FCC Radio Test Report

FCC ID: KA2IR600LB1

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

Issued Date	: Feb. 28, 2013
Project No.	: 1301C059
Equipment	: Wireless N150 Cloud Router
Model Name	: DIR-600L
Applicant	: D-LINK CORPORATION
Address	: No. 289, Sinhu 3rd Rd., Neihu District, Taiwan
Manufacturer	: Alpha Networks Inc.
Address	: NO. 8 Li-shing Rd. VII, Science-based Industrial Park, Hsinchu, Taiwan.

Tested by:
Neutron Engineering Inc. EMC Laboratory
Date of Receipt: Jan. 10, 2013
Date of Test:
Jan. 10, 2013 ~ Feb. 27, 2013

Testing Engineer : David Mao
(David Mao)

Technical Manager : Leo Hung
(Leo Hung)

Authorized Signatory : Steven Lu
(Steven Lu)

Neutron Engineering Inc.

No.3,Jinshagang 1st Road, ShiXia, Dalang Town, Dong Guan, China.
TEL : (0769) 8318-3000 FAX : (0769) 8319-6000

Declaration

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

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Limitation

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

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1. CERTIFICATION

Equipment	:	Wireless N150 Cloud Router
Brand Name	:	D-Link
Model Name	:	DIR-600L
Applicant	:	D-LINK CORPORATION
Date of Test	:	Jan. 10, 2013 ~ Feb. 27, 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-1-1301C059) 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).

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)	6dB Bandwidth	PASS	
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)

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 for IC 4428B-1

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

<table>
<tr><td>Equipment</td><td>Wireless N150 Cloud Router</td></tr>
<tr><td>Brand Name</td><td>D-Link</td></tr>
<tr><td>Model Name</td><td>DIR-600L</td></tr>
<tr><td>Model Difference</td><td>N/A</td></tr>
<tr><td>Product Description</td><td>The EUT is a Wireless N150 Cloud Router.

<table>
<tr><td>Operation Frequency</td><td>2412~2462 MHz</td></tr>
<tr><td>Modulation Technology</td><td>802.11b:DSSS
802.11g:OFDM
802.11n:OFDM</td></tr>
<tr><td>Bit Rate of Transmitter</td><td>802.11b:11/5.5/2/1 Mbps
802.11g:54/48/36/24/18/12/9/6 Mbps
Draft 802.11n:up to 150Mbps</td></tr>
<tr><td>Number of Channel</td><td>11 CH, Please see note 2.(Page 9)</td></tr>
<tr><td>Antenna Designation</td><td rowspan="2">Please see note 3.(Page 9)</td></tr>
<tr><td>Antenna Gain(Peak)</td></tr>
<tr><td>Output Power</td><td>802.11b: 22.83dBm
802.11g: 22.32dBm
802.11n(20MHz): 21.82 dBm
802.11n(40MHz): 19.41 dBm</td></tr>
</table>

Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.</td></tr>
<tr><td>Power Source</td><td>DC voltage supplied from AC/DC adapter.
#1 Brand/ Model name: D-Link / F05W-050100SPAU
#2 Brand/ Model name: D-Link / AMS47-0501000FU</td></tr>
<tr><td>Power Rating</td><td>#1 I/P AC 100-240V~ 50/60Hz, 190mA O/P DC 5V 1A
#2 I/P AC 100-240V~ 50/60Hz, 0.2A/15VA O/P DC 5V 1.0A</td></tr>
<tr><td>Connecting I/O Port(s)</td><td>Please refer to the User's Manual</td></tr>
</table>

Note:

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

2. 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

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
Group 1	M.gear	C037-511238-A (SSR-30090)	Dipole	N/A	4.0	
Group 2		260-31069	Dipole	N/A	3.29	

ANT 1 and ANT 2 are the same type antenna, ANT 1 is recorded as the worst case since which gain is higher than ANT 2.

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	Normal Link

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	Normal Link

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.

3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

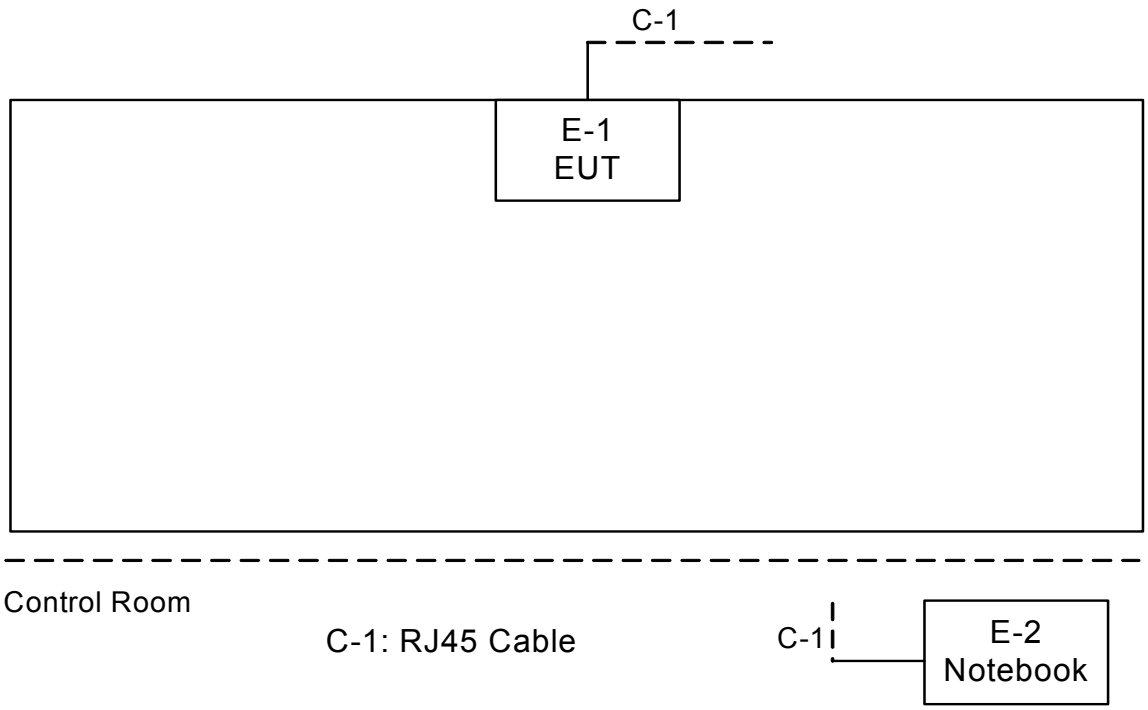
During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final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

Test software version	MP_TEST		
Frequency	**2412 MHz**	**2437 MHz**	**2462 MHz**
IEEE 802.11b DSSS	44	44	44
IEEE 802.11g OFDM	43	43	43

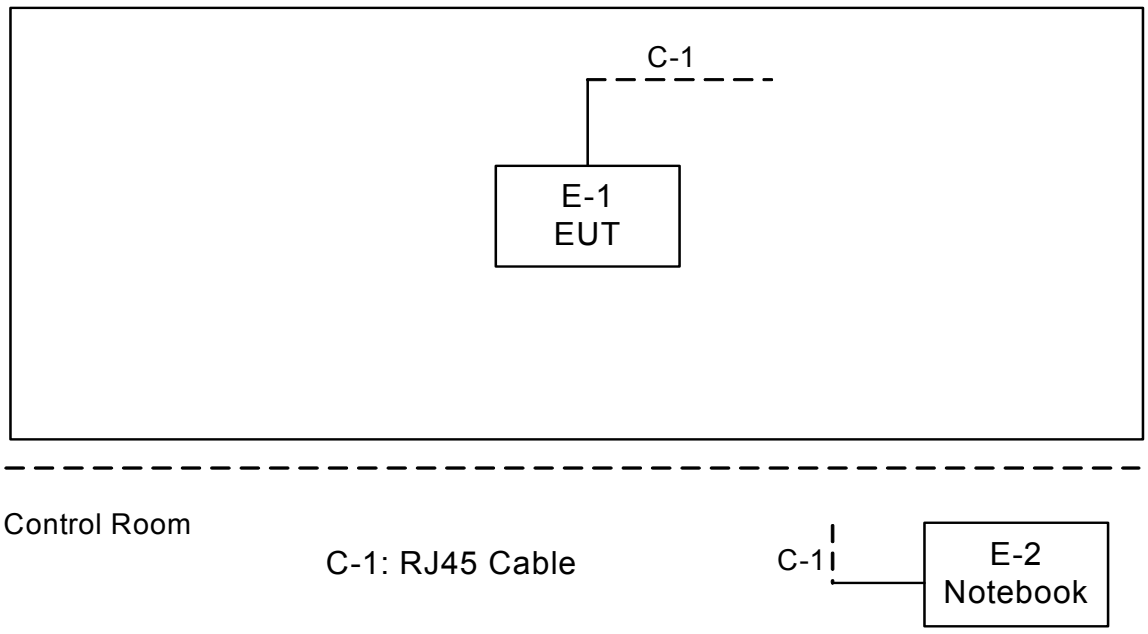
Test software version	MP-TOOL		
Frequency (MHz)	**2412 MHz**	**2437 MHz**	**2462 MHz**
IEEE 802.11n (20MHz)	43	43	43
Frequency (MHz)	**2422 MHz**	**2437 MHz**	**2452 MHz**
IEEE 802.11n (40MHz)	36	36	36

3.4 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Conducted Mode:



Radiated Mode:



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.	IC ID	Series No.	Note
E-1	Wireless N150 Cloud Router	D-Link	DIR-600L	KA2IR600LB1	N/A	EUT
E-2	NOTEBOOK	DELL	INSPIRON 1420	NA	NA	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	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 『Length』 column.

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
	Quasi-peak	Average	Quasi-peak	Average	
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	73.00	60.00	56.00	46.00	CISPR
5.0 -30.0	73.00	60.00	60.00	50.00	CISPR

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

Note:

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

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

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

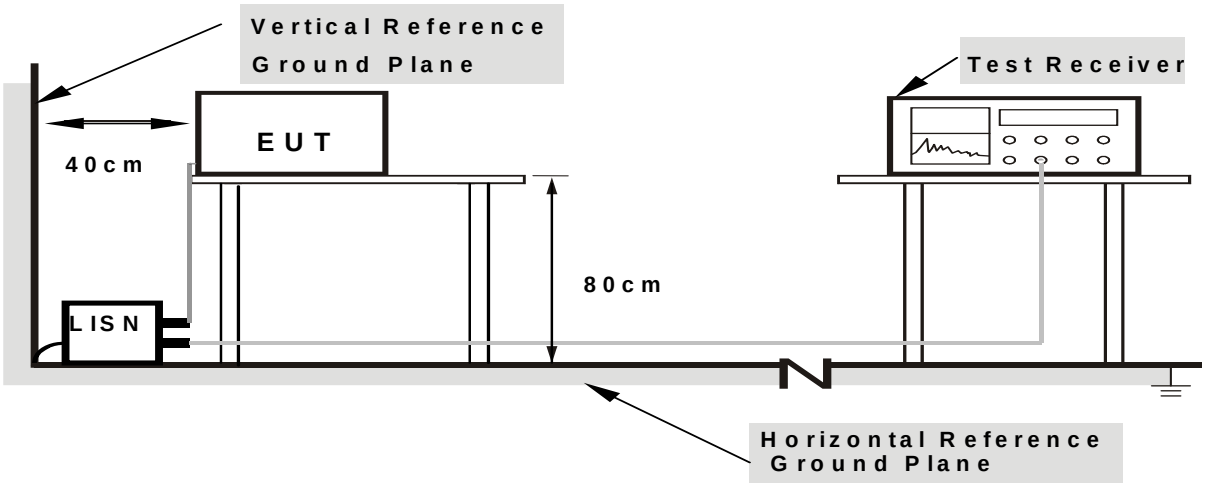
4.1.3 TEST PROCEDURE

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.

4.1.7 TEST RESULTS

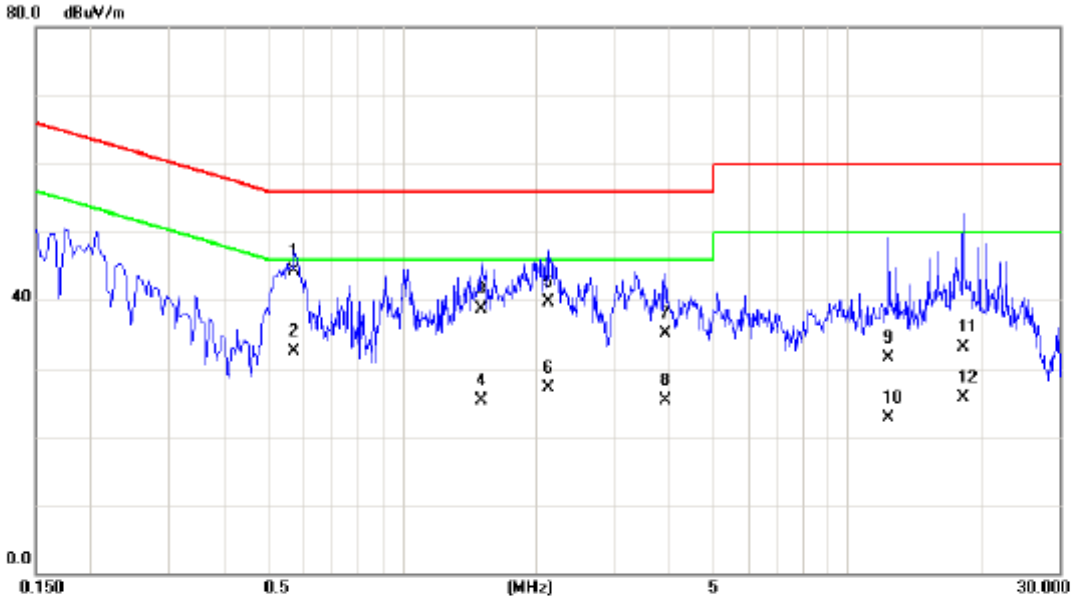
Remark

(1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9KHz；SPA setting in RBW=10KHz,VBW =10KHz, Swp. Time = 0.3 sec./MHz。Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=10KHz,VBW=10KHz, Swp. Time =0.3 sec./MHz。

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

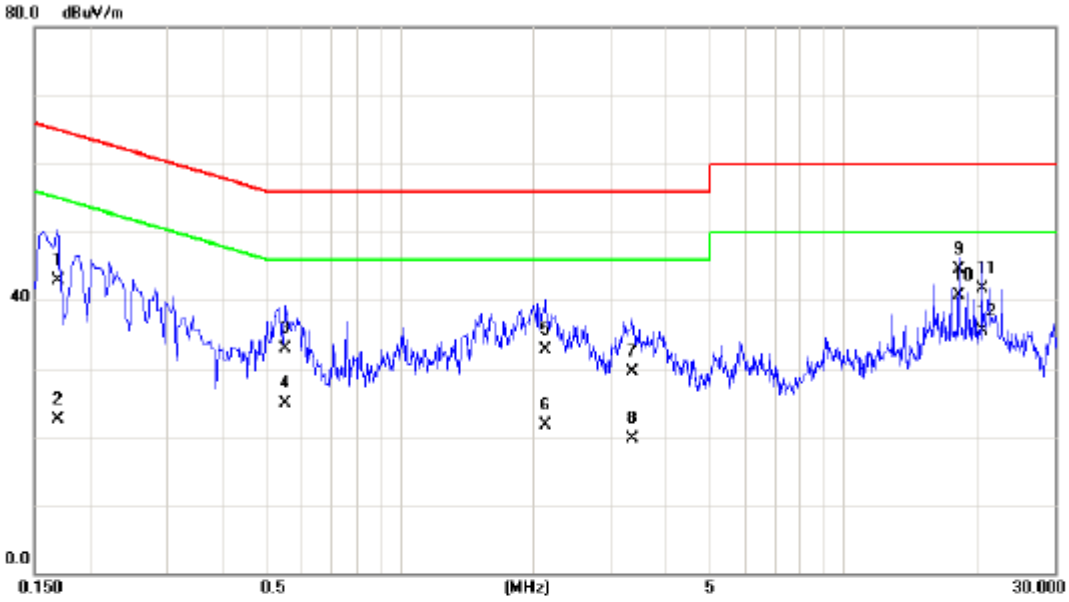
(3) Measuring frequency range from 150KHz to 30MHz。

EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ˚C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Line
Test Mode:	Normal Link– Adapter: F05W-050100SPAU		



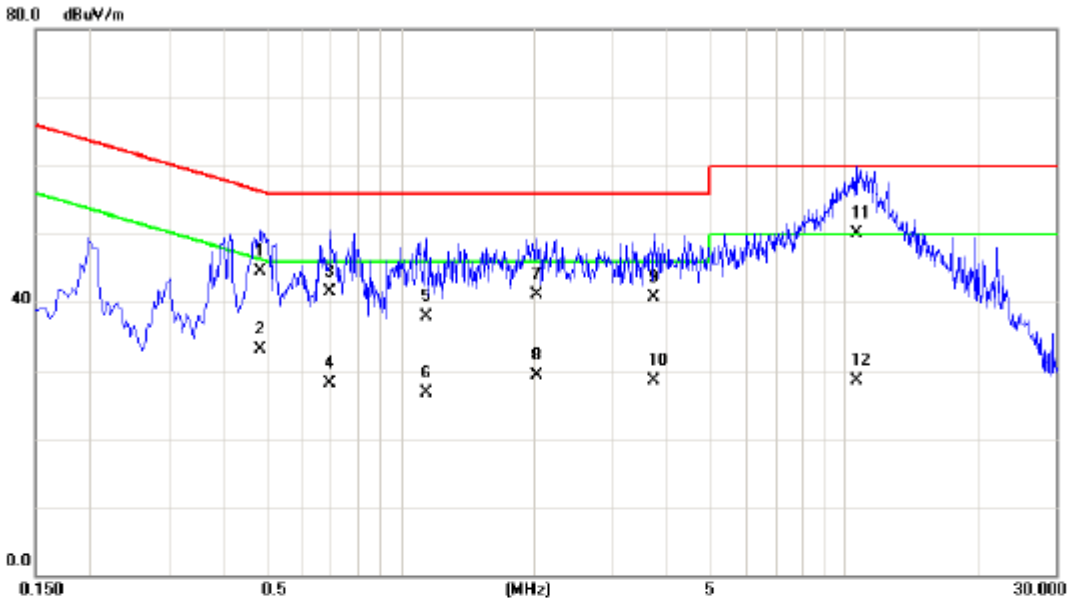
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.5740	34.60	9.70	44.30	56.00	-11.70	QP	
2		0.5740	22.80	9.70	32.50	46.00	-13.50	AVG	
3		1.5100	28.90	9.74	38.64	56.00	-17.36	QP	
4		1.5100	15.60	9.74	25.34	46.00	-20.66	AVG	
5		2.1340	30.00	9.76	39.76	56.00	-16.24	QP	
6		2.1340	17.30	9.76	27.06	46.00	-18.94	AVG	
7		3.9100	25.20	9.82	35.02	56.00	-20.98	QP	
8		3.9100	15.50	9.82	25.32	46.00	-20.68	AVG	
9		12.4260	21.30	10.15	31.45	60.00	-28.55	QP	
10		12.4260	12.60	10.15	22.75	50.00	-27.25	AVG	
11		18.2380	22.80	10.33	33.13	60.00	-26.87	QP	
12		18.2380	15.40	10.33	25.73	50.00	-24.27	AVG	

EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ˚C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Neutral
Test Mode:	Normal Link– Adapter: F05W-050100SPAU		



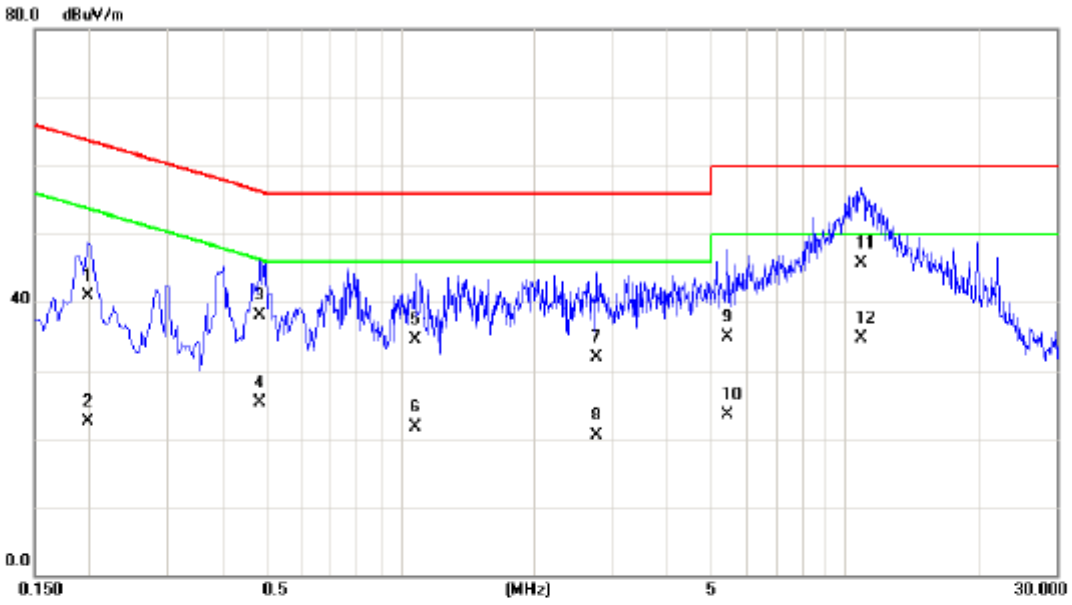
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.1700	33.20	9.68	42.88	64.96	-22.08	QP	
2		0.1700	12.88	9.68	22.56	54.96	-32.40	AVG	
3		0.5540	23.20	9.70	32.90	56.00	-23.10	QP	
4		0.5540	15.20	9.70	24.90	46.00	-21.10	AVG	
5		2.1340	22.90	9.78	32.68	56.00	-23.32	QP	
6		2.1340	11.90	9.78	21.68	46.00	-24.32	AVG	
7		3.3500	19.74	9.81	29.55	56.00	-26.45	QP	
8		3.3500	9.90	9.81	19.71	46.00	-26.29	AVG	
9		18.2900	34.00	10.42	44.42	60.00	-15.58	QP	
10	*	18.2900	30.30	10.42	40.72	50.00	-9.28	AVG	
11		20.5820	31.10	10.54	41.64	60.00	-18.36	QP	
12		20.5820	24.90	10.54	35.44	50.00	-14.56	AVG	

EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ˚C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Line
Test Mode:	Normal Link– Adapter: AMS47-0501000FU		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.4860	34.90	9.70	44.60	56.24	-11.64	QP	
2		0.4860	23.50	9.70	33.20	46.24	-13.04	AVG	
3		0.6940	31.70	9.71	41.41	56.00	-14.59	QP	
4		0.6940	18.40	9.71	28.11	46.00	-17.89	AVG	
5		1.1420	28.20	9.71	37.91	56.00	-18.09	QP	
6		1.1420	17.00	9.71	26.71	46.00	-19.29	AVG	
7		2.0260	31.30	9.76	41.06	56.00	-14.94	QP	
8		2.0260	19.60	9.76	29.36	46.00	-16.64	AVG	
9		3.7340	30.90	9.80	40.70	56.00	-15.30	QP	
10		3.7340	18.70	9.80	28.50	46.00	-17.50	AVG	
11	*	10.6580	40.00	10.10	50.10	60.00	-9.90	QP	
12		10.6580	18.40	10.10	28.50	50.00	-21.50	AVG	

EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ˚C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Neutral
Test Mode:	Normal Link– Adapter: AMS47-0501000FU		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.1980	31.20	9.69	40.89	63.69	-22.80	QP	
2		0.1980	12.90	9.69	22.59	53.69	-31.10	AVG	
3		0.4860	28.40	9.69	38.09	56.24	-18.15	QP	
4		0.4860	15.60	9.69	25.29	46.24	-20.95	AVG	
5		1.0780	24.80	9.72	34.52	56.00	-21.48	QP	
6		1.0780	11.90	9.72	21.62	46.00	-24.38	AVG	
7		2.7740	22.20	9.80	32.00	56.00	-24.00	QP	
8		2.7740	10.70	9.80	20.50	46.00	-25.50	AVG	
9		5.4700	25.10	9.86	34.96	60.00	-25.04	QP	
10		5.4700	13.70	9.86	23.56	50.00	-26.44	AVG	
11	*	10.9140	35.50	10.15	45.65	60.00	-14.35	QP	
12		10.9140	24.60	10.15	34.75	50.00	-15.25	AVG	

4.1.8. EUT TEST PHOTO

Conducted Measurement Photos

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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	(dBuV/m) (at 3m)	
	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	5th harmonic of the highest frequency or 40 GHz, whichever is lower

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+SUHNER	C-45	N/A	May.04.2012	May.02.2013
9	Controller	CT	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 (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

4.2.3 TEST PROCEDURE

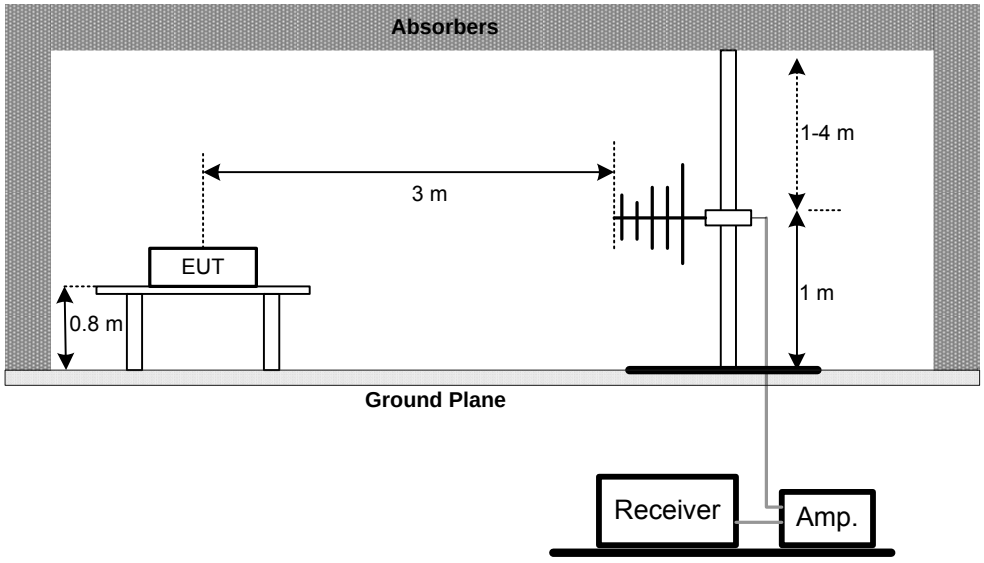
a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.2.4 DEVIATION FROM TEST STANDARD

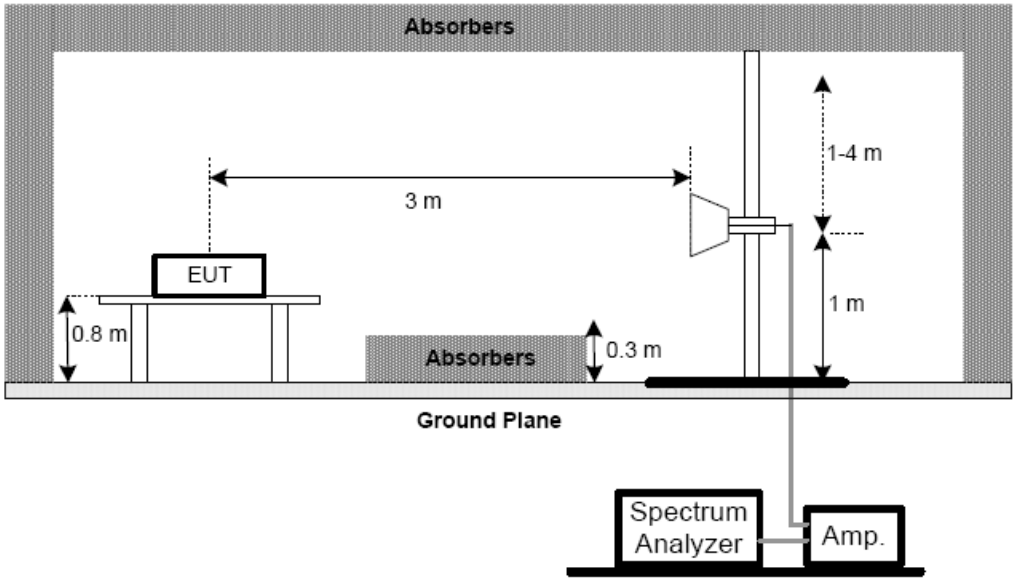
No deviation

4.2.5 TEST SETUP

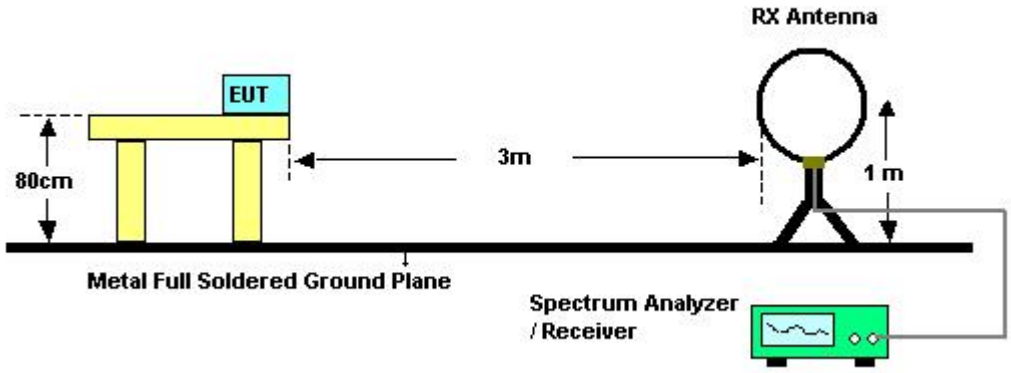
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



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



(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.

4.2.7 TEST RESULTS (BELOW 30MHZ)

EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	55 %
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX Mode – Adapter: AMS47-0501000FU		

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.0906	0°	29.63	21.59	51.22	108.46	-57.24	QP
0.0976	0°	42.52	21.45	63.97	107.82	-43.85	QP
0.1064	0°	24.80	21.30	46.10	107.07	-60.97	QP
0.1083	0°	22.39	21.27	43.66	106.91	-63.25	QP
0.5219	0°	22.82	19.87	42.69	73.25	-30.56	QP
1.2877	0°	25.96	19.57	45.53	65.41	-19.88	QP

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.0941	90°	28.28	21.52	49.80	108.13	-58.33	QP
0.1052	90°	25.46	21.32	46.78	107.16	-60.39	QP
0.1095	90°	27.52	21.25	48.77	106.82	-58.05	QP
0.5138	90°	21.82	19.84	41.66	73.39	-31.72	QP
0.6241	90°	22.39	20.20	42.59	71.70	-29.11	QP
1.2140	90°	22.86	19.58	42.44	65.92	-23.48	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.。

4.2.8 TEST RESULTS (BETWEEN 30 – 1000 MHZ)

Remark：

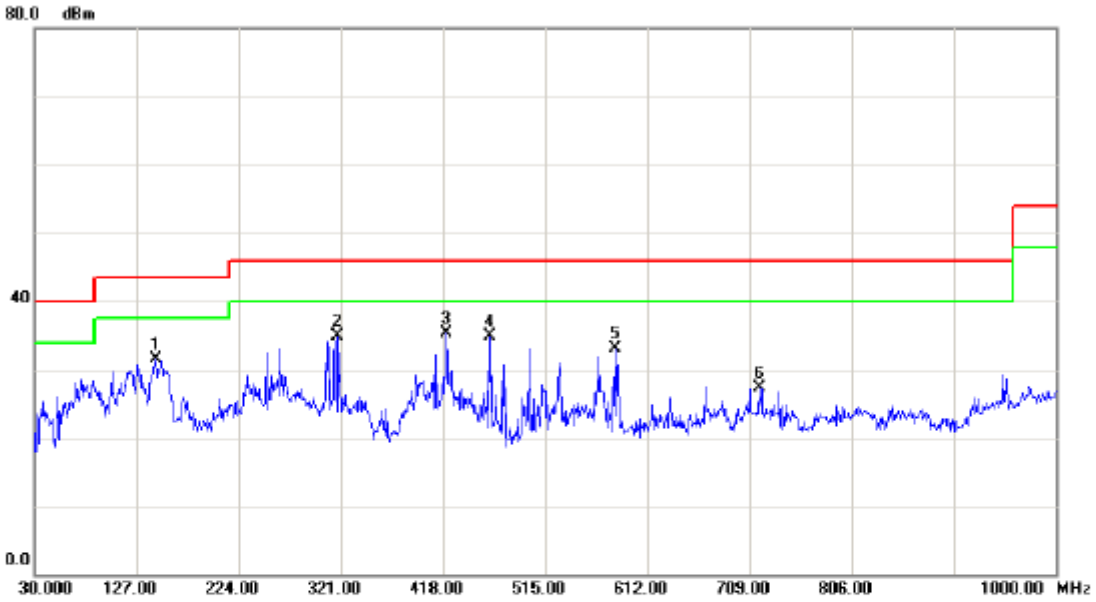
(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

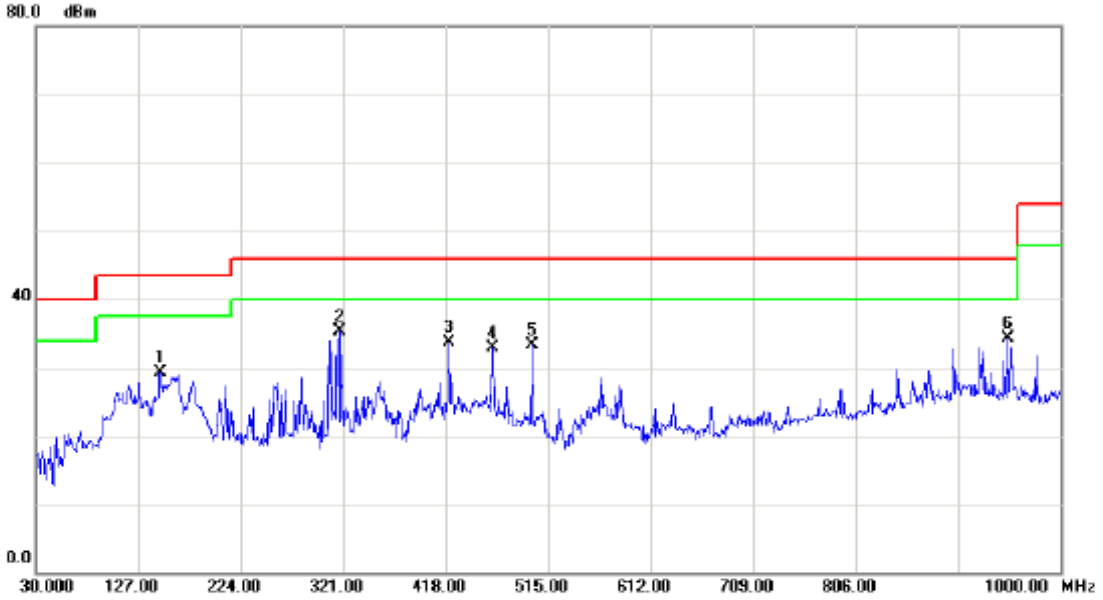
(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table。

EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz	Phase:	Vertical
Test Mode:	TX B MODE CHANNEL 01 – Adapter: F05W-050100SPAU		



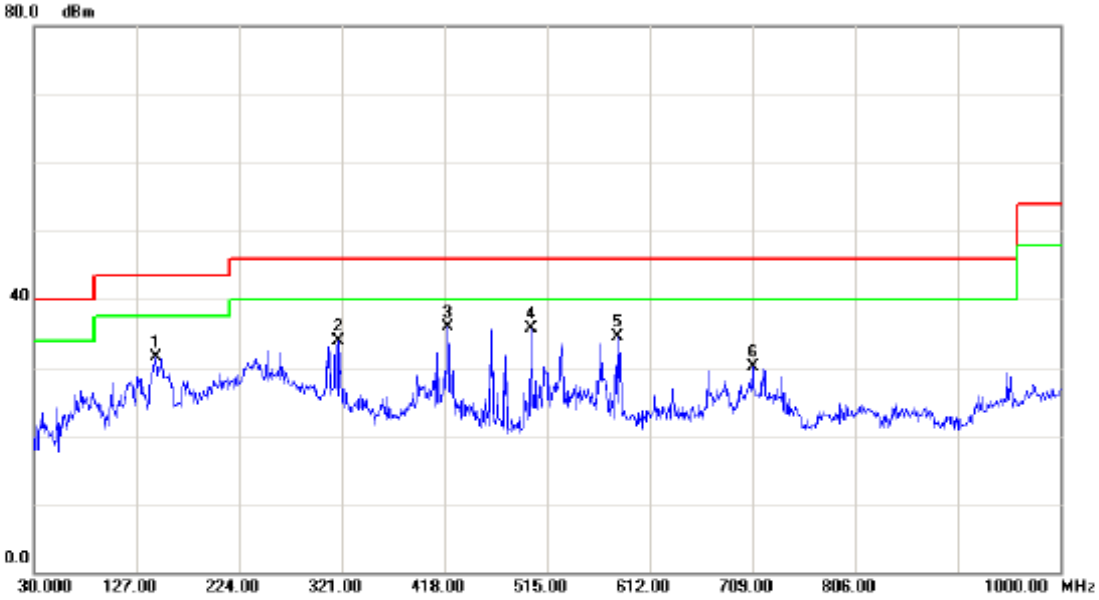
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		145.4300	46.41	-14.88	31.53	43.50	-11.97	peak	
2		317.1200	46.38	-11.50	34.88	46.00	-11.12	peak	
3	*	420.9100	45.49	-10.18	35.31	46.00	-10.69	peak	
4		462.6200	44.35	-9.39	34.96	46.00	-11.04	peak	
5		580.9600	39.97	-6.92	33.05	46.00	-12.95	peak	
6		718.7000	33.82	-6.49	27.33	46.00	-18.67	peak	

EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz	Phase:	Horizontal
Test Mode:	TX B MODE CHANNEL 01 – Adapter: F05W-050100SPAU		



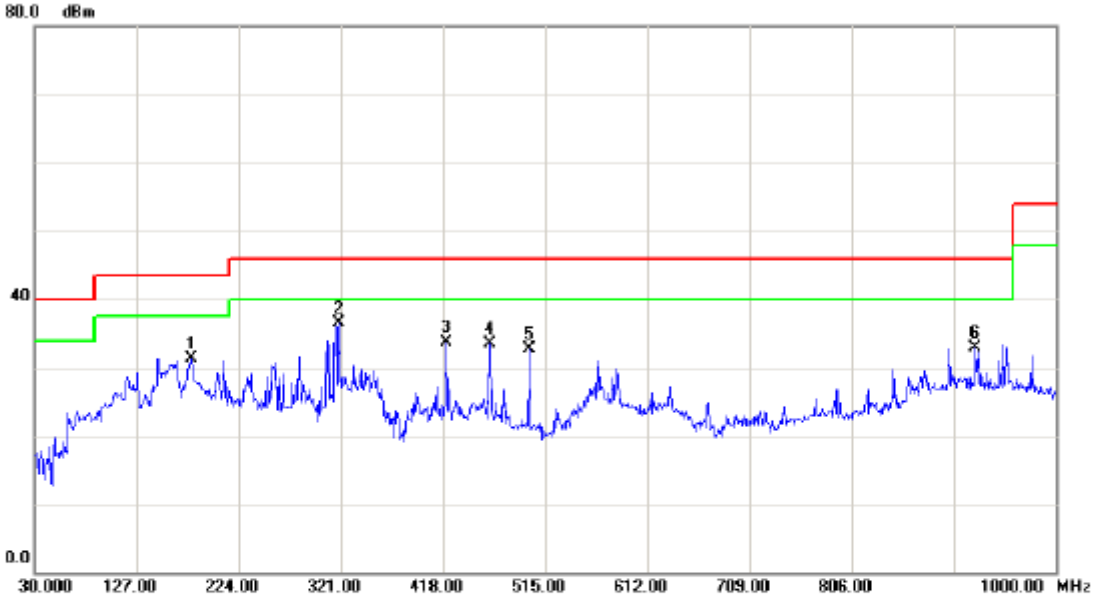
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		148.3400	44.21	-14.92	29.29	43.50	-14.21	peak	
2	*	317.1200	46.84	-11.50	35.34	46.00	-10.66	peak	
3		420.9100	43.94	-10.18	33.76	46.00	-12.24	peak	
4		462.6200	42.39	-9.39	33.00	46.00	-13.00	peak	
5		500.4500	41.78	-8.48	33.30	46.00	-12.70	peak	
6		949.5600	38.71	-4.33	34.38	46.00	-11.62	peak	

EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz	Phase:	Vertical
Test Mode:	TX B MODE CHANNEL 06 – Adapter: F05W-050100SPAU		



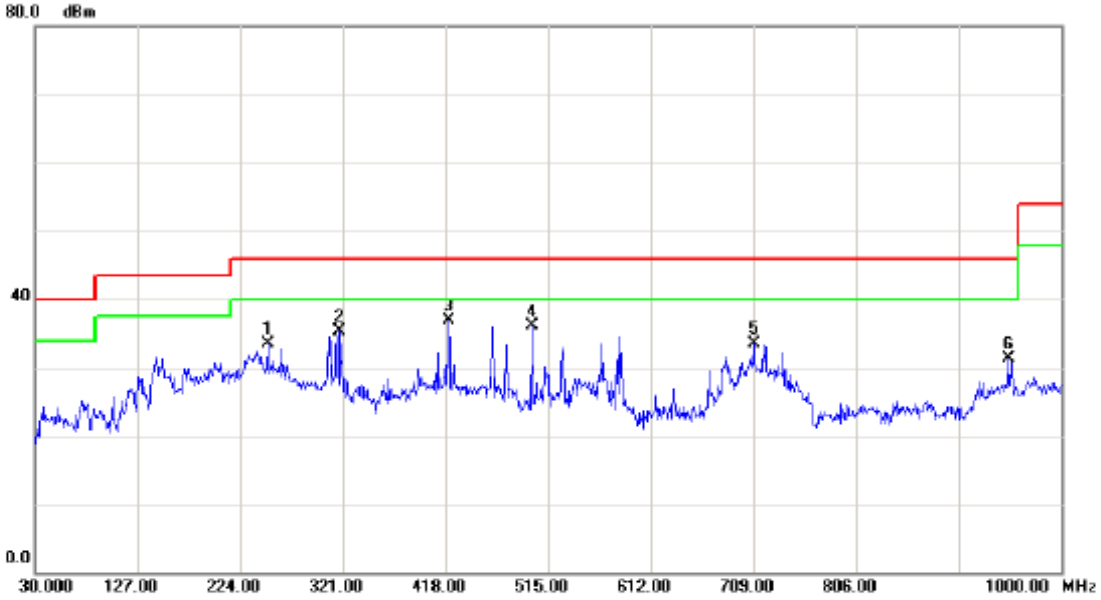
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		145.4300	46.41	-14.88	31.53	43.50	-11.97	peak	
2		317.1200	45.38	-11.50	33.88	46.00	-12.12	peak	
3	*	420.9100	45.99	-10.18	35.81	46.00	-10.19	peak	
4		500.4500	44.09	-8.48	35.61	46.00	-10.39	peak	
5		580.9600	41.47	-6.92	34.55	46.00	-11.45	peak	
6		709.0000	36.48	-6.47	30.01	46.00	-15.99	peak	

EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz	Phase:	Horizontal
Test Mode:	TX B MODE CHANNEL 06 – Adapter: F05W-050100SPAU		



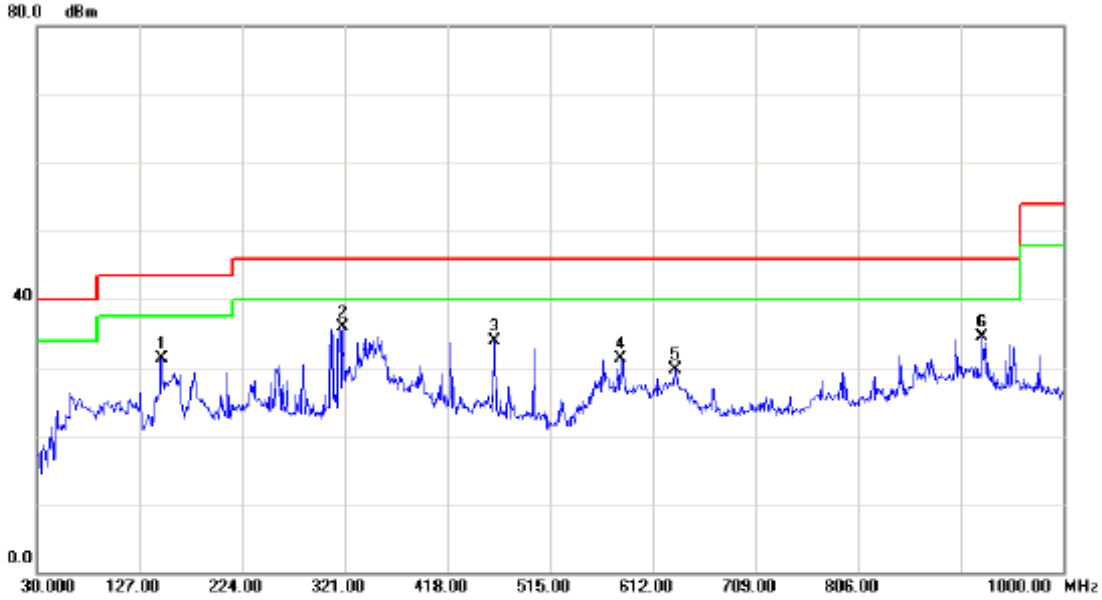
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		179.3800	45.88	-14.57	31.31	43.50	-12.19	peak	
2	*	319.0600	47.95	-11.47	36.48	46.00	-9.52	peak	
3		420.9100	43.94	-10.18	33.76	46.00	-12.24	peak	
4		462.6200	42.88	-9.39	33.49	46.00	-12.51	peak	
5		500.4500	41.28	-8.48	32.80	46.00	-13.20	peak	
6		923.3700	38.00	-5.01	32.99	46.00	-13.01	peak	

EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz	Phase:	Vertical
Test Mode:	TX B MODE CHANNEL 11 – Adapter: F05W-050100SPAU		



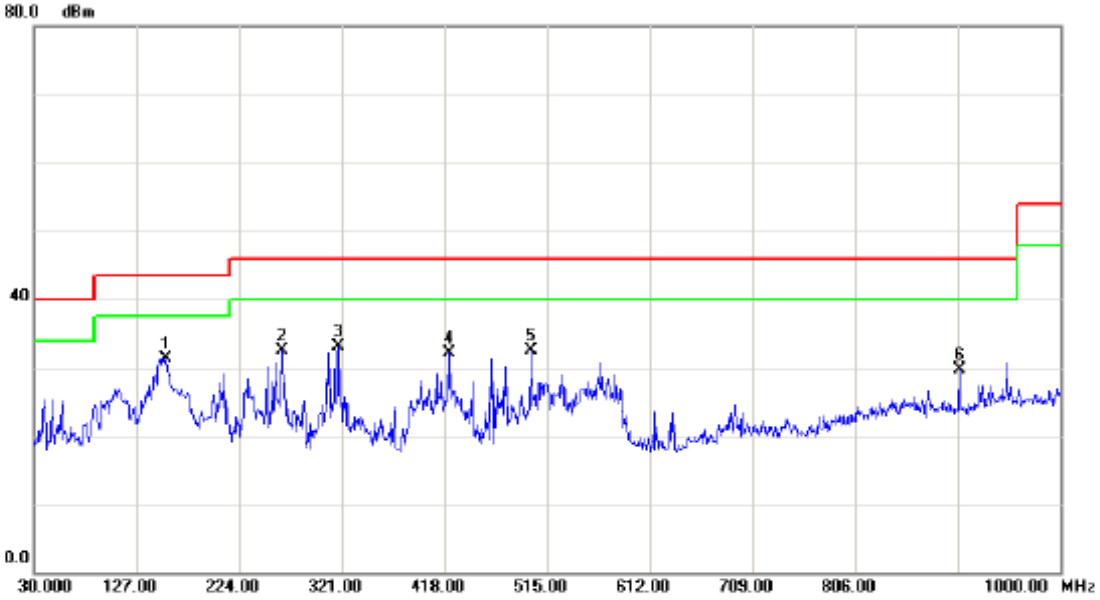
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		250.1900	47.18	-13.62	33.56	46.00	-12.44	peak	
2		317.1200	46.88	-11.50	35.38	46.00	-10.62	peak	
3	*	420.9100	46.99	-10.18	36.81	46.00	-9.19	peak	
4		500.4500	44.59	-8.48	36.11	46.00	-9.89	peak	
5		709.0000	39.98	-6.47	33.51	46.00	-12.49	peak	
6		949.5600	35.69	-4.33	31.36	46.00	-14.64	peak	

EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz	Phase:	Horizontal
Test Mode:	TX B MODE CHANNEL 11 – Adapter: F05W-050100SPAU		



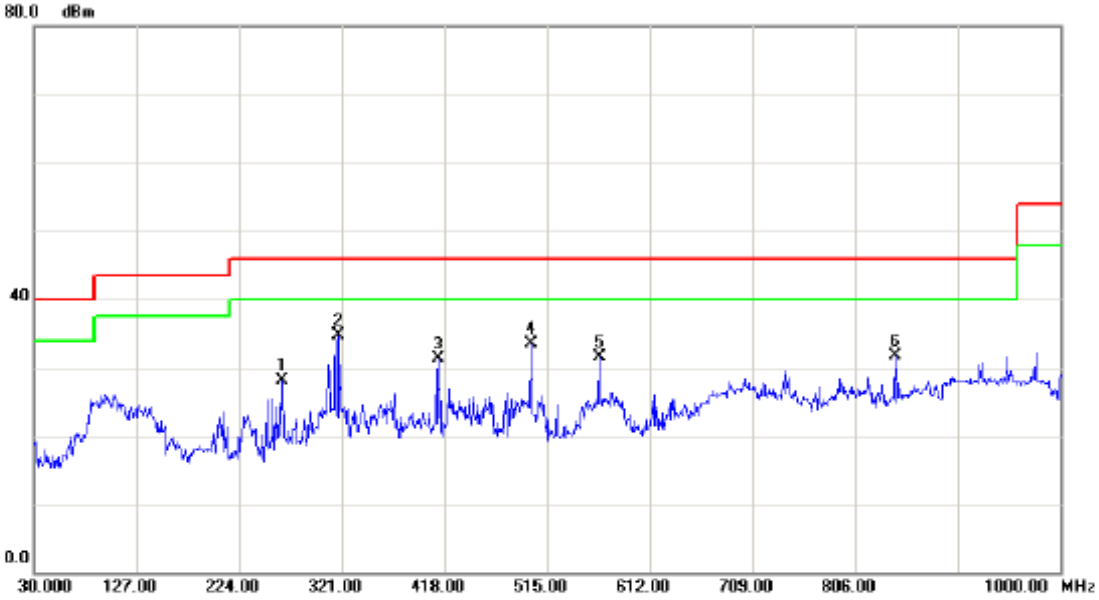
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		148.3400	46.21	-14.92	31.29	43.50	-12.21	peak	
2	*	319.0600	47.45	-11.47	35.98	46.00	-10.02	peak	
3		462.6200	43.38	-9.39	33.99	46.00	-12.01	peak	
4		580.9600	38.22	-6.92	31.30	46.00	-14.70	peak	
5		633.3400	36.35	-6.66	29.69	46.00	-16.31	peak	
6		923.3700	39.50	-5.01	34.49	46.00	-11.51	peak	

EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz	Phase:	Vertical
Test Mode:	TX B MODE CHANNEL 01 – Adapter: AMS47-0501000FU		



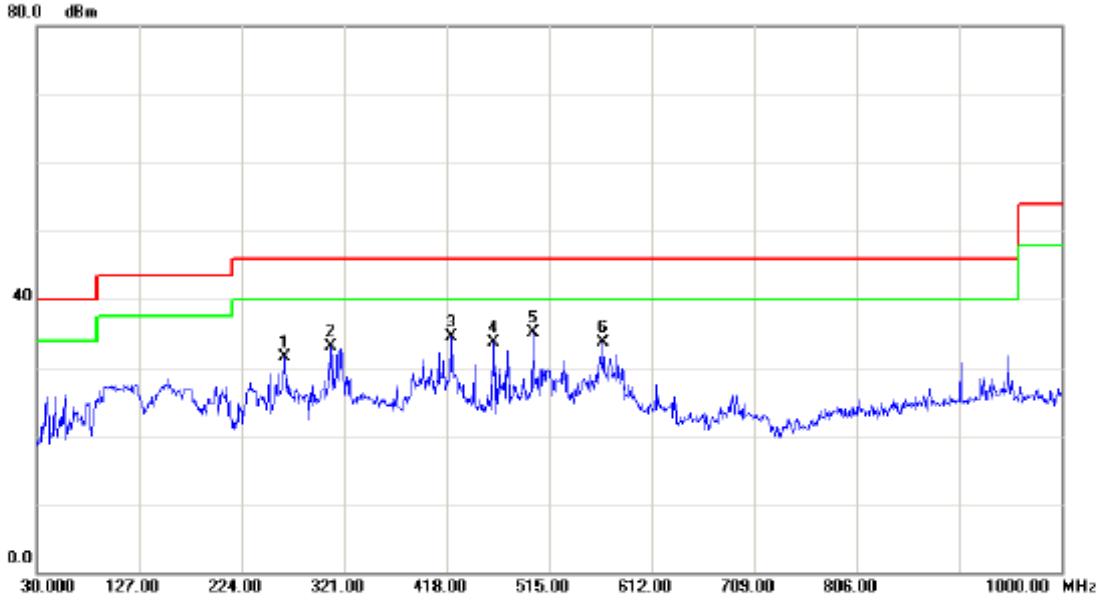
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	154.1600	46.20	-14.86	31.34	43.50	-12.16	peak	
2		264.7400	45.35	-12.77	32.58	46.00	-13.42	peak	
3		317.1200	44.66	-11.50	33.16	46.00	-12.84	peak	
4		422.8500	42.24	-10.14	32.10	46.00	-13.90	peak	
5		500.4500	41.02	-8.48	32.54	46.00	-13.46	peak	
6		904.9400	35.18	-5.49	29.69	46.00	-16.31	peak	

EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz	Phase:	Horizontal
Test Mode:	TX B MODE CHANNEL 01 – Adapter: AMS47-0501000FU		



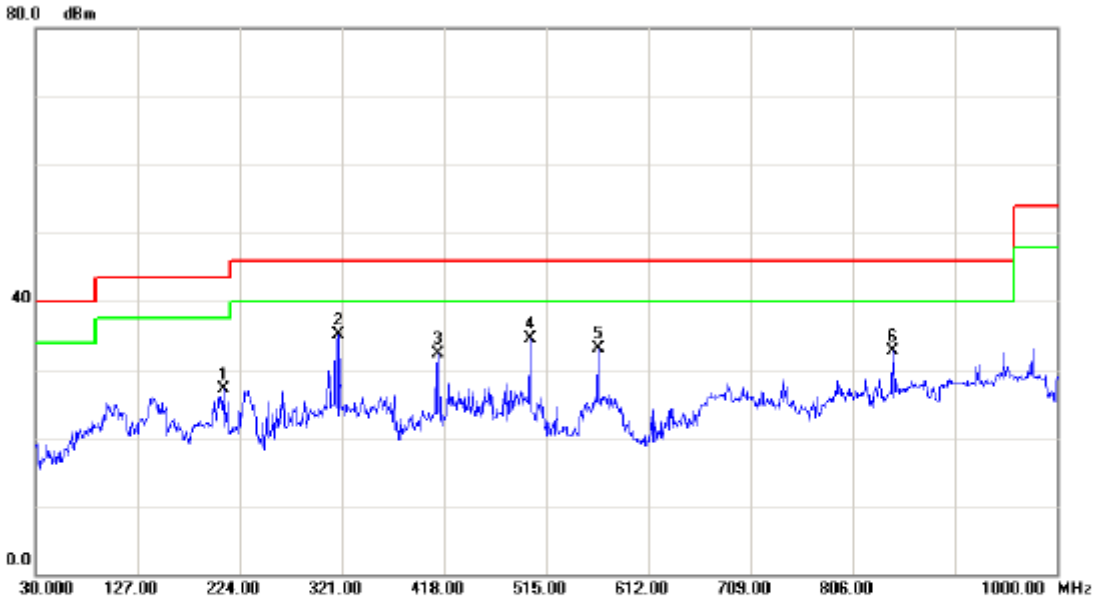
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		264.7400	40.97	-12.77	28.20	46.00	-17.80	peak	
2	*	317.1200	46.15	-11.50	34.65	46.00	-11.35	peak	
3		412.1800	41.53	-10.32	31.21	46.00	-14.79	peak	
4		500.4500	41.89	-8.48	33.41	46.00	-12.59	peak	
5		564.4700	38.69	-7.13	31.56	46.00	-14.44	peak	
6		843.8300	37.75	-6.06	31.69	46.00	-14.31	peak	

EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz	Phase:	Vertical
Test Mode:	TX B MODE CHANNEL 06 – Adapter: AMS47-0501000FU		



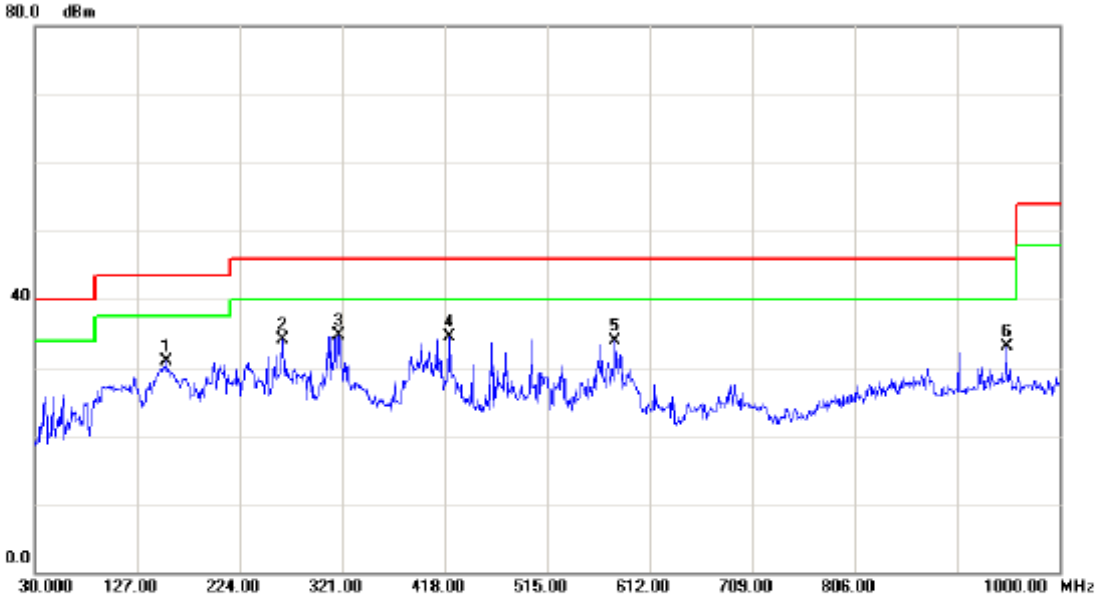
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		264.7400	44.35	-12.77	31.58	46.00	-14.42	peak	
2		308.3900	44.72	-11.63	33.09	46.00	-12.91	peak	
3		422.8500	44.74	-10.14	34.60	46.00	-11.40	peak	
4		462.6200	43.19	-9.39	33.80	46.00	-12.20	peak	
5	*	500.4500	43.52	-8.48	35.04	46.00	-10.96	peak	
6		566.4100	40.90	-7.11	33.79	46.00	-12.21	peak	

EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz	Phase:	Horizontal
Test Mode:	TX B MODE CHANNEL 06 – Adapter: AMS47-0501000FU		



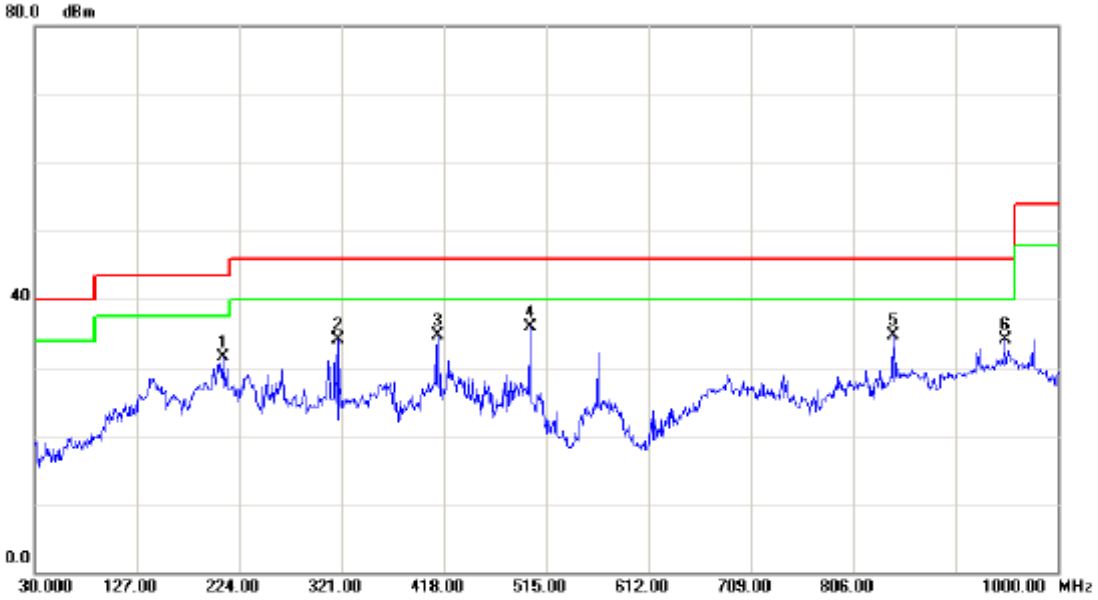
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		208.4800	41.53	-14.45	27.08	43.50	-16.42	peak	
2	*	317.1200	46.65	-11.50	35.15	46.00	-10.85	peak	
3		412.1800	42.54	-10.32	32.22	46.00	-13.78	peak	
4		500.4500	42.89	-8.48	34.41	46.00	-11.59	peak	
5		564.4700	40.19	-7.13	33.06	46.00	-12.94	peak	
6		843.8300	38.75	-6.06	32.69	46.00	-13.31	peak	

EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz	Phase:	Vertical
Test Mode:	TX B MODE CHANNEL 11 – Adapter: AMS47-0501000FU		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		154.1600	45.70	-14.86	30.84	43.50	-12.66	peak	
2		264.7400	46.85	-12.77	34.08	46.00	-11.92	peak	
3	*	317.1200	46.16	-11.50	34.66	46.00	-11.34	peak	
4		422.8500	44.74	-10.14	34.60	46.00	-11.40	peak	
5		579.0200	40.87	-6.94	33.93	46.00	-12.07	peak	
6		949.5600	37.46	-4.33	33.13	46.00	-12.87	peak	

EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz	Phase:	Horizontal
Test Mode:	TX B MODE CHANNEL 11 – Adapter: AMS47-0501000FU		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		208.4800	46.03	-14.45	31.58	43.50	-11.92	peak	
2		317.1200	45.65	-11.50	34.15	46.00	-11.85	peak	
3		412.1800	45.04	-10.32	34.72	46.00	-11.28	peak	
4	*	500.4500	44.39	-8.48	35.91	46.00	-10.09	peak	
5		843.8300	40.75	-6.06	34.69	46.00	-11.31	peak	
6		949.5600	38.41	-4.33	34.08	46.00	-11.92	peak	

4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage:	AC 120V/60Hz
Test Mode:	TX B MODE 2412MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	29.00	20.35	32.28	61.28	52.63	74.00	54.00	X/E
2413.00	**V**	**80.79**	**77.19**	**32.25**	**113.04**	**109.44**			**X/F**
4823.85	V	48.33	42.40	6.19	54.52	48.59	74.00	54.00	X/H

Remark：

(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 。

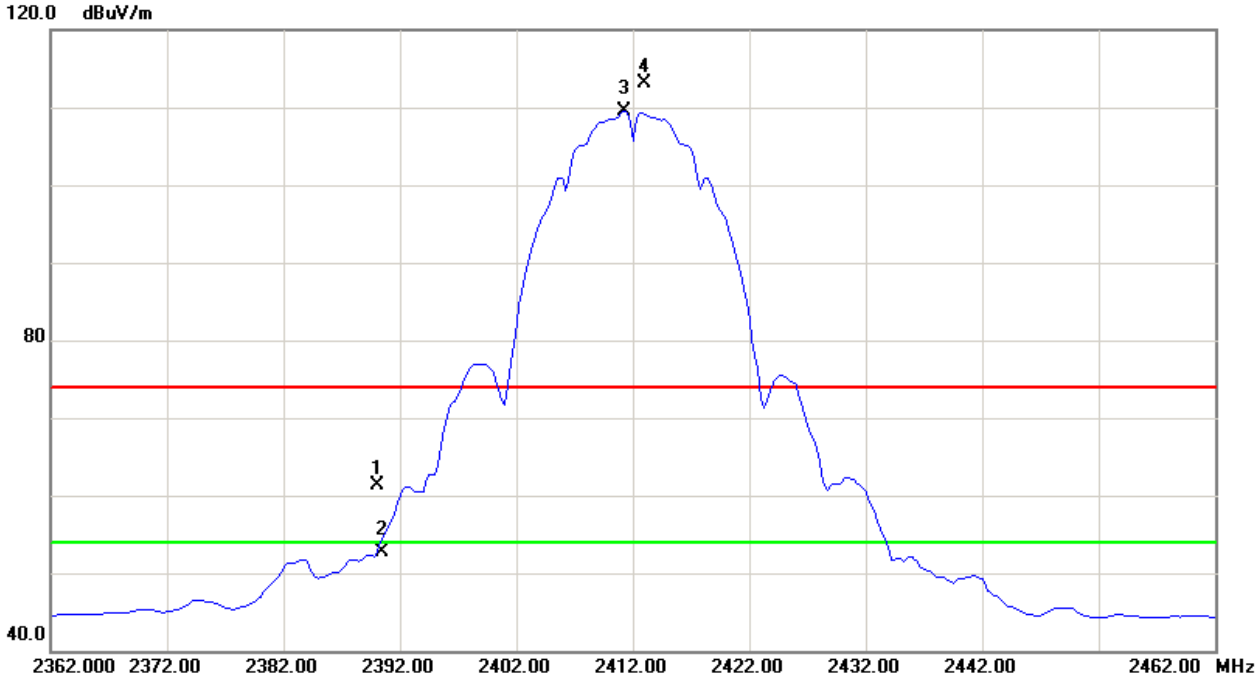
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

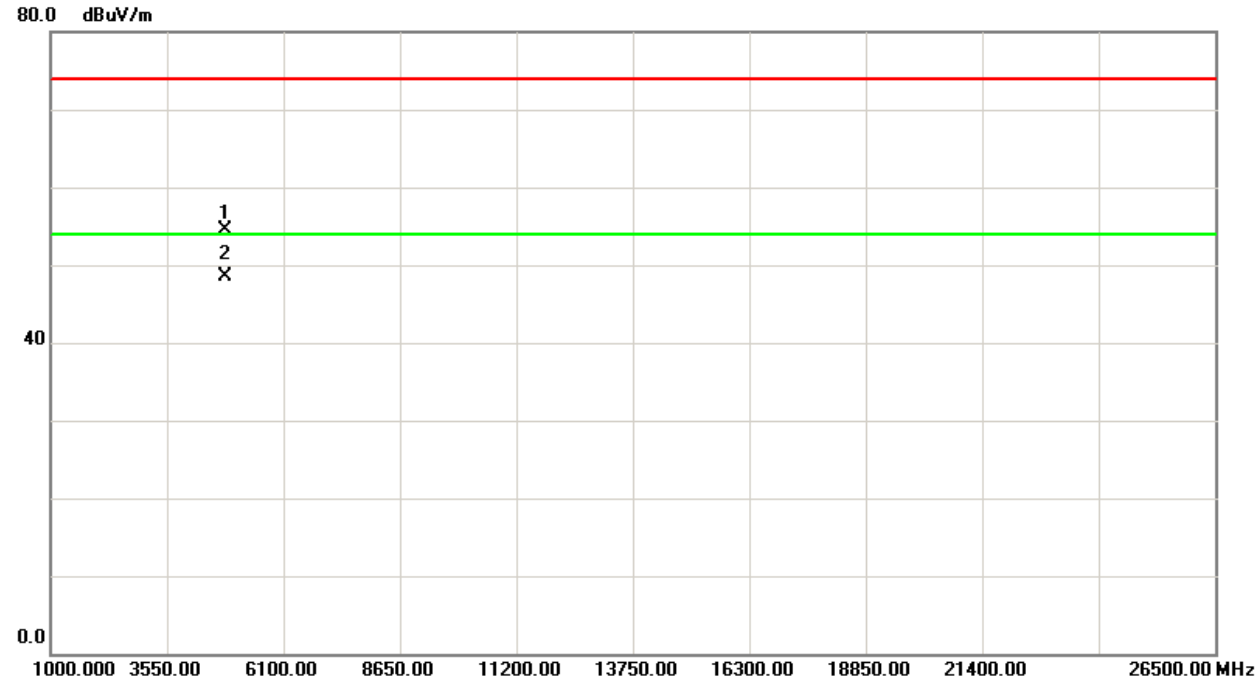
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH01 (Above 1000 MHz, Vertical)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage:	AC 120V/60Hz
Test Mode:	TX B MODE 2412MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	H	22.24	11.17	32.28	54.52	43.45	74.00	54.00	X/E
2413.00	**H**	**67.93**	**64.41**	**32.25**	**100.18**	**96.66**			**X/F**
4823.50	H	44.52	38.32	6.19	50.71	44.51	74.00	54.00	X/H

Remark：

(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 。

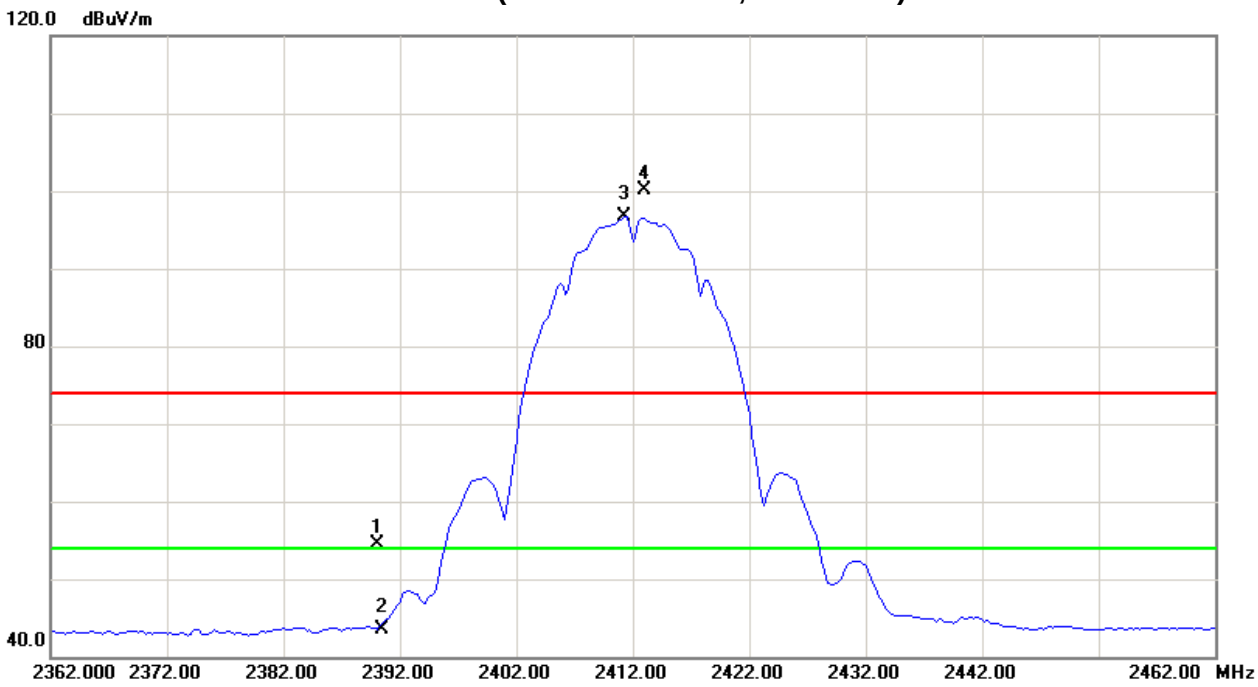
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

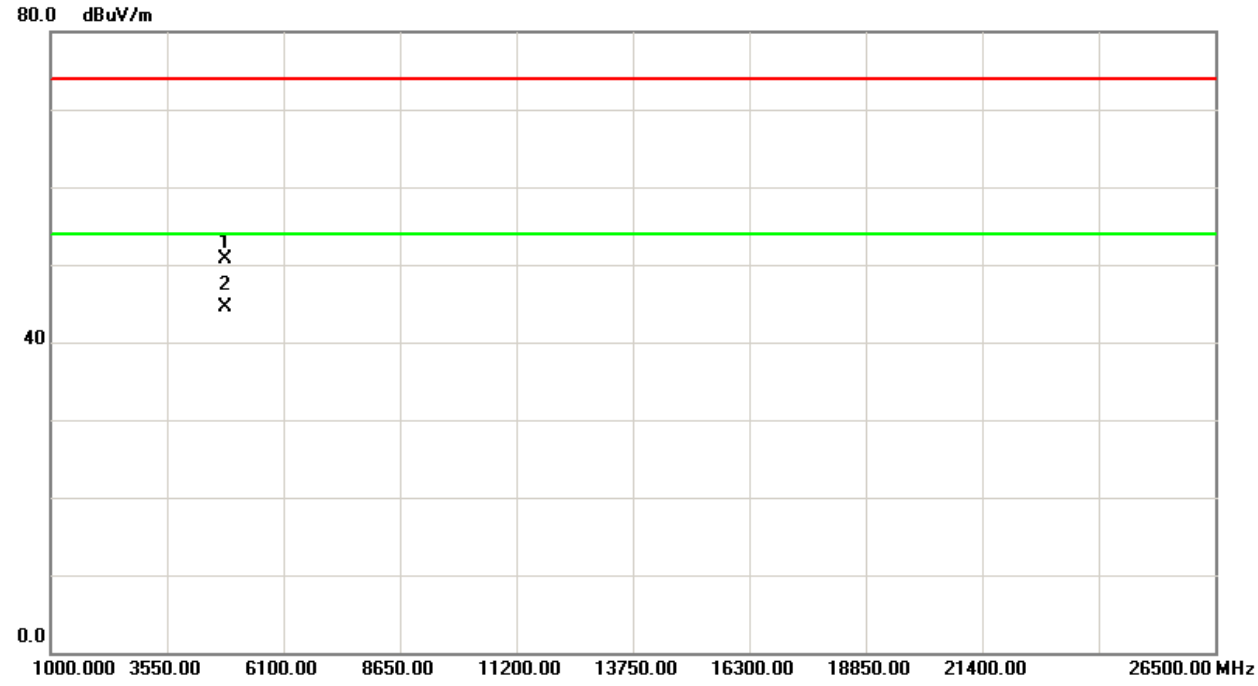
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH01 (Above 1000 MHz, Horizontal)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage:	AC 120V/60Hz
Test Mode:	TX B MODE 2437MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2436.00	**V**	**79.48**	**76.08**	**32.23**	**111.71**	**108.31**			**X/F**
4873.84	V	46.88	41.73	6.39	53.27	48.12	74.00	54.00	X/H

Remark：

(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 。

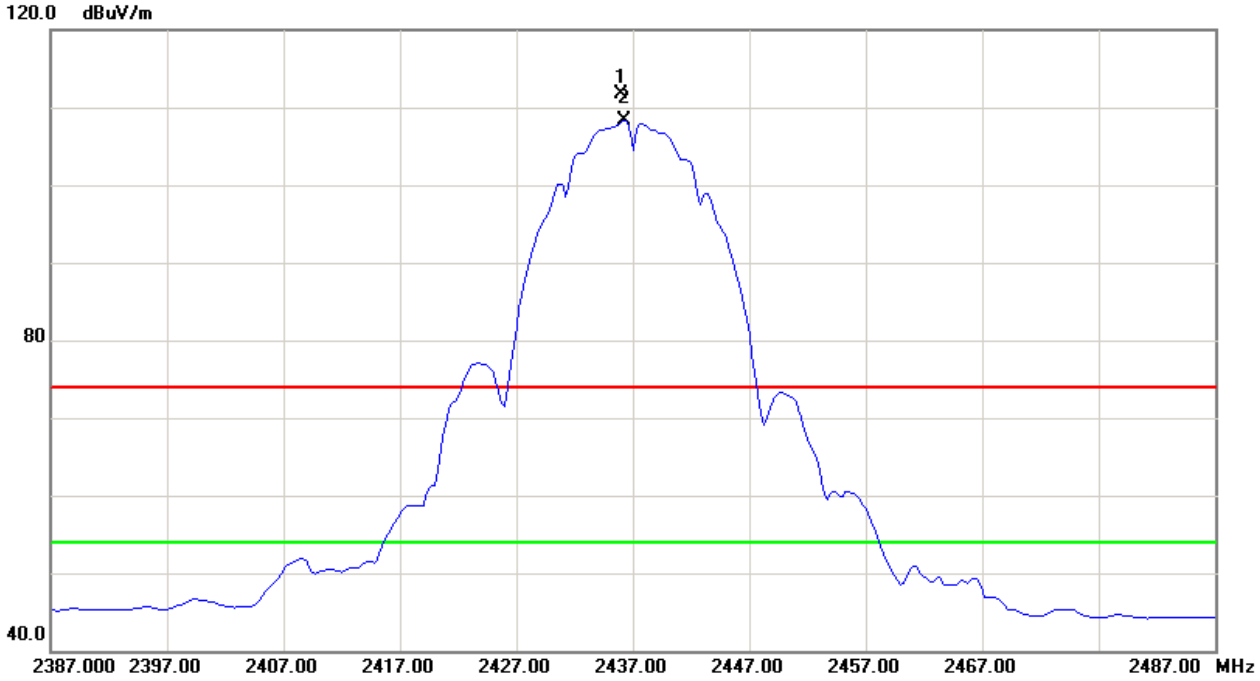
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

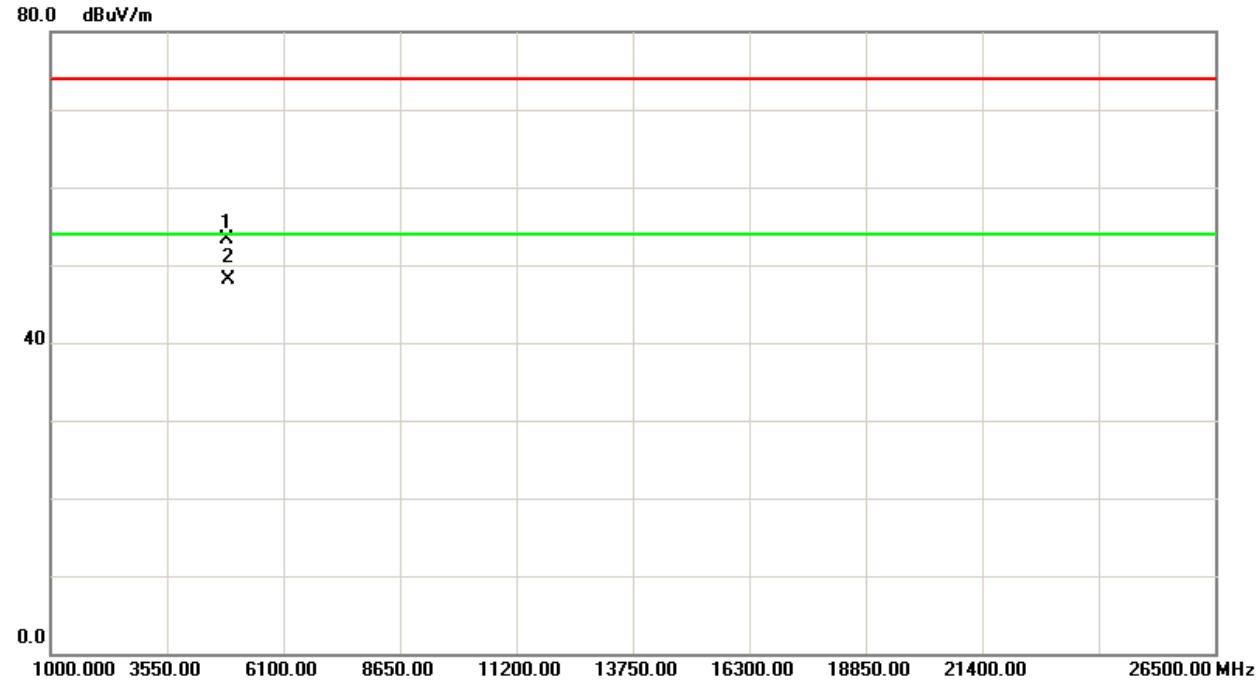
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH06 (Above 1000 MHz, Vertical)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage:	AC 120V/60Hz
Test Mode:	TX B MODE 2437MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2438.00	**H**	**69.86**	**66.21**	**32.22**	**102.08**	**98.43**			**X/F**
4873.77	H	46.08	40.88	6.39	52.47	47.27	74.00	54.00	X/H

Remark：

(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 。

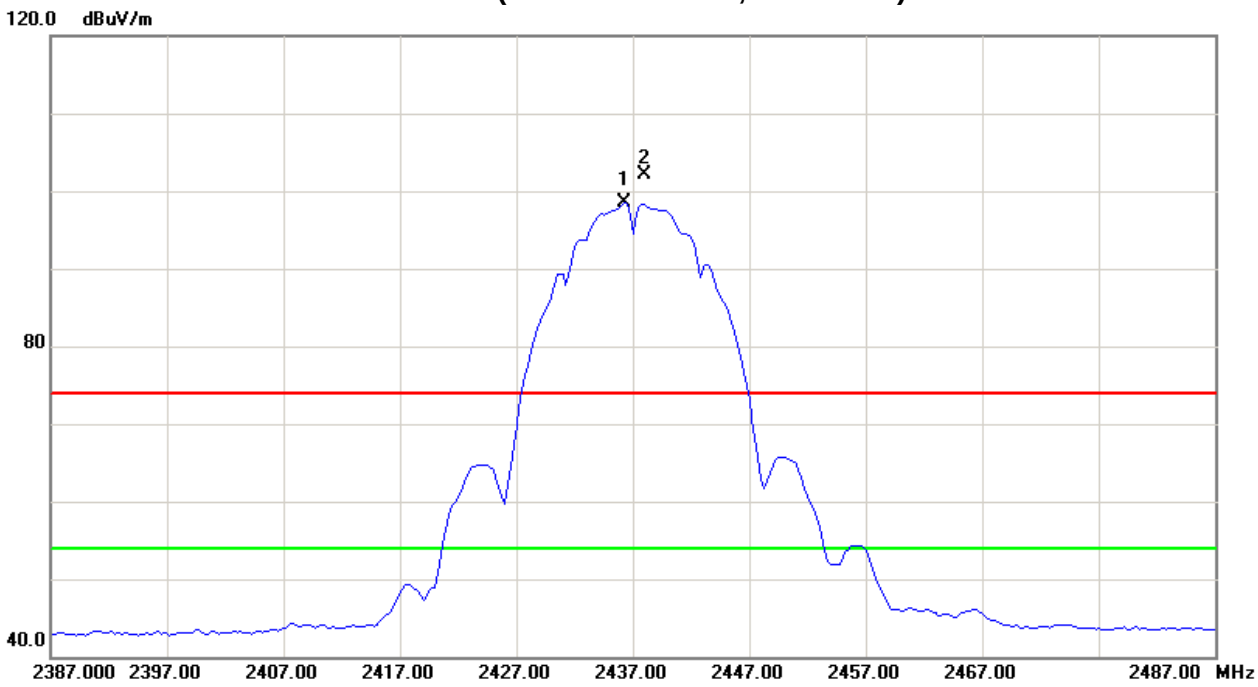
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

