



FCC Part 15C Test Report

FCC ID: 2AISMAMP160

Product Name:	WIRELESS AMPLIFIER
Trademark:	
Model Name :	MainStream AMP160 MainStream AMP160 80, iEAST AMP160, iEAST AMP80
Prepared For :	Distinct Distributors Inc.
Address :	14600 Durham Road 57 Blackstock, ON L0B 1B0, Canada
Prepared By :	Shenzhen BCTC Technology Co., Ltd.
Address :	No.101,Yousong Road,Longhua New District, Shenzhen,China
Test Date:	Aug. 12 – Aug. 23, 2016
Date of Report :	Aug. 24, 2016
Report No.:	BCTC-LH160810254E



TEST RESULT CERTIFICATION

Applicant's name : Distinct Distributors Inc.
Address : 14600 Durham Road 57 Blackstock, ON L0B 1B0, Canada

Manufacture's Name : Shenzhen UYESEE Technology Co., Ltd.
Address : 201D, C6 Building, HengFeng Industry Park, Hezhou,
518126, Baoan District, Shenzhen, China

Product description

Product name..... : WIRELESS AMPLIFIER

Trademark..... :



Model and/or type reference : MainStream AMP160
MainStream AMP160 80, iEAST AMP160, iEAST AMP80

Standards : FCC Part15.247
ANSI C63.10:2013
KBD 558074 D01 DTS Meas Guidance v03r05

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

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Testing Engineer : _____
Eric Yang

Reviewer (Supervisor) : _____
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**Approved & Authorized
Signer(Manager)** : _____
Carson Zhang



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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.247) , Subpart C KBD 558074 D01 DTS Meas Guidance v03r05			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	
15.247 (a)(2)	6dB Bandwidth	PASS	
15.247 (b)	Peak Output Power	PASS	
15.247 (c)	Radiated Spurious Emission	PASS	
15.247 (d)	Power Spectral Density	PASS	
15.205	Restricted Band of Operation	PASS	
15.247 (d)	Band Edge (Out of Band Emissions)	PASS	
15.203	Antenna Requirement	PASS	

NOTE:

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



1.1 TEST FACILITY

Shenzhen BCTC Technology Co., Ltd.

Add. : No.101,Yousong Road,Longhua New District, Shenzhen,China

FCC Registered No.: 187086

1.2 MEASUREMENT UNCERTAINTY


The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately **95 %**.

No.	Item	Uncertainty
1	Conducted Emission Test	$\pm 1.38\text{dB}$
2	RF power,conducted	$\pm 0.16\text{dB}$
3	Spurious emissions,conducted	$\pm 0.21\text{dB}$
4	All emissions,radiated(<1G)	$\pm 4.68\text{dB}$
5	All emissions,radiated(>1G)	$\pm 4.89\text{dB}$
6	Temperature	$\pm 0.5^{\circ}\text{C}$
7	Humidity	$\pm 2\%$



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	WIRELESS AMPLIFIER	
Trade Name		
Model Name	MainStream AMP160 MainStream AMP160 80, iEAST AMP160, iEAST AMP80	
Model Difference	All the models are the same circuit and RF module, except the model names and outlook color.	
Product Description	The EUT is a WIRELESS AMPLIFIER	
	Operation Frequency:	802.11b/g/n20MHz:2412~2462 MHz 802.11n40MHz:2422~2452 MHz
	Modulation Type:	WIFI: OFDM/DSSS
	Bit Rate of Transmitter	802.11b:11/5.5/2/1 Mbps 802.11g:54/48/36/24/18/12/9/6Mbps 802.11n Up to 150Mbps
	Number Of Channel	802.11b/g/n20MHz:11 CH 802.11n40MHz: 7 CH
	Antenna Designation:	Please see Note 3.
Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.		
Channel List	Please refer to the Note 2.	
Power	DC 32V from adapter	
Adapter	Model:JC-225 I/P:AC 100-240V 50/60Hz 1.5A O/P:DC 32V 5A	
hardware version	--	
Software version	--	
Serial number	--	
Connecting I/O Port(s)	Please refer to the User's Manual	

Note:

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



2.

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

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

3.

