34.66	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ${}_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission
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- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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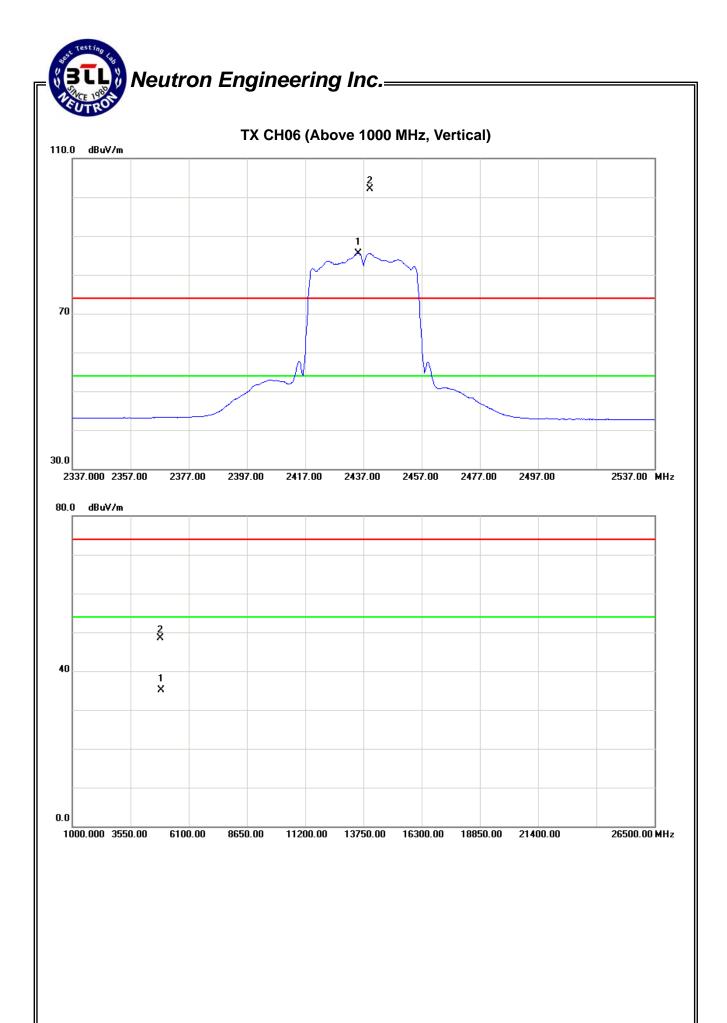
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IEU I •	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	23 ℃	Relative Humidity:	51 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2437MHz		

	Freq.	Ant.Pol.	Ant Pol Reading		Ant./CF	A	Act.		Limit	
r req. Ant.	Ant.r oi.	Peak	AV		Peak	AV	Peak	AV	Note	
	(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
	2439.20	٧	69.90	53.31	32.22	102.12	85.53			X/F
ı	4873.45	V	42.15	28.71	6.39	48.54	35.10	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of $^{\mathbb{F}}$ Note $_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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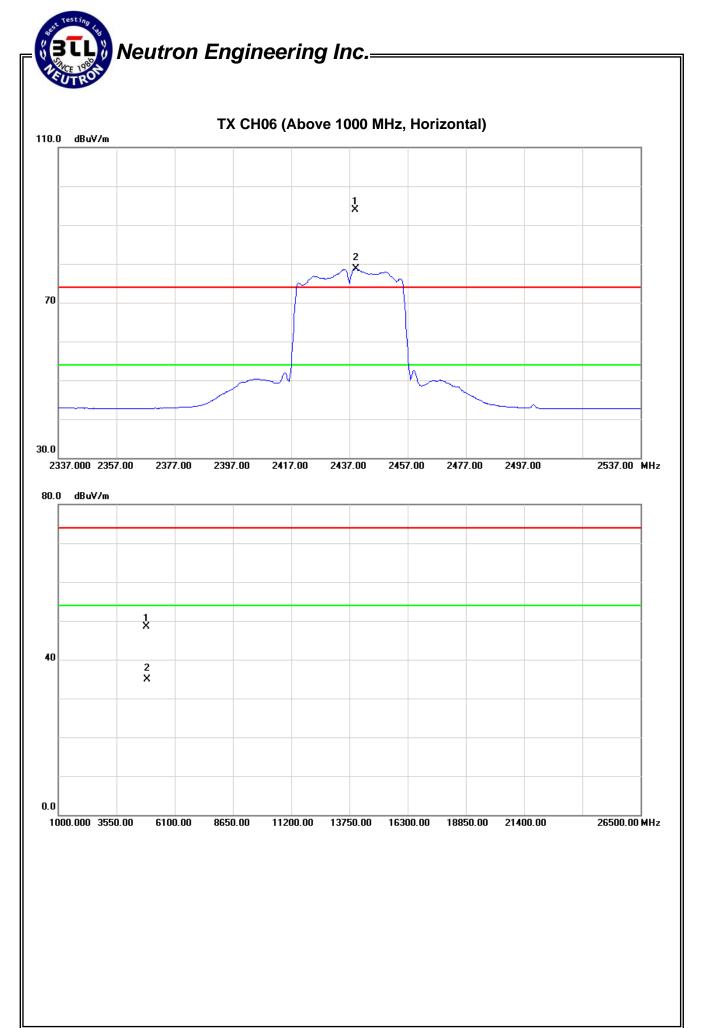


EUT:	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	23 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2437MHz		

	Freq. Ant.F	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
ı		Ant.r oi.	Peak	AV		Peak	AV	Peak	AV	Note
	(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
	2439.00	Н	61.78	46.58	32.22	94.00	78.80			X/F
ı	4873.60	Н	42.05	28.54	6.39	48.44	34.93	74.00	54.00	X/H

- (1) 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。
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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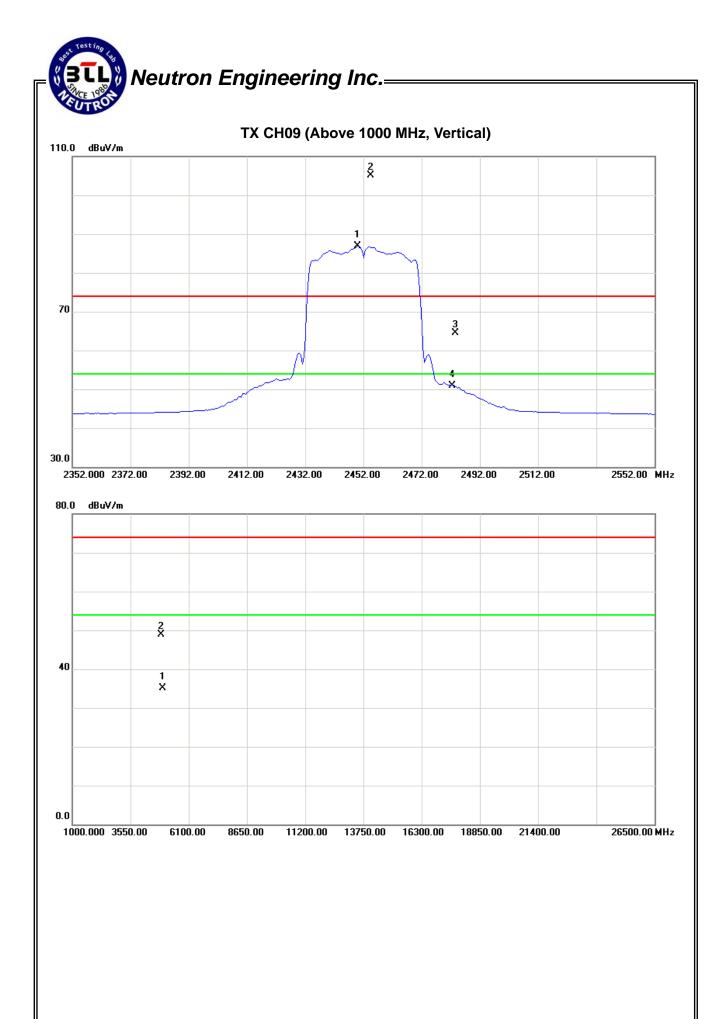


IFUI.	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	23 ℃	Relative Humidity:	51 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2452MHz		

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)	
2454.50	V	72.92	54.61	32.21	105.13	86.82			X/F
2483.50	V	32.29	18.77	32.17	64.46	50.94	74.00	54.00	X/E
4903.79	V	42.32	28.54	6.51	48.83	35.05	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of $^{\mathbb{F}}$ Note $_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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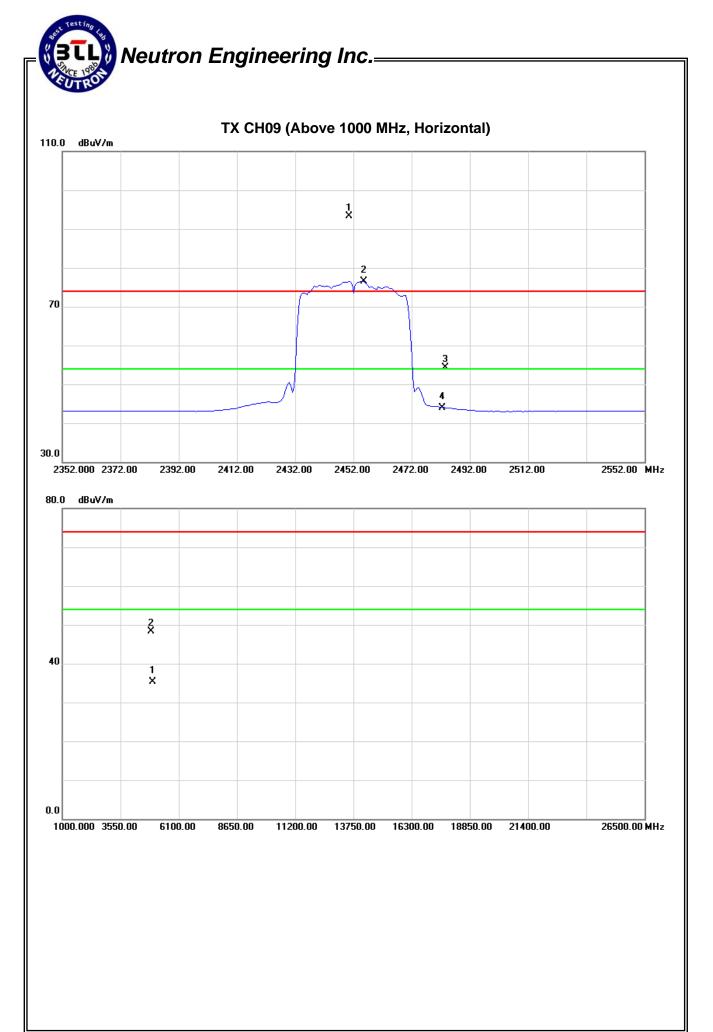


IEU I •	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	23 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2452MHz		

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)	
2450.50	Н	61.02	44.26	32.21	93.23	76.47			X/F
2483.50	Н	22.14	11.82	32.17	54.31	43.99	74.00	54.00	X/E
4904.75	Н	41.89	28.74	6.51	48.40	35.25	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ${}_{\circ}$
- (2) 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. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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5. BANDWIDTH TEST

5.1 Applied procedures / limit

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

5.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100185	Nov. 16.2012	Nov. 16.2013

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of Equipment List is One Year.