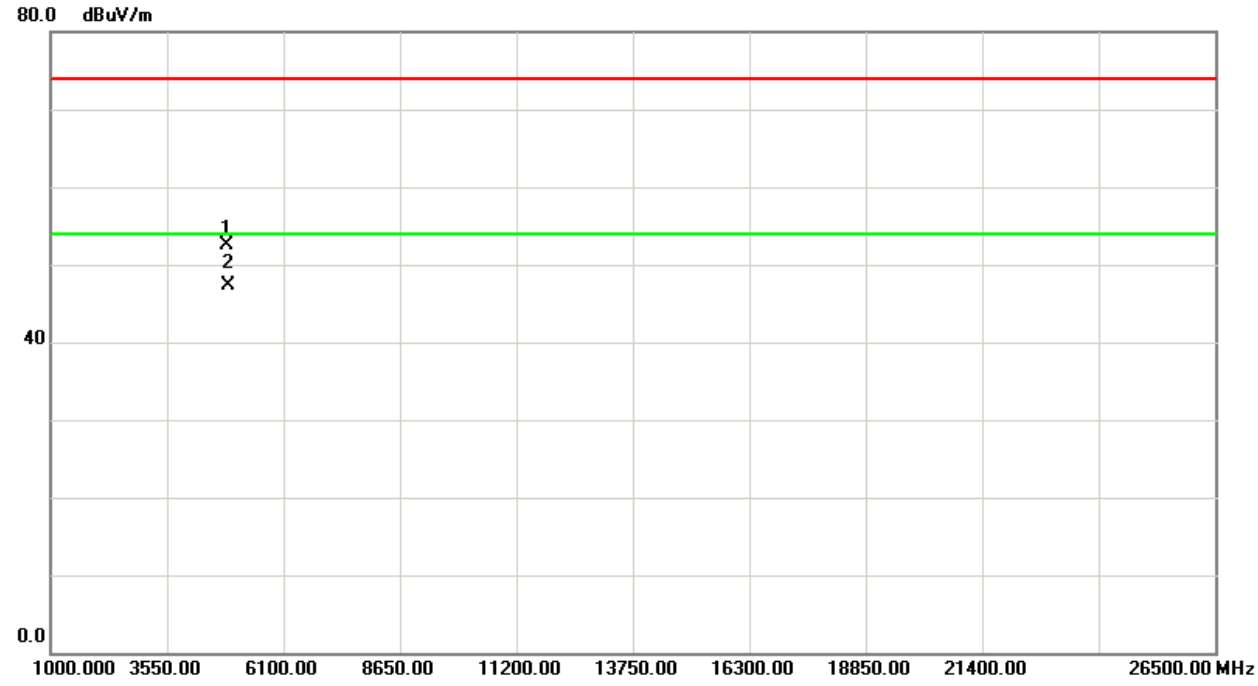
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH06 (Above 1000 MHz, Horizontal)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	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		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2463.00	**V**	**80.68**	**76.95**	**32.20**	**112.88**	**109.15**			**X/F**
2483.50	V	28.50	21.61	32.17	60.67	53.78	74.00	54.00	X/E
4923.00	V	46.58	40.63	6.59	53.17	47.22	74.00	54.00	X/H

Remark：

(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 。

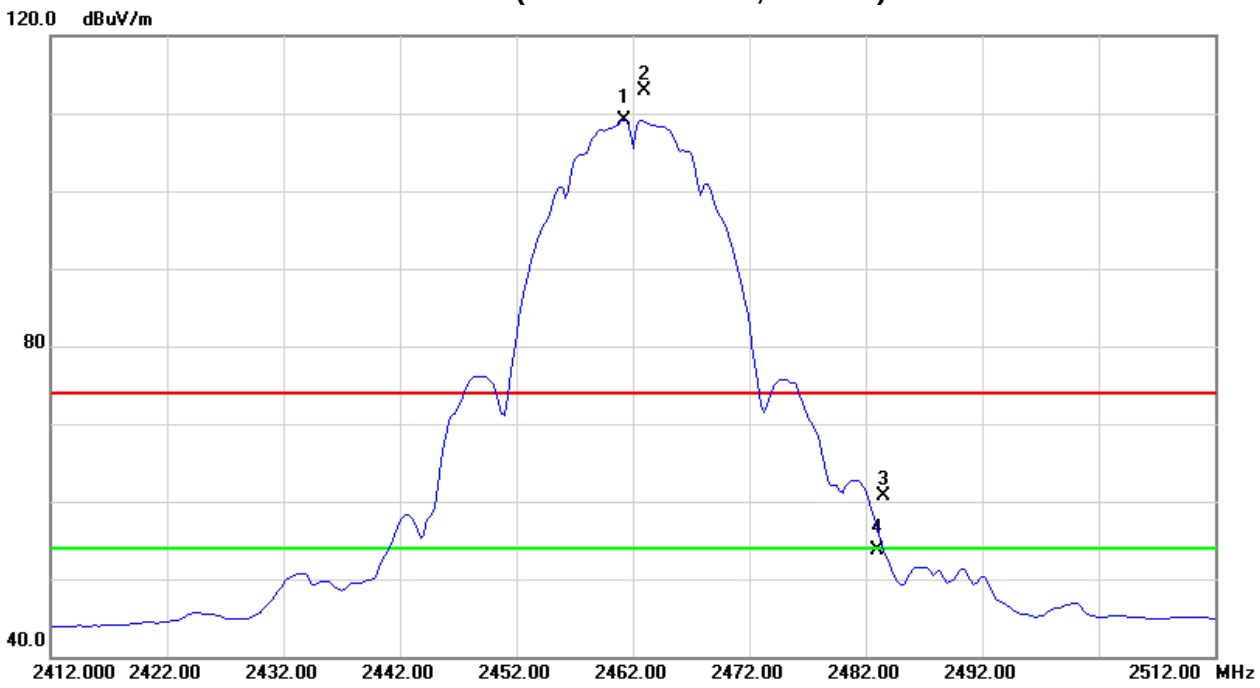
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

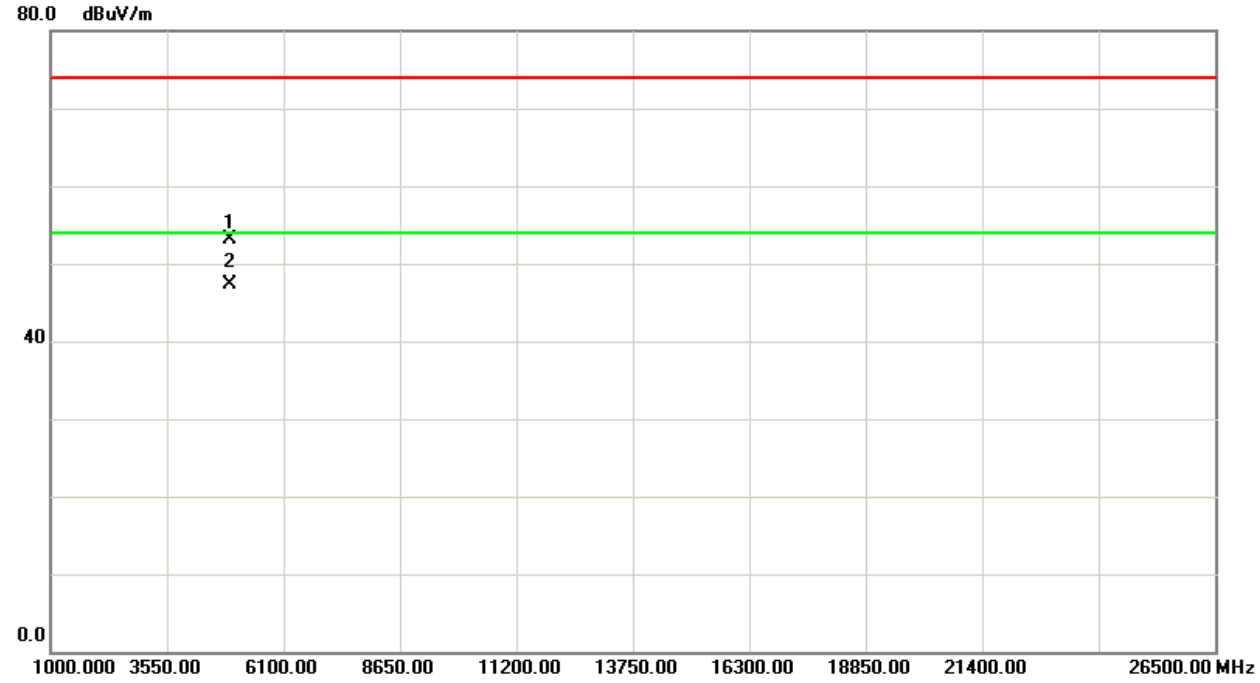
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH11 (Above 1000 MHz, Vertical)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	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		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2463.00	**H**	**71.63**	**67.87**	**32.20**	**103.83**	**100.07**			**X/F**
2483.50	H	23.04	15.10	32.17	55.21	47.27	74.00	54.00	X/E
4923.74	H	43.88	38.78	6.59	50.47	45.37	74.00	54.00	X/H

Remark：

(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 。

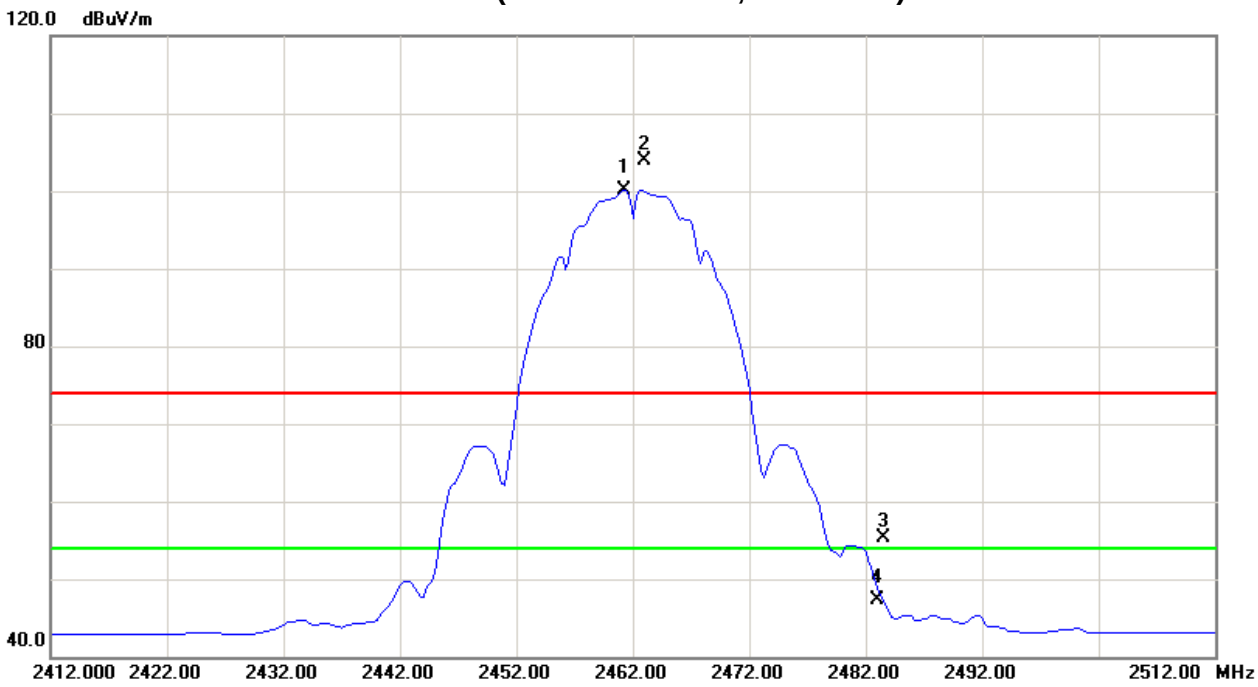
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

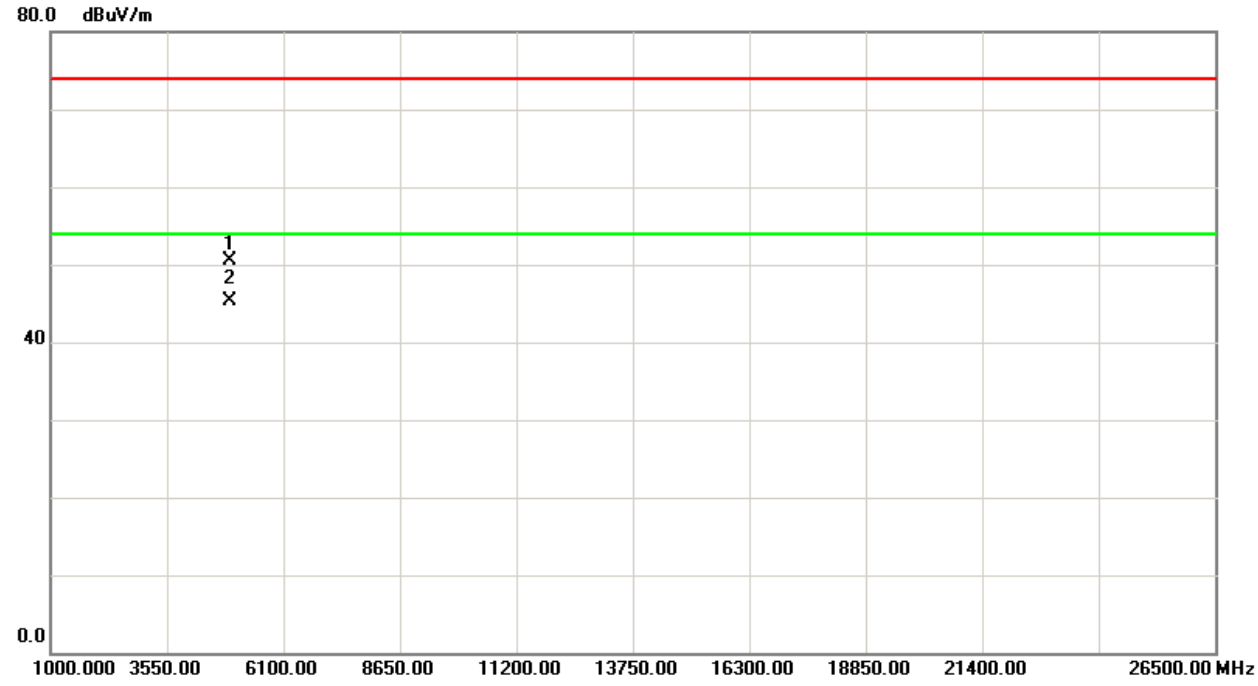
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH11 (Above 1000 MHz, Horizontal)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage:	AC 120V/60Hz
Test Mode:	TX G MODE 2412MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	30.30	18.42	32.28	62.58	50.70	74.00	54.00	X/E
2408.75	**V**	**75.40**	**67.03**	**32.26**	**107.66**	**99.29**			**X/F**
4824.19	V	43.20	36.74	6.19	49.39	42.93	74.00	54.00	X/H

Remark：

(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 。

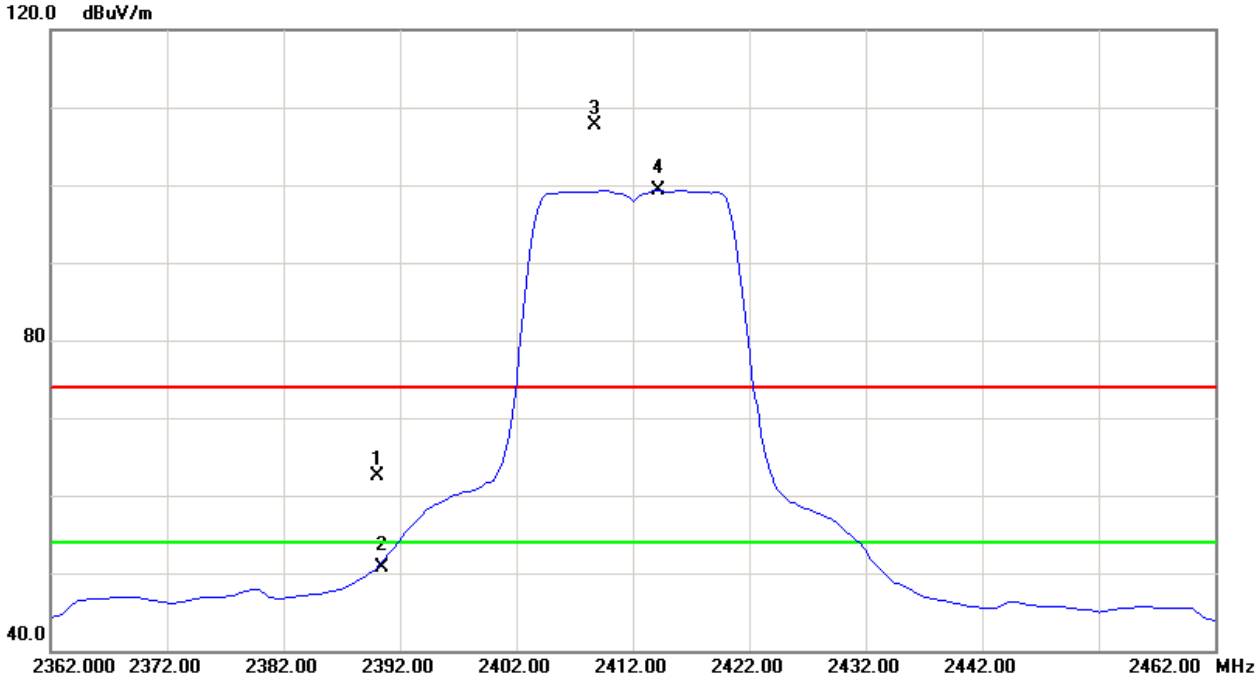
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

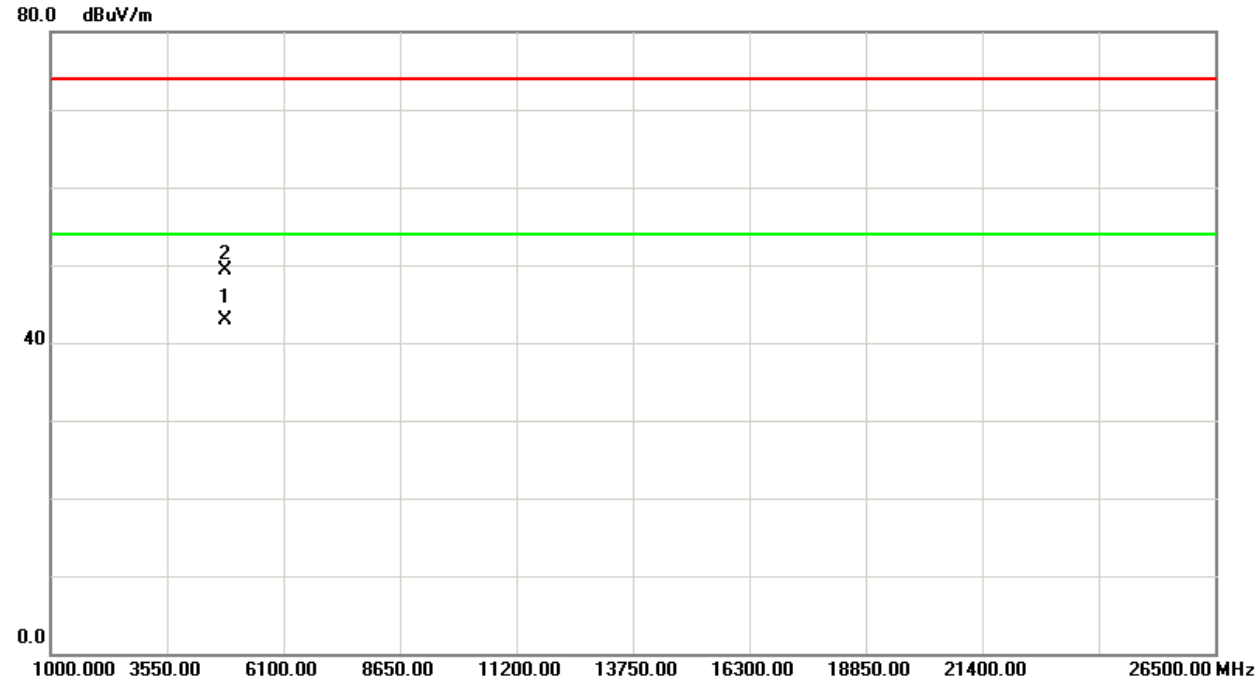
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH01 (Above 1000 MHz, Vertical)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage:	AC 120V/60Hz
Test Mode:	TX G MODE 2412MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	H	20.08	12.19	32.28	52.36	44.47	74.00	54.00	X/E
2408.75	**H**	**66.40**	**58.48**	**32.26**	**98.66**	**90.74**			**X/F**
4823.79	H	41.35	32.94	6.19	47.54	39.13	74.00	54.00	X/H

Remark：

(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 。

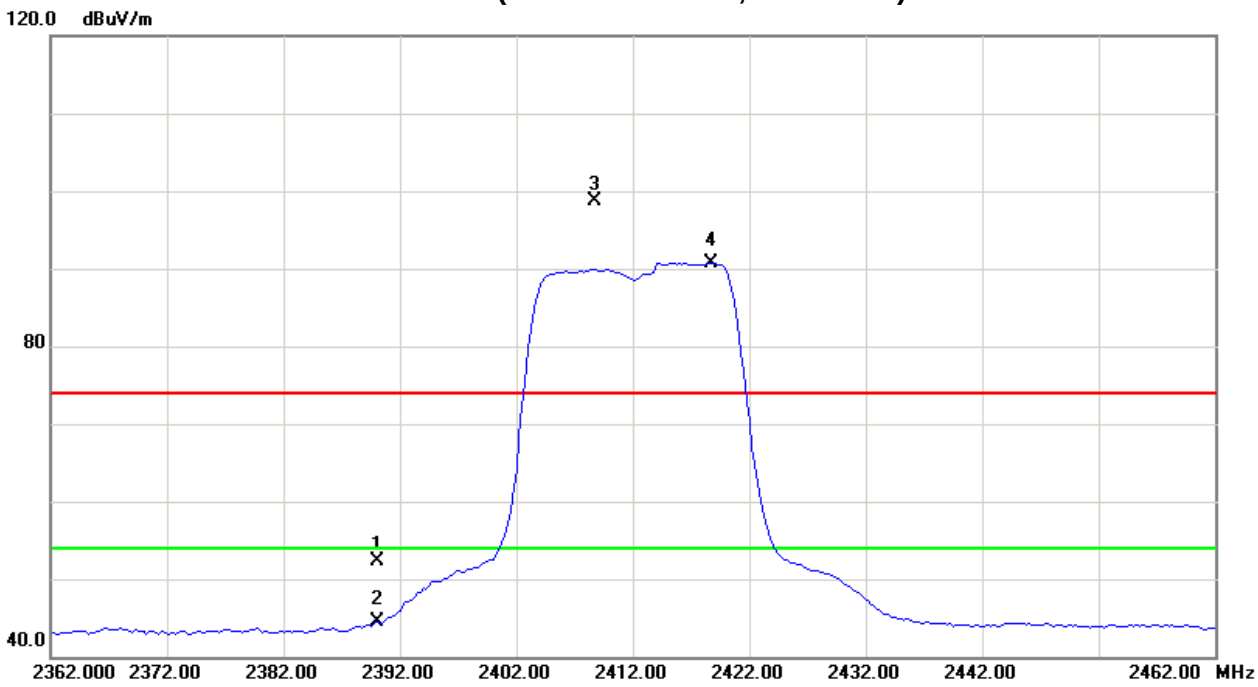
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

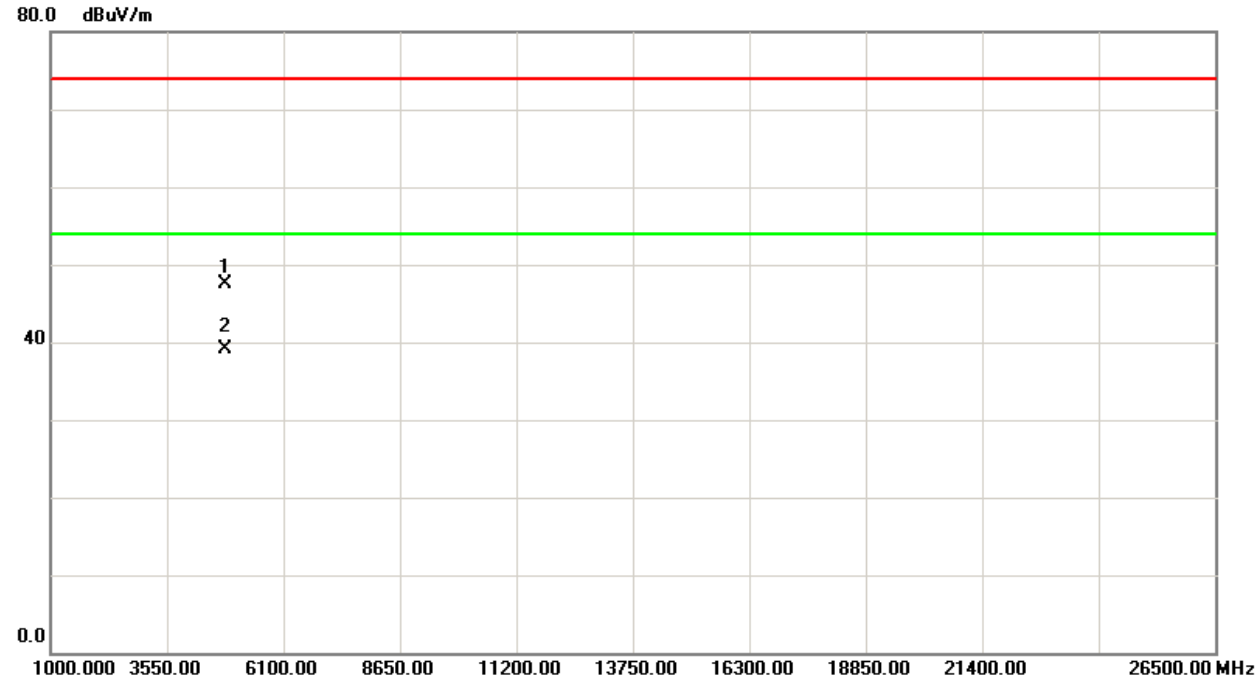
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH01 (Above 1000 MHz, Horizontal)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	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		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2443.25	**V**	**75.60**	**66.81**	**32.22**	**107.82**	**99.03**			**X/F**
4874.03	V	44.16	36.73	6.39	50.55	43.12	74.00	54.00	X/H

Remark：

(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.

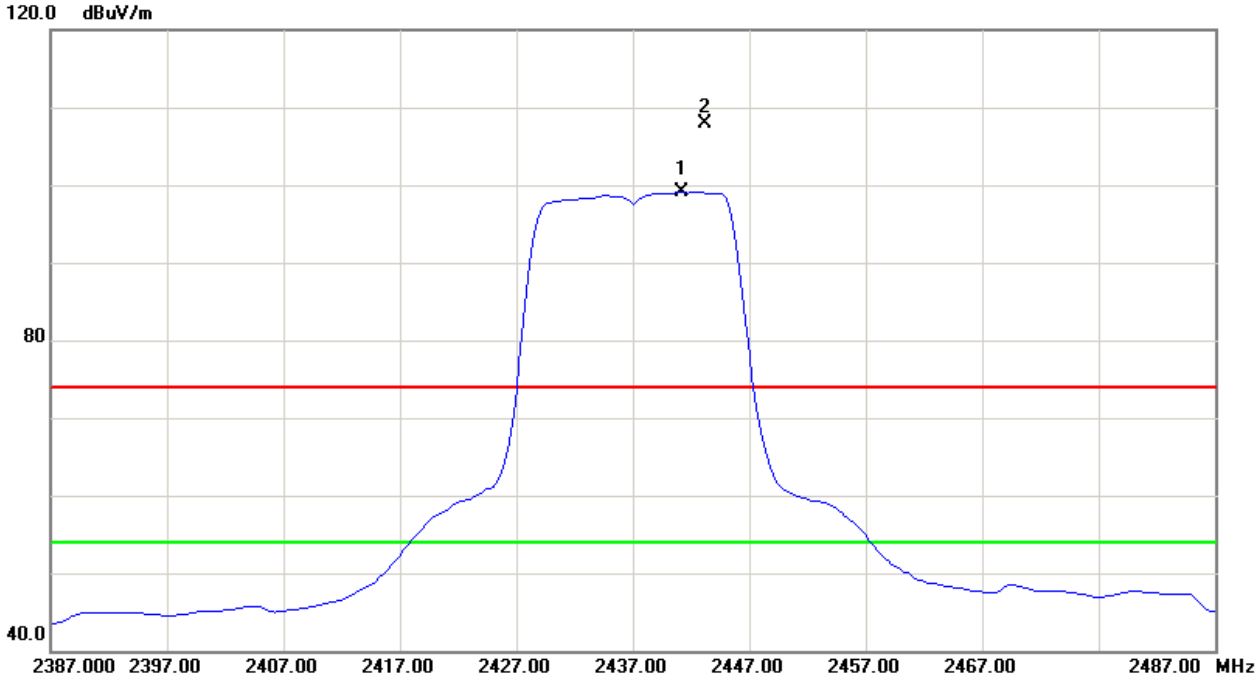
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

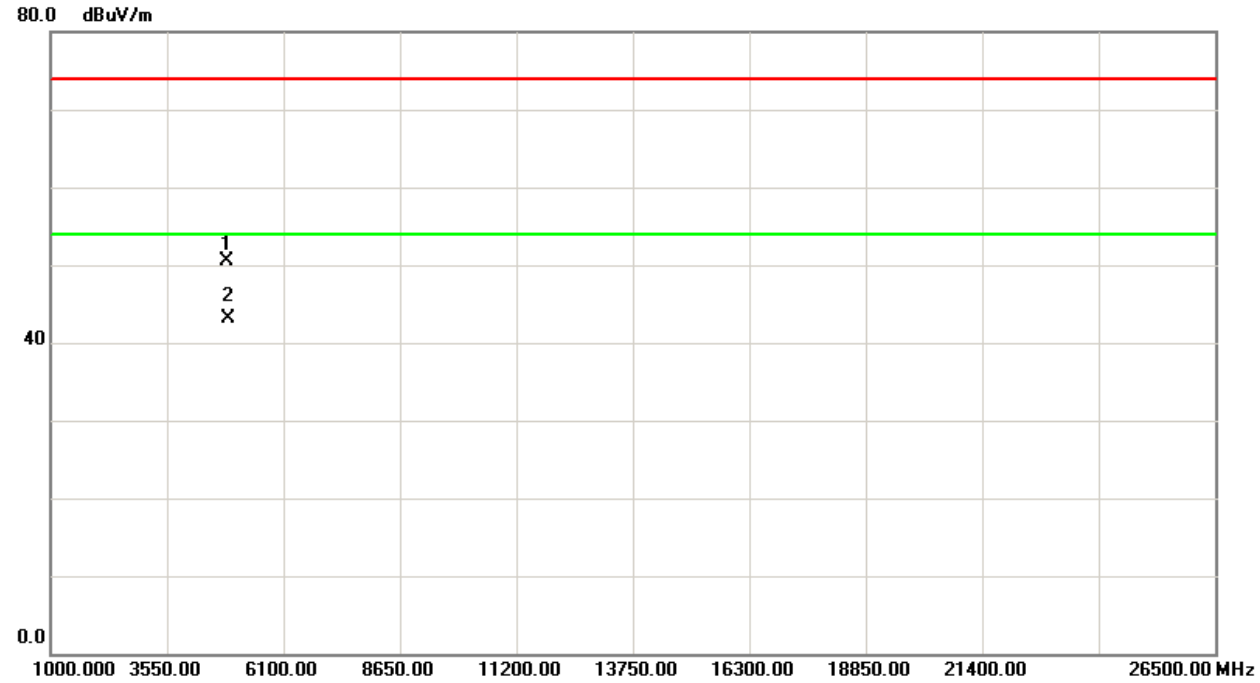
(6) EUT Orthogonal Axis：

"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

TX CH06 (Above 1000 MHz, Vertical)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	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		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2434.00	**H**	**67.08**	**58.38**	**32.23**	**99.31**	**90.61**			**X/F**
4873.75	H	41.69	34.09	6.39	48.08	40.48	74.00	54.00	X/H

Remark：

(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 。

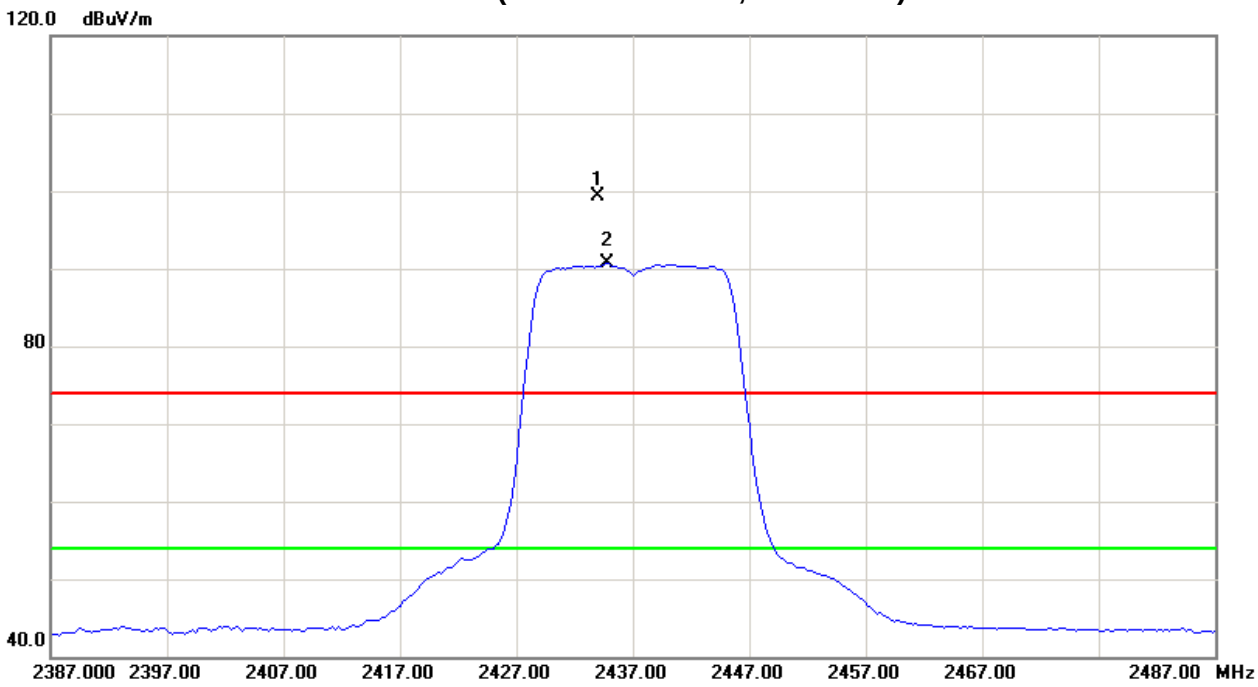
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

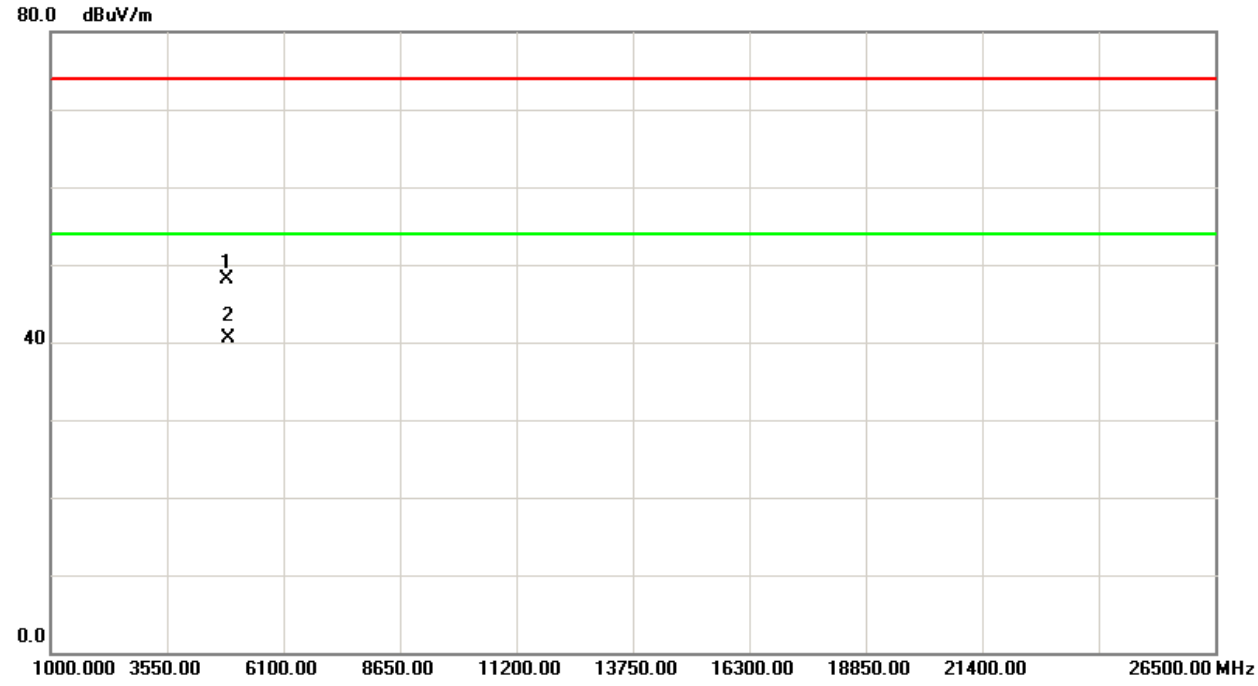
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH06 (Above 1000 MHz, Horizontal)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	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		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2465.25	**V**	**75.89**	**68.47**	**32.20**	**108.09**	**100.67**			**X/F**
2483.50	V	36.80	20.81	32.17	68.97	52.98	74.00	54.00	X/E
4924.09	V	43.48	35.71	6.59	50.07	42.30	74.00	54.00	X/H

Remark：

(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 。

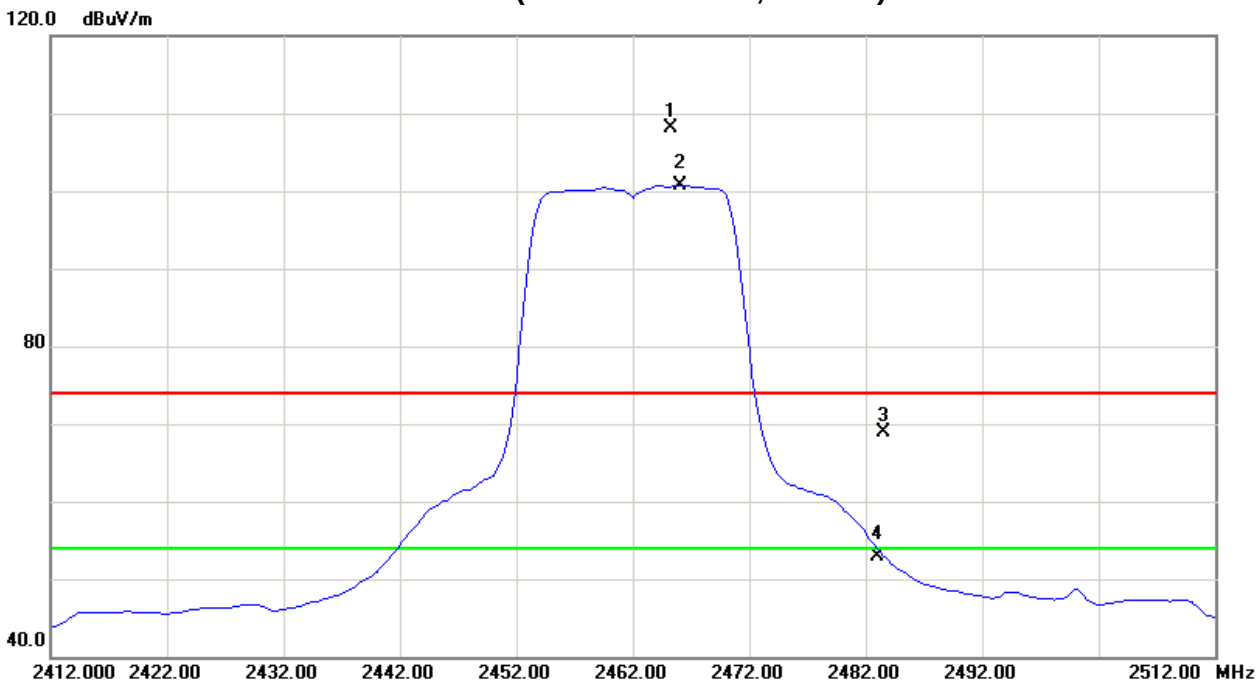
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

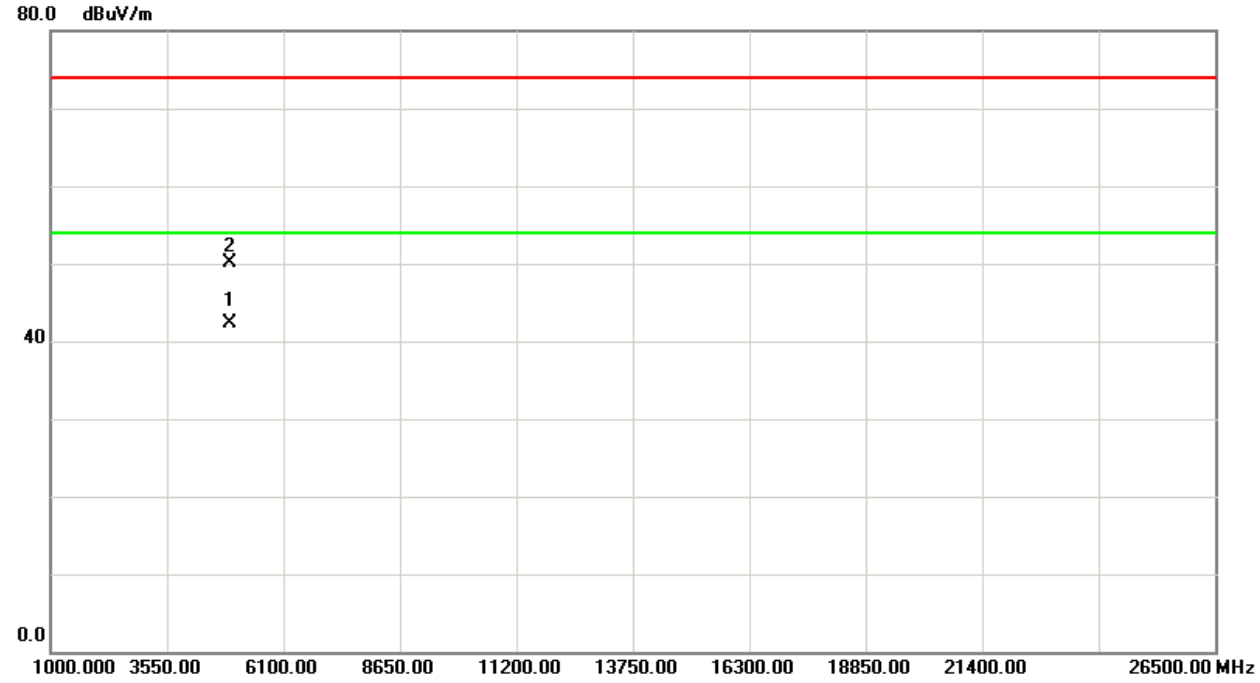
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH11 (Above 1000 MHz, Vertical)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	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		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2468.50	**H**	**68.20**	**59.56**	**32.19**	**100.39**	**91.75**			**X/F**
2483.50	H	30.24	14.63	32.17	62.41	46.80	74.00	54.00	X/E
4923.74	H	43.20	33.53	6.59	49.79	40.12	74.00	54.00	X/H