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	N/A	N/A	external antenna		3.0	

2.2 DESCRIPTION OF TEST MODES

Pretest Mode	Description
Mode 1	802.11b CH1/ CH6/ CH11
Mode 2	802.11g CH1/ CH6/ CH11
Mode 3	802.11n20 CH1/ CH6/ CH11
Mode 4	802.11n40 CH3/ CH6/ CH9
Mode 5	Link Mode

Conducted Emission	
Final Test Mode	Description
Mode 5	Link Mode

For Radiated Emission	
Final Test Mode	Description
Mode 1	802.11b CH1/ CH6/ CH11
Mode 2	802.11g CH1/ CH6/ CH11
Mode 3	802.11n20 CH1/ CH6/ CH11
Mode 4	802.11n40 CH3/ CH6/ CH9

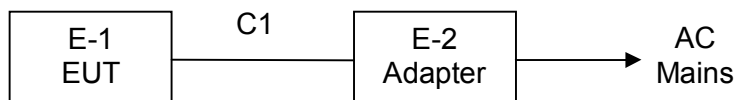
Note:

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




2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Emission Test



2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

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

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	WIRELESS AMPLIFIER		MainStream AMP160	N/A	EUT
E-2	Adapter	N/A	JC-225		

Item	Shielded Type	Ferrite Core	Length	Note
C1	No	No	0.8m	DC Line

Note:

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



2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	Spectrum Analyzer	Agilent	E4407B	MY45109572	2015.08.25	2016.08.24
2	Test Receiver	R&S	ESPI	101396	2015.08.25	2016.08.24
3	Bilog Antenna	SCHWARZBECK	VULB9160	VULB9160-3369	2015.08.25	2016.08.24
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264416	2016.07.06	2017.07.05
5	Spectrum Analyzer	Agilent	N9020A	MY5051041	2016.07.06	2017.07.05
6	Horn Antenna	SCHWARZBECK	9120D	9120D-1275	2015.08.25	2016.08.24
7	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2016.07.06	2017.07.05
8	Amplifier	SCHWARZBECK	BBV9718	9718-270	2015.08.25	2016.08.24
9	Amplifier	SCHWARZBECK	BBV9743	9743-119	2015.08.25	2016.08.24
10	Loop Antenna	ARA	PLDS83030/B	1029	2016.07.06	2017.07.05
11	Power Meter	R&S	NRVS	100696	2016.07.06	2017.07.05
12	Power Sensor	R&S	URV5-Z4	0395.1619.05	2016.07.06	2017.07.05
13	RF cables	R&S	N/A	N/A	2016.07.06	2017.07.05
14	966 Chamber	ChengYu	966 Room	966	2016.07.06	2017.07.05

Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	Test Receiver	R&S	ESCI	1166.5950K03-101165-ha	2015.08.25	2016.08.24
2	LISN	R&S	NSLK8126	8126466	2015.08.25	2016.08.24
3	LISN	R&S	NSLK8126	8126487	2015.08.25	2016.08.24
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2015.08.25	2016.08.24
5	RF cables	R&S	R204	R20X	2015.08.25	2016.08.24



3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

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

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

Note:

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

The following table is the setting of the receiver

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

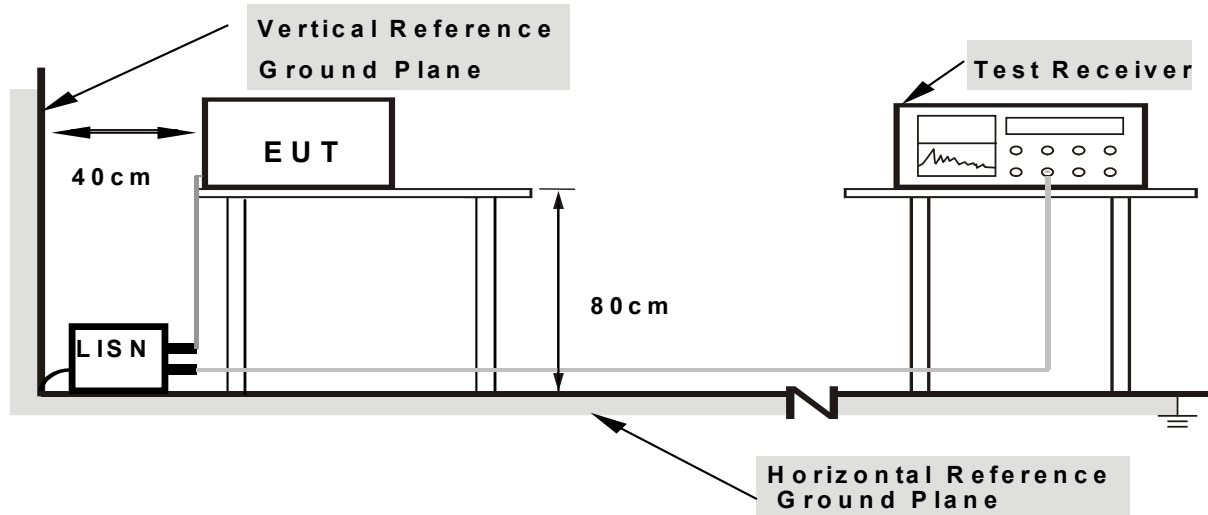
3.1.2 TEST PROCEDURE

- a. The EUT was placed 0.8 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.