5.1.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW= 100KHz, VBW=300KHz, Sweep time = 2.5 ms.

5.1.3 DEVIATION FROM STANDARD

No deviation.

5.1.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

5.1.5 EUT OPERATION CONDITIONS

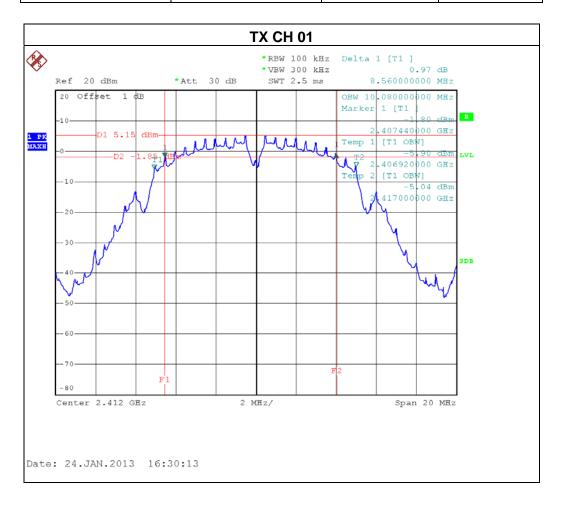
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

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5.1.6 TEST RESULTS

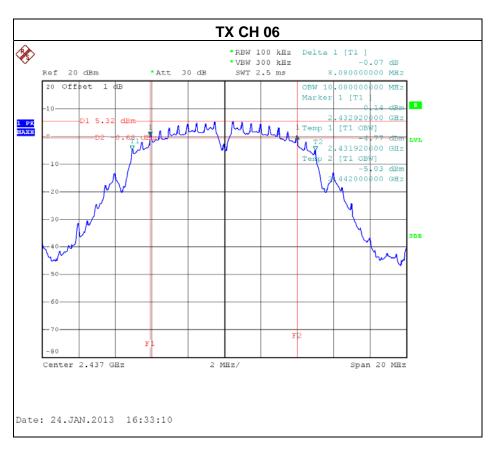
IF() .	300Mbps Wireless ADSL2+ Router	Model Name. :	HG532d
Temperature :	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH	11	

Test Channel	Frequency (MHz)	Bandwidth (MHz)	LIMIT (MHz)
CH01	2412	8.56	>=500KHz
CH06	2437	8.08	>=500KHz
CH11	2462	8.04	>=500KHz



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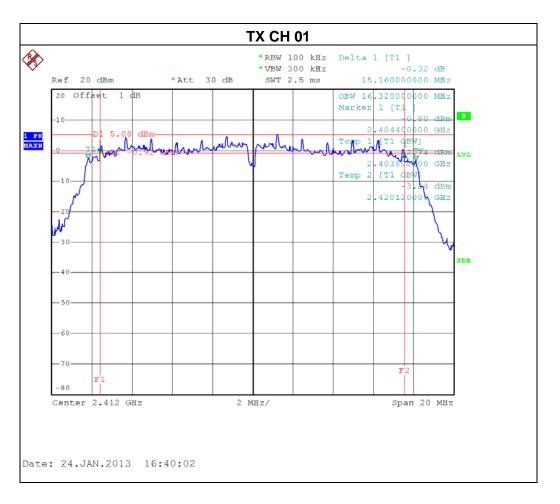


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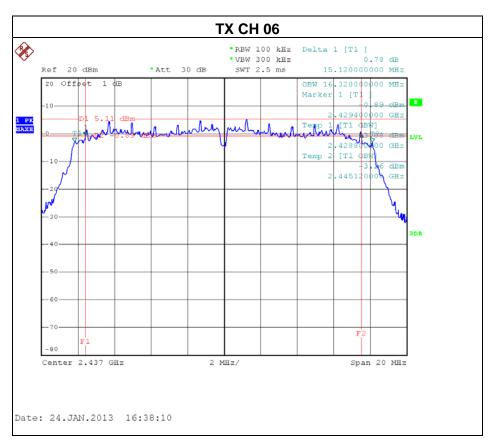
IFUI.	300Mbps Wireless ADSL2+ Router	Model Name. :	HG532d
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE /CH01, CH06, CH11		

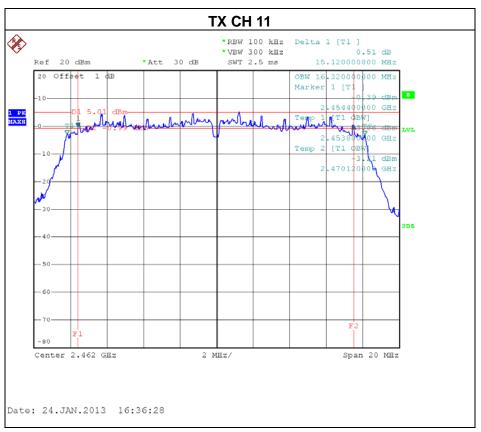
Test Channel	Frequency (MHz)	Bandwidth (MHz)	LIMIT (MHz)
CH01	2412	15.16	>=500KHz
CH06	2437	15.12	>=500KHz
CH11	2462	15.12	>=500KHz



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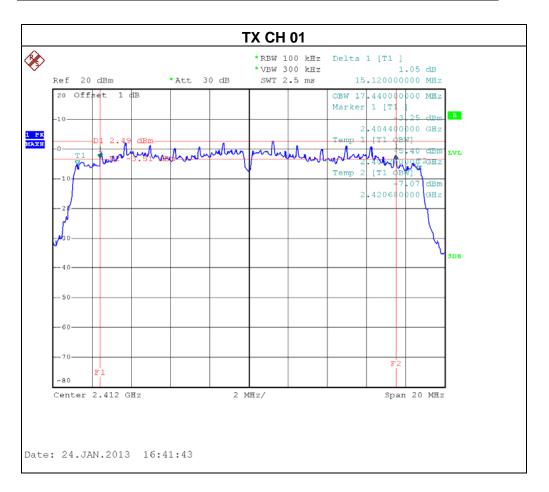






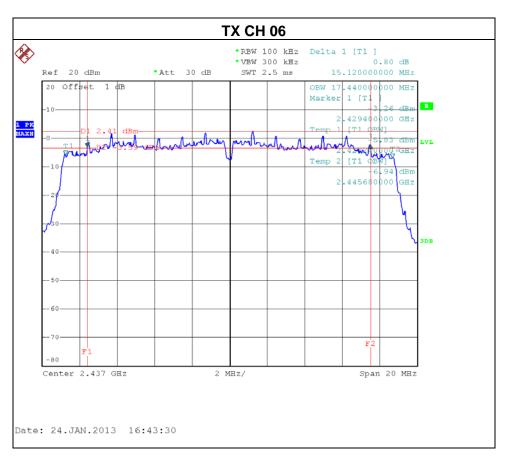
IFUI.	300Mbps Wireless ADSL2+ Router	Model Name. :	HG532d
Temperature :	24 ℃	Relative Humidity:	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE -20MHz/ CH01, CH06, CH11		

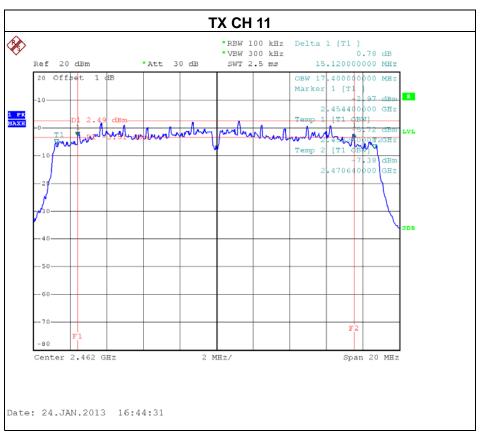
Test Channel	Frequency (MHz)	Bandwidth (MHz)	LIMIT (MHz)
CH01	2412	15.12	>=500KHz
CH06	2437	15.12	>=500KHz
CH11	2462	15.12	>=500KHz



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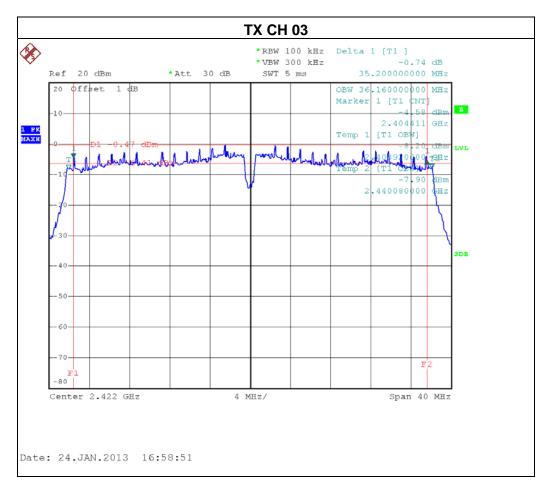




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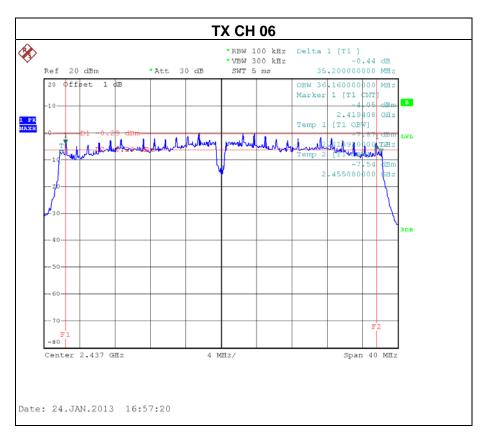
IF() .	300Mbps Wireless ADSL2+ Router	Model Name. :	HG532d	
Temperature:	24 ℃	Relative Humidity:	60 %	
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N MODE -40MHz/ CH03, CH06, CH09			

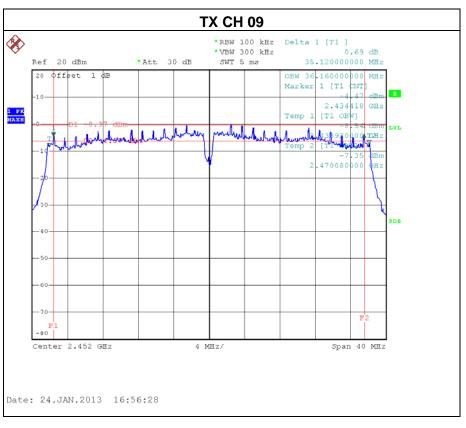
Test Channel	Frequency	Bandwidth	LIMIT
Test Orialine	(MHz)	(MHz)	(MHz)
CH03	2422	35.20	>=500KHz
CH06	2437	35.20	>=500KHz
CH09	2452	35.12	>=500KHz



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6. MAXIMUM OUTPUT POWER TEST

6.1 Applied procedures / limit

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

6.1.1 MEASUREMENT INSTRUMENTS LIST

It	tem	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
	1	Power Meter	ANRITSU	ML2495A	1128009	Nov.01.2012	Nov.01.2013
	2	Pulse Power Sensor	ANRITSU	MA 2411B	1027500	Nov.01.2012	Nov.01.2013

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of Equipment List is One Year.