Remark：

(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 。

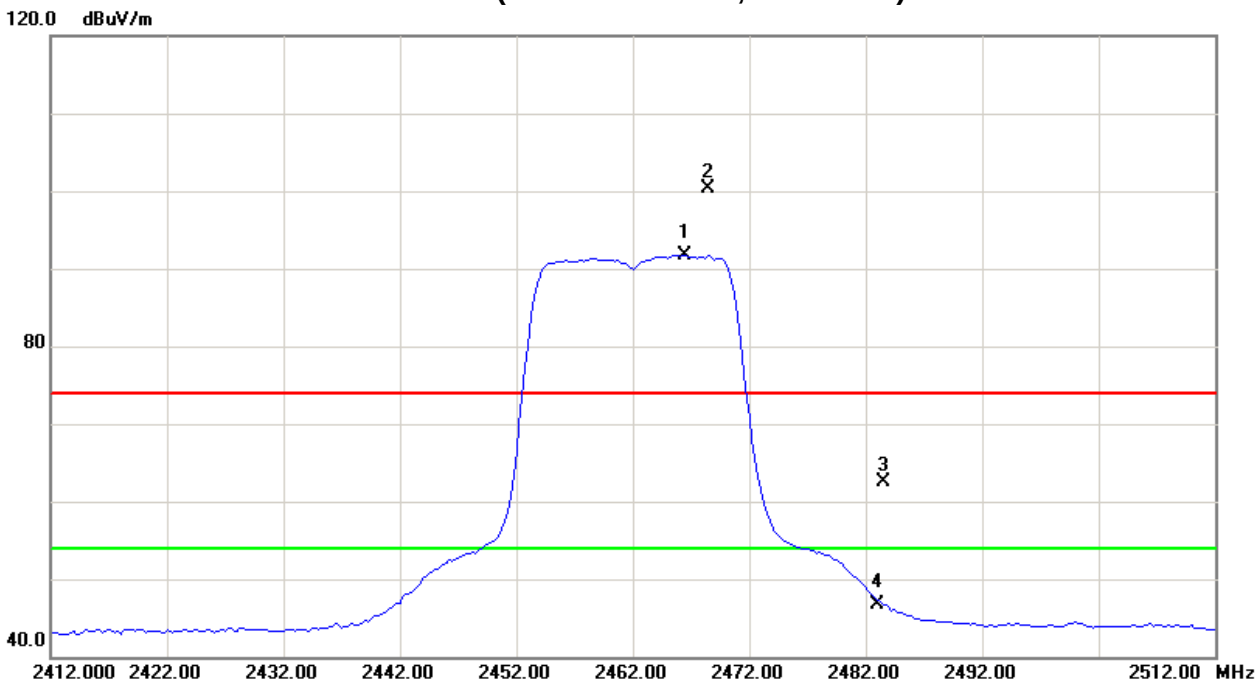
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

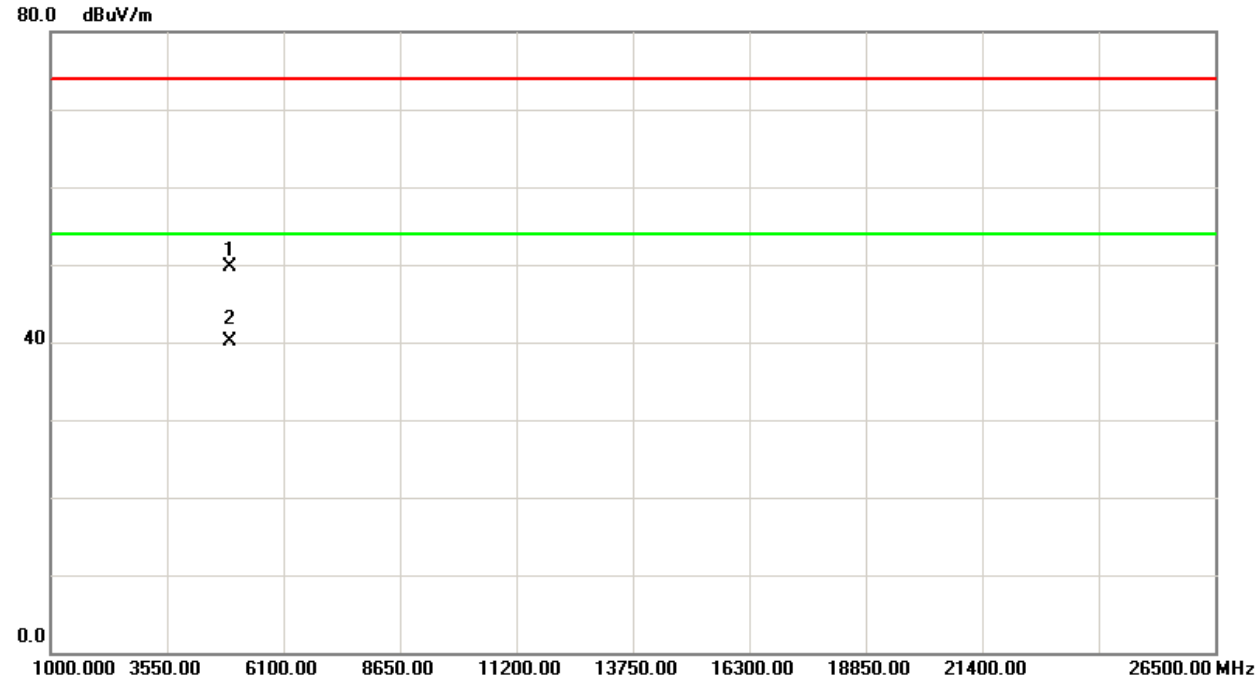
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH11 (Above 1000 MHz, Horizontal)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	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.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	33.30	19.46	32.28	65.58	51.74	74.00	54.00	X/E
2408.75	**V**	**76.40**	**67.25**	**32.26**	**108.66**	**99.51**			**X/F**
4823.98	V	45.78	38.71	6.19	51.97	44.90	74.00	54.00	X/H

Remark：

(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 。

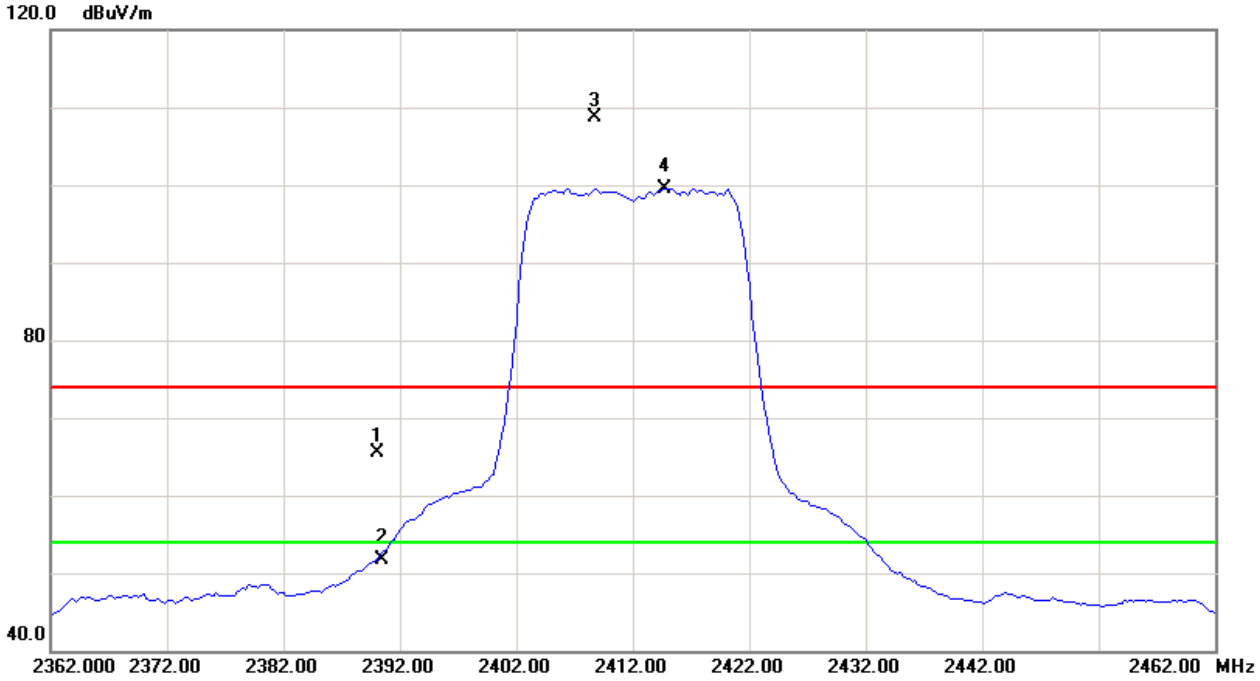
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

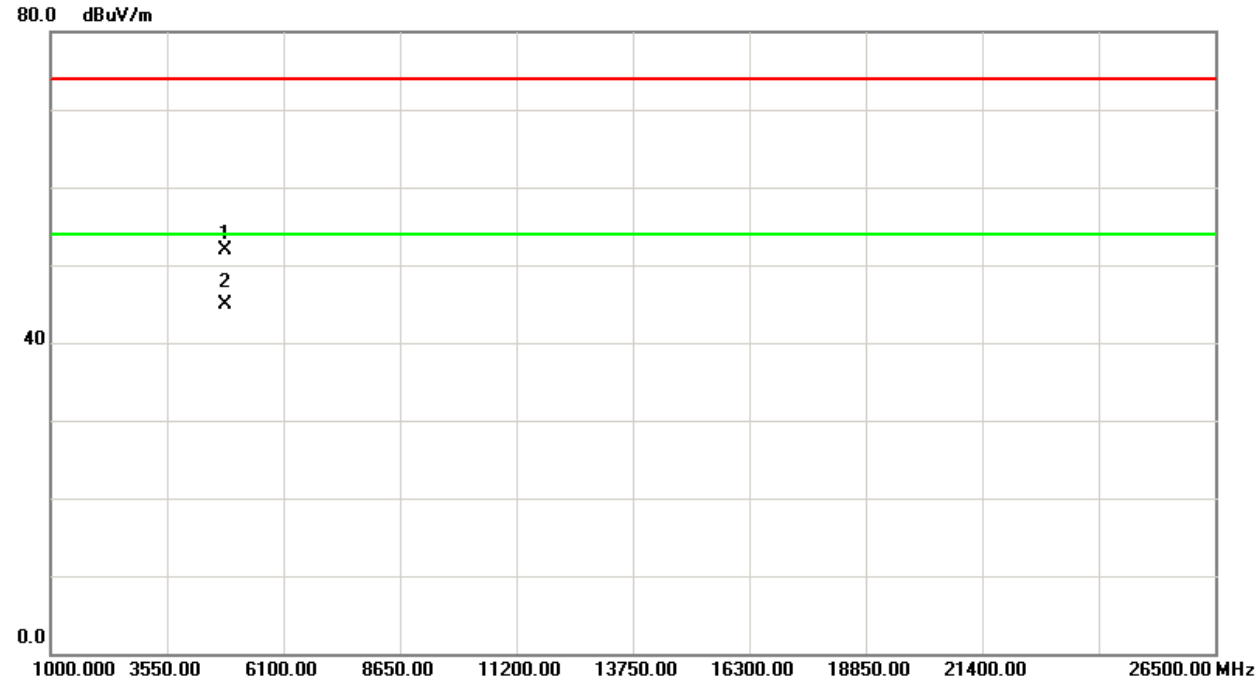
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH01 (Above 1000 MHz, Vertical)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	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.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	H	25.45	12.43	32.28	57.73	44.71	74.00	54.00	X/E
2409.00	**H**	**67.41**	**57.12**	**32.26**	**99.67**	**89.38**			**X/F**
4824.00	H	43.93	34.73	6.19	50.12	40.92	74.00	54.00	X/H

Remark：

(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 。

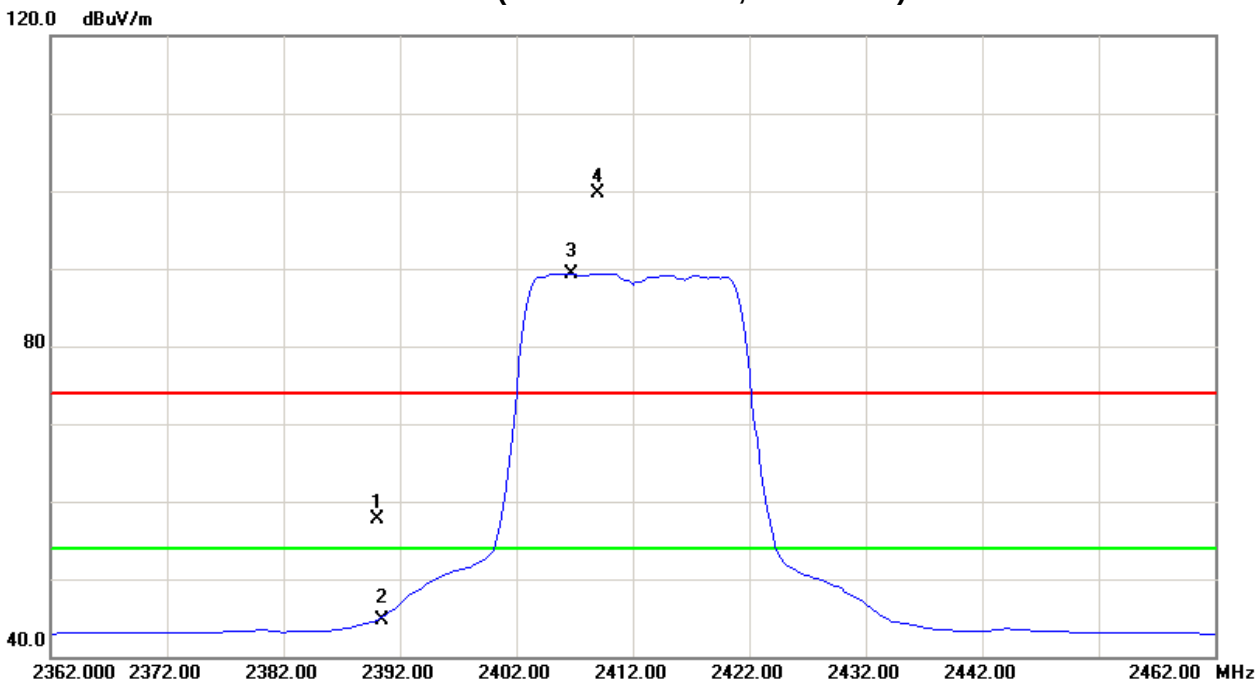
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

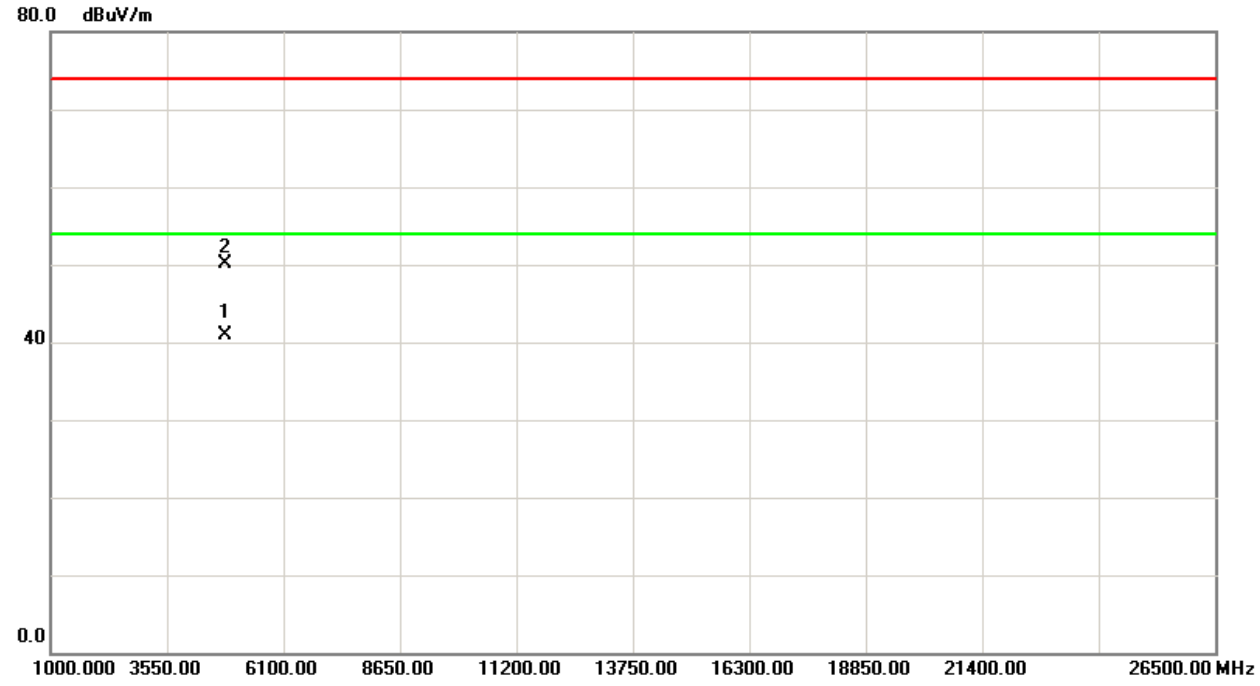
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH01 (Above 1000 MHz, Horizontal)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage:	AC 120V/60Hz
Test Mode:	TX N-20M MODE 2437MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2433.75	**V**	**76.94**	**67.45**	**32.23**	**109.17**	**99.68**			**X/F**
4874.04	V	45.48	36.77	6.39	51.87	43.16	74.00	54.00	X/H

Remark：

(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 。

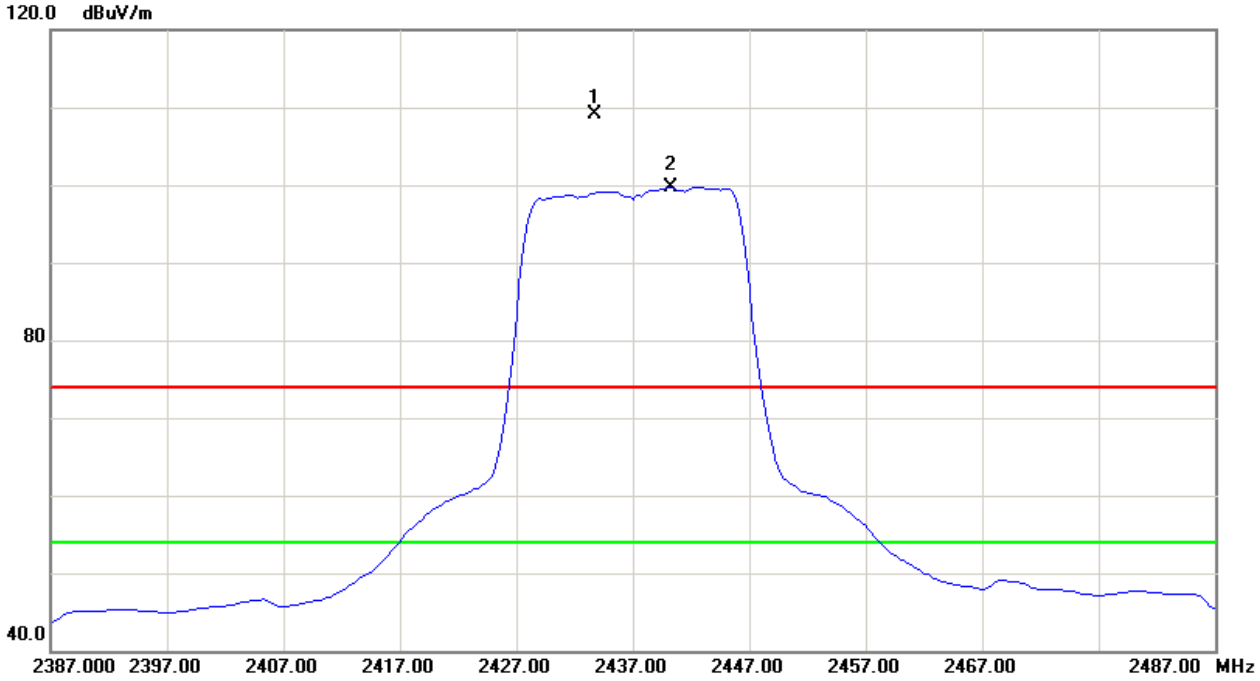
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

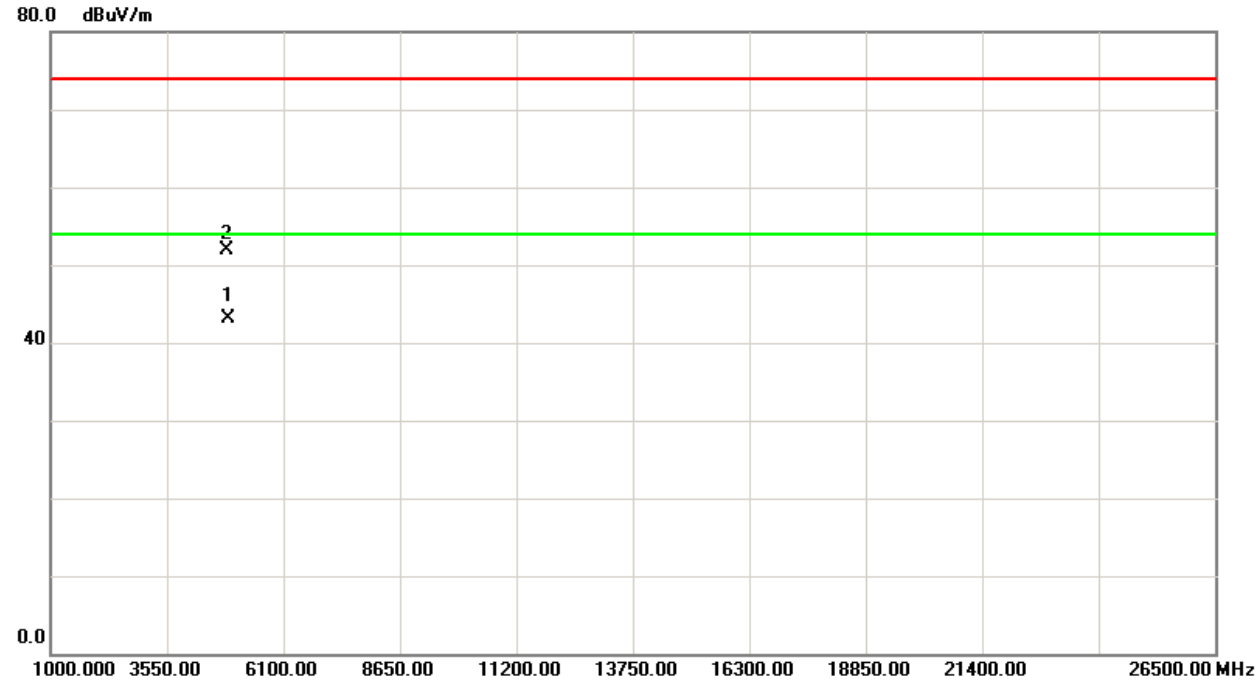
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH06 (Above 1000 MHz, Vertical)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage:	AC 120V/60Hz
Test Mode:	TX N-20M MODE 2437MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2433.75	**H**	**65.78**	**58.36**	**32.23**	**98.01**	**90.59**			**X/F**
4873.75	H	45.64	34.42	6.39	52.03	40.81	74.00	54.00	X/H

Remark：

(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 。

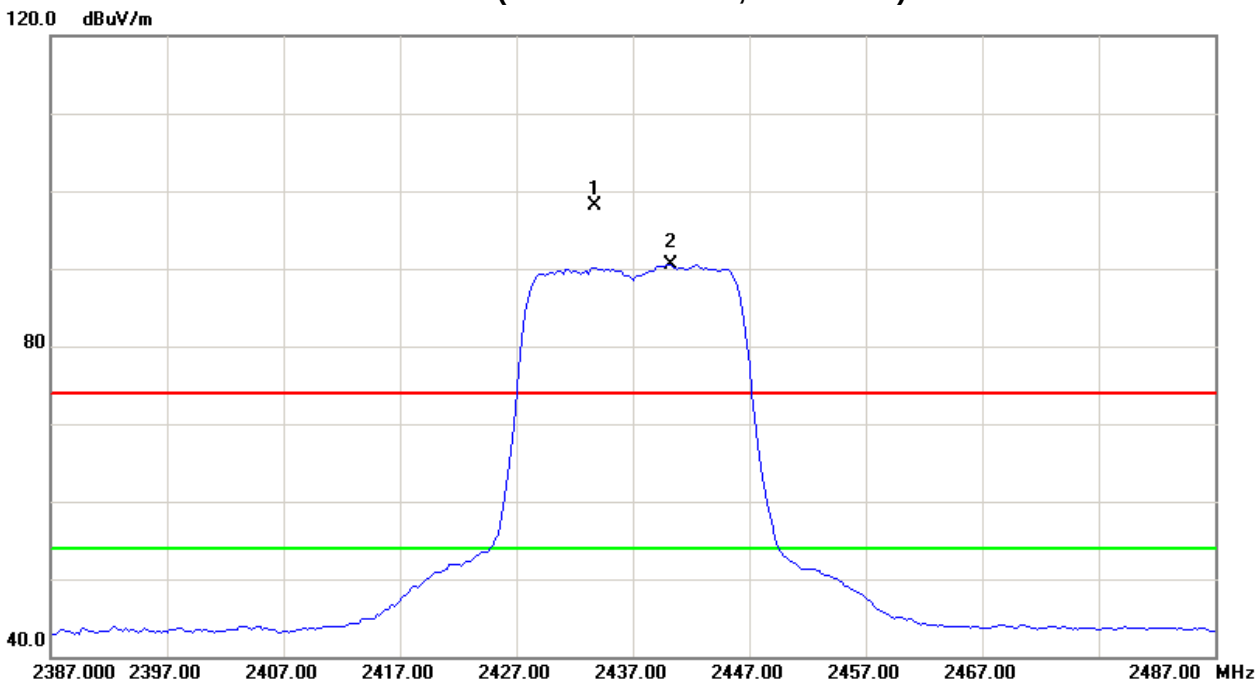
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

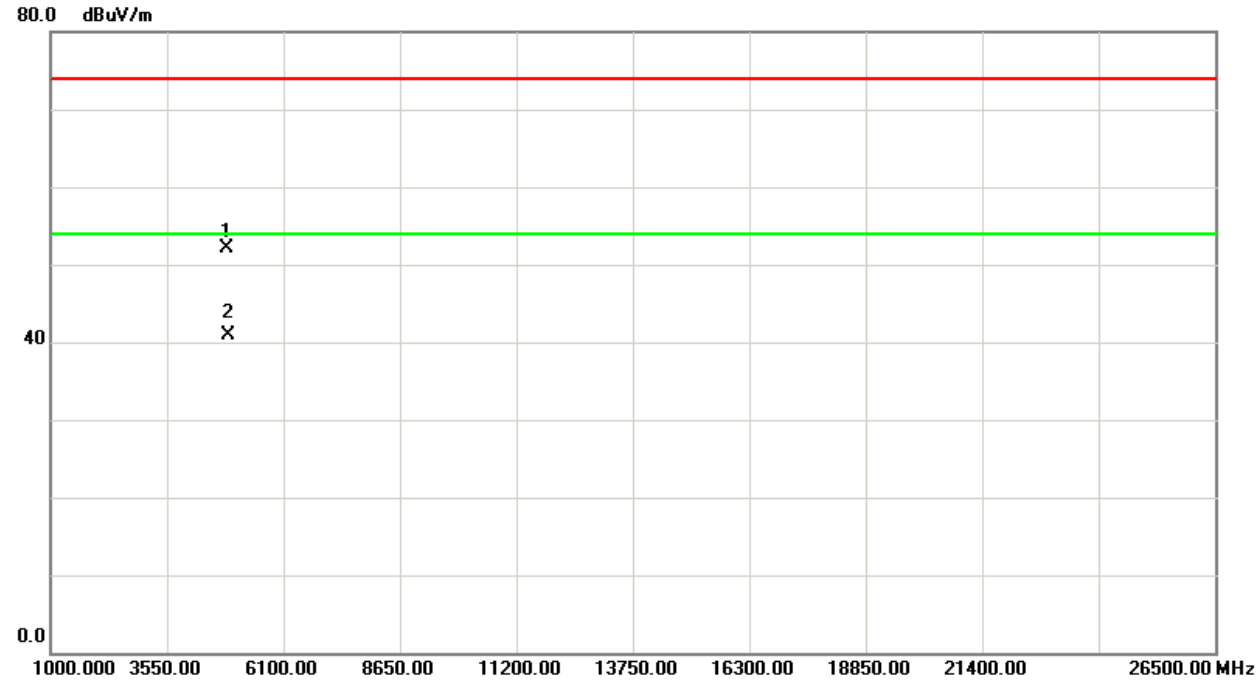
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH06 (Above 1000 MHz, Horizontal)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	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		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2458.75	**V**	**78.03**	**68.77**	**32.20**	**110.23**	**100.97**			**X/F**
2483.50	V	38.85	21.72	32.17	71.02	53.89	74.00	54.00	X/E
4824.10	V	44.48	35.73	6.59	51.07	42.32	74.00	54.00	X/H

Remark：

(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 。

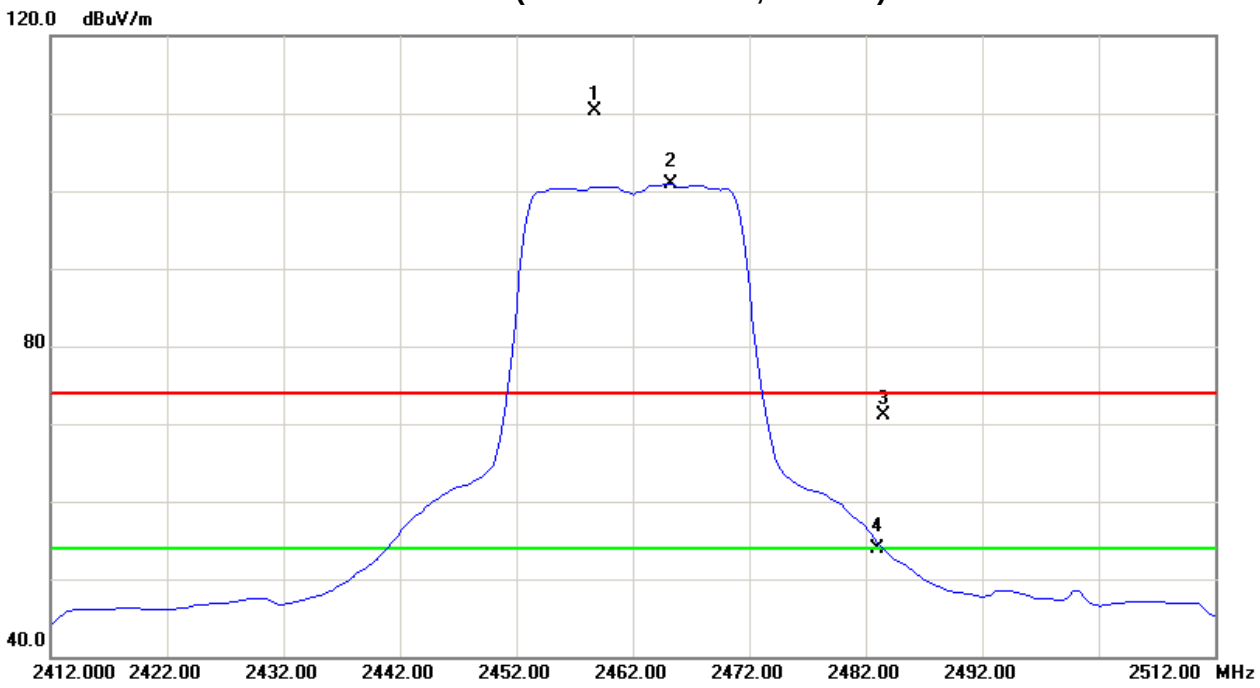
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

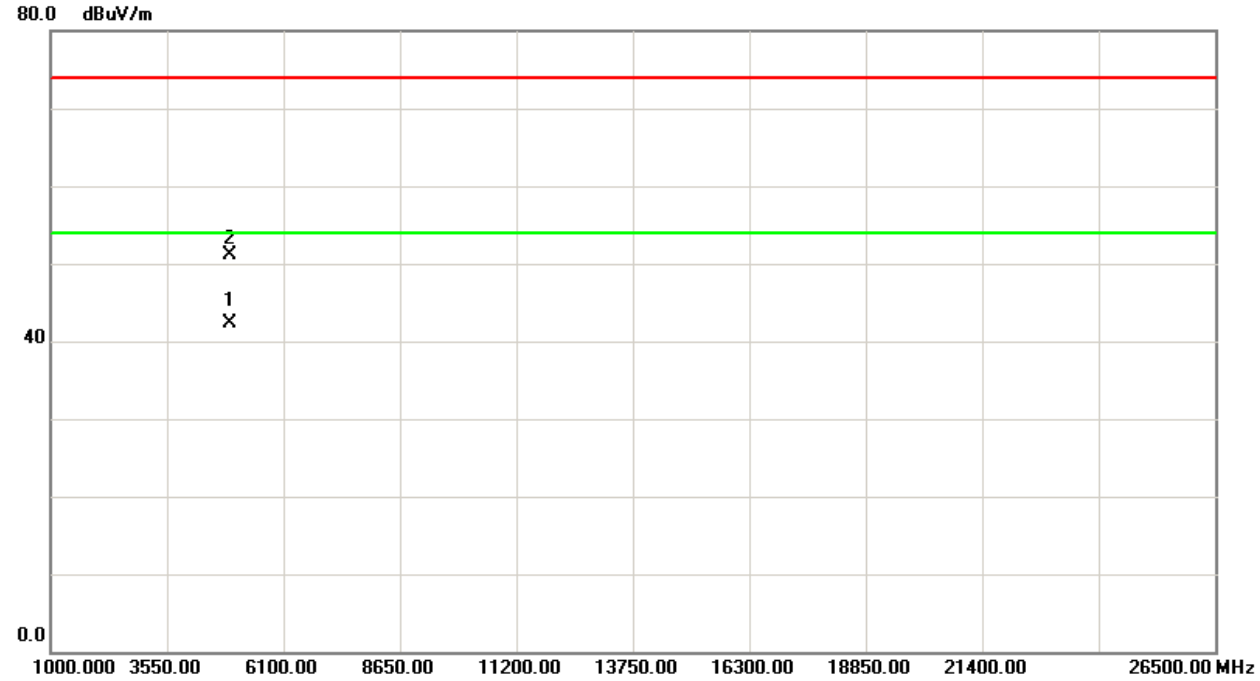
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH11 (Above 1000 MHz, Vertical)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	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		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2459.25	**H**	**66.65**	**57.15**	**32.20**	**98.85**	**89.35**			**X/F**
2483.50	H	26.19	14.09	32.17	58.36	46.26	74.00	54.00	X/E
4924.07	H	43.76	34.71	6.59	50.35	41.30	74.00	54.00	X/H

Remark：

(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 。

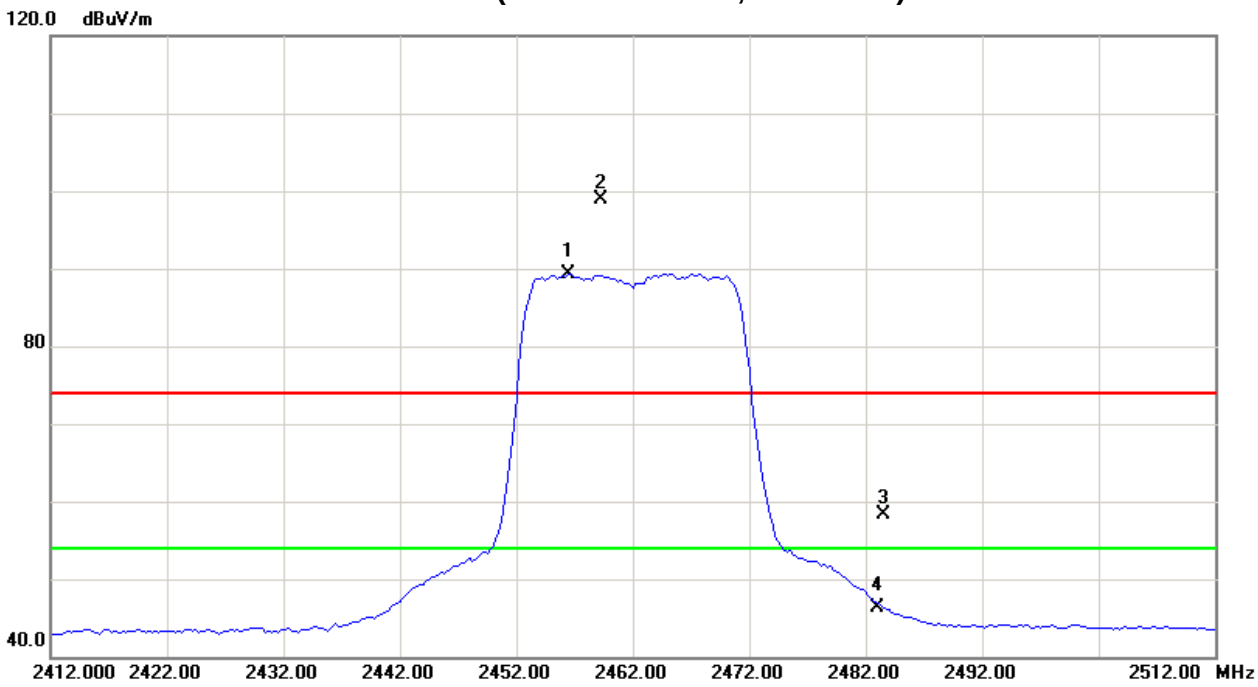
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

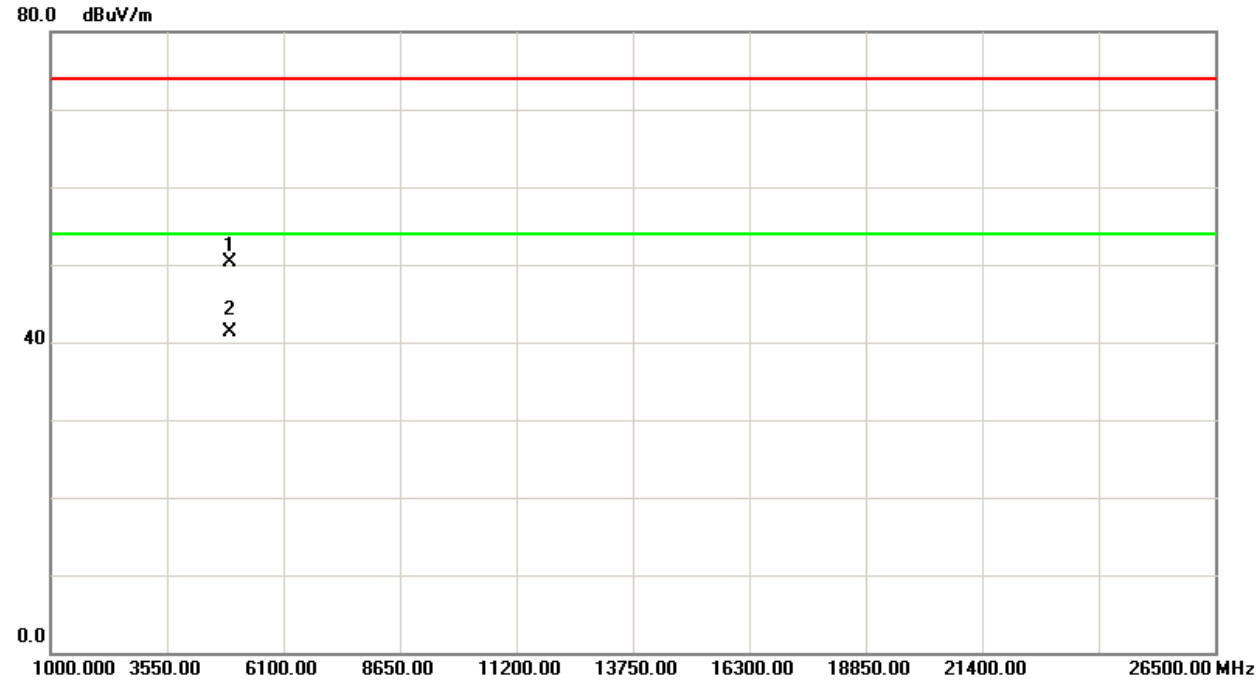
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH11 (Above 1000 MHz, Horizontal)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	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.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	31.10	20.71	32.28	63.38	52.99	74.00	54.00	X/E
2412.40	**V**	**72.72**	**63.26**	**32.26**	**104.98**	**95.52**			**X/F**
4843.95	V	43.22	32.46	6.27	49.49	38.73	74.00	54.00	X/H