3.1.3 DEVIATION FROM TEST STANDARD

No deviation

3.1.4 TEST SETUP



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

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

3.1.5 EUT OPERATING CONDITIONS

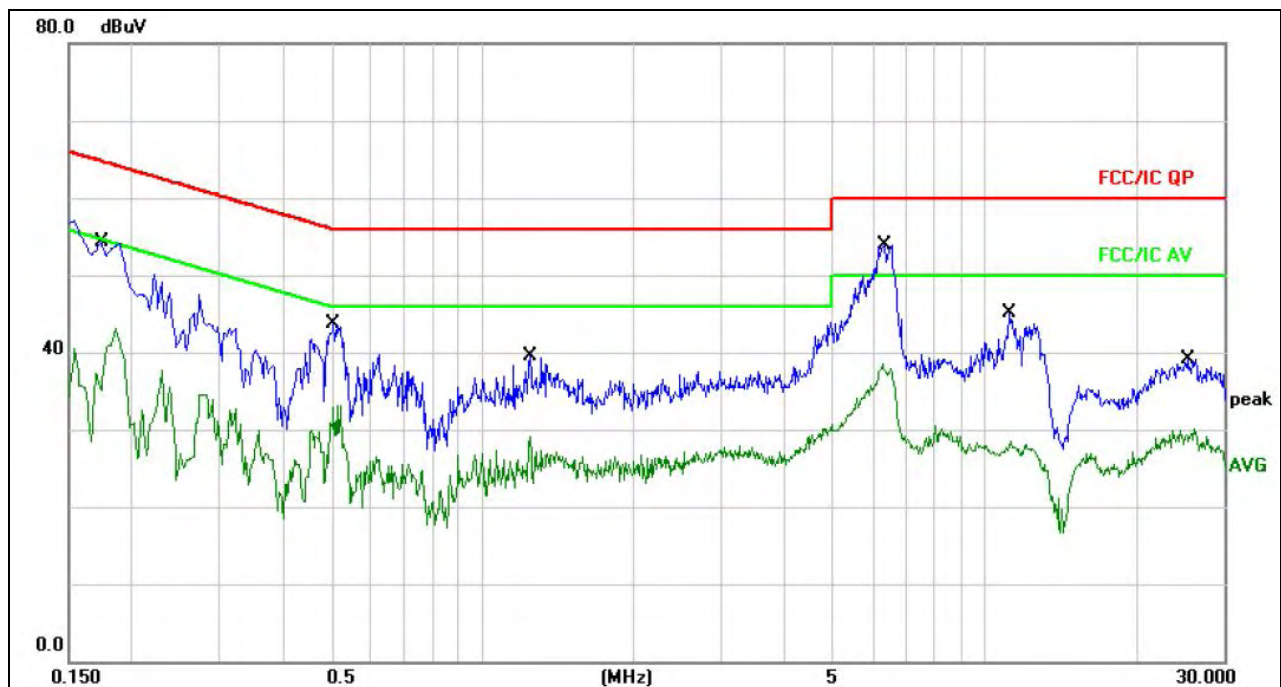
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

We pretest AC 120V and AC 240V, the worst voltage was AC 120V and the data recording in the report.

3.1.6 TEST RESULTS



Temperature :	25 °C	Relative Humidity :	54%
Pressure :	1010hPa	Phase :	L
Test Voltage :	AC 120V/60Hz	Test Mode :	Mode 5