6.1.2 TEST PROCEDURE

- a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
- b. The maximum peak conducted output power was performed in accordance with method 8.1.3 of FCC KDB 558074

6.1.3 DEVIATION FROM STANDARD

No deviation.

6.1.4 TEST SETUP

EUT	Power Meter
	1 ower weter

6.1.5 EUT OPERATION 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.

Transmit output power was measured while the host equipment supply voltage was varied from 85 % to 115 % of the nominal rated supply voltage. No change in transmit output power was observed.

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6.1.6 TEST RESULTS

HUI.	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode : TX B MODE /CH01, CH06, CH11			

Maximum Output Power

Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	16.23	30	1
CH06	2437 MHz	15.93	30	1
CH11	2462 MHz	16.22	30	1

	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE /CH01, CH06, CH11		

Maximum Output Power

Test Channel	Frequency	Output Power	LIMIT	LIMIT
rest Grianner	(MHz)	(dBm)	(dBm)	(W)
CH01	2412 MHz	19.23	30	1
CH06	2437 MHz	19.15	30	1
CH11	2462 MHz	19.08	30	1

EUT:	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d	
Temperature :	24 ℃	Relative Humidity:	60 %	
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N-20M MODE /CH01, CH06, CH11 - ANT1			

Maximum Output Power

Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	16.43	30	1
CH06	2437 MHz	16.28	30	1
CH11	2462 MHz	16.18	30	1

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IFUI .	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	24 ℃	Relative Humidity:	60 %
Pressure :	016 hPa Test Voltage :		AC 120V/60Hz
Test Mode :	TX N-20M MODE /CH01, CH06, CH11 - ANT2		

Maximum Output Power

Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	16.09	30	1
CH06	2437 MHz	15.95	30	1
CH11	2462 MHz	15.89	30	1

IF() .	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE /CH03, CH06, CH09 - ANT1		

Maximum Output Power

	Frequency	Output Power	LIMIT	LIMIT
Test Channel	Frequency			
	(MHz)	(dBm)	(dBm)	(W)
CH03	2422 MHz	15.68	30	1
CH06	2437 MHz	15.57	30	1
CH09	2452 MHz	15.72	30	1

HUI.	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d		
Temperature:	24 ℃	Relative Humidity:	60 %		
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz		
Test Mode :	TX N-40M MODE /CH03, CH06, CH09 - ANT2				

Maximum Output Power

Test Channel	Frequency	Output Power	LIMIT	LIMIT	
	(MHz)	(dBm)	(dBm)	(W)	
CH03	2422 MHz	15.43	30	1	
CH06	2437 MHz	15.32	30	1	
CH09	2452 MHz	15.50	30	1	

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IF() .	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE /CH01, CH06, CH11		

Maximum Output Power

	ANT1 + ANT2					
Test Channel	Frequency	Output Power	LIMIT	LIMIT		
rest Charmer	(MHz)	(dBm)	(dBm)	(W)		
CH01	2412 MHz	19.27	30	1		
CH06	2437 MHz	19.13	30	1		
CH11	2462 MHz	19.05	30	1		

EUT:	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE /CH03, CH06, CH09		

Maximum Output Power

ANT1 + ANT2					
Test Channel	Frequency	Output Power	LIMIT	LIMIT	
rest orialine	(MHz)	(dBm)	(dBm)	(W)	
CH03	2422 MHz	18.57	30	1	
CH06	2437 MHz	18.46	30	1	
CH09	2452 MHz	18.62	30	1	

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7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 Applied procedures / limit

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

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

7.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100185	Nov. 16.2012	Nov. 16.2013

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of Equipment List is One Year.

7.1.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: RBW= 100KHz, VBW=300KHz, Sweep time = 10 ms.

7.1.3 DEVIATION FROM STANDARD

No deviation.

7.1.4 TEST SETUP



7.1.5 EUT OPERATION 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.

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7.1.6 TEST RESULTS

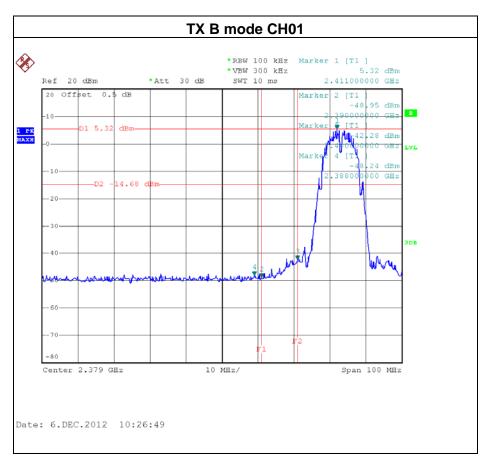
FUI.	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11		

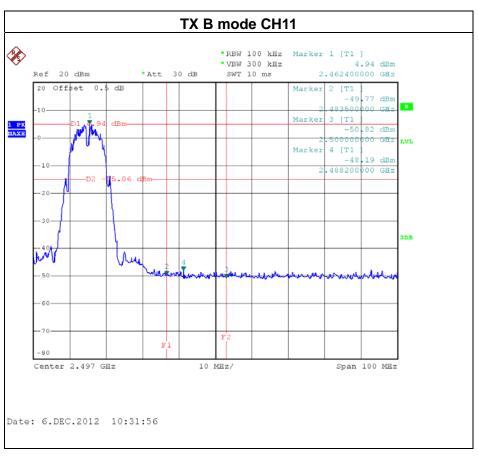
Channel of Worst Data: CH01					
The max. radio frequency power in any 100kHz bandwidth outside the frequency band bandwidth outside the frequency band.					
FREQUENCY(MHz) POWER(dBm) FREQUENCY(MHz) POWER(dBm)					
2400.00 -42.28 2488.20 -48.19					
	Re	sult			

In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

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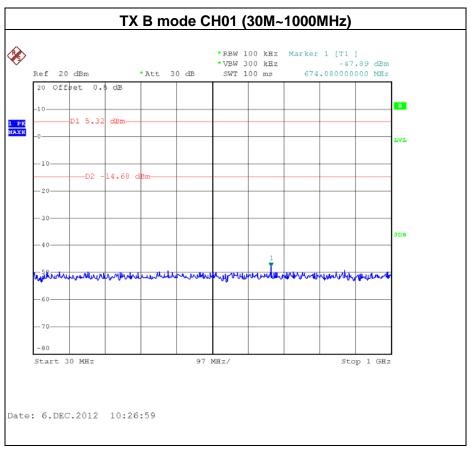


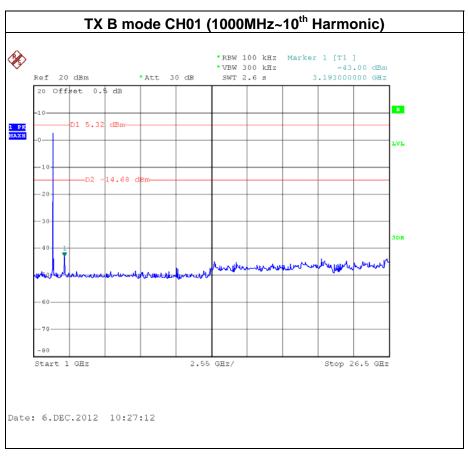




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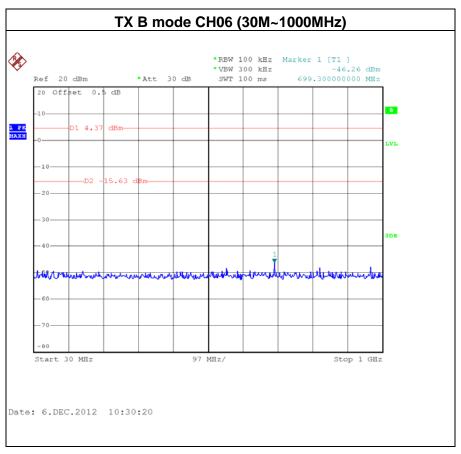


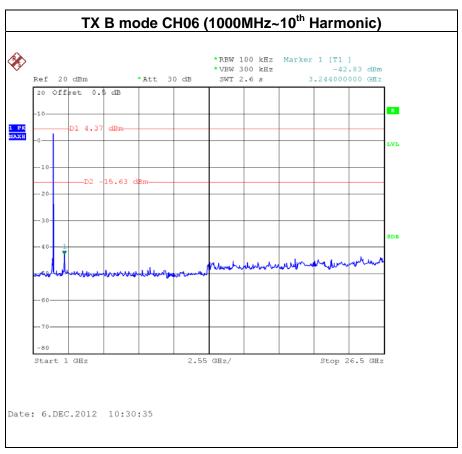




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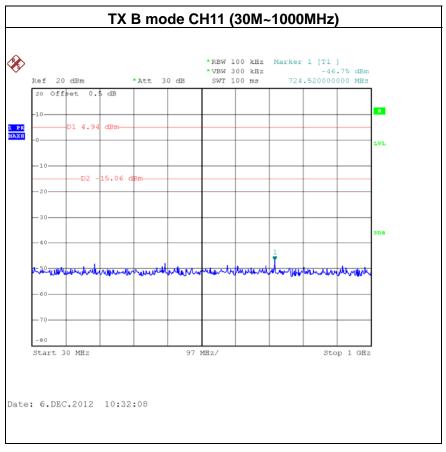


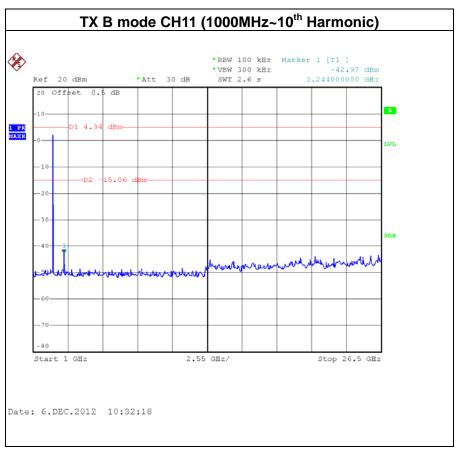




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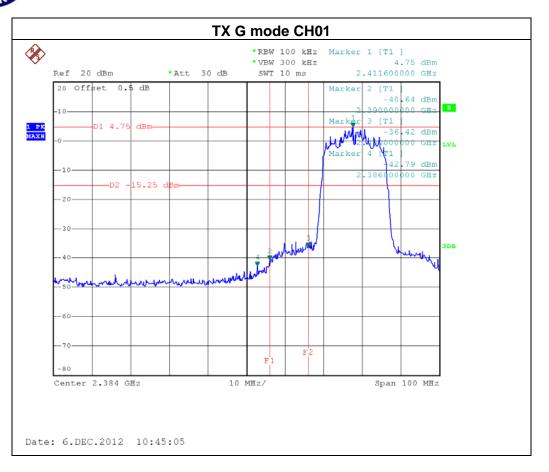