Remark：

(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 。

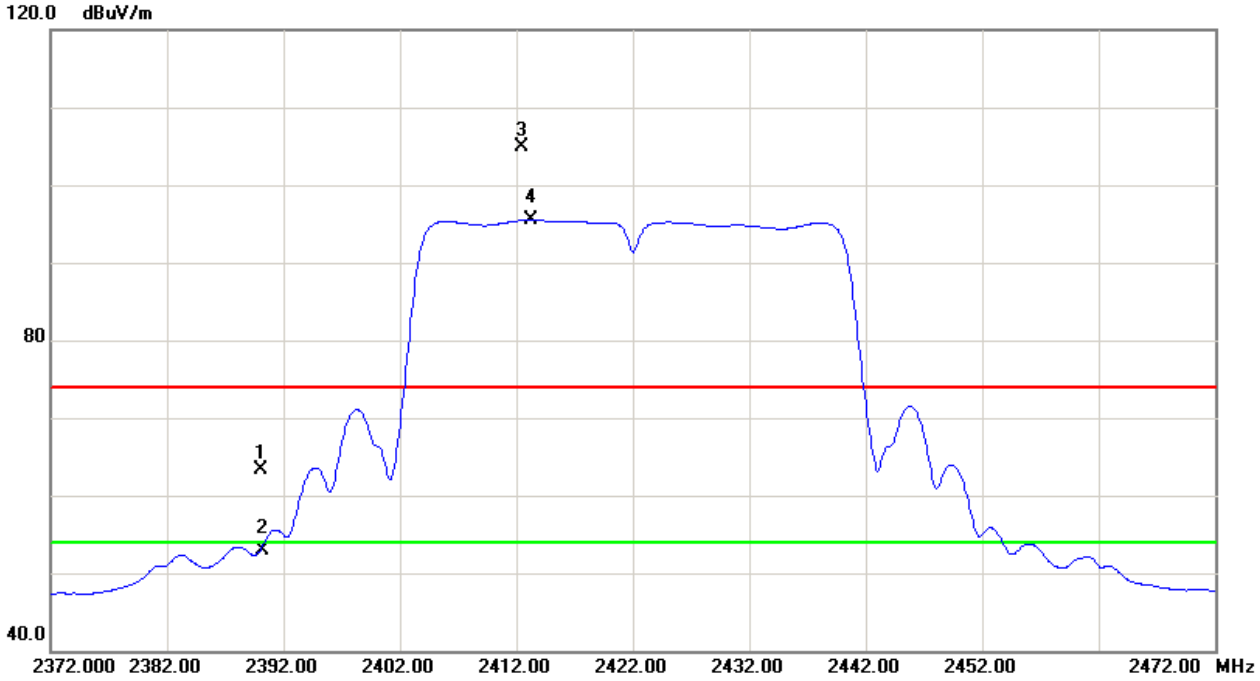
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

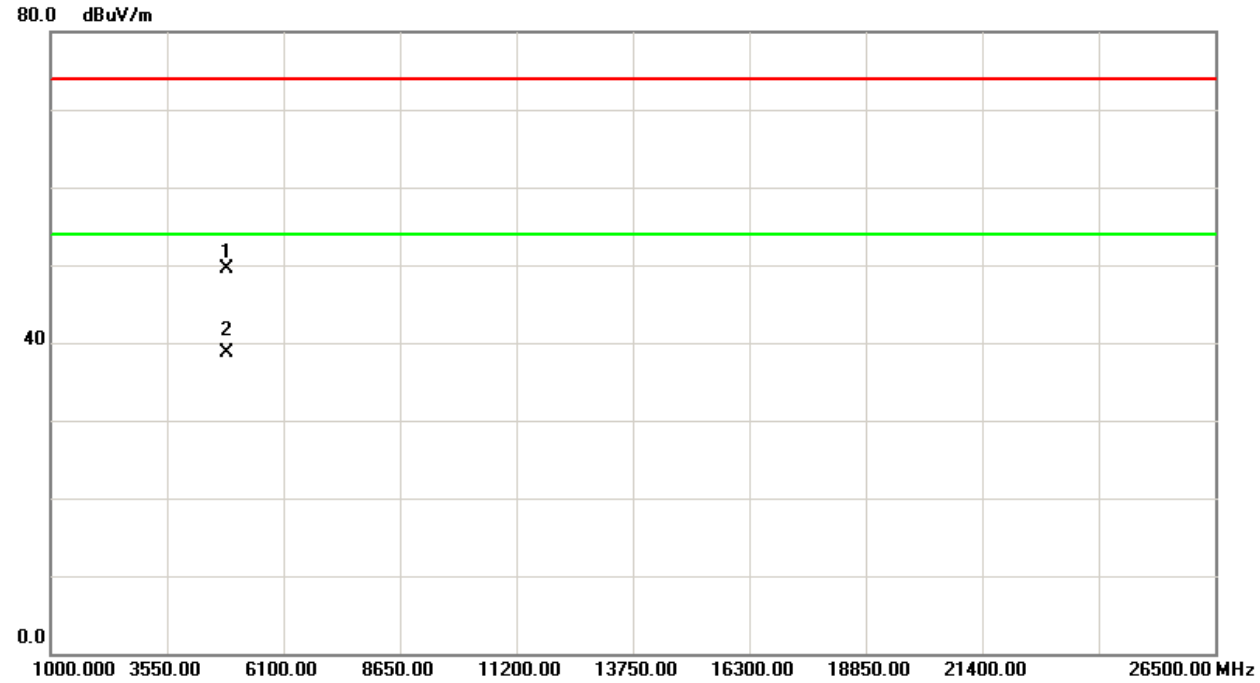
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH03 (Above 1000 MHz, Vertical)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	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.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	H	20.96	12.42	32.28	53.24	44.70	74.00	54.00	X/E
2438.60	**H**	**61.17**	**51.79**	**32.22**	**93.39**	**84.01**			**X/F**
4844.02	H	42.16	31.60	6.27	48.43	37.87	74.00	54.00	X/H

Remark：

(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 。

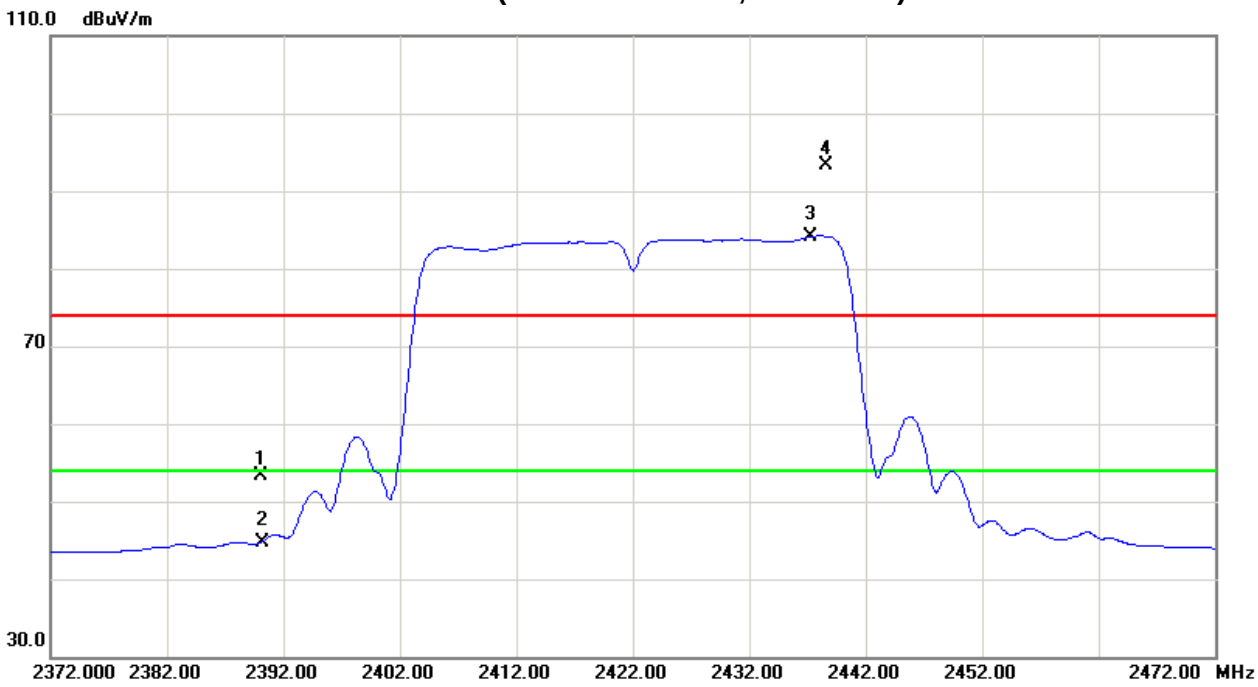
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

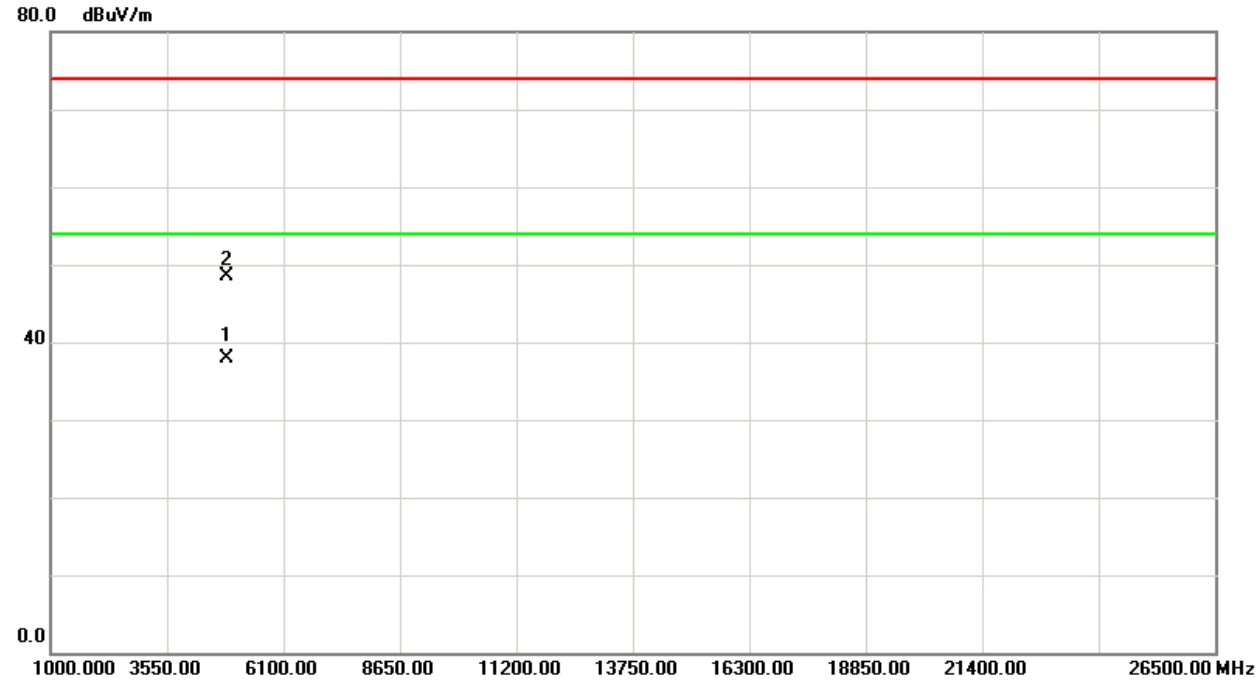
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH03 (Above 1000 MHz, Horizontal)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage:	AC 120V/60Hz
Test Mode:	TX N-40M MODE 2437MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2447.40	**V**	**72.45**	**63.17**	**32.22**	**104.67**	**95.39**			**X/F**
4874.10	V	43.06	33.37	6.39	49.45	39.76	74.00	54.00	X/H

Remark：

(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 。

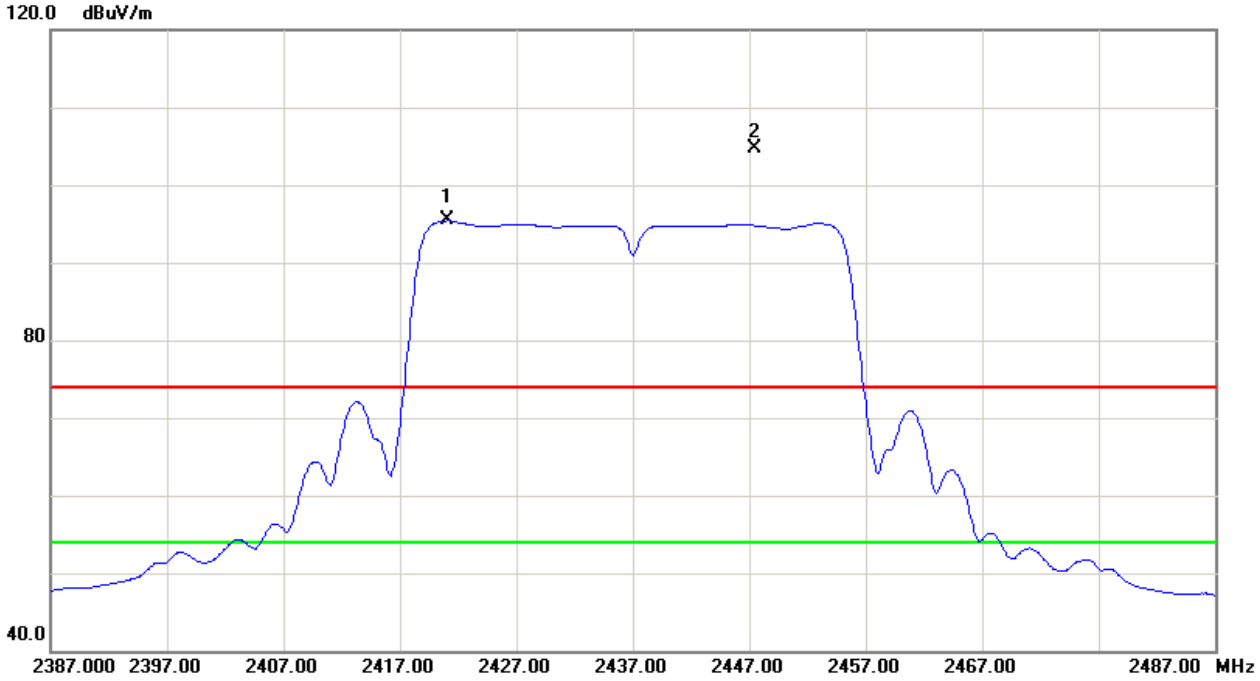
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

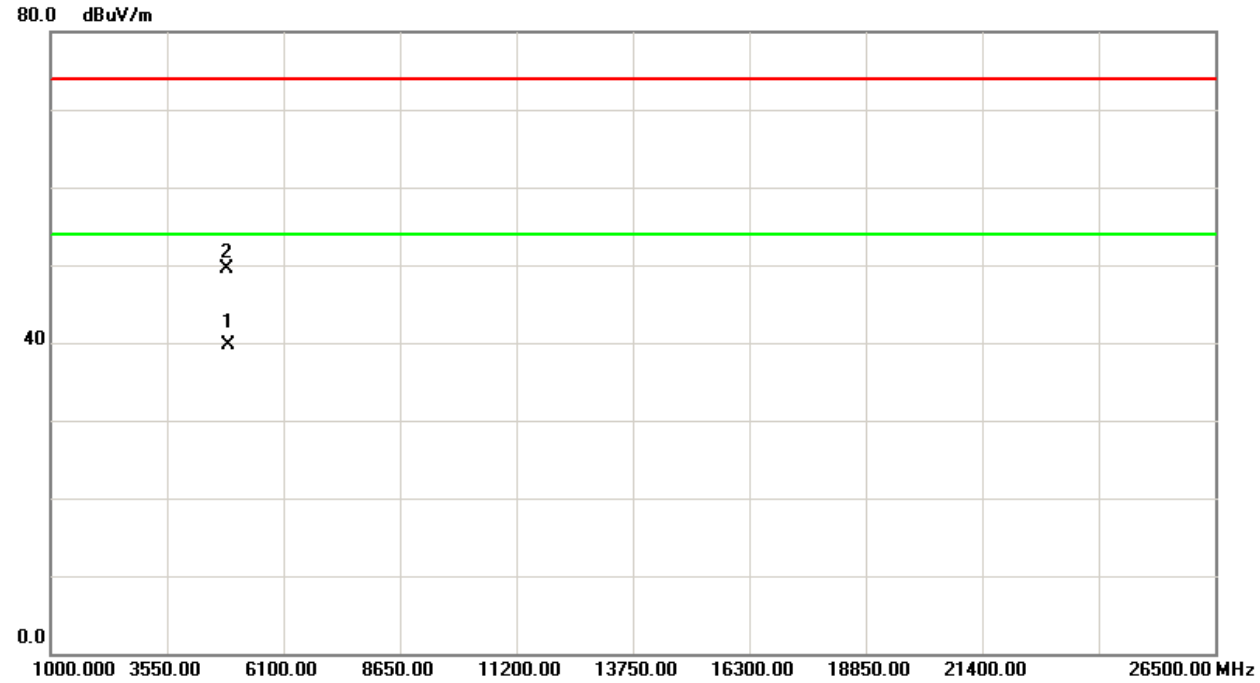
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH06 (Above 1000 MHz, Vertical)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage:	AC 120V/60Hz
Test Mode:	TX N-40M MODE 2437MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2453.60	**H**	**62.07**	**52.90**	**32.21**	**94.28**	**85.11**			**X/F**
4874.00	H	42.41	32.12	6.39	48.80	38.51	74.00	54.00	X/H

Remark：

(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 。

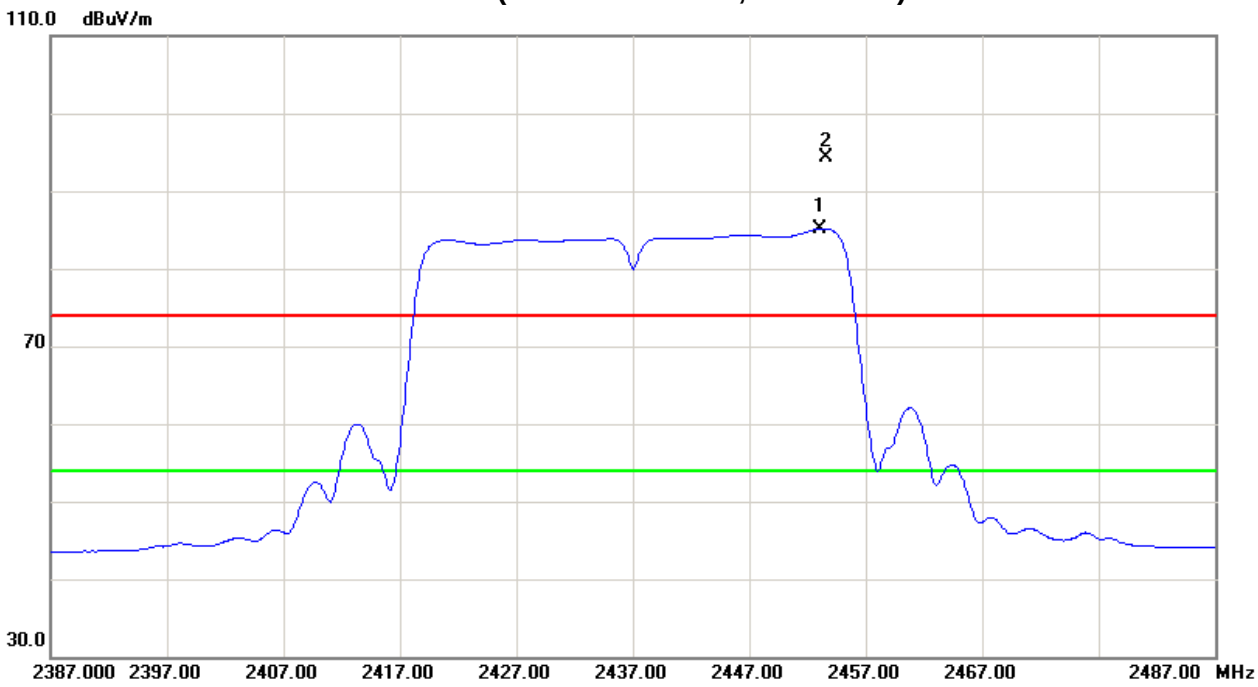
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

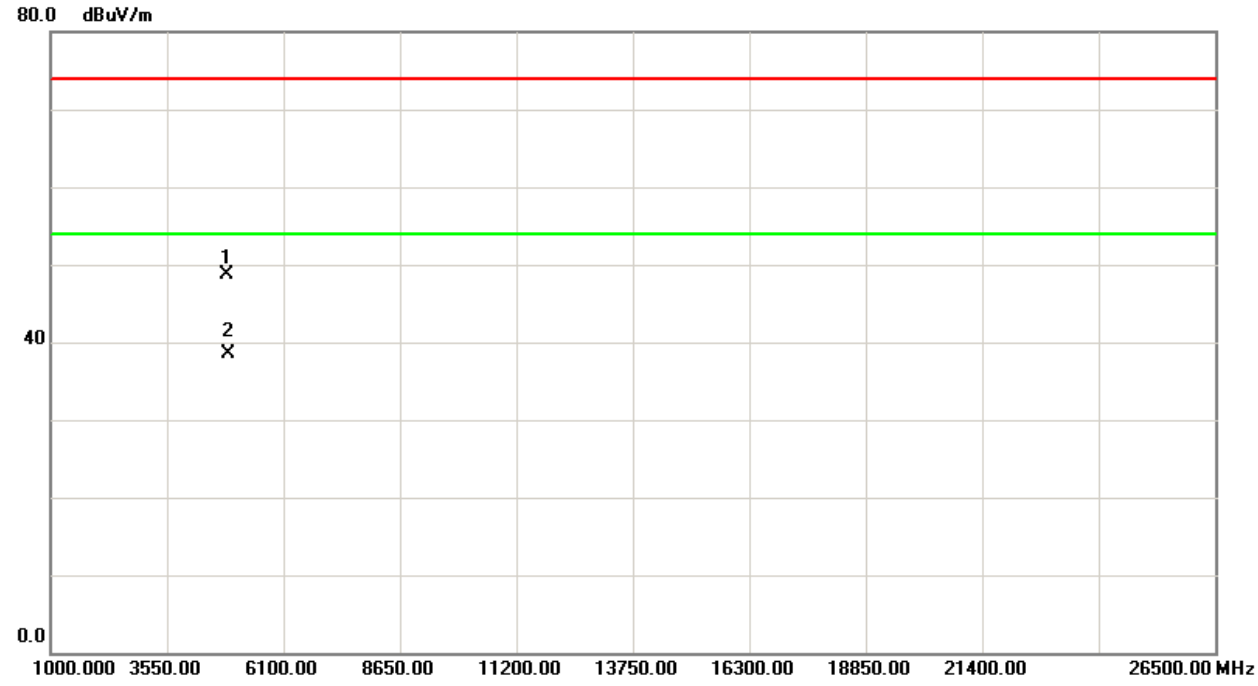
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH06 (Above 1000 MHz, Horizontal)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	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		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2442.30	**V**	**71.83**	**62.78**	**32.23**	**104.06**	**95.01**			**X/F**
2483.50	V	31.13	21.08	32.17	63.30	53.25	74.00	54.00	X/E
4903.80	V	42.58	33.89	6.51	49.09	40.40	74.00	54.00	X/H

Remark：

(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 。

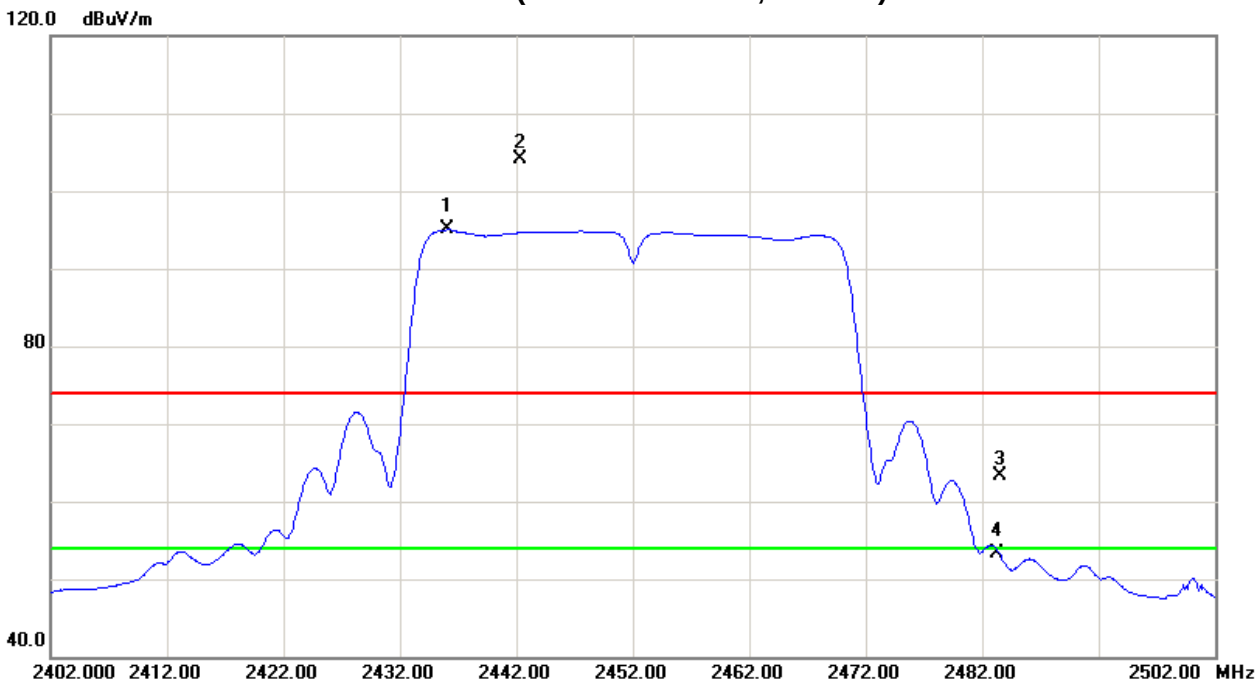
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

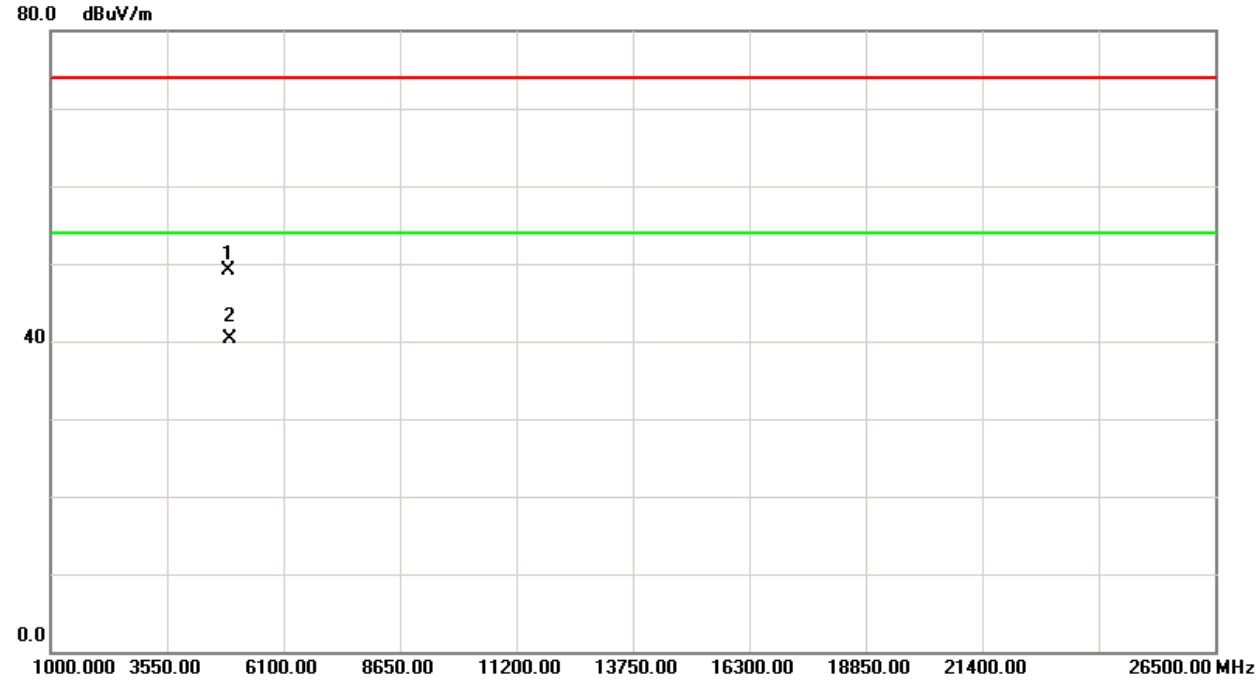
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

TX CH09 (Above 1000 MHz, Vertical)





EUT:	Wireless N150 Cloud Router	Model Name:	DIR-600L
Temperature:	25 ℃	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		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2462.40	**H**	**62.99**	**53.32**	**32.21**	**95.20**	**85.53**			**X/F**
2483.50	H	24.99	14.84	32.17	57.16	47.01	74.00	54.00	X/E
4904.00	H	41.08	30.12	6.51	47.59	36.63	74.00	54.00	X/H

Remark：

(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 。

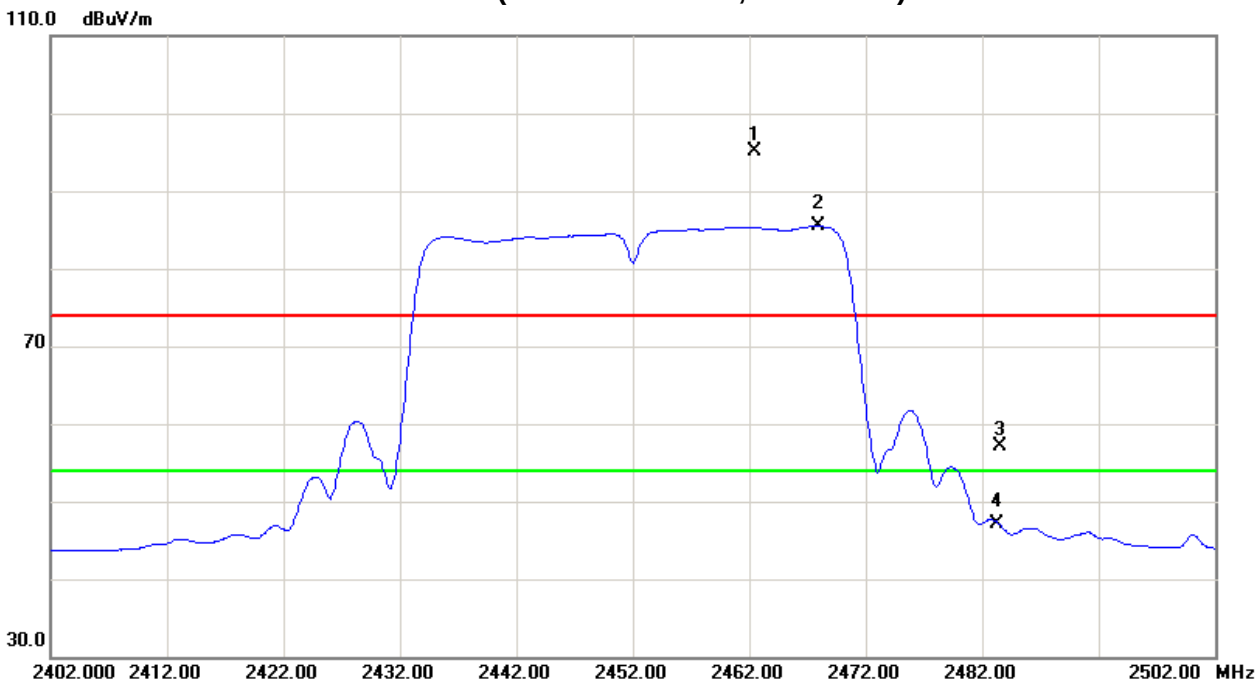
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

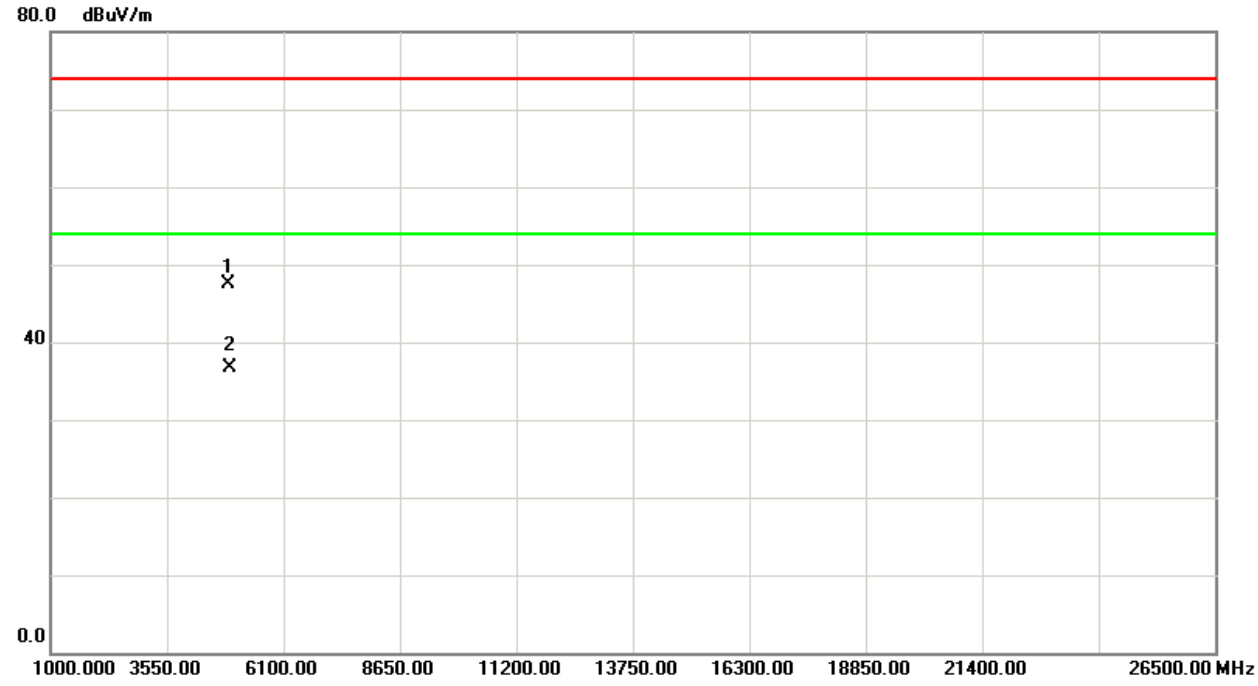
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(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

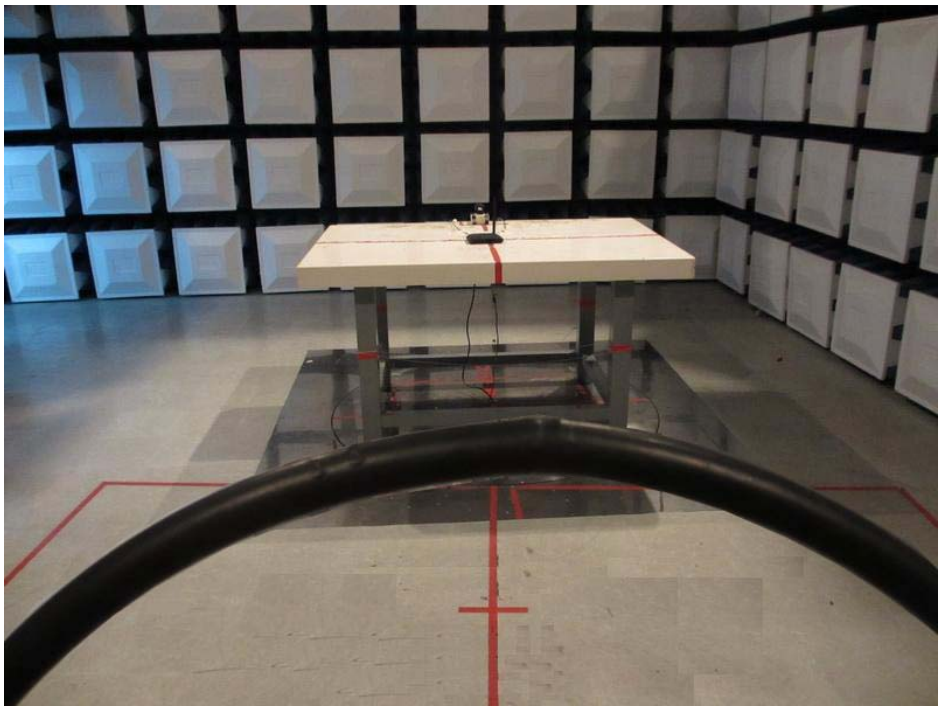
TX CH09 (Above 1000 MHz, Horizontal)

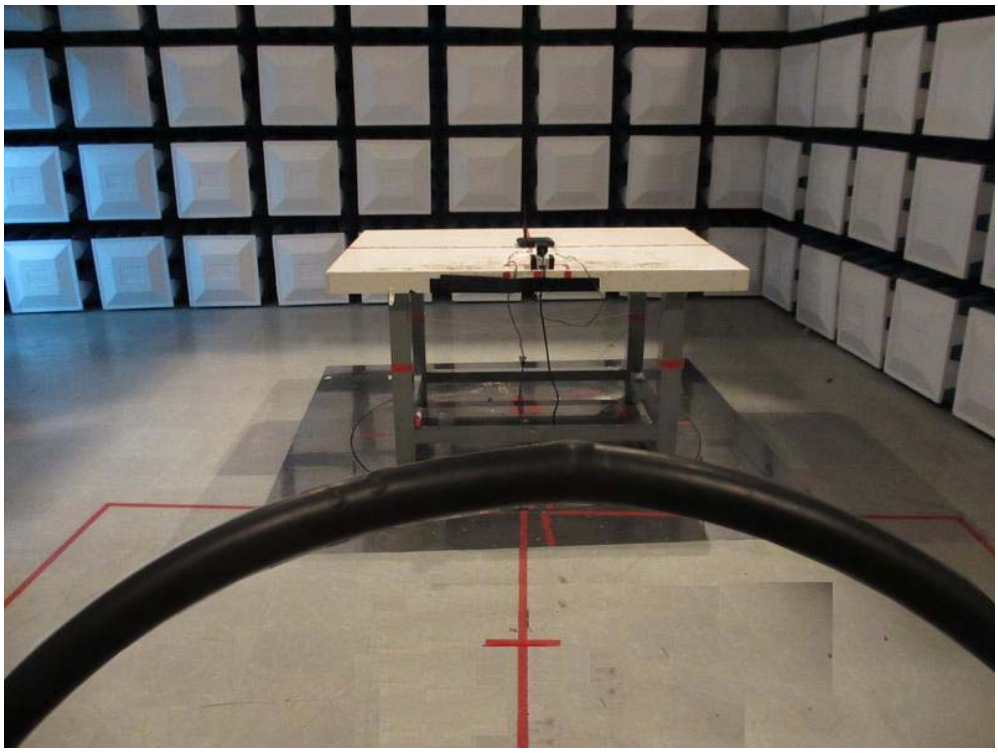




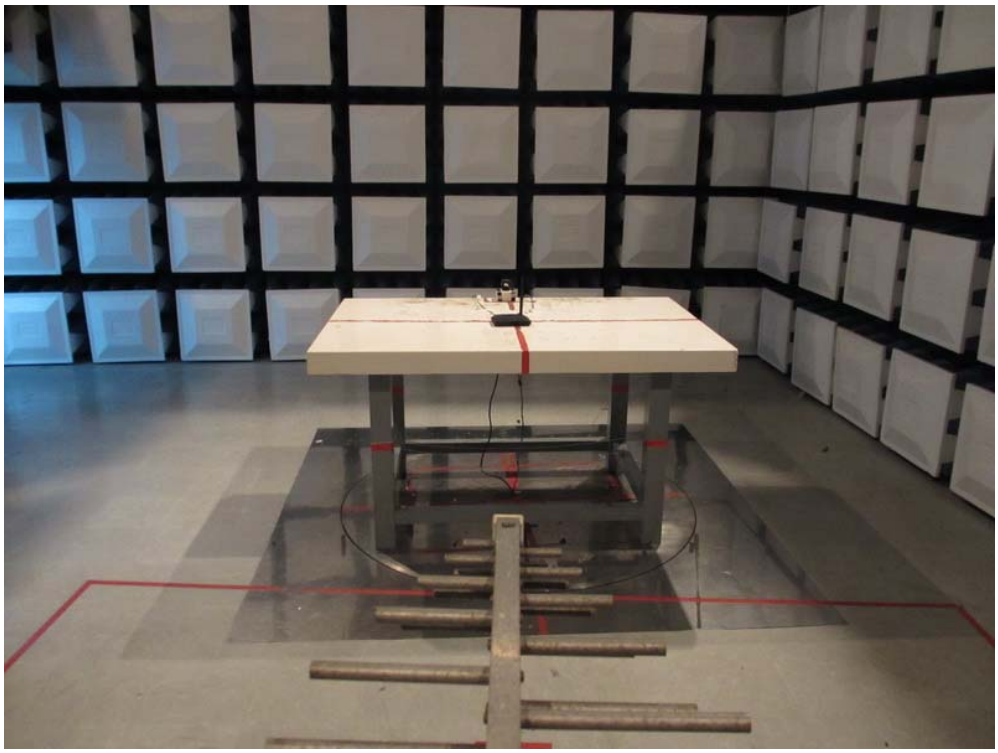
4.2.10. EUT TEST PHOTO

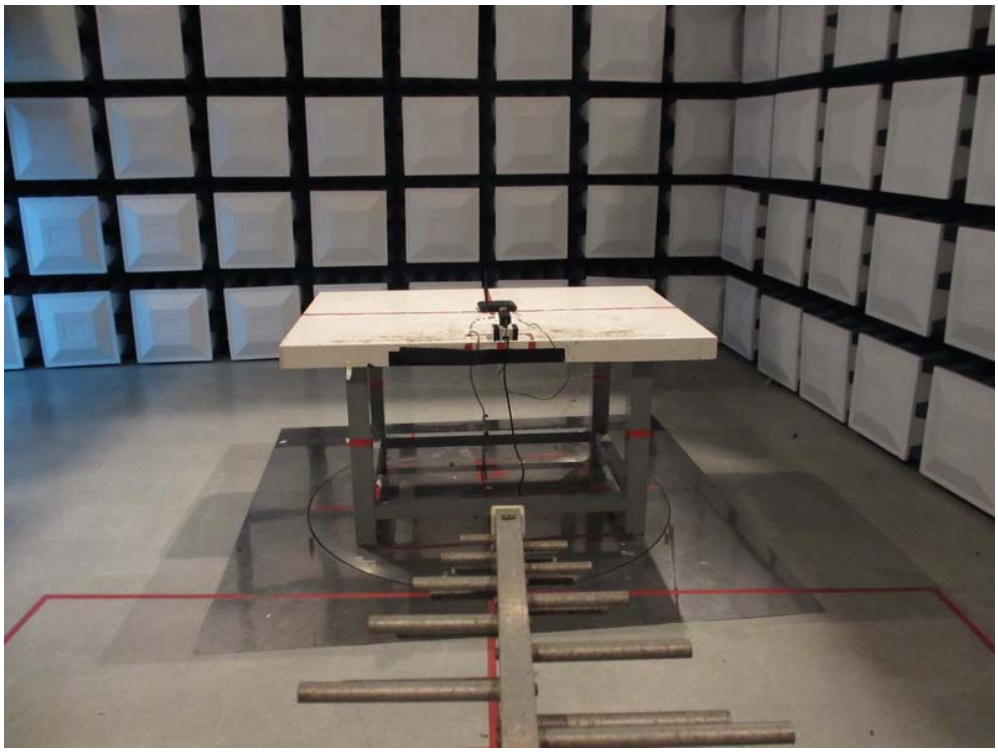
Radiated Measurement Photos
9K~ 30MHz





Radiated Measurement Photos
30MHz~1000MHz





Radiated Measurement Photos
Above 1000MHz

5. BANDWIDTH TEST

5.1 Applied procedures / limit

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

5.1.1 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.