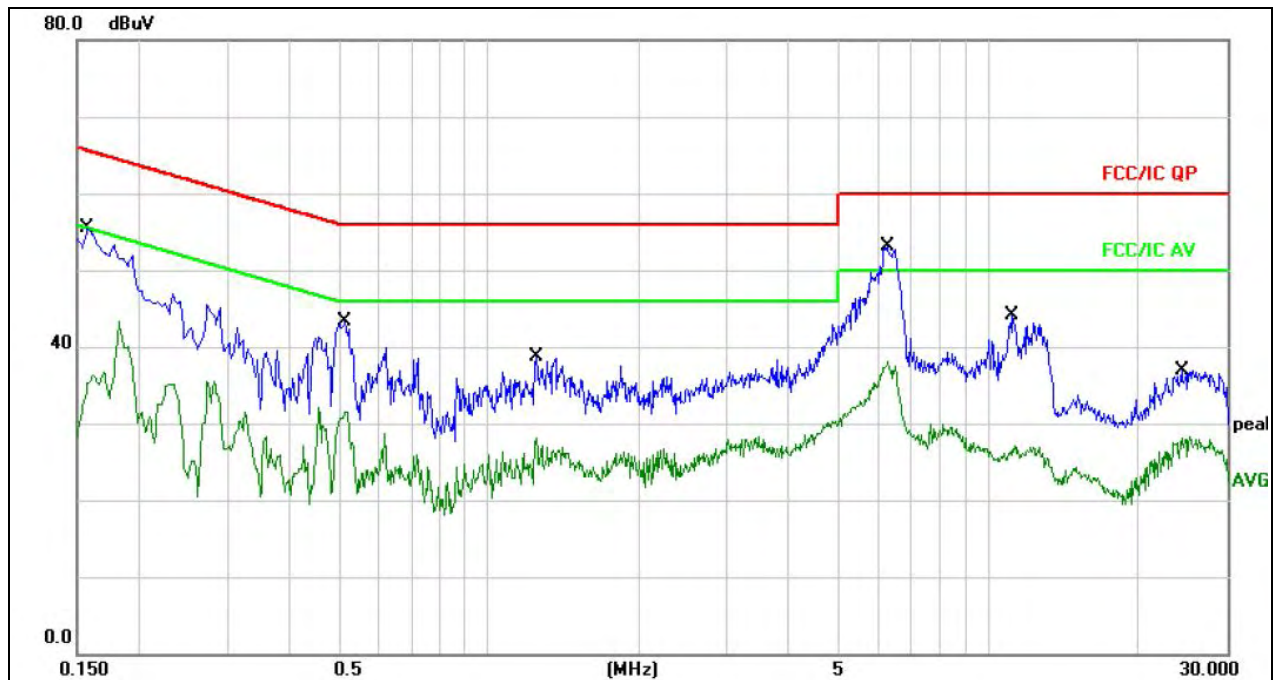
Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1740	44.24	10.06	54.30	64.76	-10.46	QP	
2		0.1740	33.07	10.06	43.13	54.76	-11.63	AVG	
3		0.5060	33.52	10.12	43.64	56.00	-12.36	QP	
4		0.5060	22.94	10.12	33.06	46.00	-12.94	AVG	
5		1.2460	29.35	10.17	39.52	56.00	-16.48	QP	
6		1.2460	18.98	10.17	29.15	46.00	-16.85	AVG	
7	*	6.2740	43.81	10.09	53.90	60.00	-6.10	QP	
8		6.2740	28.41	10.09	38.50	50.00	-11.50	AVG	
9		11.2340	34.91	10.13	45.04	60.00	-14.96	QP	
10		11.2340	18.32	10.13	28.45	50.00	-21.55	AVG	
11		25.4460	28.87	10.20	39.07	60.00	-20.93	QP	
12		25.4460	19.99	10.20	30.19	50.00	-19.81	AVG	



Temperature :	25 °C	Relative Humidity :	54%
Pressure :	1010hPa	Phase :	N
Test Voltage :	AC 120V/60Hz	Test Mode :	Mode 5



Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV	dBuV	dB		
1		0.1580	45.51	10.05	55.56	65.56	-10.00	QP	
2		0.1580	33.19	10.05	43.24	55.56	-12.32	AVG	
3		0.5180	33.10	10.12	43.22	56.00	-12.78	QP	
4		0.5180	21.36	10.12	31.48	46.00	-14.52	AVG	
5		1.2460	28.40	10.17	38.57	56.00	-17.43	QP	
6		1.2460	18.01	10.17	28.18	46.00	-17.82	AVG	
7	*	6.2619	43.02	10.09	53.11	60.00	-6.89	QP	
8		6.2619	28.00	10.09	38.09	50.00	-11.91	AVG	
9		11.1899	34.04	10.13	44.17	60.00	-15.83	QP	
10		11.1899	16.99	10.13	27.12	50.00	-22.88	AVG	
11		24.3660	26.66	10.19	36.85	60.00	-23.15	QP	
12		24.3660	17.99	10.19	28.18	50.00	-21.82	AVG	



3.2 RADIATED EMISSION MEASUREMENT

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

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

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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	Class B (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).

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	25GHz
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average

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

3.2.2 TEST PROCEDURE

Below 1GHz test procedure as below:

- 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.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Above 1GHz test procedure as below:

- Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre(Above 18GHz the distance is 1 meter and table is 1.5 metre).
- Test the EUT in the lowest channel ,the middle channel ,the Highest channel

Note:

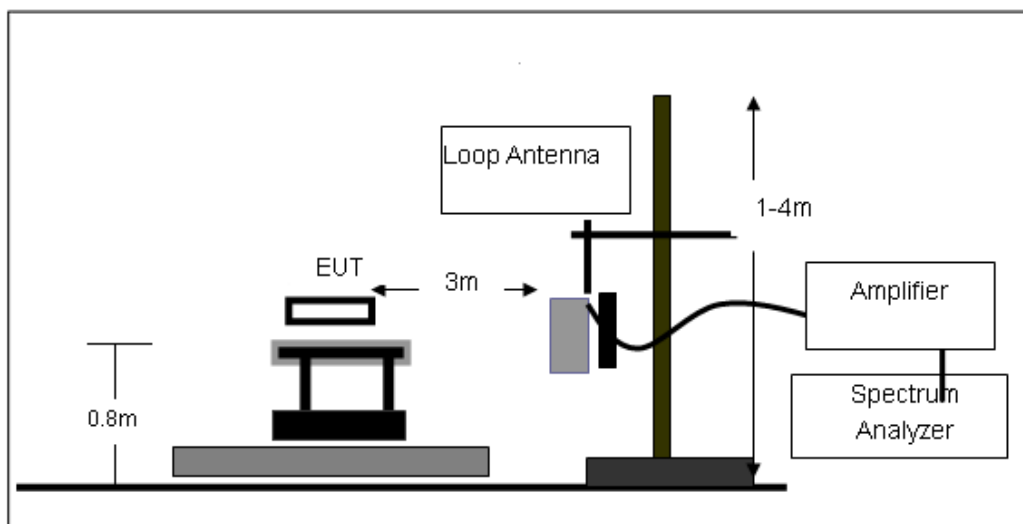
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported We pretest AC 120V and AC 240V, the worst voltage was AC 120V and the data recording in the report.

3.2.3 DEVIATION FROM TEST STANDARD

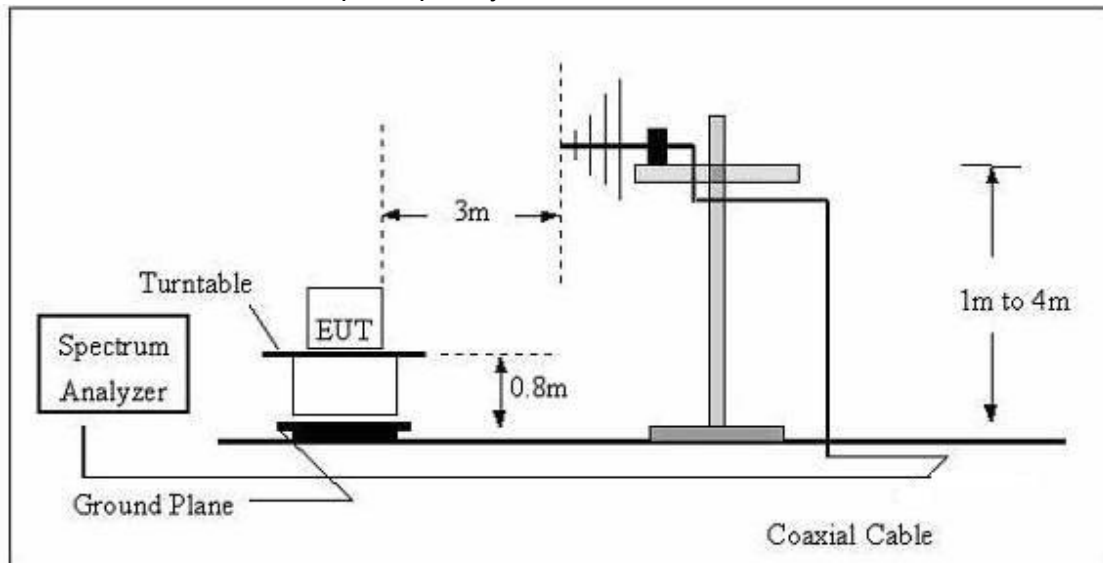
No deviation

3.2.4 TEST SETUP

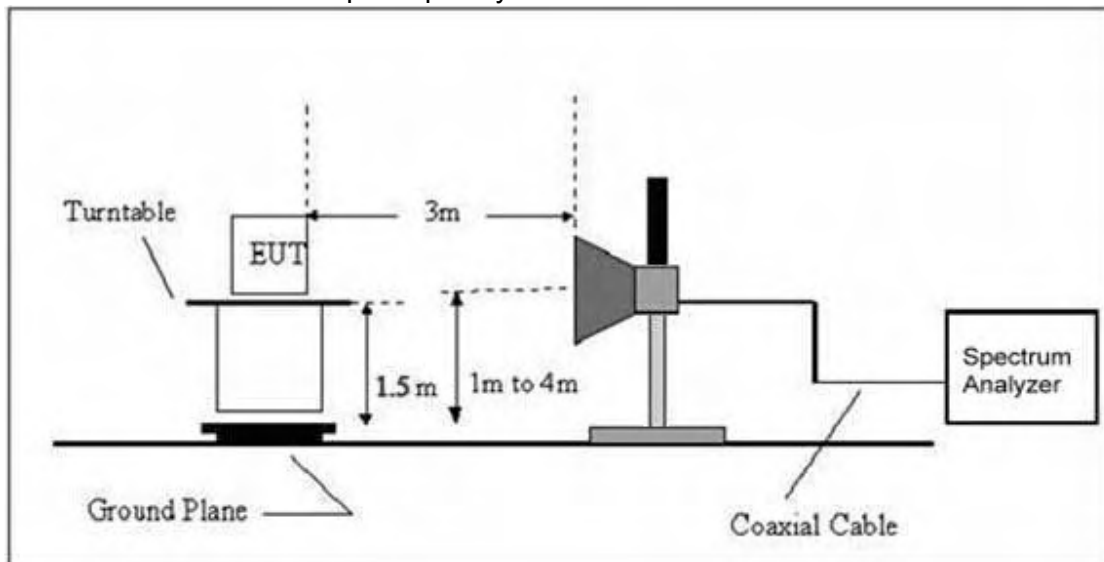
(A) Radiated Emission Test-Up Frequency Below 30MHz