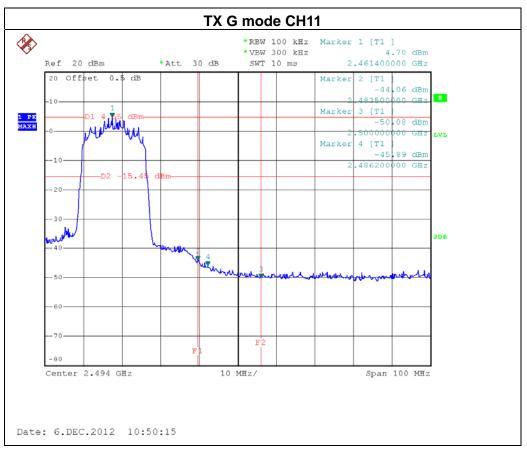
IF() .	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE / CH01, CH06, CH11		

Channel of Worst Data: CH01					
The max. radio frequent bandwidth within the	<i>y</i> .	The max. radio frequence bandwidth outside t			
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)		
2400.00 -36.42 2483.50 -44.06					
	Result				

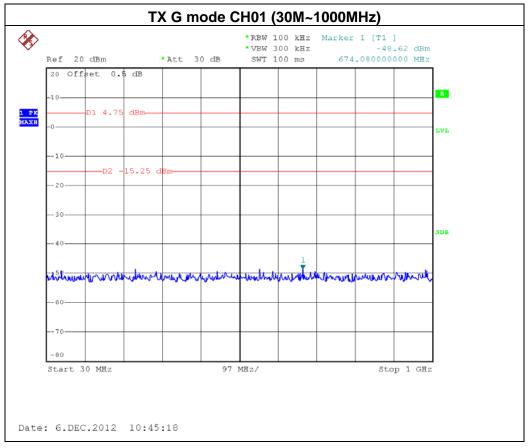
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

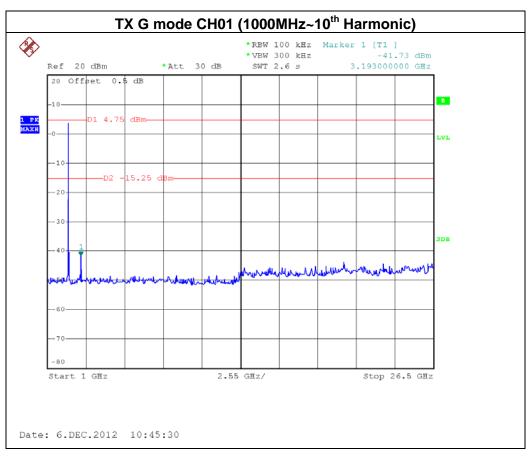
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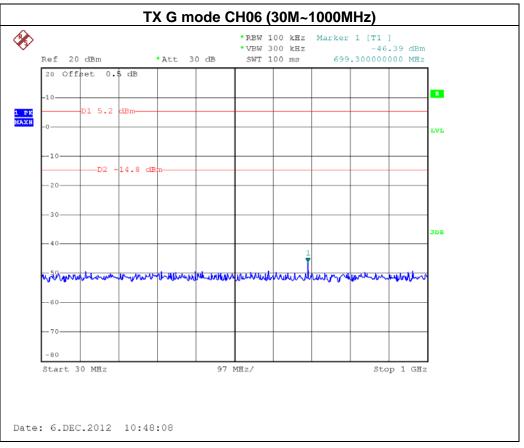


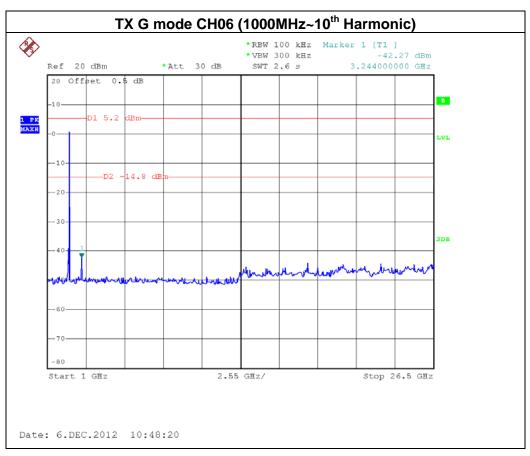
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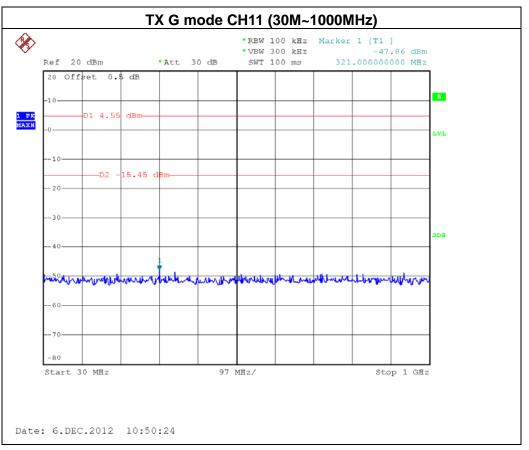


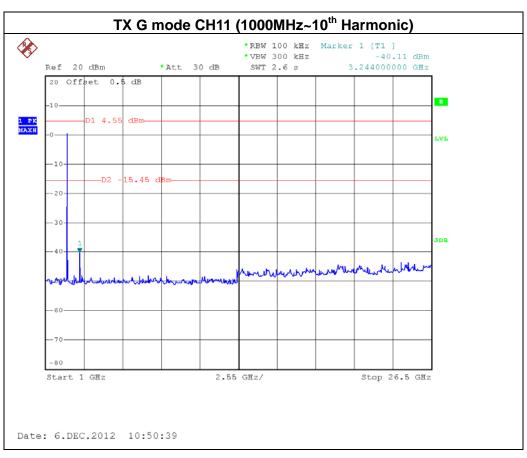
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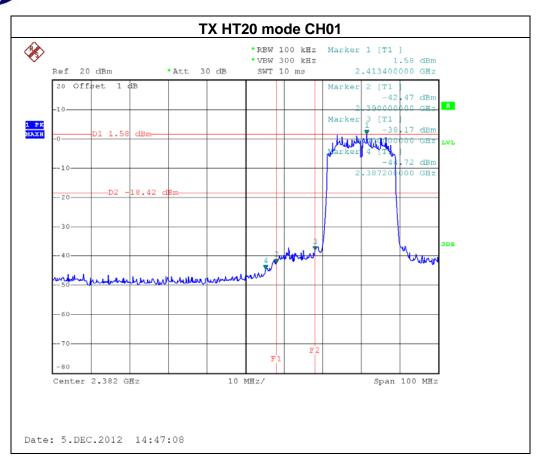
IFUI .	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE / CH01, CH06 , CH11 - ANT1		

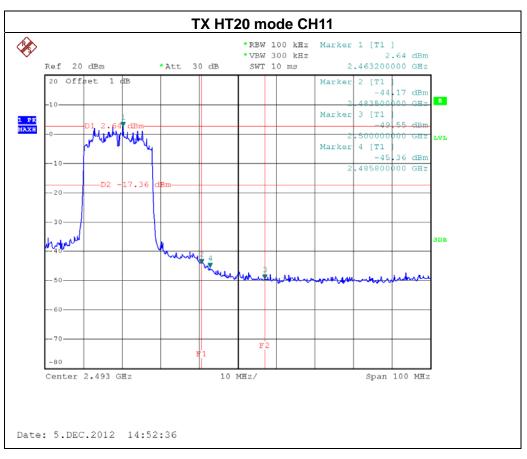
Channel of Worst Data: CH01					
The max. radio frequency power in any 100kHz bandwidth within the frequency band bandwidth within the frequency band bandwidth within the frequency band					
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)		
2400.00 -38.17 2483.50 -44.17					
Result					

In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

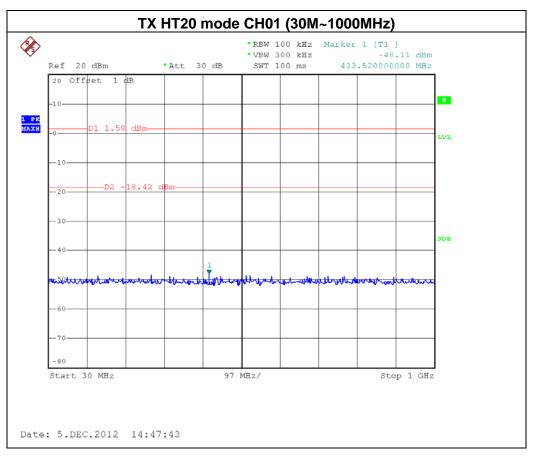
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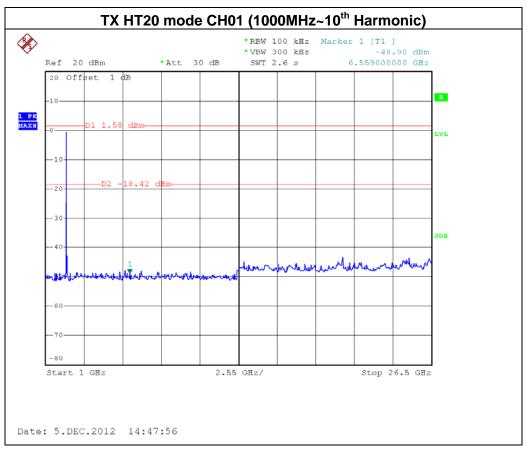