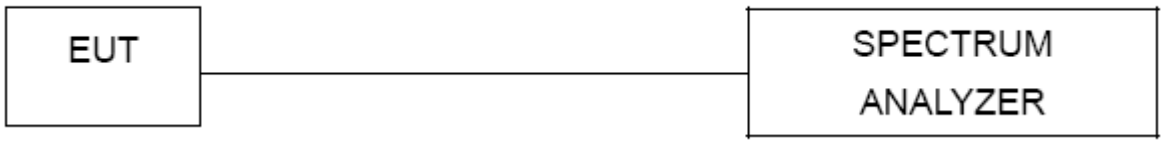
5.1.2 TEST PROCEDURE

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 = 5 ms.

5.1.3 DEVIATION FROM STANDARD

No deviation.

5.1.4 TEST SETUP



5.1.5 EUT OPERATION CONDITIONS

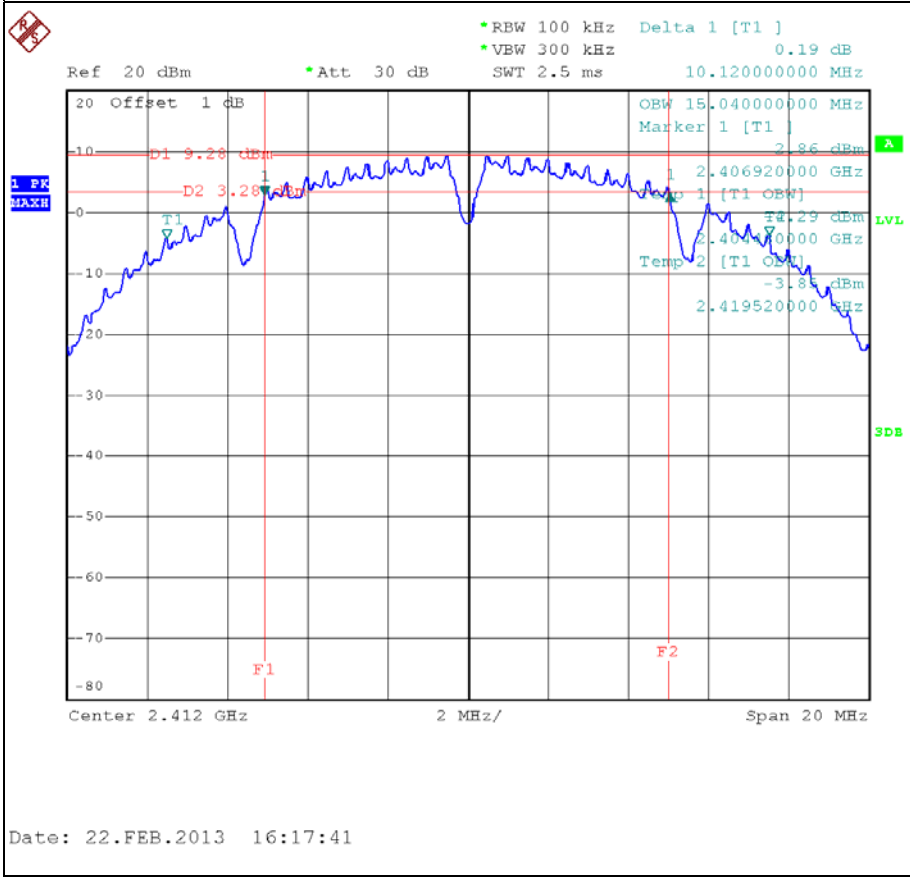
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

5.1.6 TEST RESULTS

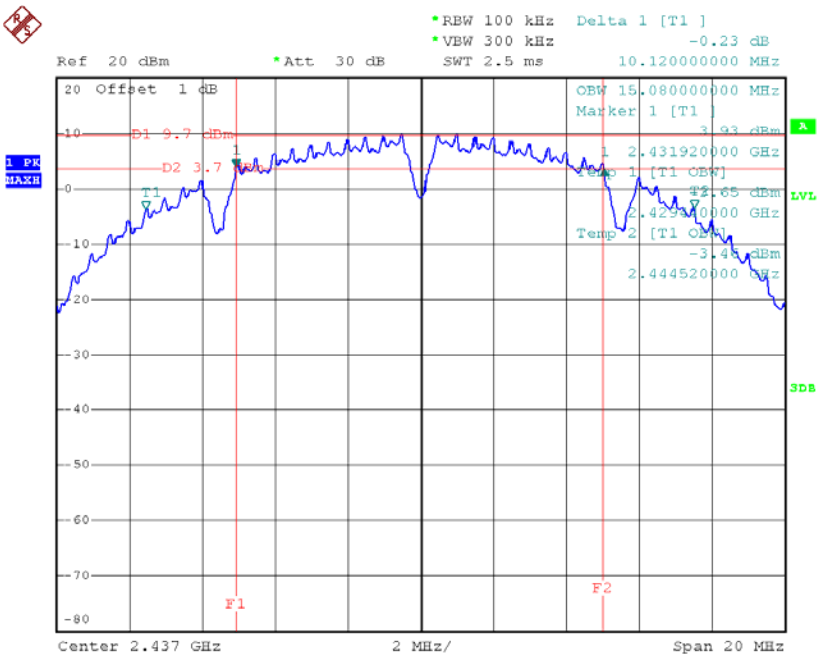
EUT：	Wireless N150 Cloud Router	Model Name. ：	DIR-600L
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX B MODE /CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Bandwidth (MHz)	99% Occupied BW (MHz)	LIMIT (MHz)
CH01	2412	10.12	15.04	>=500KHz
CH06	2437	10.12	15.08	>=500KHz
CH11	2462	10.12	15.12	>=500KHz

TX CH 01

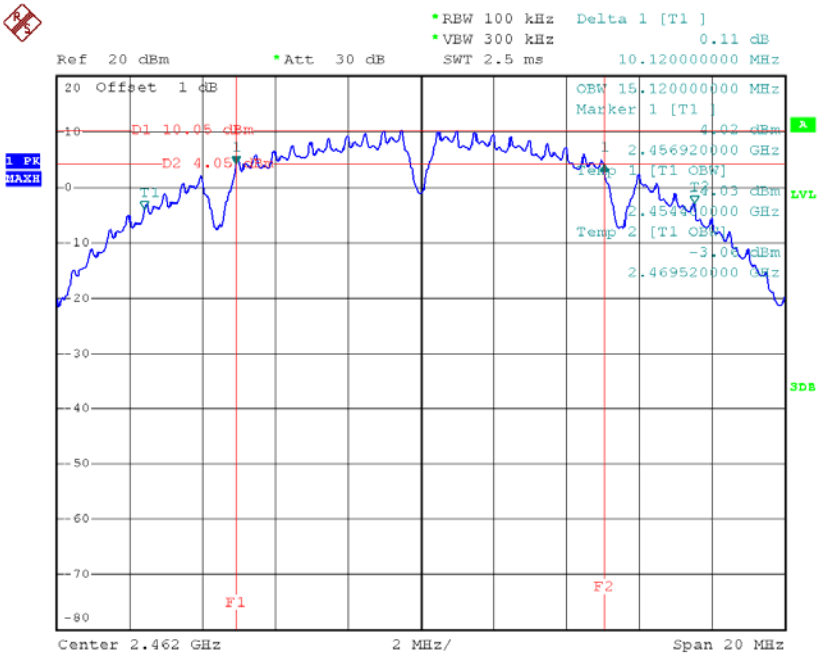


TX CH 06



Date: 22.FEB.2013 16:19:23

TX CH 11

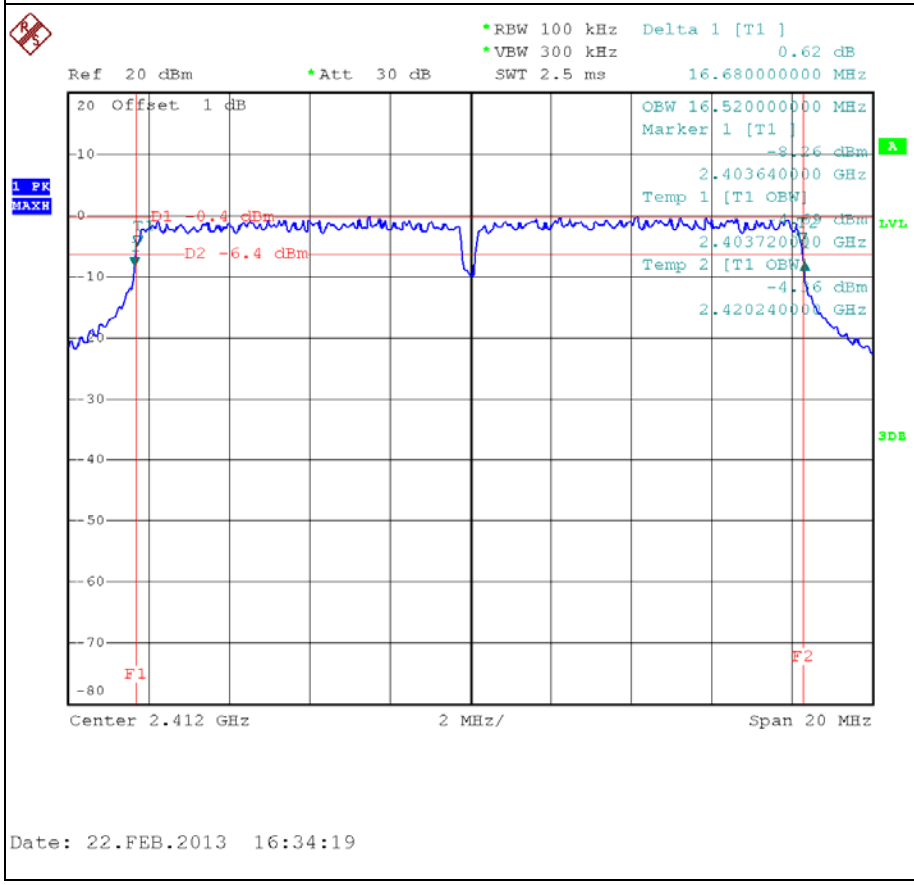


Date: 22.FEB.2013 16:20:21

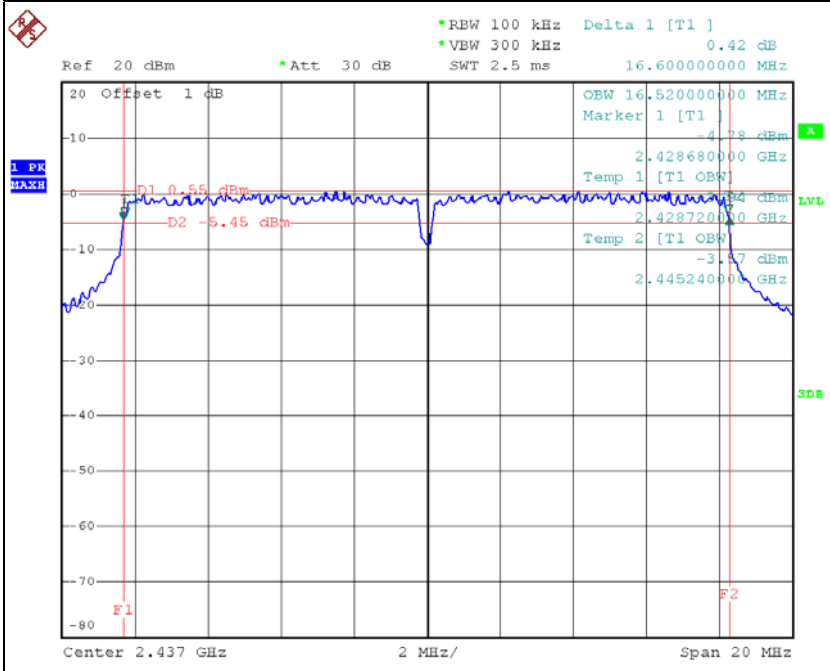
EUT：	Wireless N150 Cloud Router	Model Name. ：	DIR-600L
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX G MODE /CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Bandwidth (MHz)	99% Occupied BW (MHz)	LIMIT (MHz)
CH01	2412	16.68	16.52	>=500KHz
CH06	2437	16.60	16.52	>=500KHz
CH11	2462	16.68	16.56	>=500KHz

TX CH 01

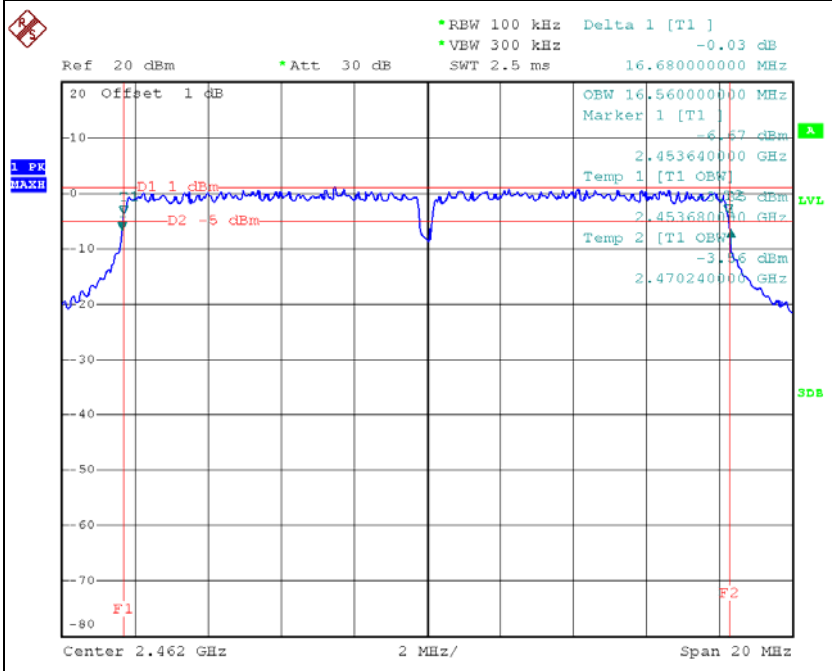


TX CH 06



Date: 22.FEB.2013 16:33:14

TX CH 11

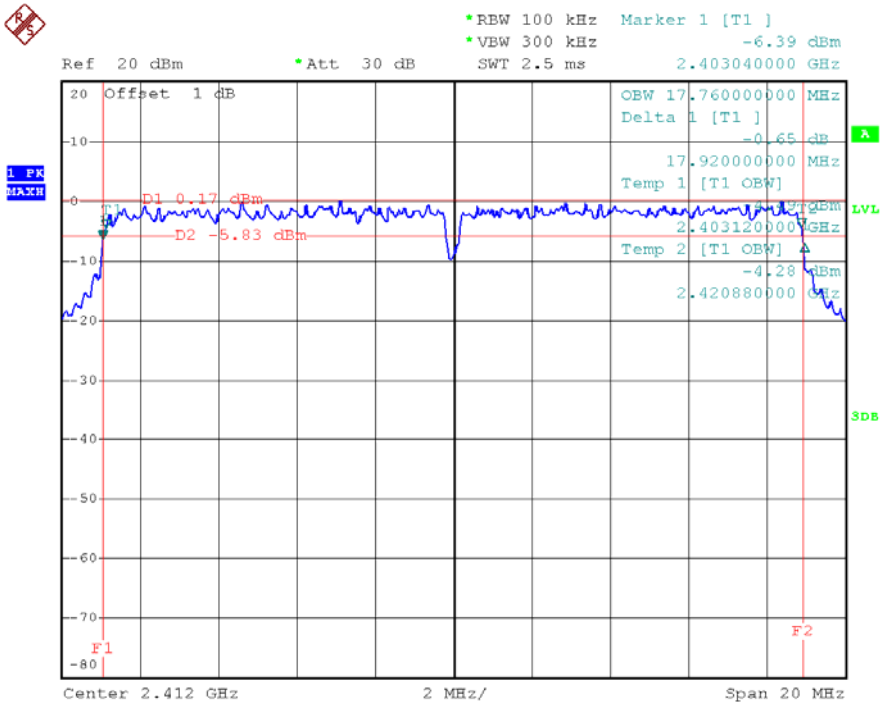


Date: 22.FEB.2013 16:28:54

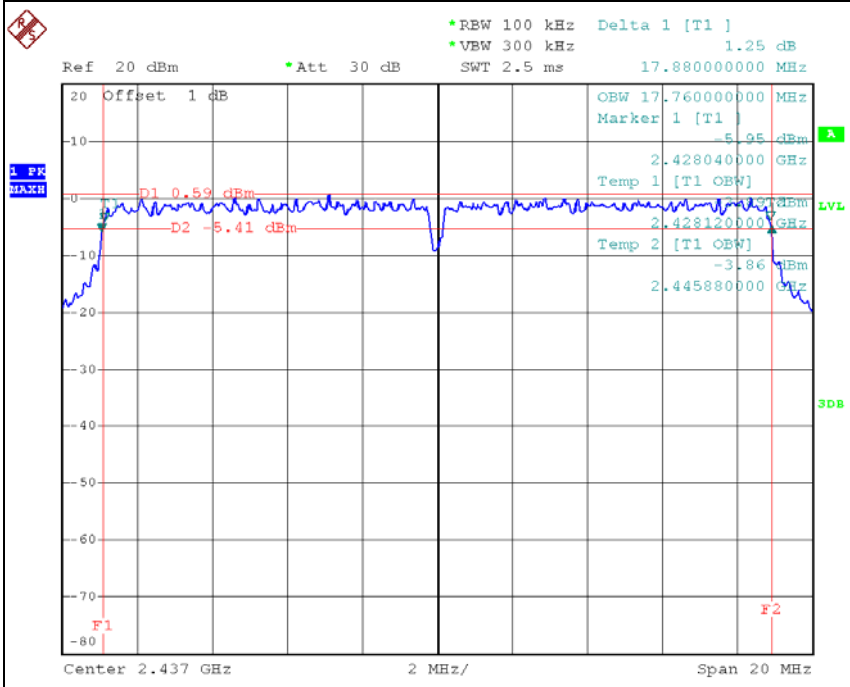
EUT：	Wireless N150 Cloud Router	Model Name. ：	DIR-600L
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N MODE -20MHz/ CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Bandwidth (MHz)	99% Occupied BW (MHz)	LIMIT (MHz)
CH01	2412	17.92	17.76	>=500KHz
CH06	2437	17.88	17.76	>=500KHz
CH11	2462	17.88	17.76	>=500KHz

TX CH 01

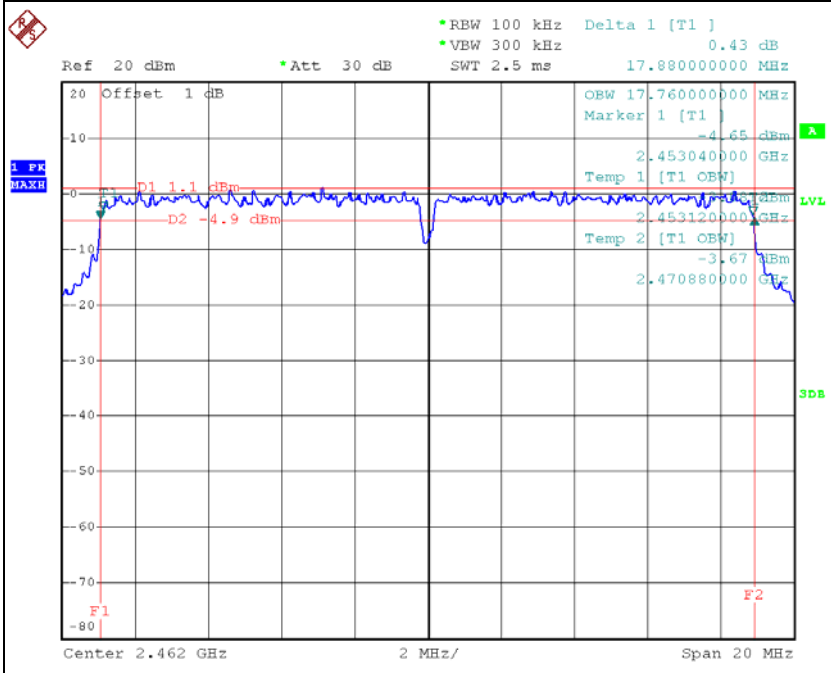


TX CH 06



Date: 22.FEB.2013 16:36:40

TX CH 11

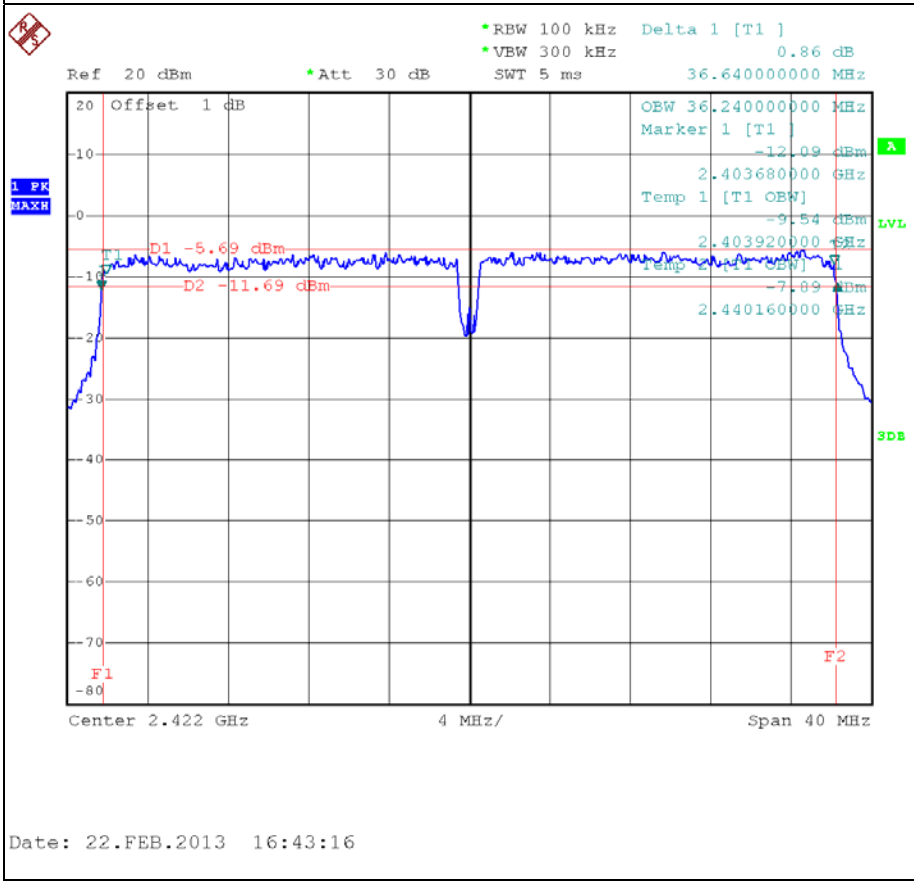


Date: 22.FEB.2013 16:39:19

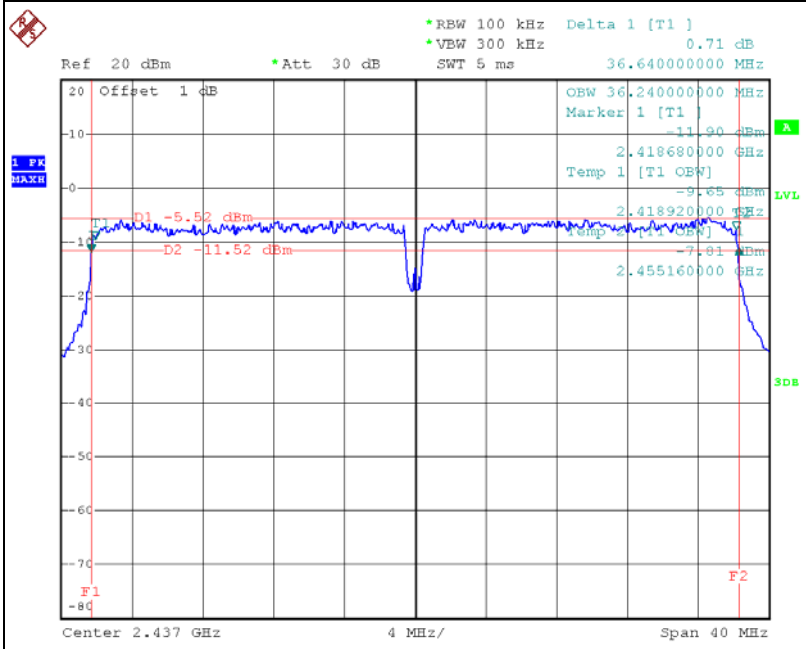
EUT：	Wireless N150 Cloud Router	Model Name. ：	DIR-600L
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N MODE -40MHz/ CH03, CH06, CH09		

Test Channel	Frequency (MHz)	Bandwidth (MHz)	99% Occupied BW (MHz)	LIMIT (MHz)
CH03	2422	36.64	36.24	>=500KHz
CH06	2437	36.64	36.24	>=500KHz
CH09	2452	36.64	36.24	>=500KHz

TX CH 03

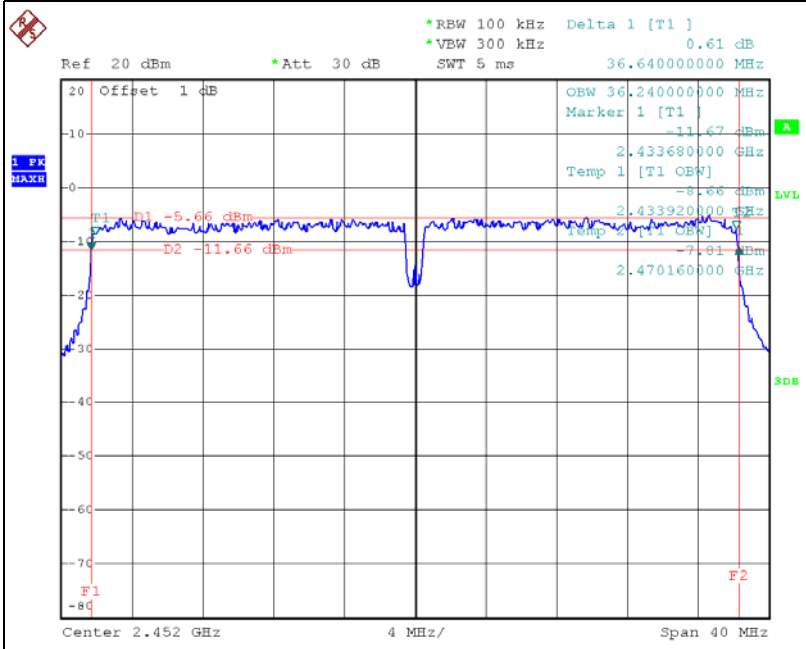


TX CH 06



Date: 22.FEB.2013 16:45:09

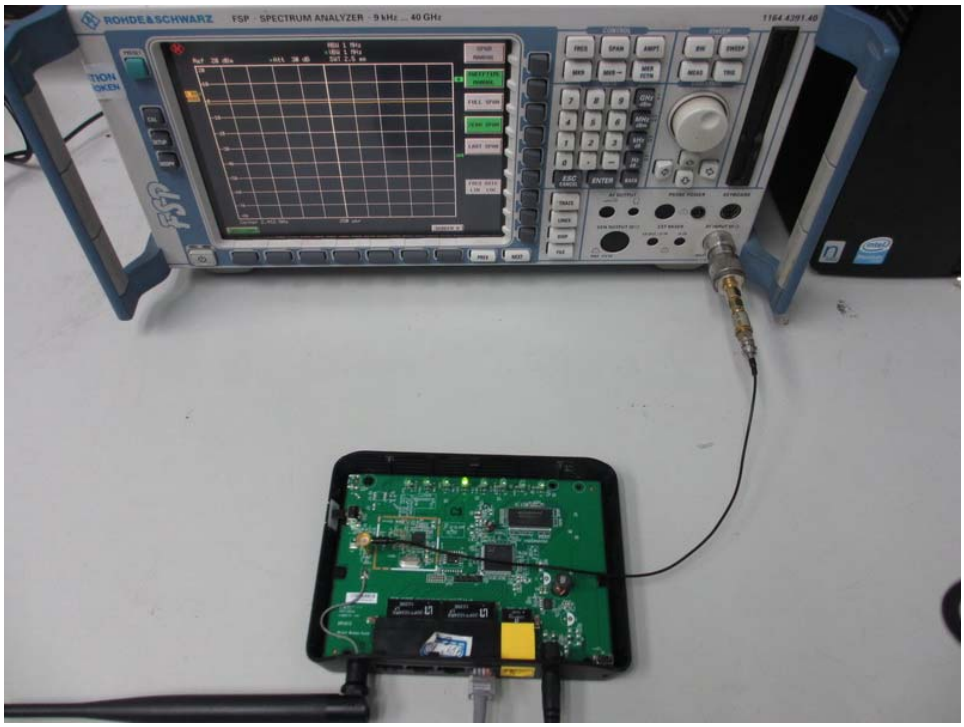
TX CH 09



Date: 22.FEB.2013 16:46:08

5.1.7. EUT TEST PHOTO

BANDWIDTH MEASUREMENT PHOTOS



6. MAXIMUM OUTPUT POWER TEST

6.1 Applied procedures / limit

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

6.1.1 MEASUREMENT INSTRUMENTS LIST

Item	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.

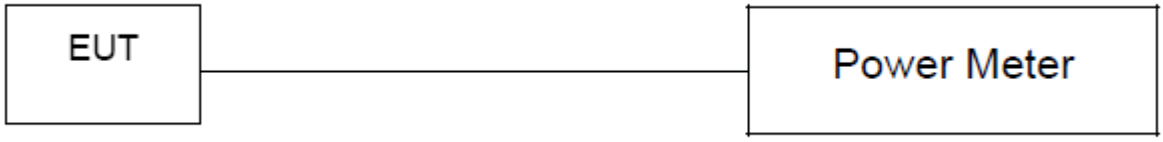
6.1.2 TEST PROCEDURE

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



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.

6.1.6 TEST RESULTS

EUT：	Wireless N150 Cloud Router	Model Name ：	DIR-600L
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	22.74	30	1
CH06	2437 MHz	22.83	30	1
CH11	2462 MHz	22.82	30	1

EUT：	Wireless N150 Cloud Router	Model Name ：	DIR-600L
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 (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	22.15	30	1
CH06	2437 MHz	22.32	30	1
CH11	2462 MHz	22.11	30	1

EUT：	Wireless N150 Cloud Router	Model Name ：	DIR-600L
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

Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	21.82	30	1
CH06	2437 MHz	21.76	30	1
CH11	2462 MHz	21.74	30	1

EUT：	Wireless N150 Cloud Router	Model Name ：	DIR-600L
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

Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH03	2422 MHz	19.19	30	1
CH06	2437 MHz	19.41	30	1
CH09	2452 MHz	19.29	30	1

6.1.7. EUT TEST PHOTO

MAXIMUM OUTPUT POWER MEASUREMENT PHOTOS

7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 Applied procedures / limit

30dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

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

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.

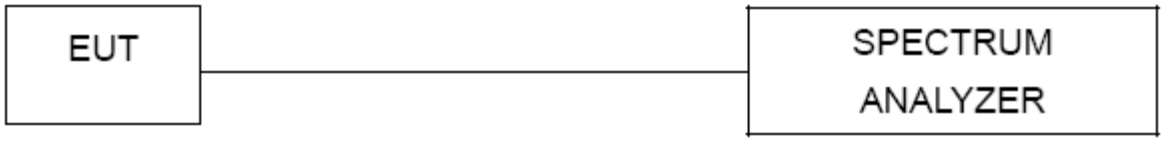
7.1.2 TEST PROCEDURE

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

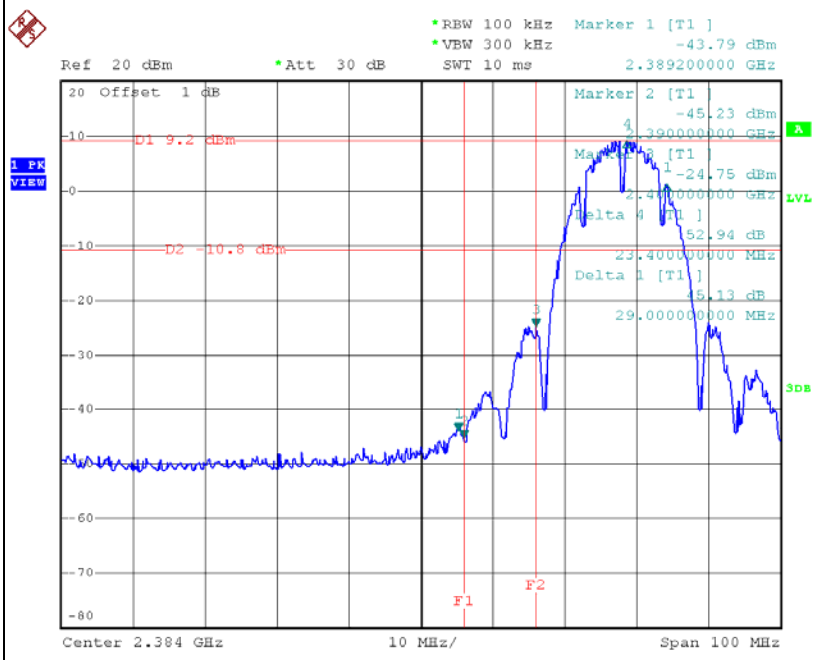
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

7.1.6 TEST RESULTS

EUT：	Wireless N150 Cloud Router	Model Name ：	DIR-600L
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX B MODE /CH01, CH06 , CH11		

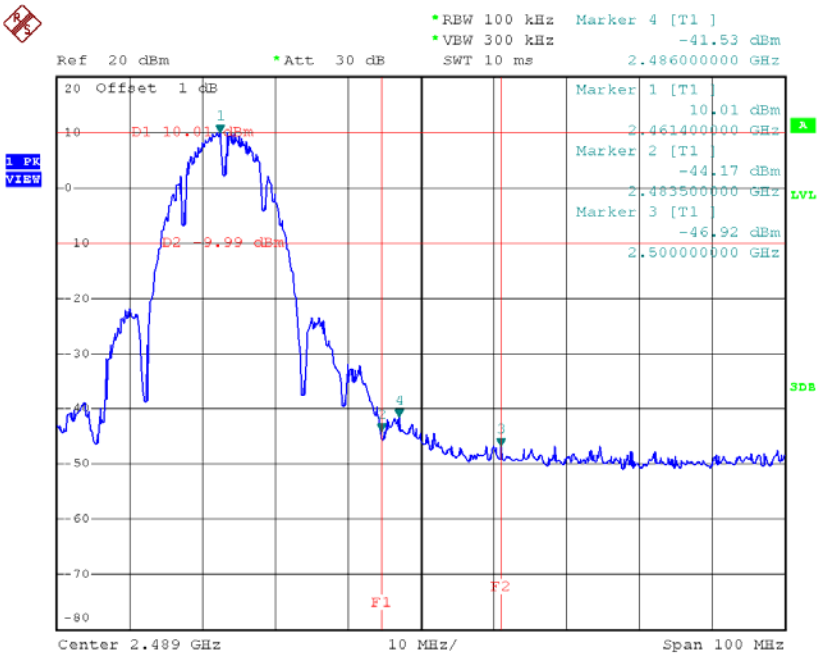
Channel of Worst Data: CH01			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth outside the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2400.00	-24.75	2486.00	-41.53
Result			
In any 100kHz 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.			

TX B mode CH01



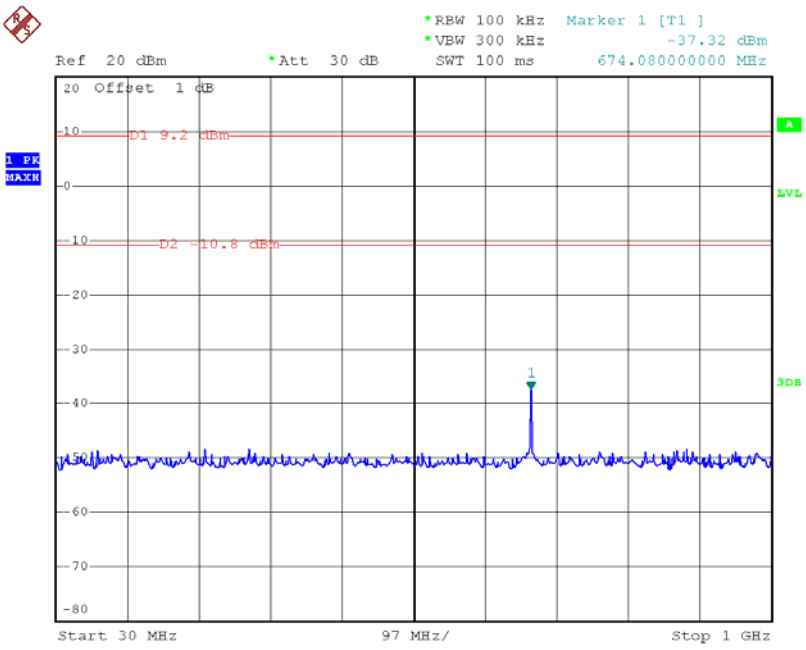
Date: 22.FEB.2013 17:24:08

TX B mode CH11



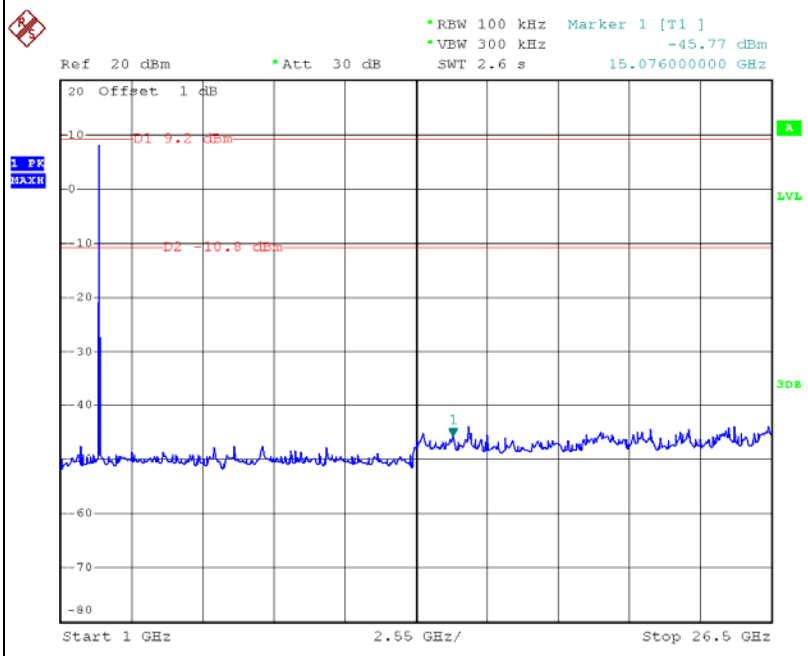
Date: 22.FEB.2013 17:32:55

TX B mode CH01 (30M~1000MHz)



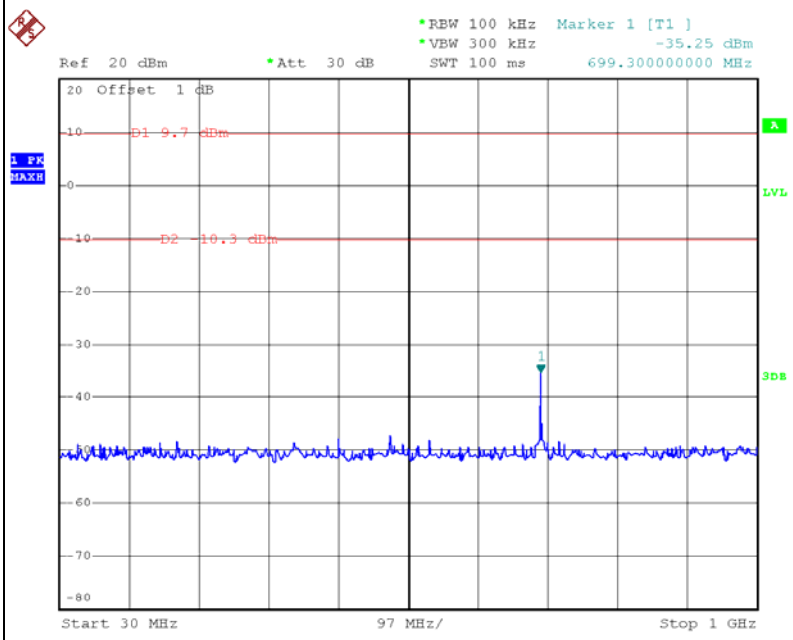
Date: 22.FEB.2013 17:24:34

TX B mode CH01 (1000MHz~10th Harmonic)



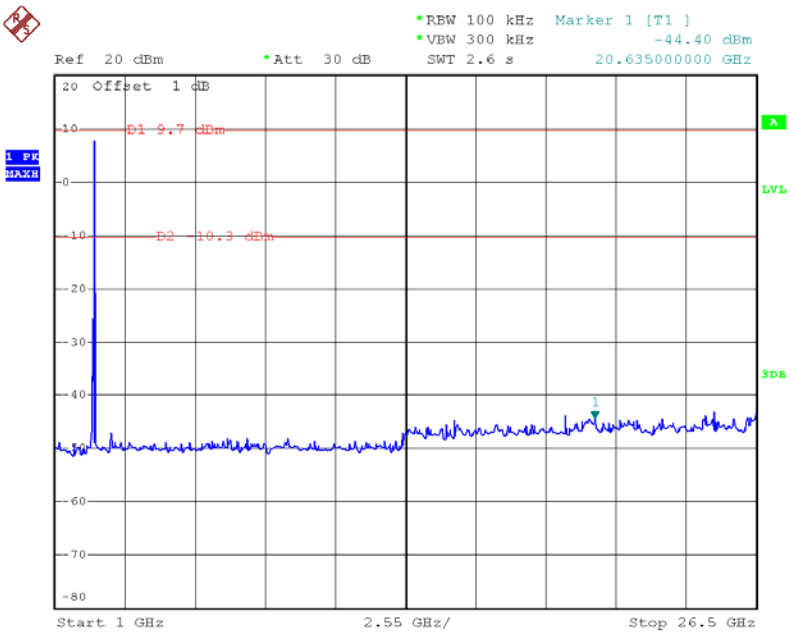
Date: 22.FEB.2013 17:24:56

TX B mode CH06 (30M~1000MHz)