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



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



3.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

**3.2.6 TEST RESULTS (BETWEEN 9KHZ – 30 MHZ)**

Temperature:	20℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 32V from adapter
Test Mode :	Mode 5	Polarization :	--

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

NOTE:

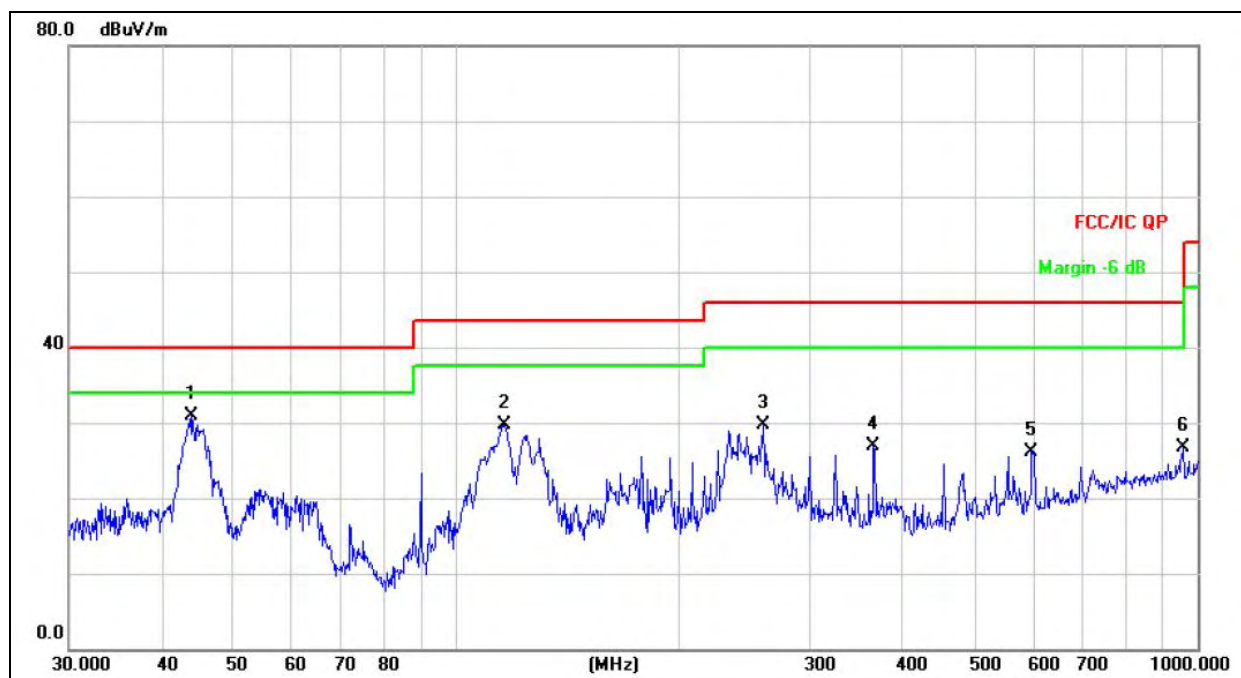
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor = $40 \log (\text{specific distance/test distance})$ (dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.

**3.2.7 TEST RESULTS (BETWEEN 30MHZ – 1GHZ)**

Temperature :	26℃	Relative Humidity :	54%
Pressure :	1010 hPa	Polarization :	Horizontal
Test Voltage :	DC 32V from adapter		
Test Mode :	Mode 5		