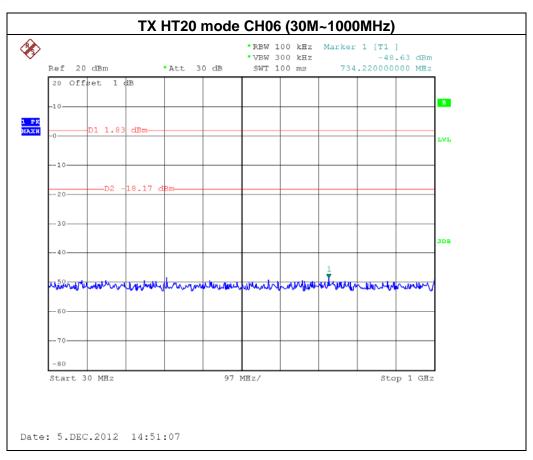


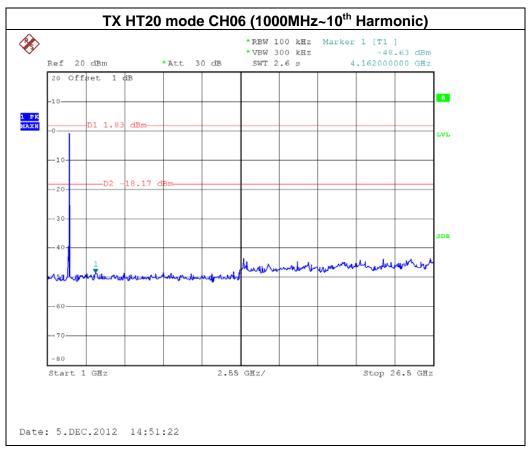
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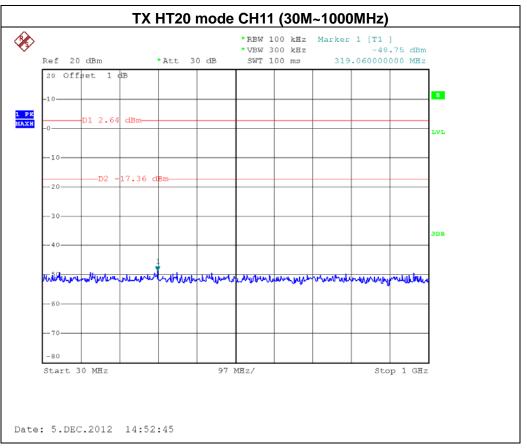


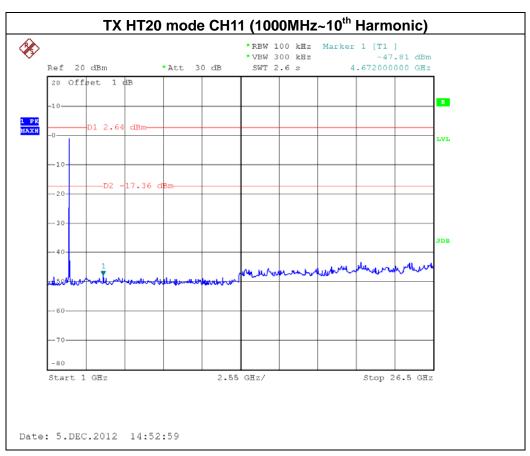
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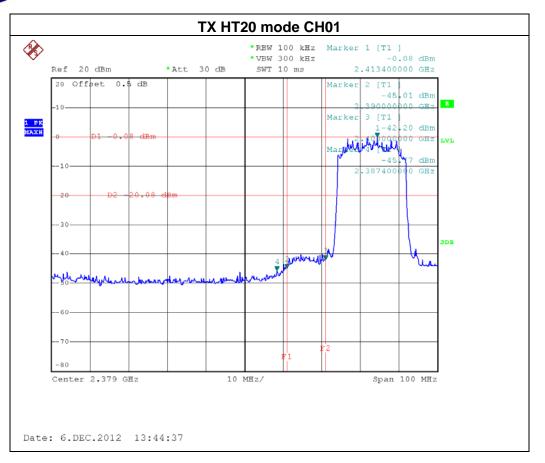


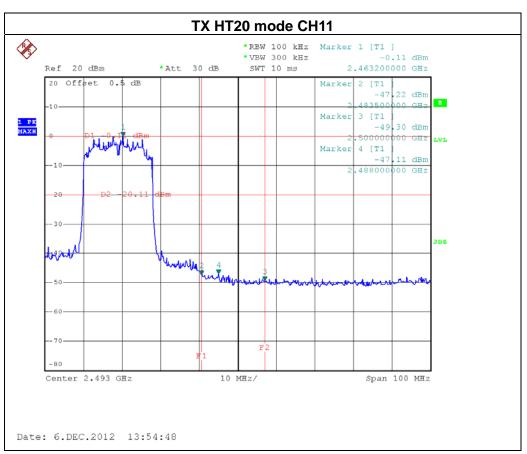
IF() .	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d	
Temperature :	24 ℃	Relative Humidity:	60 %	
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N-20M MODE / CH01, CH06 , CH11 - ANT2			

Channel of Worst Data: CH01				
The max. radio frequent bandwidth within the	<i>y</i> .	The max. radio frequence bandwidth within the	, ,	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)	
2400.00 -42.20 2488.00 -47.11				
Result				

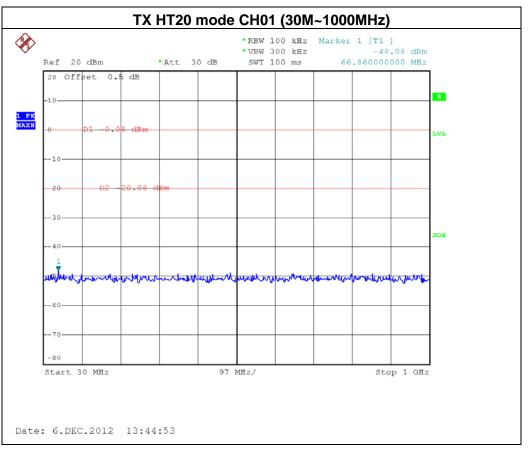
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

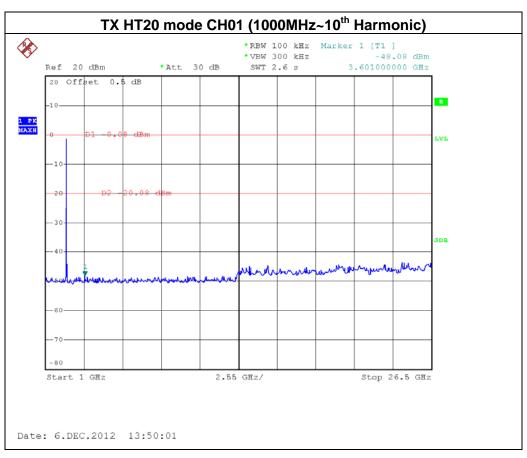
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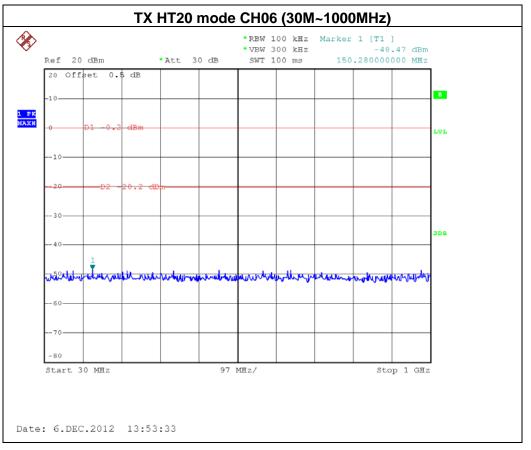


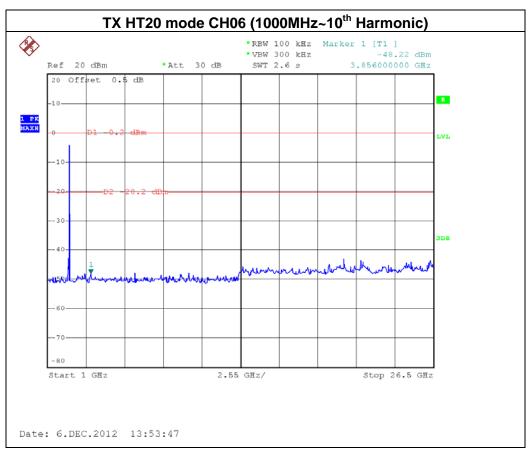
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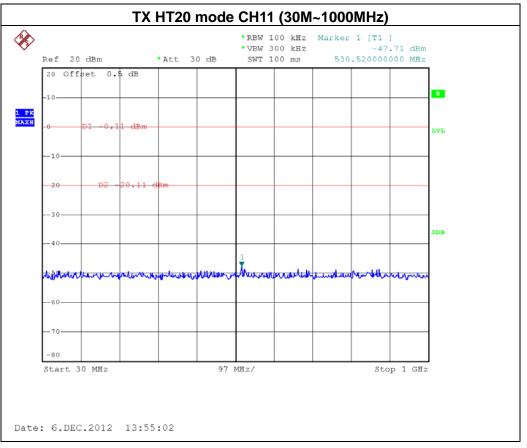


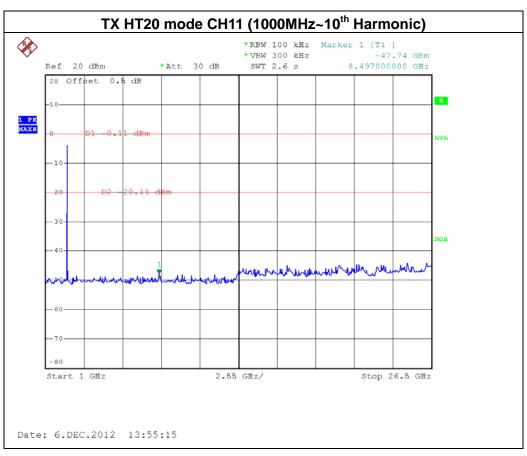
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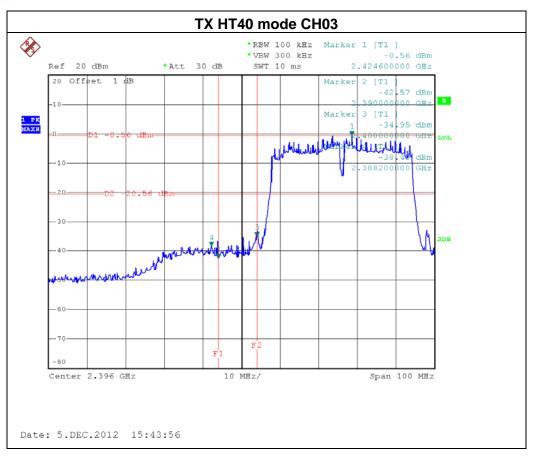


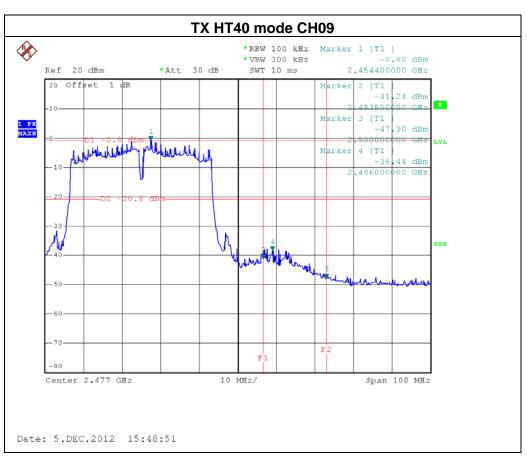
FUI.	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE / CH03, CH06 , CH09 - ANT1		

Channel of Worst Data: CH03				
•	cy power in any 100kHz he frequency band	The max. radio frequence bandwidth within the		
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)	
2400.00 -34.95 2486.00 -38.44				
Result				