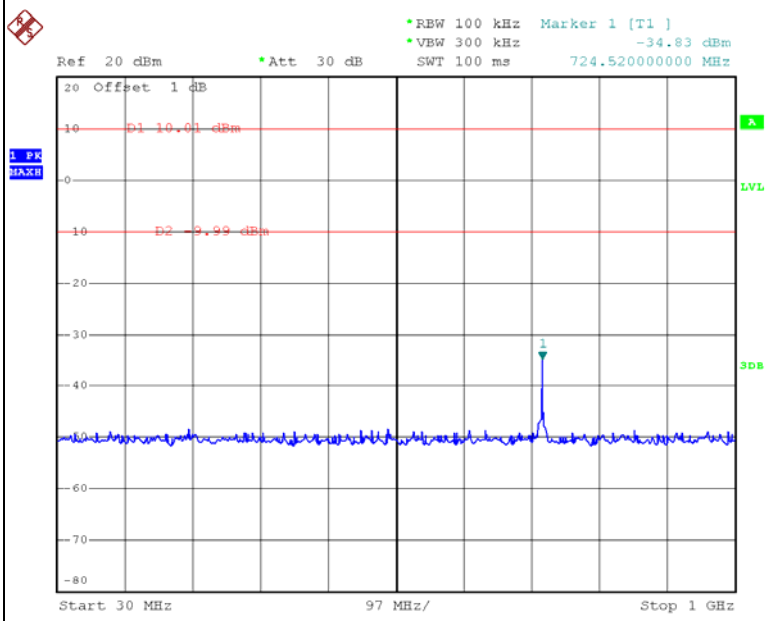
Date: 22.FEB.2013 17:31:03

TX B mode CH06 (1000MHz~10th Harmonic)

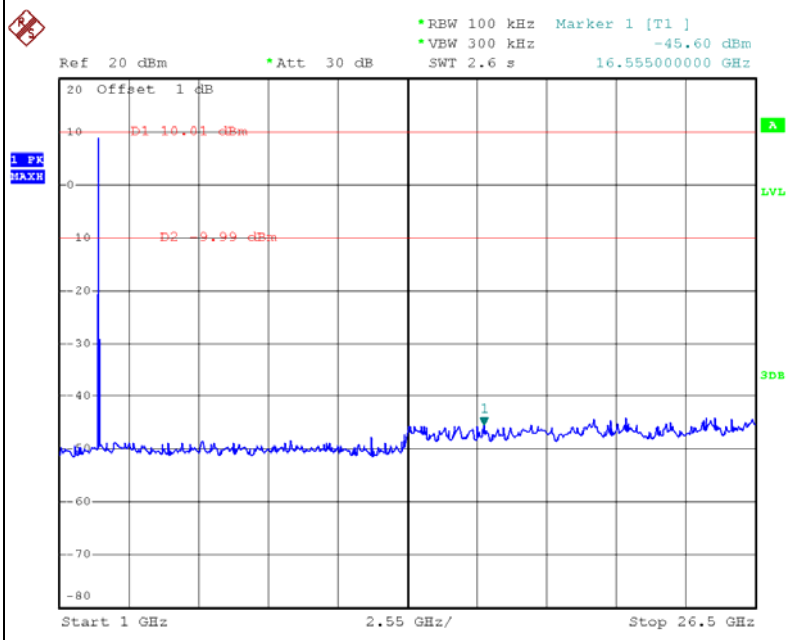


Date: 22.FEB.2013 17:30:46

TX B mode CH11 (30M~1000MHz)



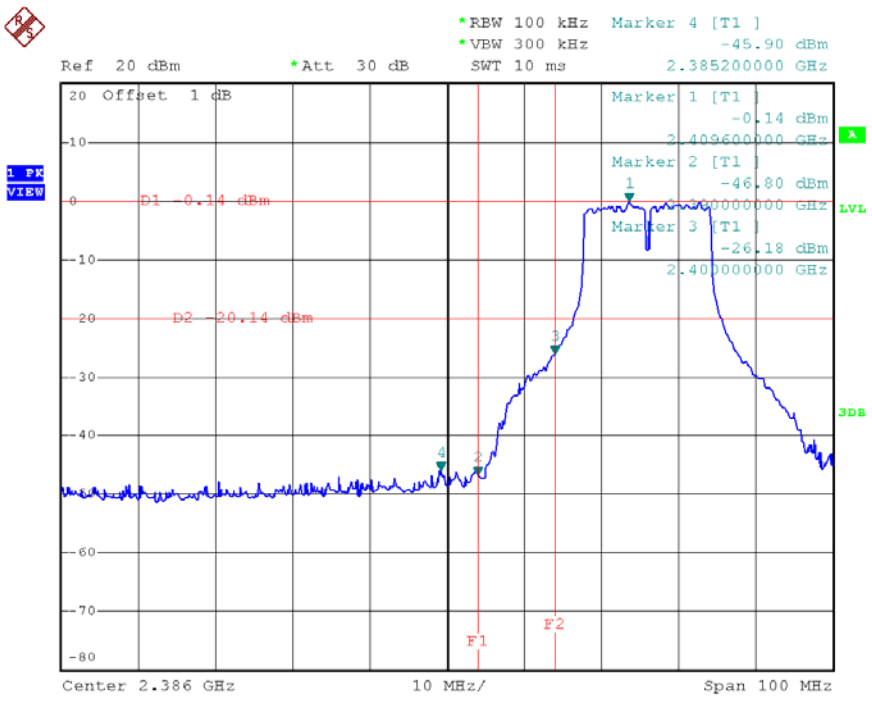
TX B mode CH11 (1000MHz~10th Harmonic)



EUT：	Wireless N150 Cloud Router	Model Name ：	DIR-600L
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX G MODE / CH01, CH06 , CH11		

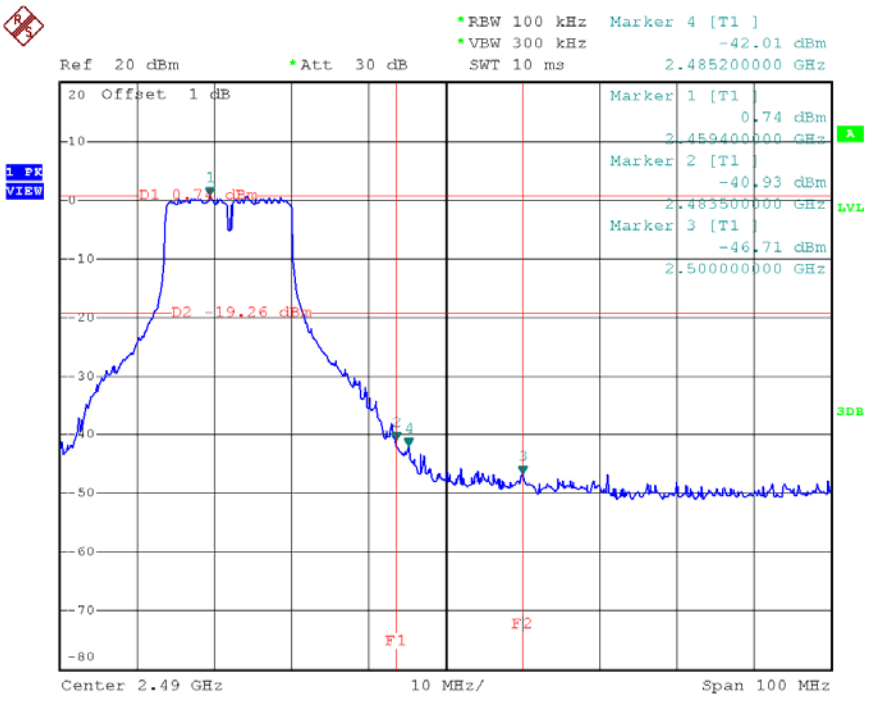
Channel of Worst Data: CH01			
The max. radio frequency power in any 100kHz bandwidth within the frequency band		The max. radio frequency power in any 100 kHz bandwidth outside the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2400.00	-26.18	2483.50	-40.93
Result			
In any 100kHz 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.			

TX G mode CH01



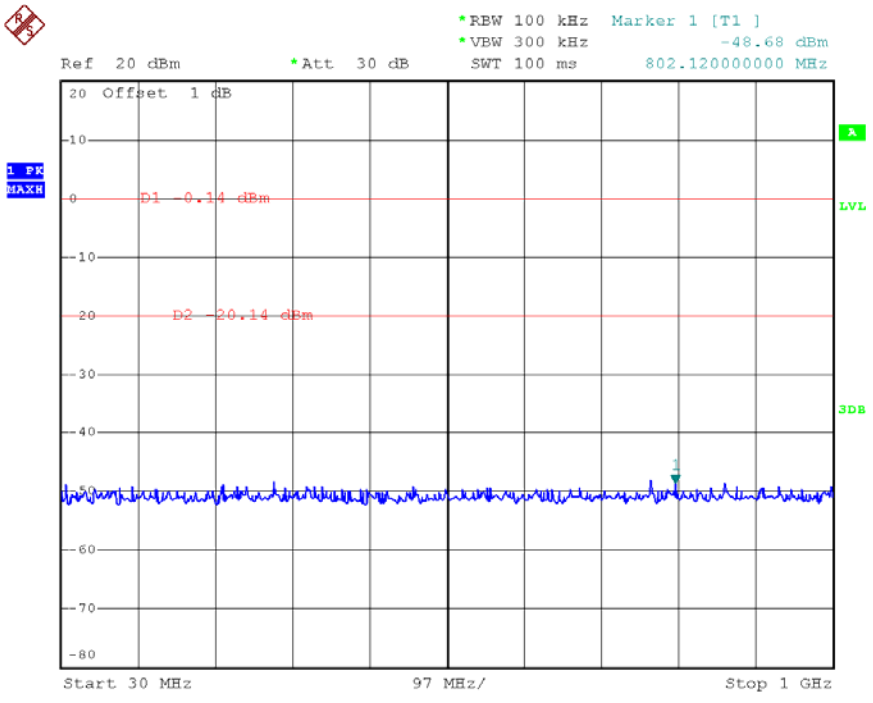
Date: 22.FEB.2013 17:19:35

TX G mode CH11



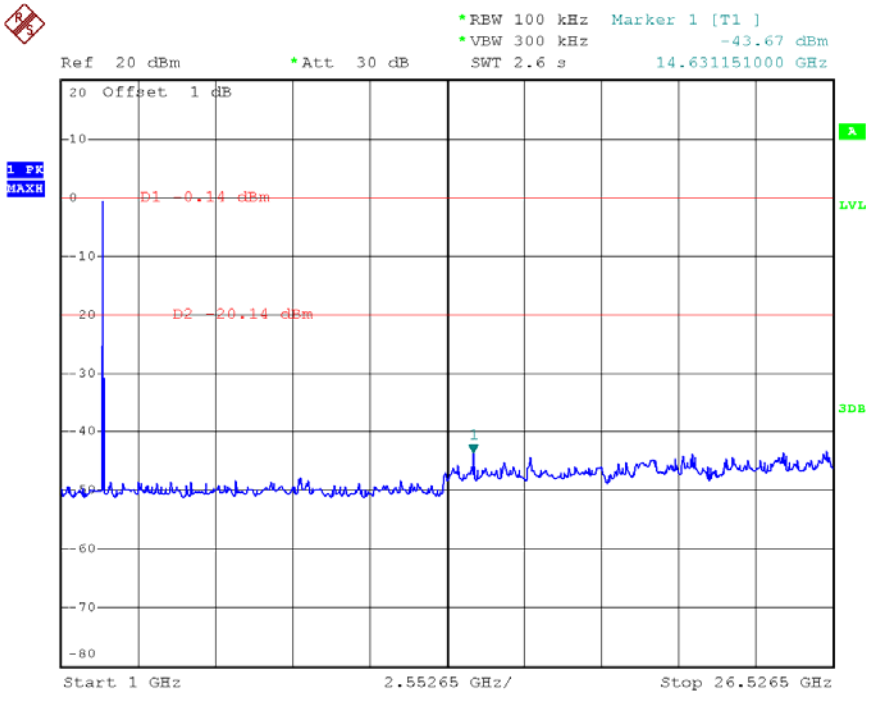
Date: 22.FEB.2013 17:14:34

TX G mode CH01 (30M~1000MHz)



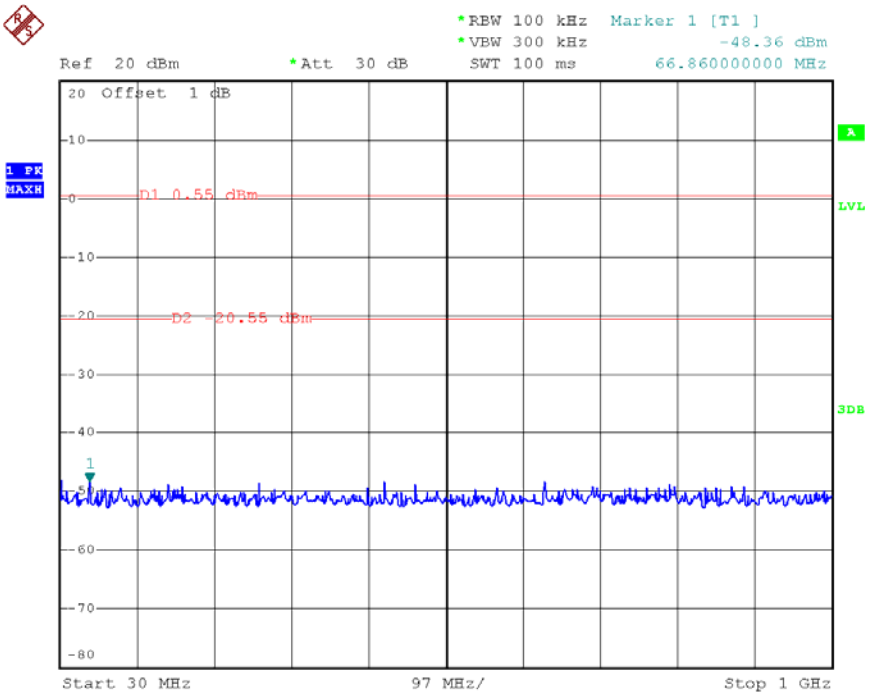
Date: 22.FEB.2013 17:20:40

TX G mode CH01 (1000MHz~10th Harmonic)



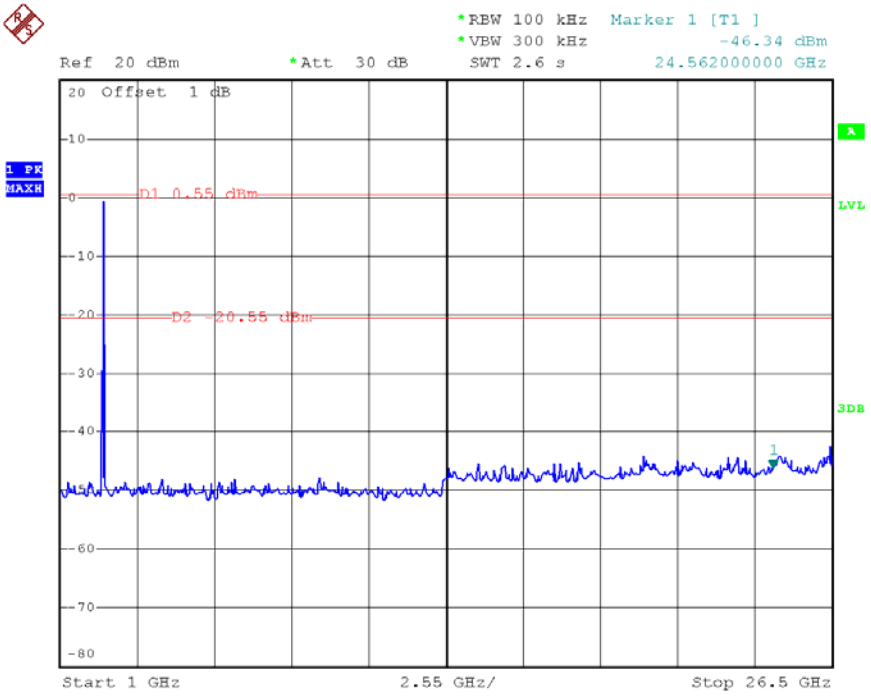
Date: 22.FEB.2013 17:21:00

TX G mode CH06 (30M~1000MHz)



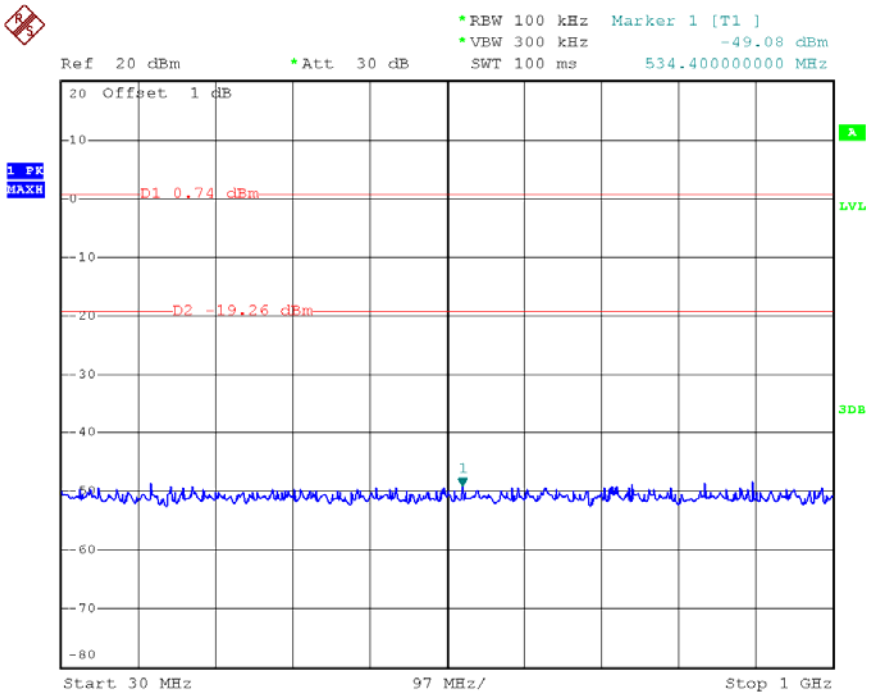
Date: 22.FEB.2013 17:16:03

TX G mode CH06 (1000MHz~10th Harmonic)



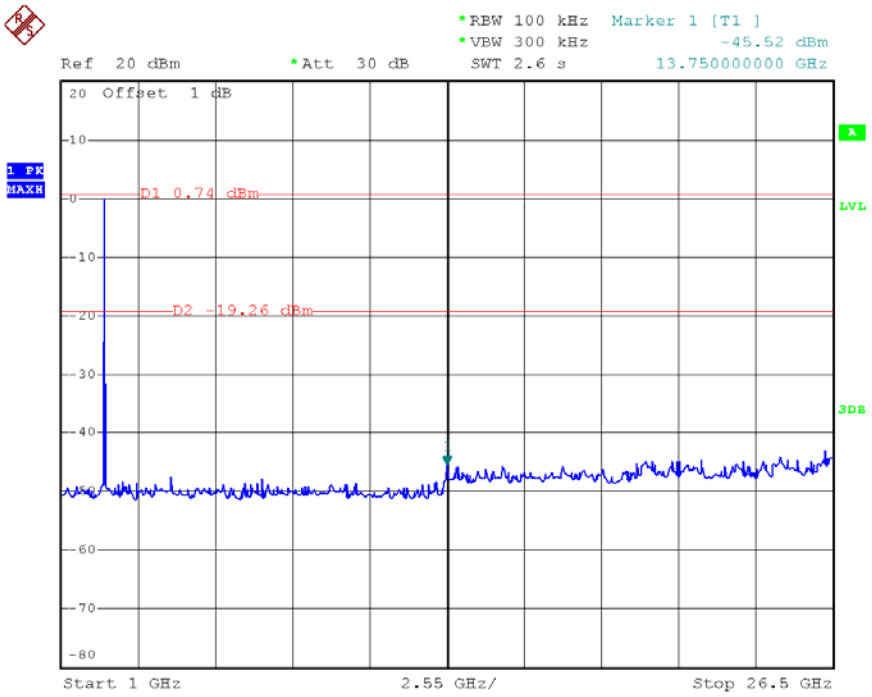
Date: 22.FEB.2013 17:15:54

TX G mode CH11 (30M~1000MHz)



Date: 22.FEB.2013 17:14:53

TX G mode CH11 (1000MHz~10th Harmonic)

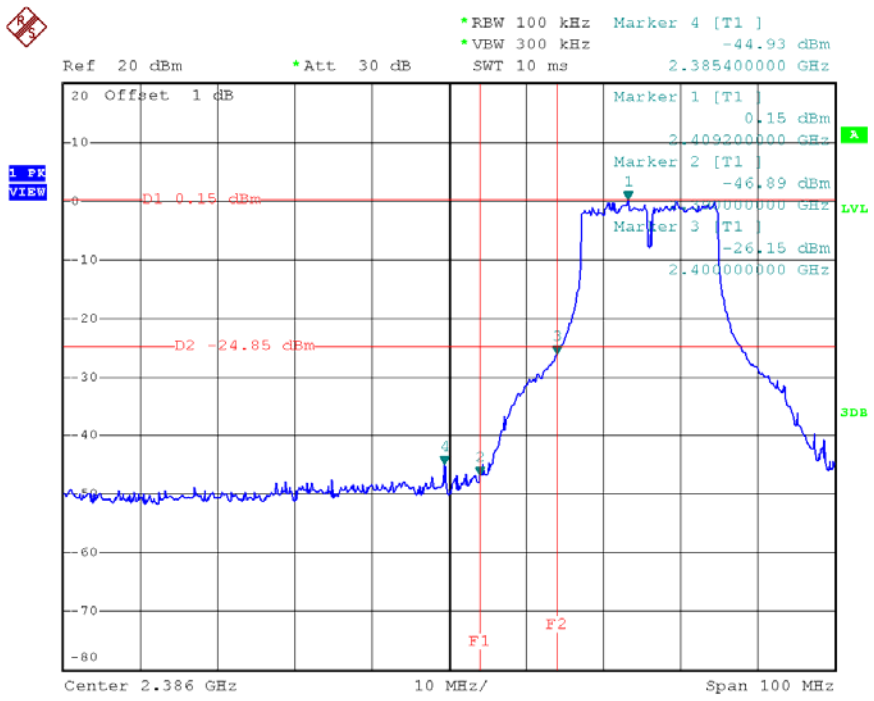


Date: 22.FEB.2013 17:15:05

EUT：	Wireless N150 Cloud Router	Model Name ：	DIR-600L
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N-20M MODE / CH01, CH06 , CH11		

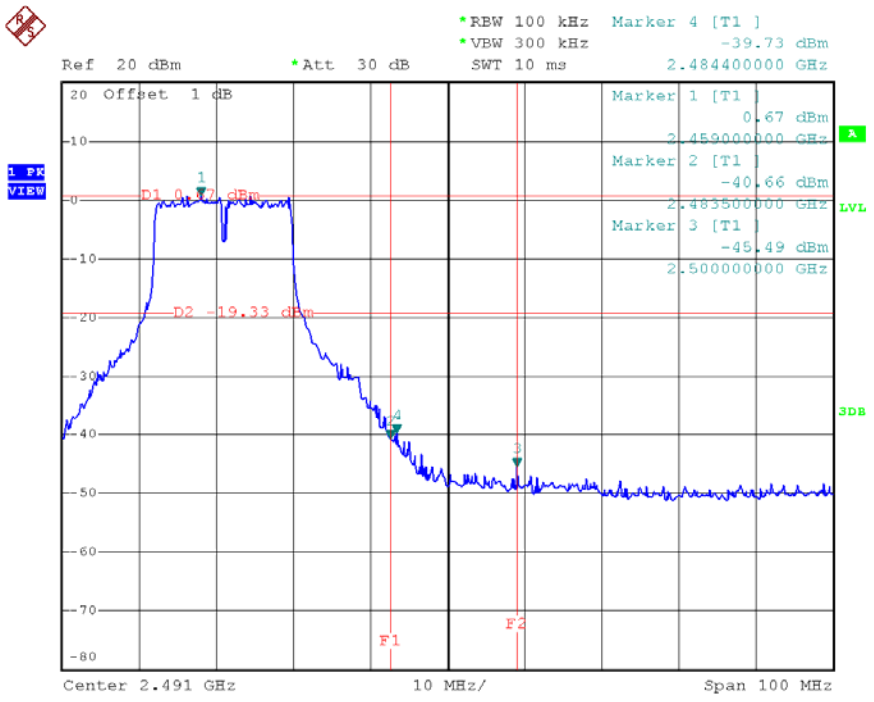
Channel of Worst Data: CH01			
The max. radio frequency power in any 100kHz bandwidth within the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2400.00	-26.15	2484.40	-39.73
Result			
In any 100kHz 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.			

TX HT20 mode CH01



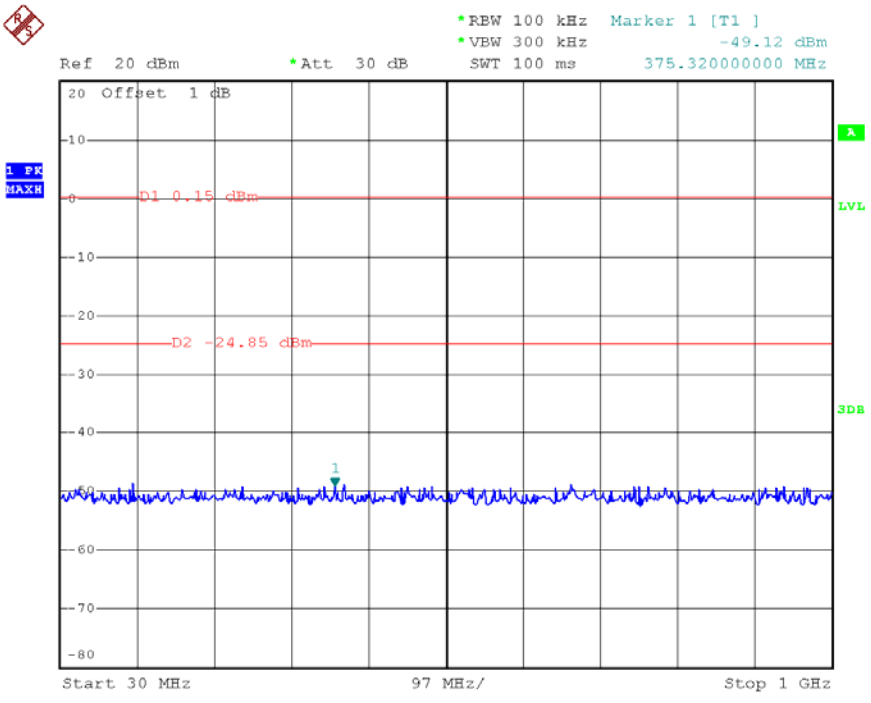
Date: 22.FEB.2013 16:59:48

TX HT20 mode CH11



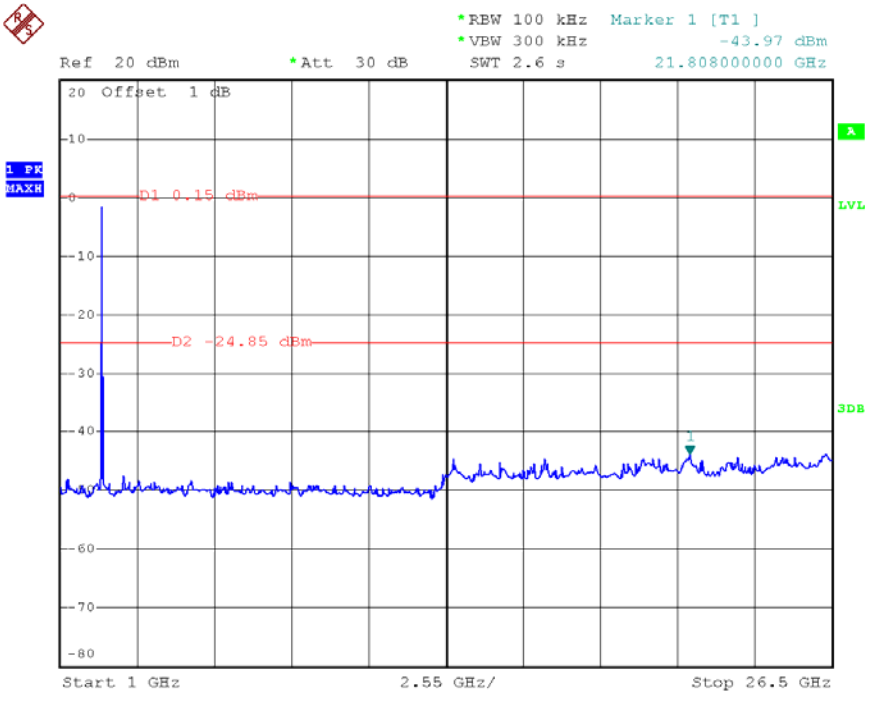
Date: 22.FEB.2013 17:07:42

TX HT20 mode CH01 (30M~1000MHz)



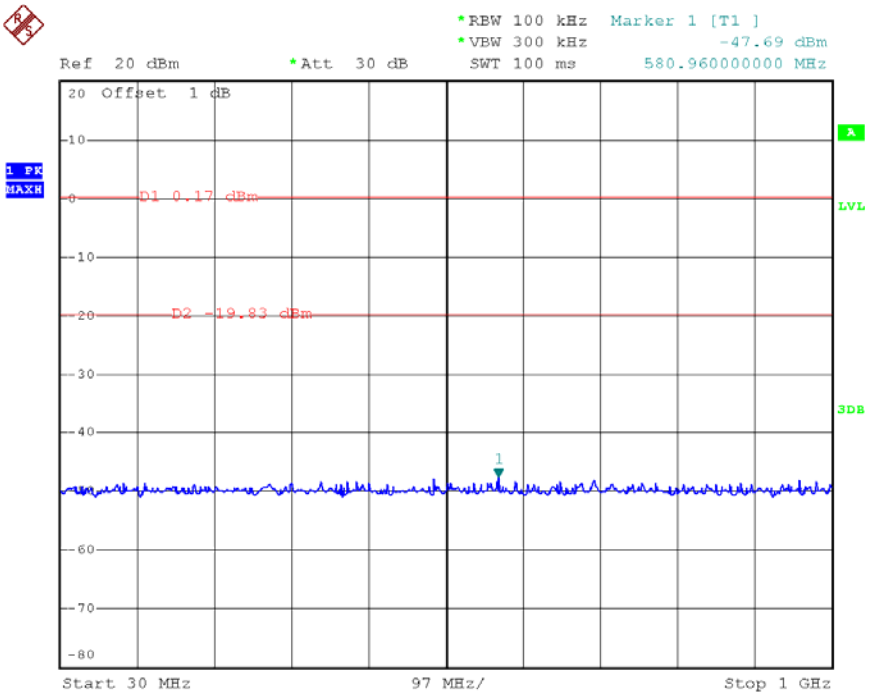
Date: 22.FEB.2013 17:00:11

TX HT20 mode CH01 (1000MHz~10th Harmonic)

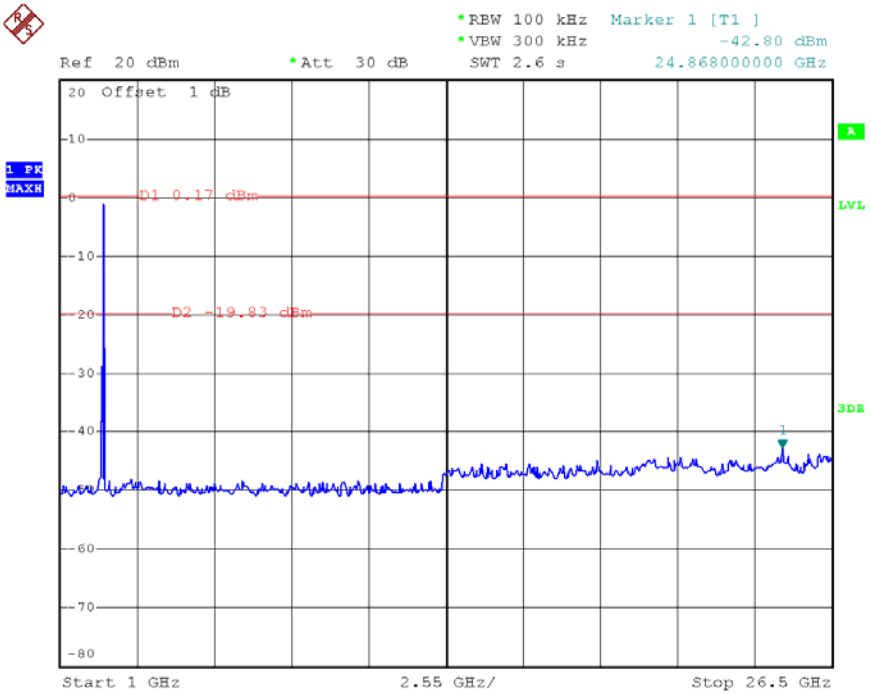


Date: 22.FEB.2013 17:00:27

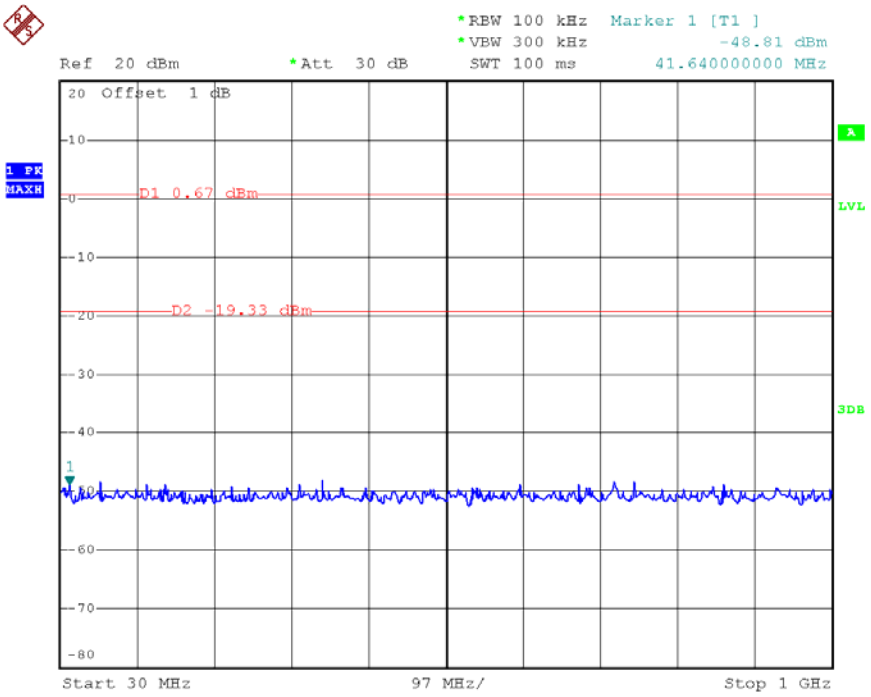
TX HT20 mode CH06 (30M~1000MHz)



TX HT20 mode CH06 (1000MHz~10th Harmonic)

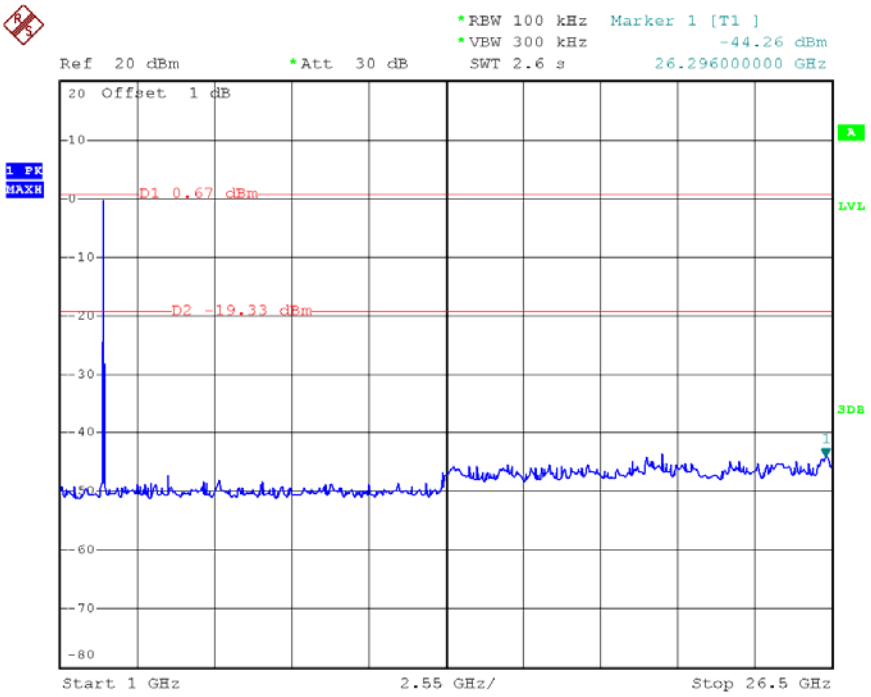


TX HT20 mode CH11 (30M~1000MHz)



Date: 22.FEB.2013 17:08:06

TX HT20 mode CH11 (1000MHz~10th Harmonic)

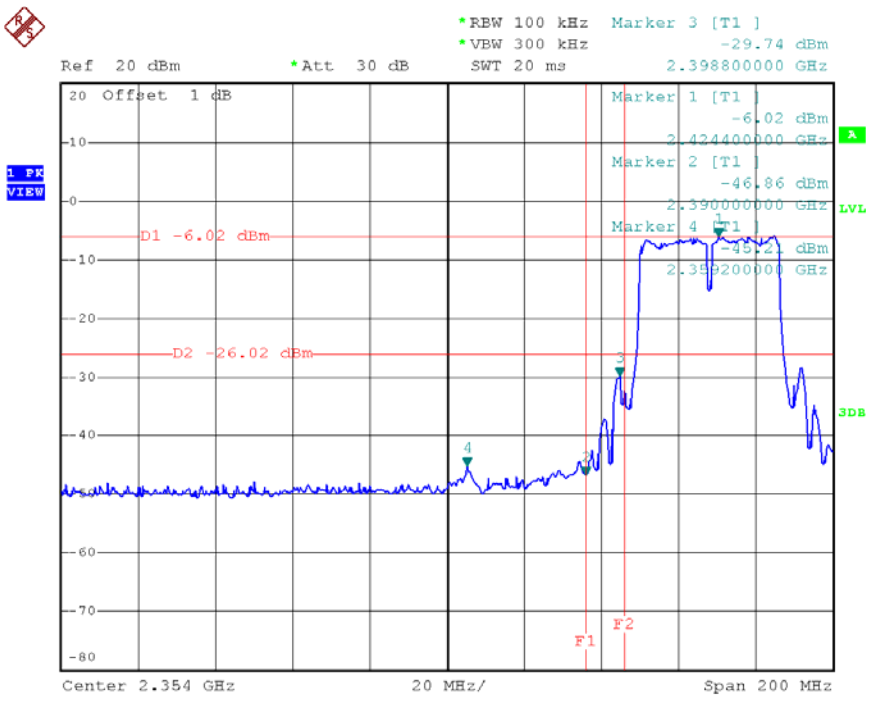


Date: 22.FEB.2013 17:08:21

EUT：	Wireless N150 Cloud Router	Model Name ：	DIR-600L
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N-40M MODE /CH03, CH06, CH09		

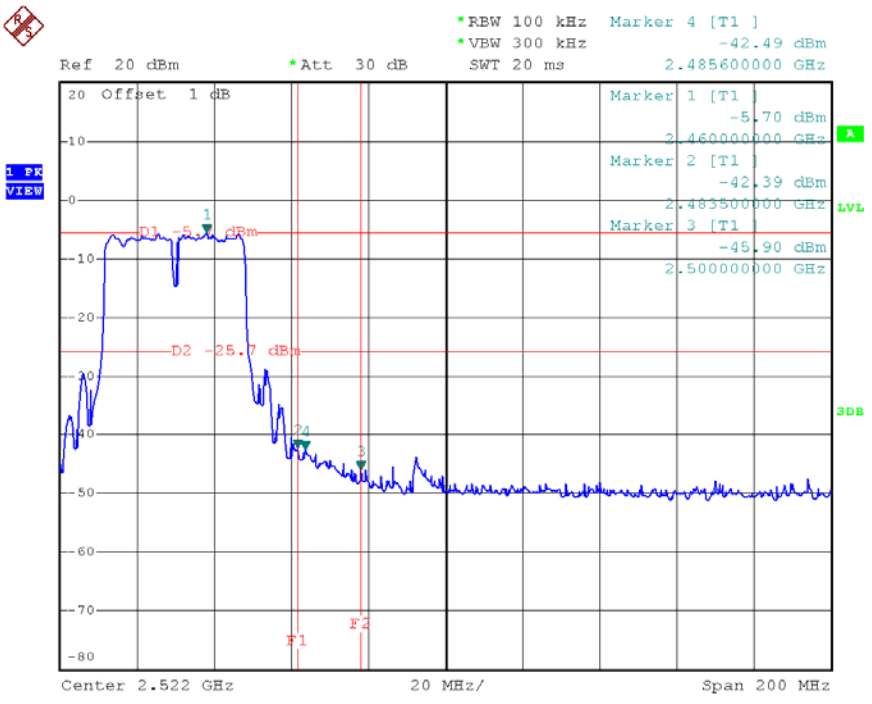
Channel of Worst Data: CH09			
The max. radio frequency power in any 100kHz bandwidth within the frequency band		The max. radio frequency power in any 100 kHz bandwidth outside the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2398.80	-29.74	2483.50	-42.39
Result			
In any 100kHz 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.			