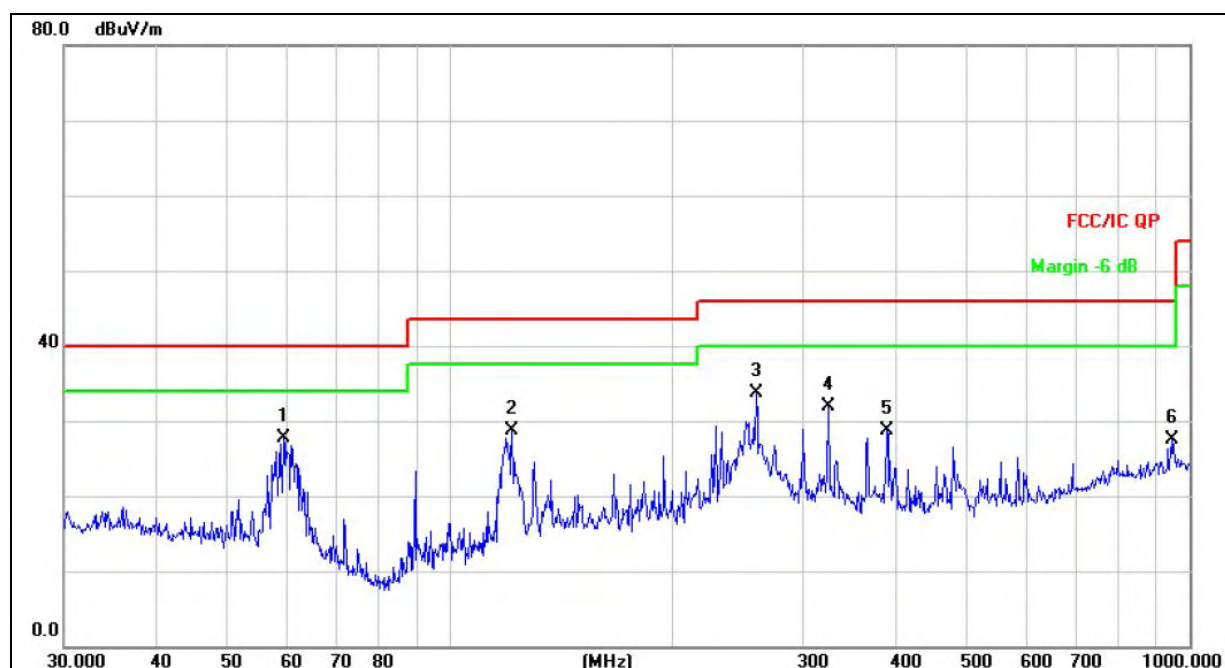
Remark:

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	43.9658	40.28	-9.35	30.93	40.00	-9.07	QP		
2		116.1321	44.74	-15.04	29.70	43.50	-13.80	QP		
3		259.2338	43.59	-13.94	29.65	46.00	-16.35	QP		
4		365.5391	37.91	-11.07	26.84	46.00	-19.16	QP		
5		597.2234	31.95	-5.77	26.18	46.00	-19.82	QP		
6		955.4381	27.16	-0.45	26.71	46.00	-19.29	QP		



Temperature :	26℃	Relative Humidity :	54%
Pressure :	1010 hPa	Polarization :	Vertical
Test Voltage :	DC 32V from adapter		
Test Mode :	Mode 5		



Remark:

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	59.4405	39.26	-11.47	27.79	40.00	-12.21	QP		
2		121.1231	43.40	-14.64	28.76	43.50	-14.74	QP		
3		259.2338	47.72	-13.94	33.78	46.00	-12.22	QP		
4		324.4561	43.94	-11.95	31.99	46.00	-14.01	QP		
5		389.3549	39.20	-10.44	28.76	46.00	-17.24	QP		
6		948.7610	28.04	-0.48	27.56	46.00	-18.44	QP		



3.2.8 TEST RESULTS (1GHZ~25GHZ)

802.11b

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:2412							
V	4824.00	41.68	19.36	61.04	74.00	-12.96	PK
V	4824.00	29.24	19.36	48.60	54.00	-5.40	AV
V	7236.00	37.95	17.17	55.12	74.00	-18.88	PK
V	7236.00	27.33	17.17	44.50	54.00	-9.50	AV
V	15450.00	31.58	20.59	52.17	74.00	-21.83	PK
H	4824.00	41.72	19.36	61.08	74.00	-12.92	PK
H	4824.00	29.05	19.36	48.41	54.00	-5.59	AV
H	7236.00	38.70	17.17	55.87	74.00	-18.13	PK
H	7236.00	29.56	17.17	46.73	54.00	-7.27	AV
H	15450.00	29.84	20.59	50.43	74.00	-23.57	PK
operation frequency:2437							
V	4874.00	41.88	19.42	61.30	74.00	-12.70	PK
V	4874.00	28.71	19.42	48.13	54.00	-5.87	AV
V	7311.00	39.93	17.19	57.12	74.00	-16.88	PK
V	7311.00	26.68	17.19	43.87	54.00	-10.13	AV
V	15450.00	31.58	20.59	52.17	74.00	-21.83	PK
H	4874.00	41.80	19.42	61.22	74.00	-12.78	PK
H	4874.00	26.52	19.42	45.94	54.00	-8.06	AV
H	7311.00	38.99	17.19	56.18	74.00	-17.82	PK
H	7311.00	25.99	17.19	43.18	54.00	-10.82	AV
H	15450.00	29.87	20.59	50.46	74.00	-23.54	PK
operation frequency:2462							
V	4924.00	41.54	19.47	61.01	74.00	-12.99	PK
V	4924.00	28.52	19.47	47.99	54.00	-6.01	AV
V	7386.00	38.03	17.22	55.25	74.00	-18.75	PK
V	7386.00	27.50	17.22	44.72	54.00	-9.28	AV
V	15450.00	31.61	20.59	52.20	74.00	-21.80	PK
H	4924.00	42.17	19.47	61.64	74.00	-12.36	PK
H	4924.00	28.25	19.47	47.72	54.00	-6.28	AV
H	7386.00	38.24	17.22	55.46	74.00	-18.54	PK
H	7386.00	28.88	17.22	46.10	54.00	-7.90	AV
H	15450.00	29.87	20.59	50.46	74.00	-23.54	PK
Remark: 1. Emission Level = Meter Reading + Factor, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.							