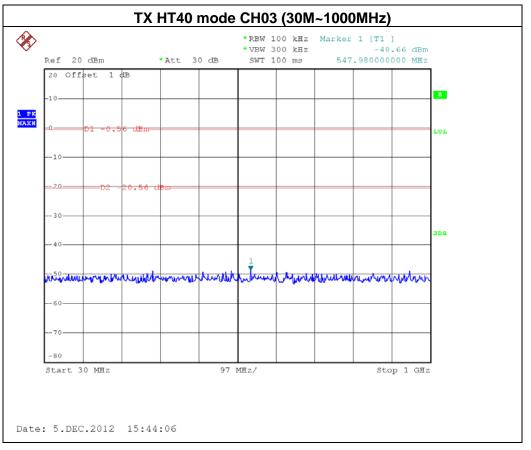
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

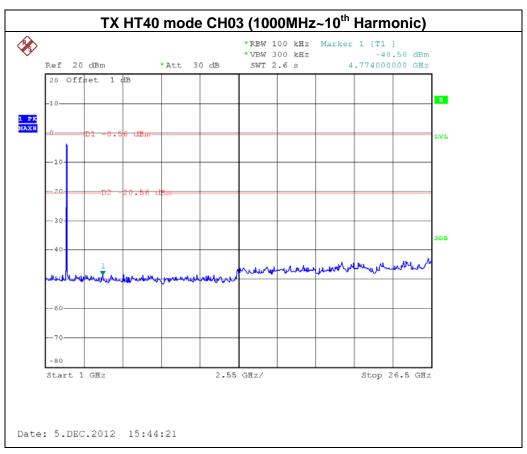
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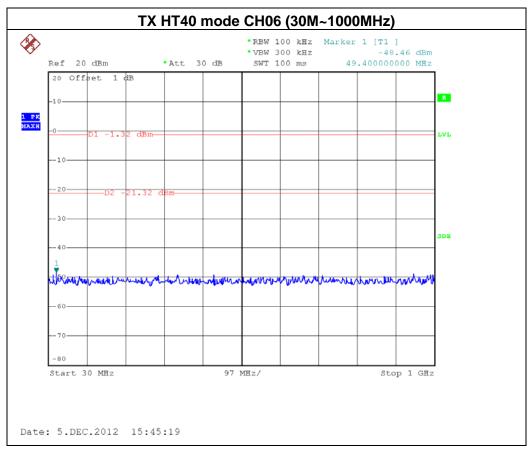


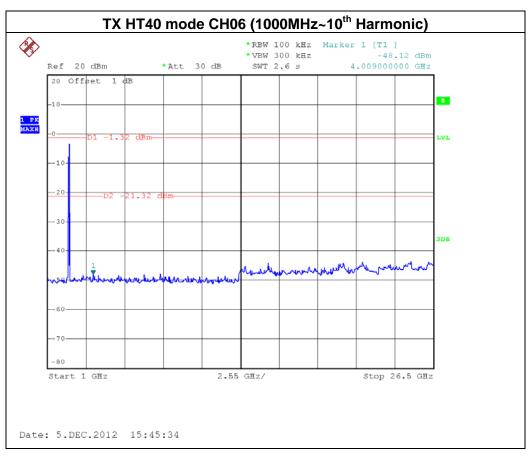
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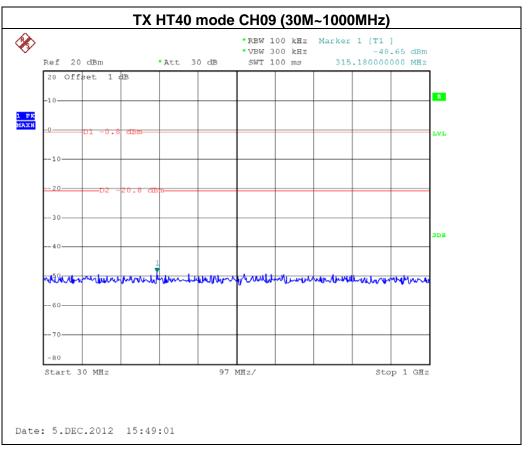


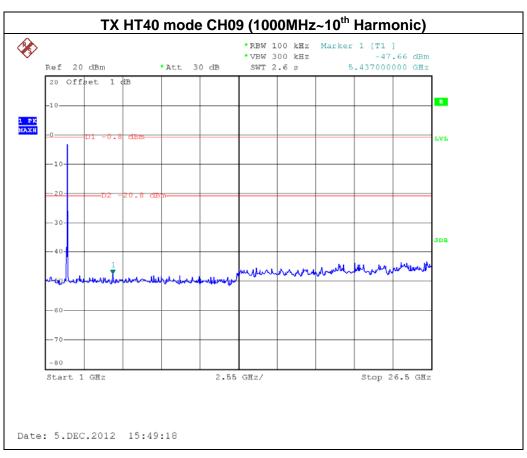
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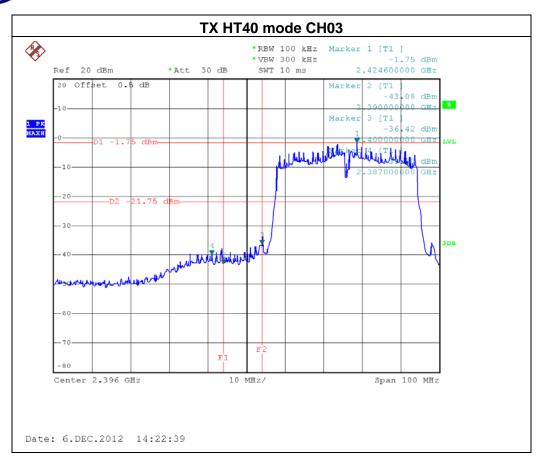
IF() .	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE /CH03, CH06, CH09 - ANT2		

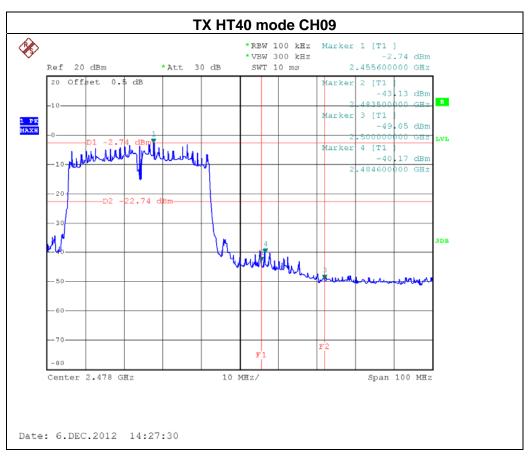
Channel of Worst Data: CH03				
•	cy power in any 100kHz ne frequency band	The max. radio frequence bandwidth outside t	cy power in any 100 kHz the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)	
2400.00 -36.42 2484.60 -40.17				
Result				

In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

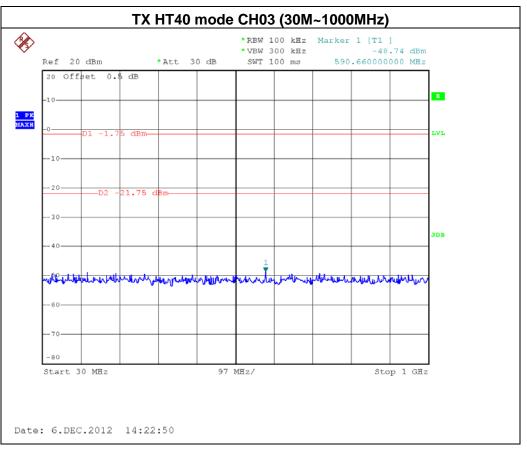
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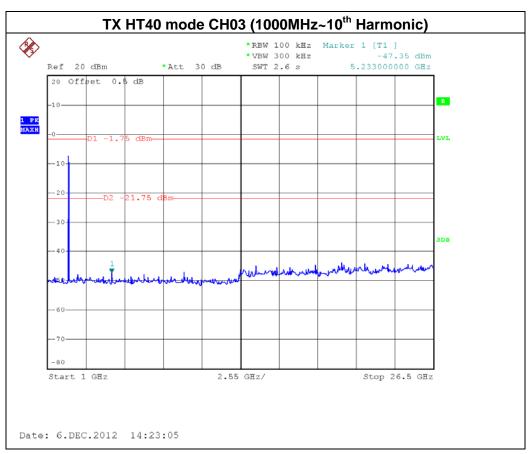




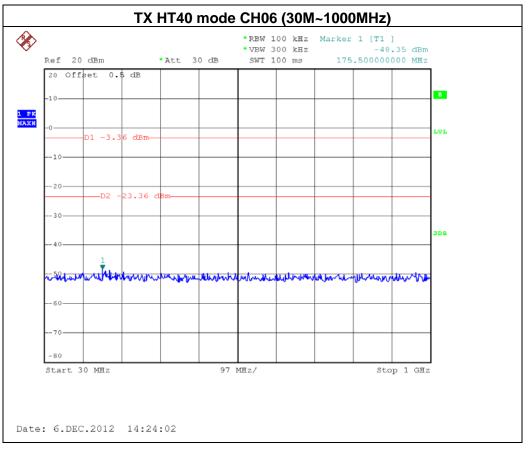


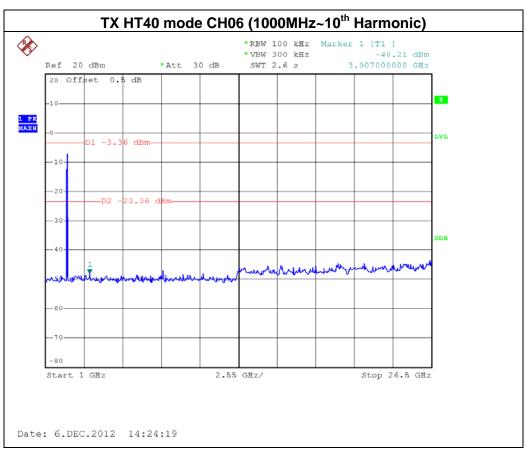
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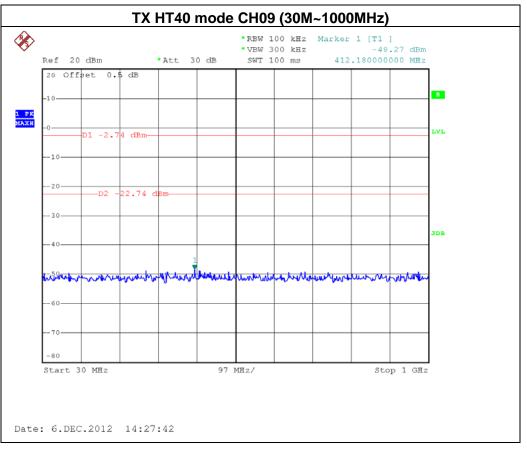


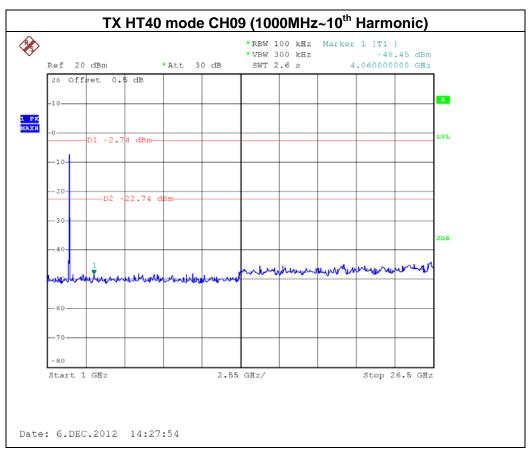
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8. POWER SPECTRAL DENSITY TEST

8.1 Applied procedures / limit

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

8.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100185	Nov. 16.2012	Nov. 16.2013

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of Equipment List is One Year.