TX HT40 mode CH03



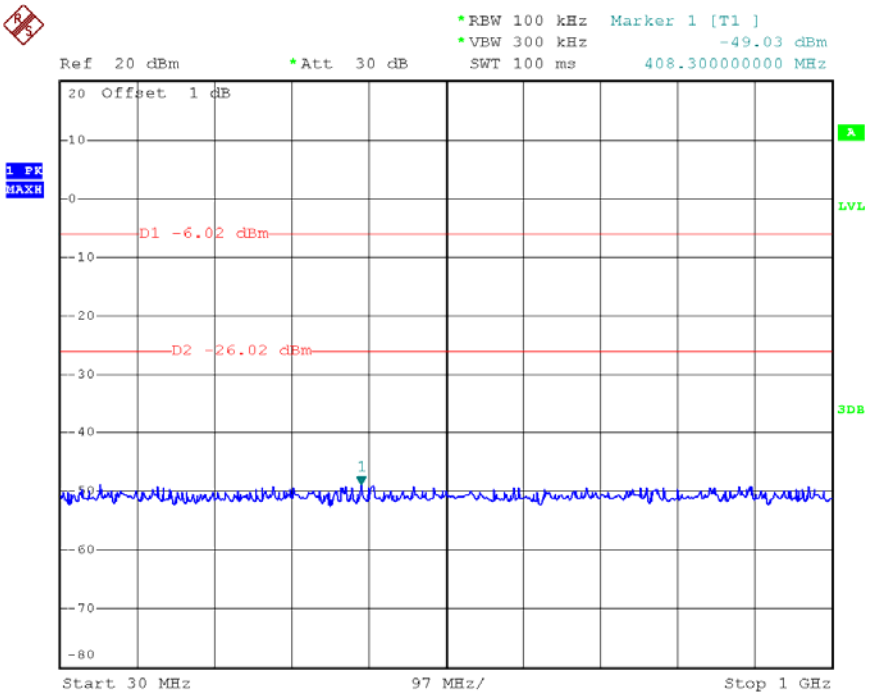
Date: 22.FEB.2013 16:55:25

TX HT40 mode CH09



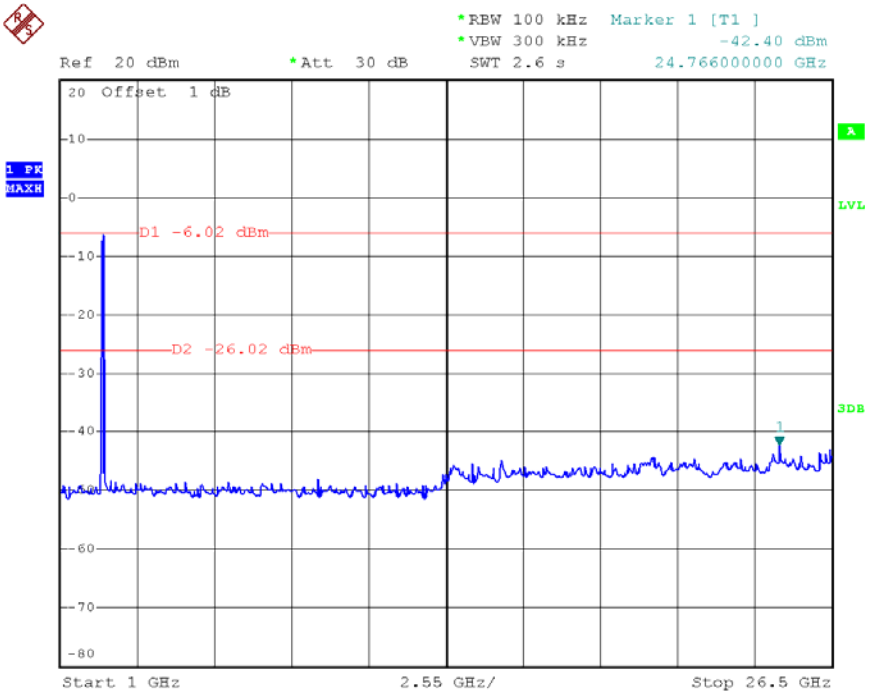
Date: 22.FEB.2013 16:47:32

TX HT40 mode CH03 (30M~1000MHz)



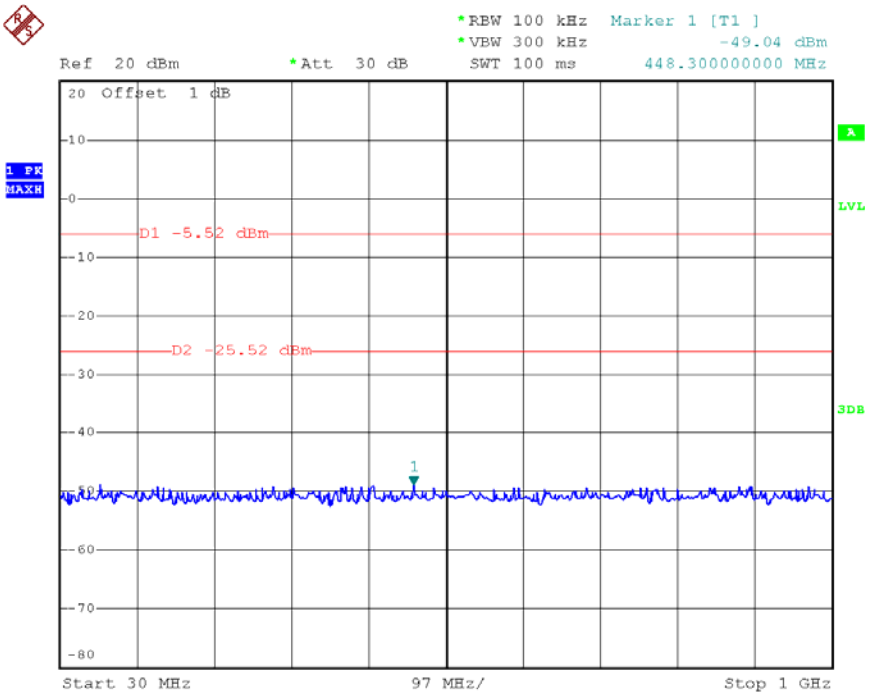
Date: 22.FEB.2013 16:56:09

TX HT40 mode CH03 (1000MHz~10th Harmonic)



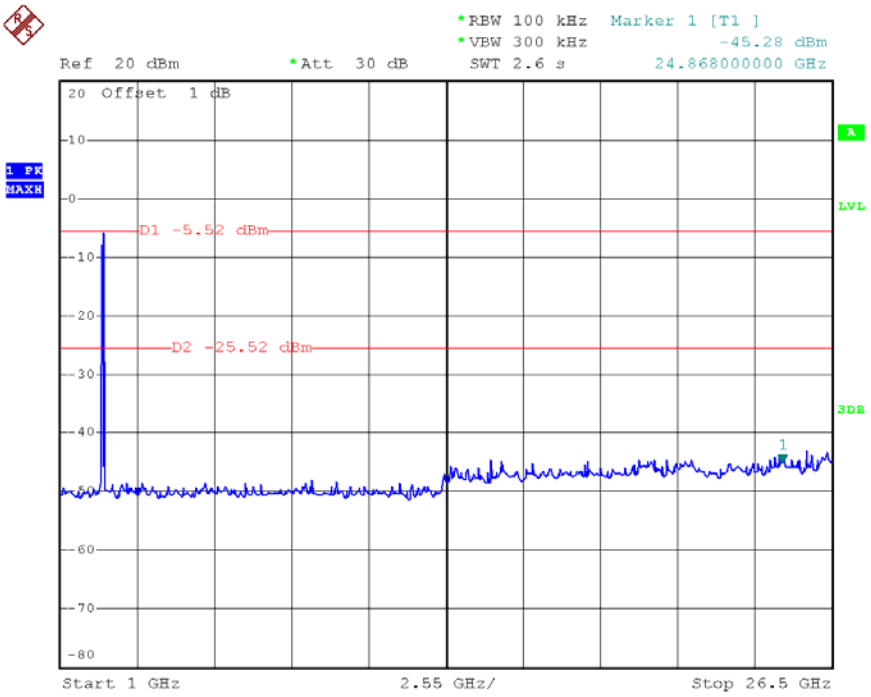
Date: 22.FEB.2013 16:56:28

TX HT40 mode CH06 (30M~1000MHz)



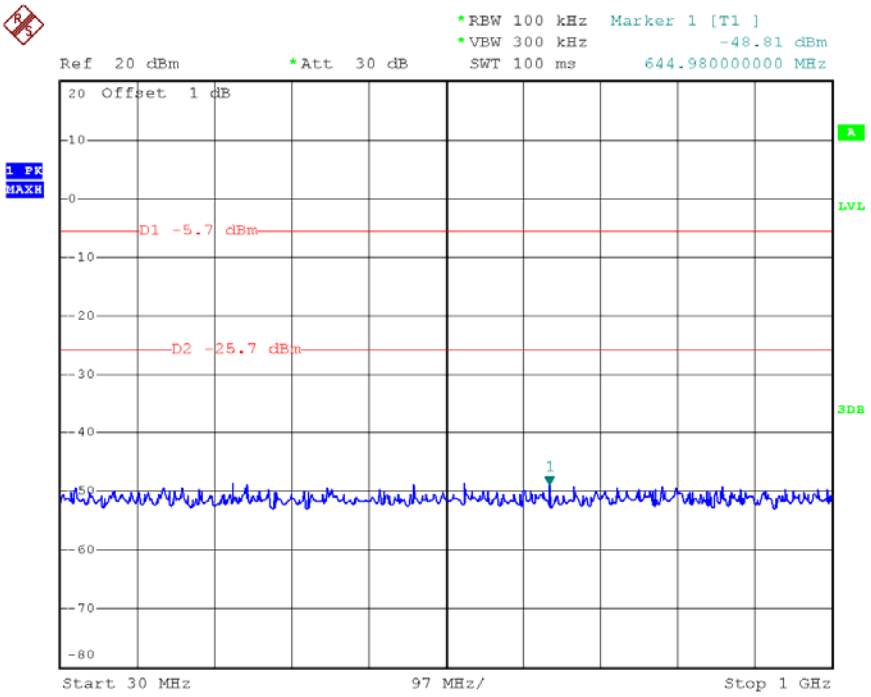
Date: 22.FEB.2013 16:56:09

TX HT40 mode CH06 (1000MHz~10th Harmonic)



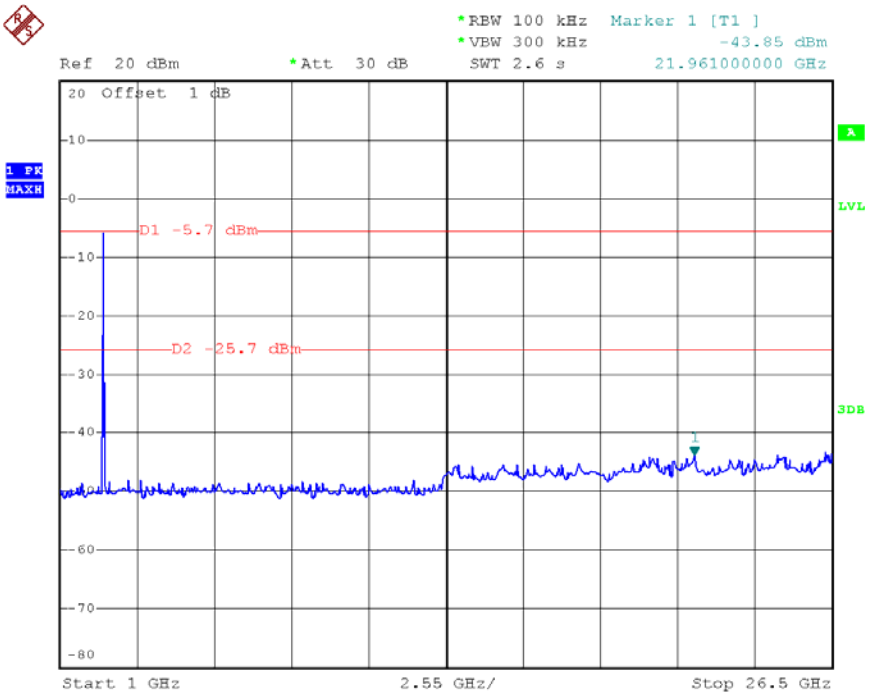
Date: 22.FEB.2013 16:57:18

TX HT40 mode CH09 (30M~1000MHz)



Date: 22.FEB.2013 16:47:50

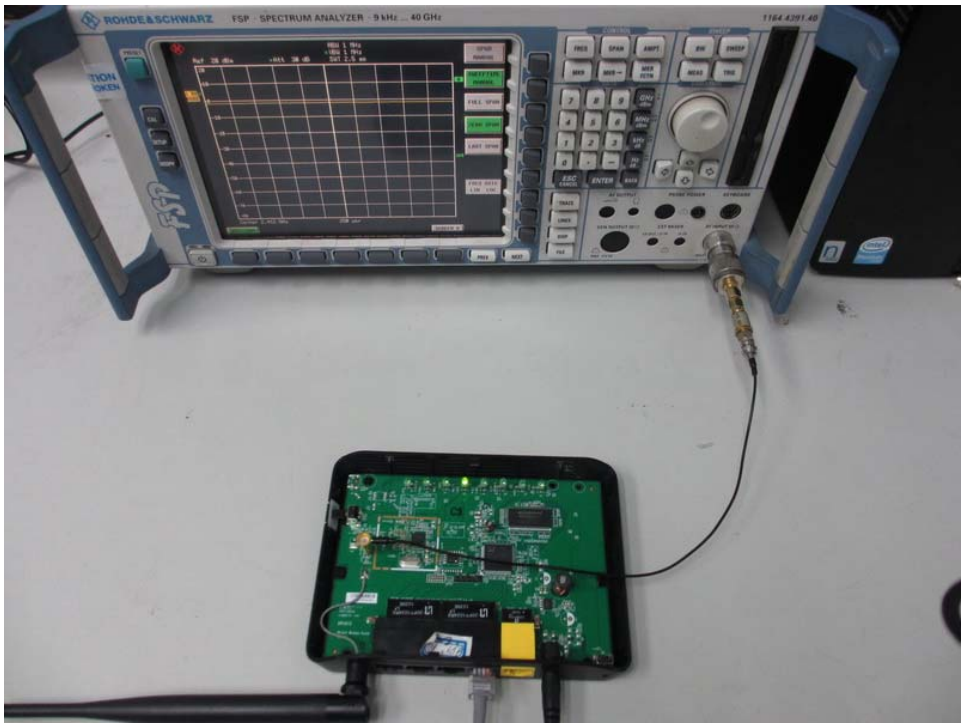
TX HT40 mode CH09 (1000MHz~10th Harmonic)



Date: 22.FEB.2013 16:48:14

7.1.7. EUT TEST PHOTO

ANTENNA CONDUCTED SPURIOUS EMISSION MEASUREMENT PHOTOS



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 = 2.5ms.

8.1.3 DEVIATION FROM STANDARD

No deviation.

8.1.4 TEST SETUP

8.1.5 EUT OPERATION CONDITIONS

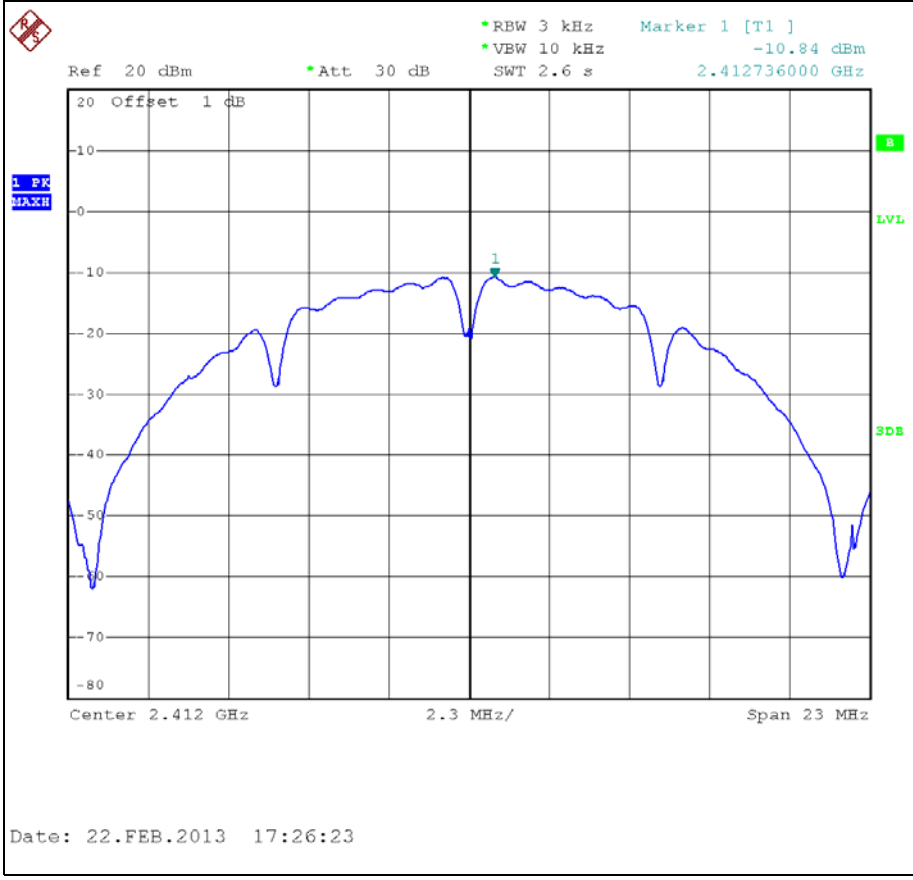
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

8.1.6 TEST RESULTS

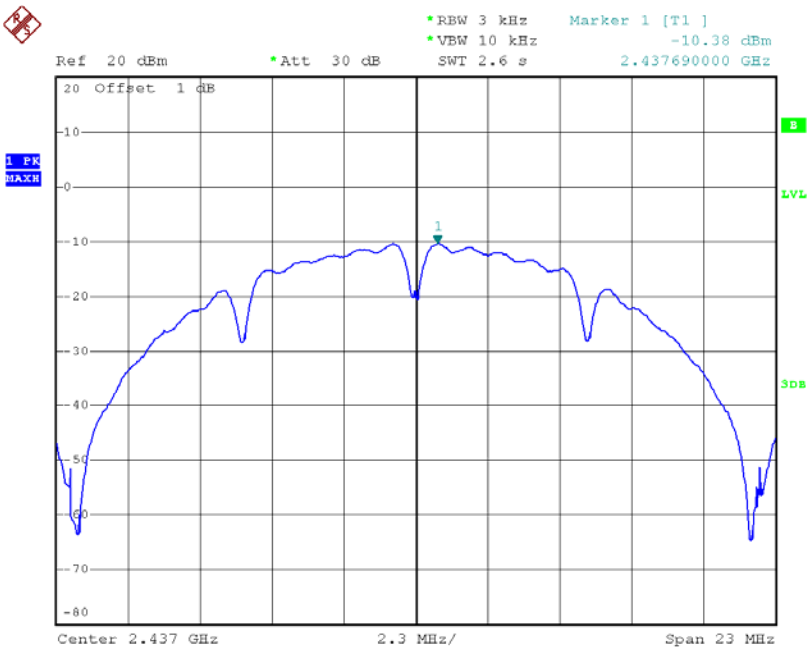
EUT：	Wireless N150 Cloud Router	Model Name ：	DIR-600L
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX B MODE /CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-10.84	8
CH06	2437 MHz	-10.38	8
CH11	2462 MHz	-10.02	8

TX CH01

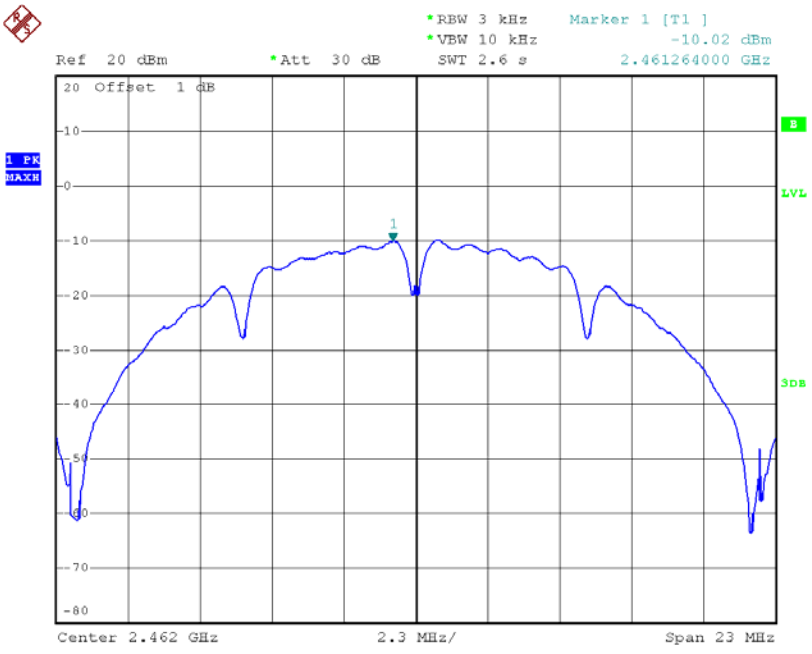


TX CH06



Date: 22.FEB.2013 17:27:39

TX CH11

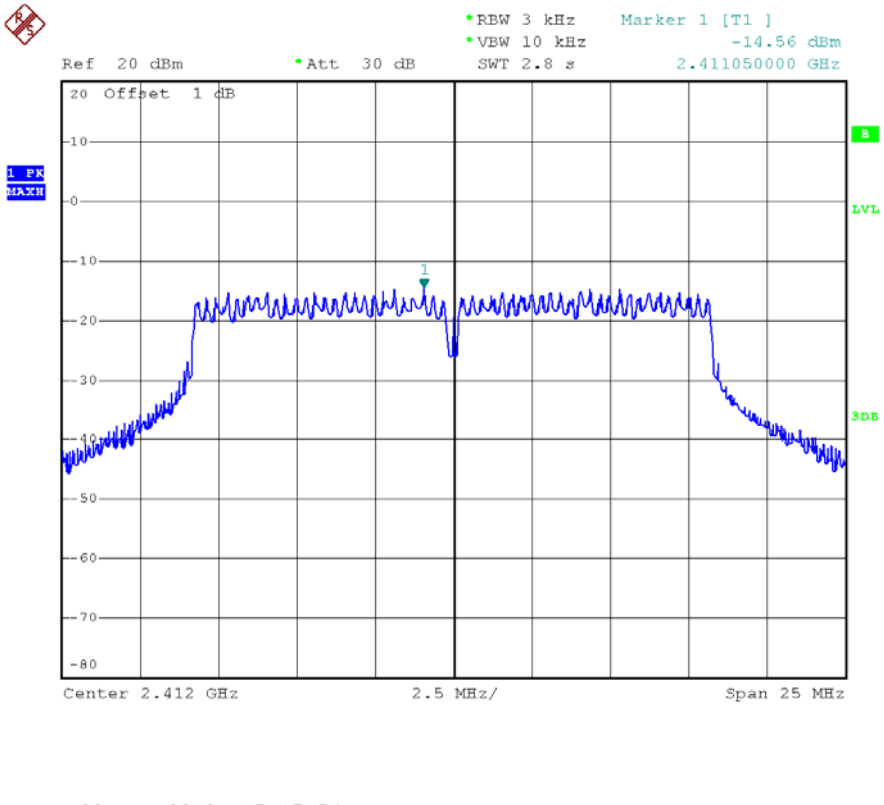


Date: 22.FEB.2013 17:28:02

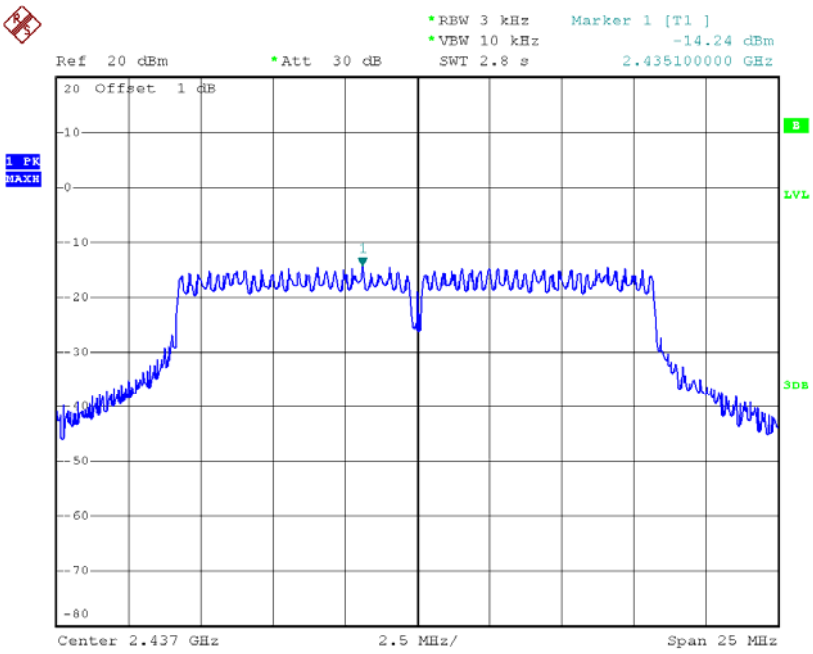
EUT：	Wireless N150 Cloud Router	Model Name ：	DIR-600L
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX G MODE /CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-14.56	8
CH06	2437 MHz	-14.24	8
CH11	2462 MHz	-13.54	8

TX CH01

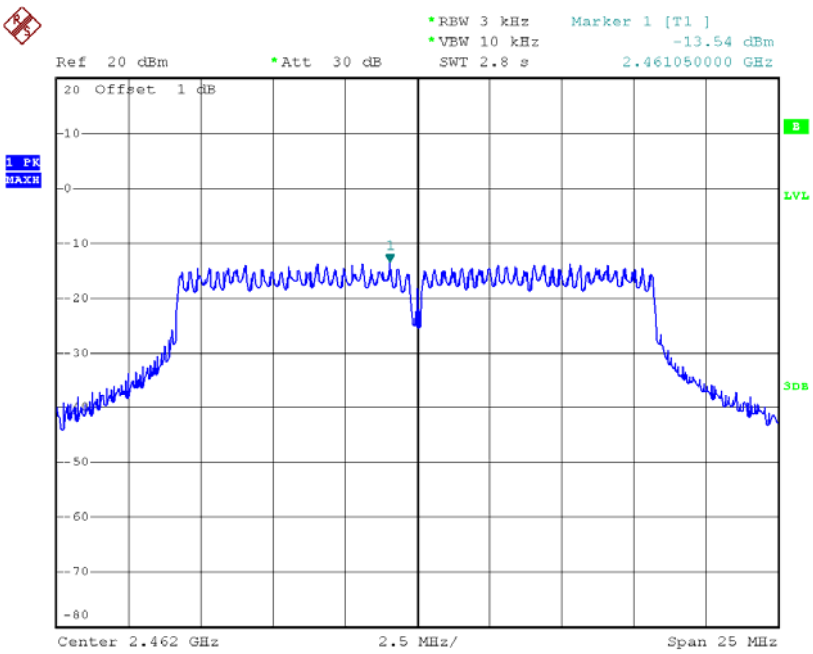


TX CH06



Date: 22.FEB.2013 17:17:19

TX CH11

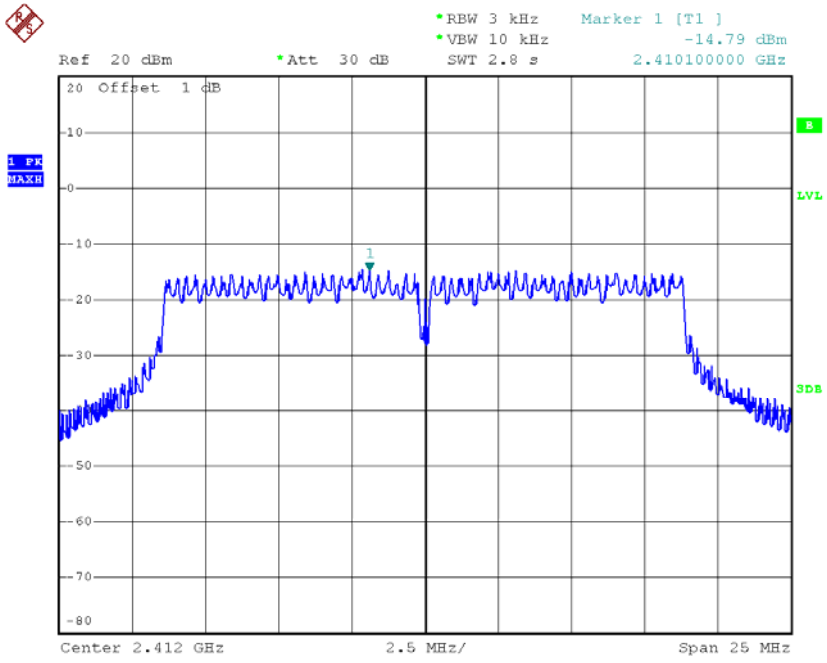


Date: 22.FEB.2013 17:11:51

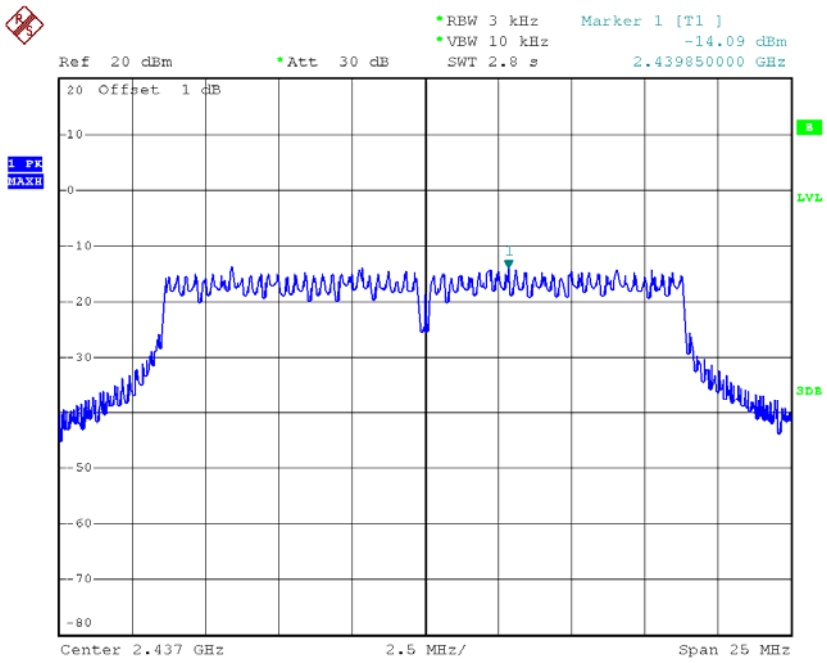
EUT：	Wireless N150 Cloud Router	Model Name ：	DIR-600L
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N MODE-20MHz /CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-14.79	8
CH06	2437 MHz	-14.09	8
CH11	2462 MHz	-13.98	8

TX CH01

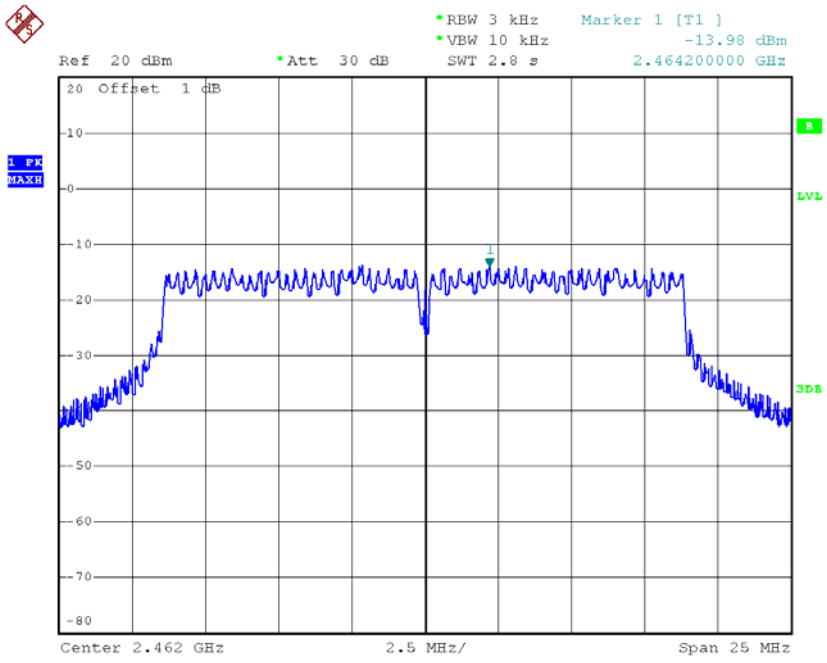


TX CH06



Date: 22.FEB.2013 17:04:02

TX CH11

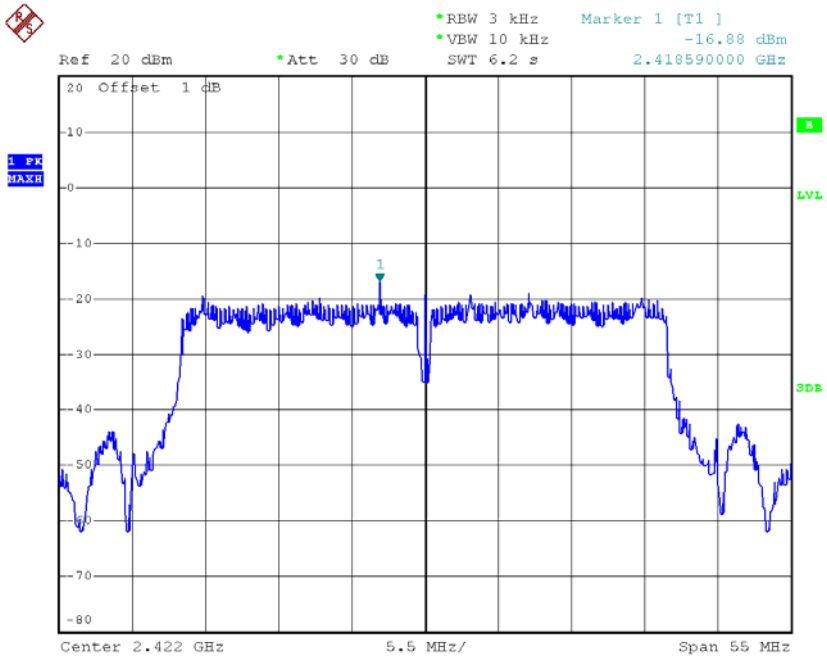


Date: 22.FEB.2013 17:10:38

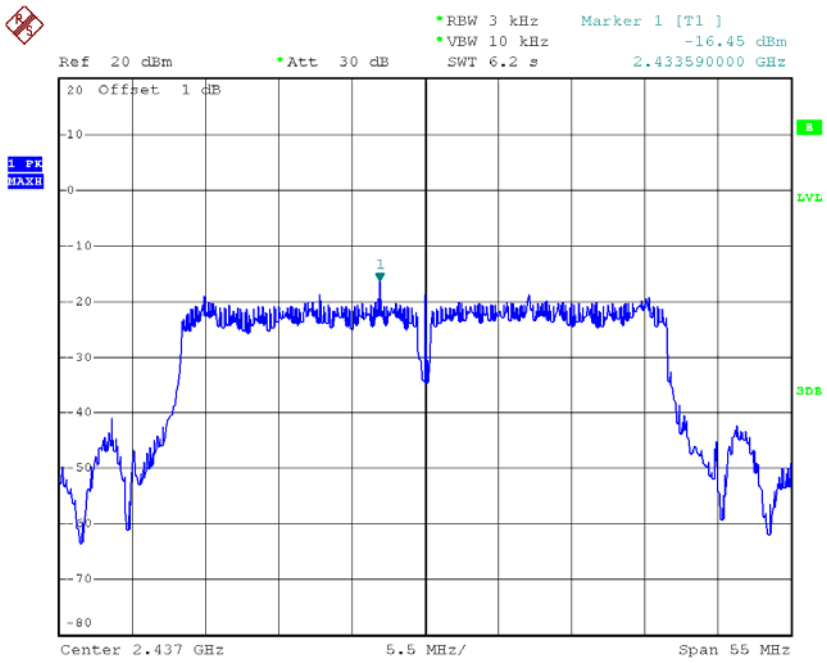
EUT：	Wireless N150 Cloud Router	Model Name ：	DIR-600L
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N MODE-40MHz /CH03, CH06, CH09		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH03	2422 MHz	-16.88	8
CH06	2437 MHz	-16.45	8
CH09	2452 MHz	-18.53	8

TX CH03

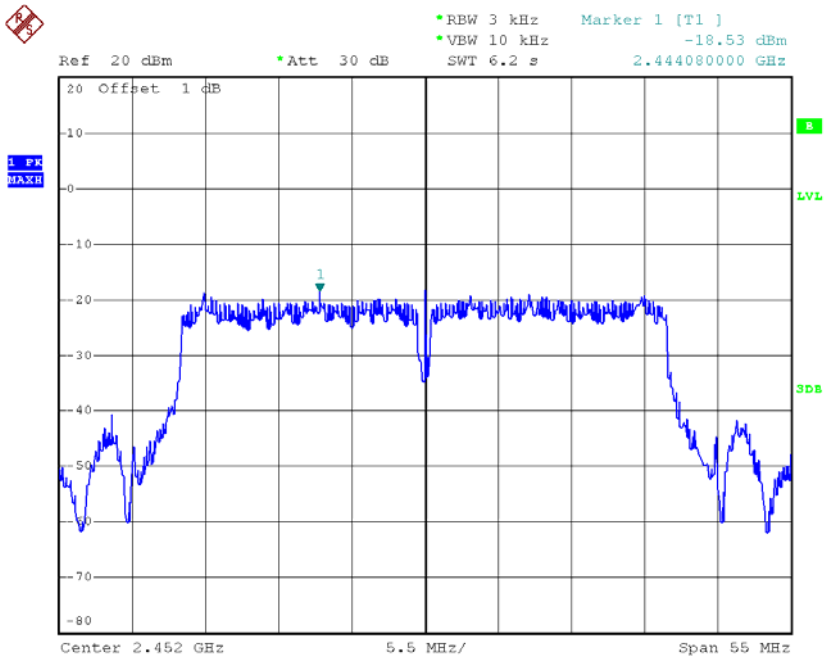


TX CH06



Date: 22.FEB.2013 16:52:26

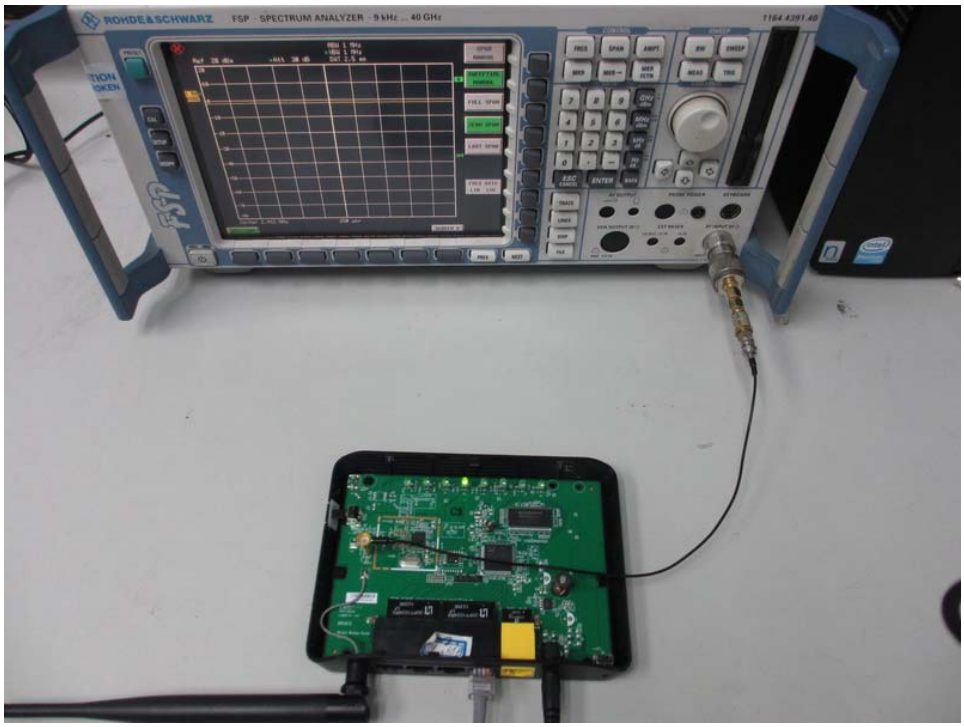
TX CH09



Date: 22.FEB.2013 16:49:26

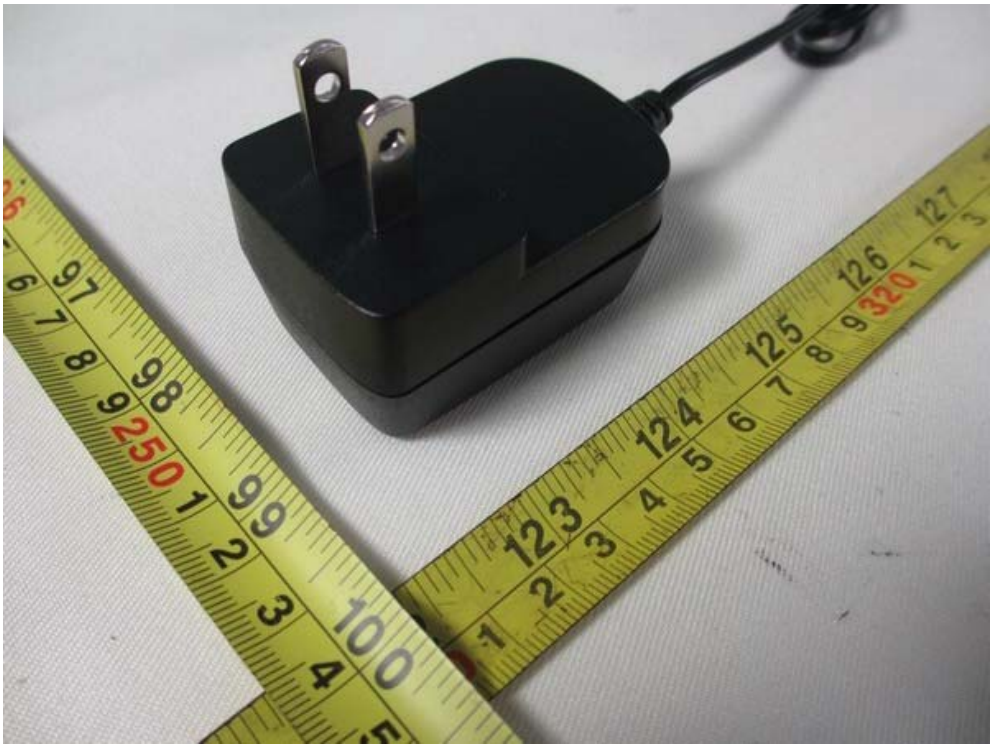
8.1.7. EUT TEST PHOTO

POWER SPECTRAL DENSITY MEASUREMENT PHOTOS



9. EUT PHOTO

Adapter: D-Link / F05W-050100SPAU



Adapter: D-Link / AMS47-0501000FU