8.1.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW=3KHz, VBW=10 KHz, Sweep time = auto.

8.1.3 DEVIATION FROM STANDARD

No deviation.

8.1.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

8.1.5 EUT OPERATION CONDITIONS

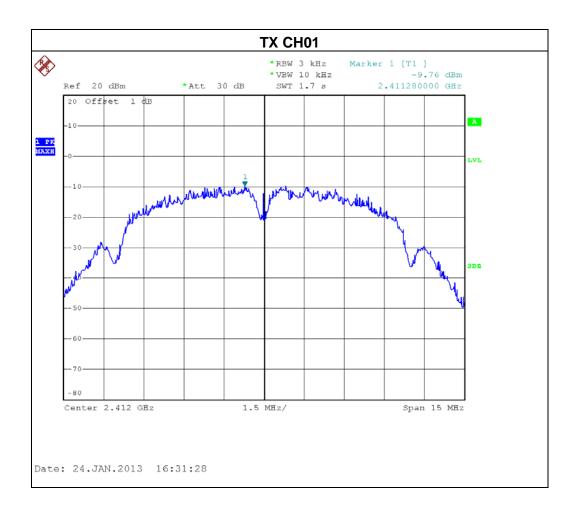
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

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8.1.6 TEST RESULTS

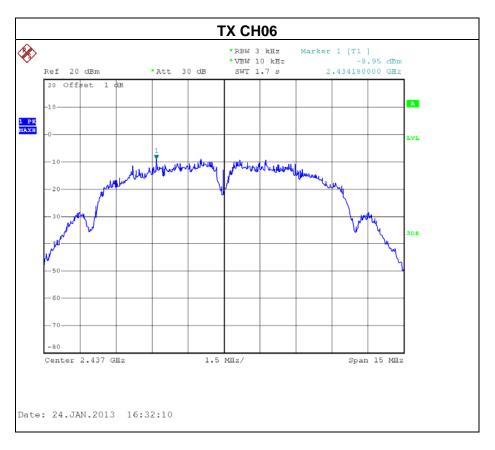
HUI.	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11		

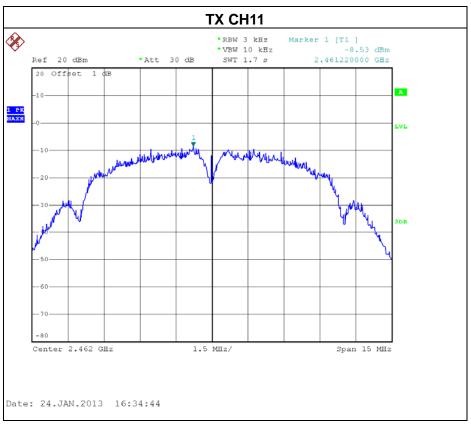
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-9.76	8
CH06	2437 MHz	-8.95	8
CH11	2462 MHz	-8.53	8



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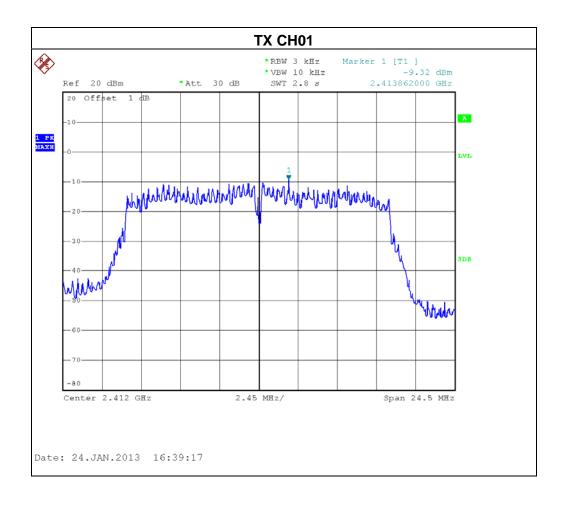






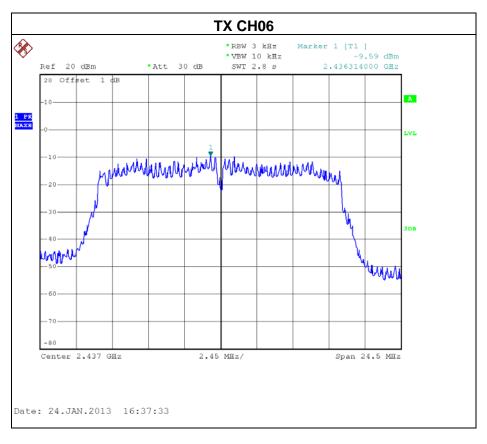
IFUI.	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d
Temperature :	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE /CH01, CH06, CH11		

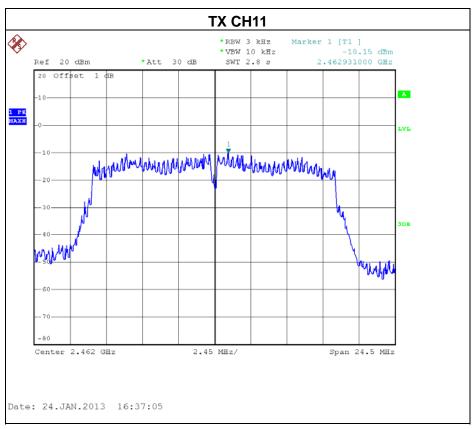
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-9.32	8
CH06	2437 MHz	-9.59	8
CH11	2462 MHz	-10.15	8



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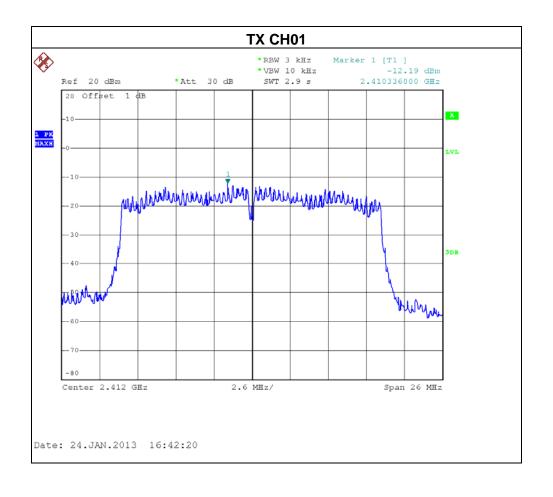


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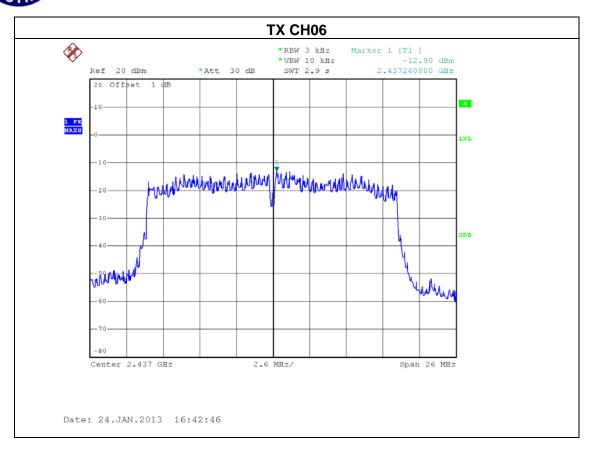
IF() .	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d		
Temperature :	24 ℃	Relative Humidity:	60 %		
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz		
Test Mode :	TX N MODE-20MHz /CH01, CH06, CH11 - ANT1				

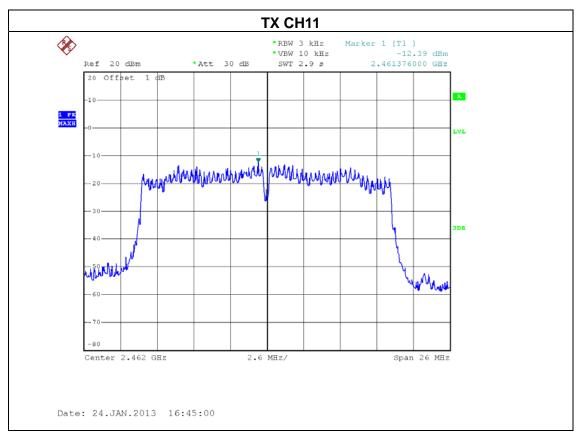
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-12.19	8
CH06	2437 MHz	-12.90	8
CH11	2462 MHz	-12.39	8



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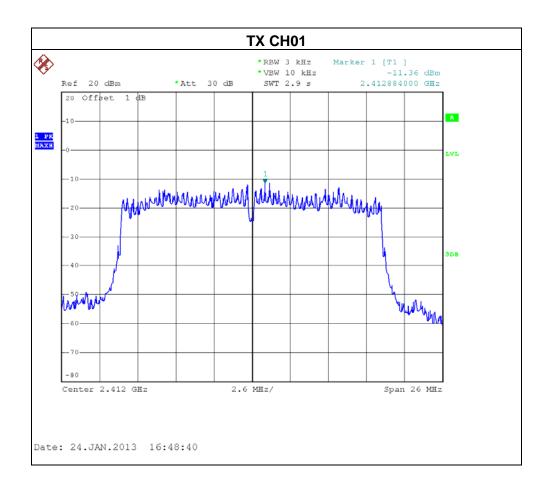




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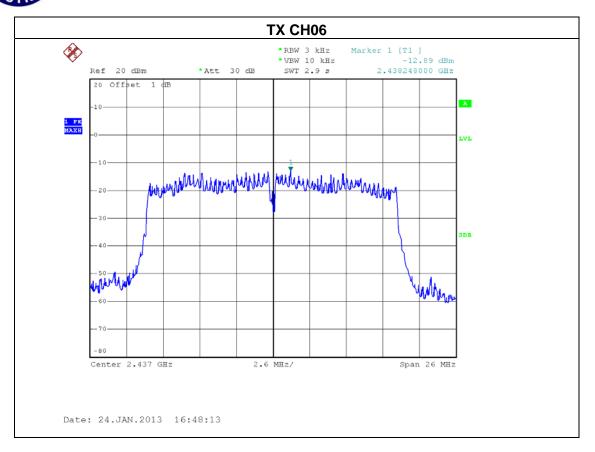
FUI.	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d		
Temperature:	24 ℃	Relative Humidity:	60 %		
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz		
Test Mode :	lode : TX N MODE-20MHz /CH01, CH06, CH11 - ANT2				

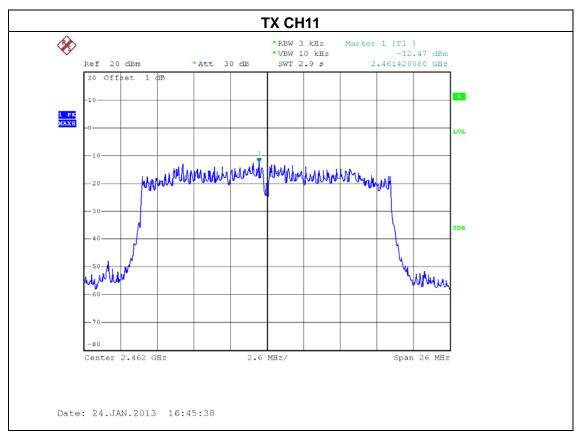
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01 2412 MHz		-11.36	8
CH06	2437 MHz	-12.89	8
CH11	2462 MHz	-12.47	8



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EUI ·	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d	
Temperature :	24 ℃	Relative Humidity:	60 %	
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N MODE-20MHz /CH01, CH06, CH11 - ANT1+ANT2			

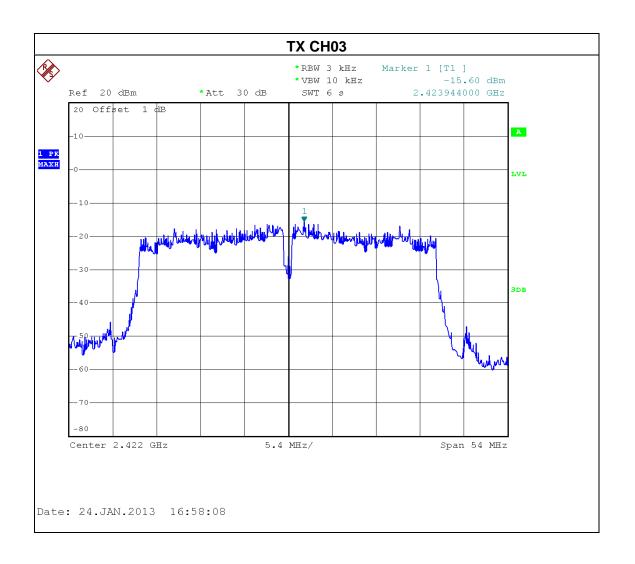
Total (Ant1 + Ant2)						
Test Channel	est Channel Frequency Power density LIMIT (MHz) (dBm) (mW) (dBm)					
CH01	2412	-8.74	0.13	8	PASS	
CH06	2437	-9.88	0.10	8	PASS	
CH11	2462	-9.42	0.11	8	PASS	

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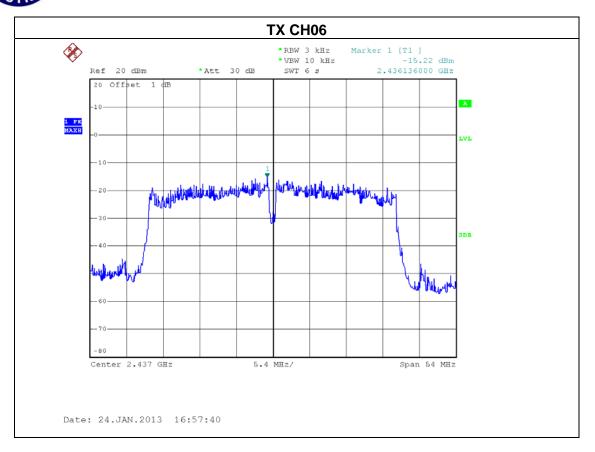
IFUI .	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d	
Temperature :	24 ℃	Relative Humidity:	60 %	
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N MODE-40MHz /CH03, CH06, CH09 - ANT1			

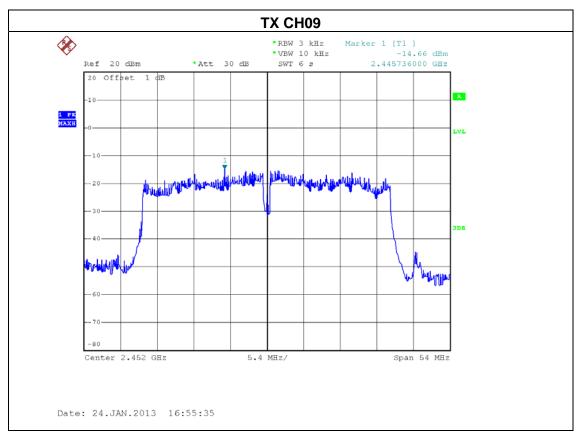
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH03	CH03 2422 MHz		8
CH06	2437 MHz	-15.22	8
CH09	2462 MHz	-14.66	8



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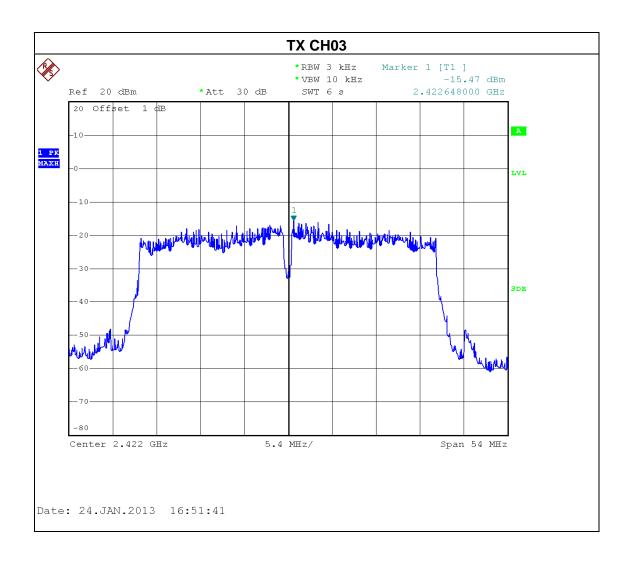


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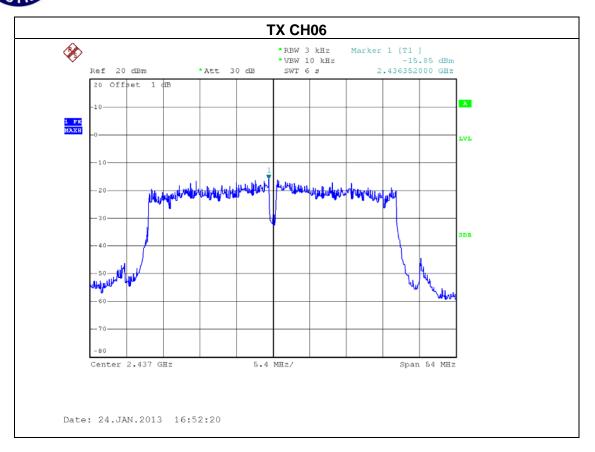
HUI.	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d	
Temperature :	24 ℃	Relative Humidity:	60 %	
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N MODE-40MHz /CH03, CH06, CH09 - ANT2			

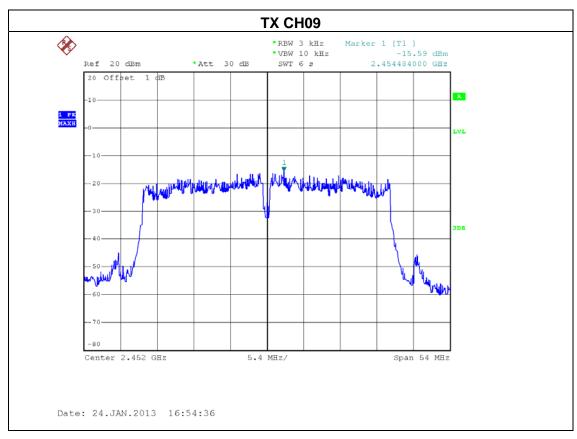
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH03	CH03 2422 MHz		8
CH06	2437 MHz	-15.85	8
CH09	2462 MHz	-15.59	8



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IF() .	300Mbps Wireless ADSL2+ Router	Model Name :	HG532d		
Temperature :	24 ℃	Relative Humidity:	60 %		
Pressure:	1016 hPa	Test Voltage : AC 120V/60Hz			
Test Mode :	TX N MODE-40MHz /CH03, CH06, CH09 - ANT1+ANT2				

Total (Ant1 + Ant2)						
Test Channel	Frequency Power density LIMIT (MHz) (dBm) (mW) (dBm) PASS/FA					
CH03	2422	-12.52	0.06	8	PASS	
CH06	2437	-12.51	0.06	8	PASS	
CH09	2452	-12.09	0.06	8	PASS	

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9. EUT TEST PHOTO

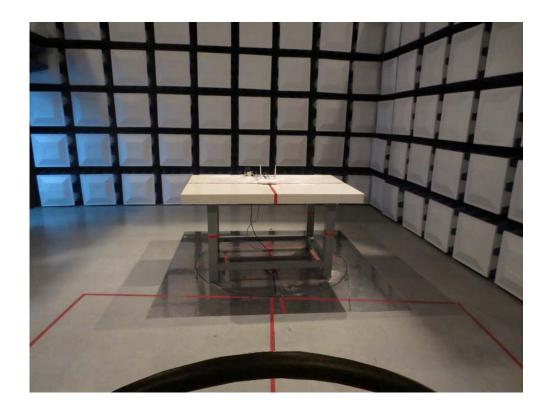
Conducted Measurement Photos

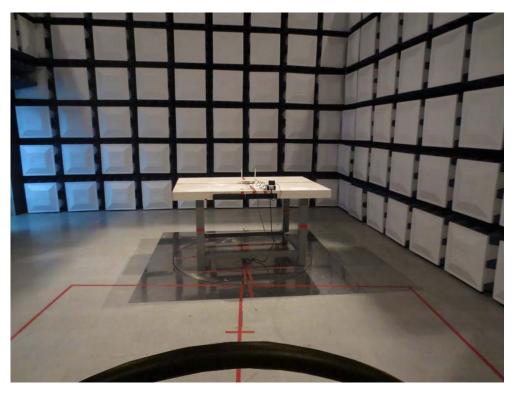




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Radiated Measurement Photos 9K~30MHz



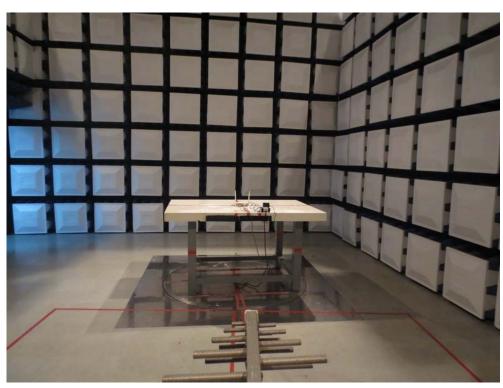


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Radiated Measurement Photos 30~1000MHz





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Radiated Measurement Photos Above 1000MHz





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