802.11g

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:2412							
V	4824.00	39.99	19.36	59.35	74.00	-14.65	PK
V	4824.00	29.44	19.36	48.80	54.00	-5.20	AV
V	7236.00	40.20	17.17	57.37	74.00	-16.63	PK
V	7236.00	29.51	17.17	46.68	54.00	-7.32	AV
V	15450.00	31.80	20.59	52.39	74.00	-21.61	PK
H	4824.00	40.03	19.36	59.39	74.00	-14.61	PK
H	4824.00	29.24	19.36	48.60	54.00	-5.40	AV
H	7236.00	39.97	17.17	57.14	74.00	-16.86	PK
H	7236.00	29.76	17.17	46.93	54.00	-7.07	AV
H	15450.00	30.04	20.59	50.63	74.00	-23.37	PK
operation frequency:2437							
V	4874.00	42.31	19.42	61.73	74.00	-12.27	PK
V	4874.00	29.01	19.42	48.43	54.00	-5.57	AV
V	7311.00	40.34	17.19	57.53	74.00	-16.47	PK
V	7311.00	26.95	17.19	44.14	54.00	-9.86	AV
V	15450.00	31.92	20.59	52.51	74.00	-21.49	PK
H	4874.00	42.23	19.42	61.65	74.00	-12.35	PK
H	4874.00	26.80	19.42	46.22	54.00	-7.78	AV
H	7311.00	39.40	17.19	56.59	74.00	-17.41	PK
H	7311.00	26.27	17.19	43.46	54.00	-10.54	AV
H	15450.00	30.14	20.59	50.73	74.00	-23.27	PK
operation frequency:2462							
V	4924.00	41.54	19.47	61.01	74.00	-12.99	PK
V	4924.00	28.52	19.47	47.99	54.00	-6.01	AV
V	7386.00	38.02	17.22	55.24	74.00	-18.76	PK
V	7386.00	27.49	17.22	44.71	54.00	-9.29	AV
V	15450.00	31.60	20.59	52.19	74.00	-21.81	PK
H	4924.00	42.16	19.47	61.63	74.00	-12.37	PK
H	4924.00	28.24	19.47	47.71	54.00	-6.29	AV
H	7386.00	38.23	17.22	55.45	74.00	-18.55	PK
H	7386.00	28.87	17.22	46.09	54.00	-7.91	AV
H	15450.00	29.86	20.59	50.45	74.00	-23.55	PK
Remark:							
1. Emission Level = Meter Reading + Factor, Margin= Emission Level - Limit							
2. If peak below the average limit, the average emission was no test.							
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.							



802.11n(20MHz)

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:2412							
V	4824.00	39.83	19.36	59.19	74.00	-14.81	PK
V	4824.00	29.32	19.36	48.68	54.00	-5.32	AV
V	7236.00	40.04	17.17	57.21	74.00	-16.79	PK
V	7236.00	29.39	17.17	46.56	54.00	-7.44	AV
V	15450.00	31.67	20.59	52.26	74.00	-21.74	PK
H	4824.00	39.87	19.36	59.23	74.00	-14.77	PK
H	4824.00	29.14	19.36	48.50	54.00	-5.50	AV
H	7236.00	39.81	17.17	56.98	74.00	-17.02	PK
H	7236.00	29.64	17.17	46.81	54.00	-7.19	AV
H	15450.00	29.92	20.59	50.51	74.00	-23.49	PK

operation frequency:2437

V	4874.00	41.99	19.42	61.41	74.00	-12.59	PK
V	4874.00	28.80	19.42	48.22	54.00	-5.78	AV
V	7311.00	40.05	17.19	57.24	74.00	-16.76	PK
V	7311.00	26.75	17.19	43.94	54.00	-10.06	AV
V	15450.00	31.67	20.59	52.26	74.00	-21.74	PK
H	4874.00	41.91	19.42	61.33	74.00	-12.67	PK
H	4874.00	26.59	19.42	46.01	54.00	-7.99	AV
H	7311.00	39.11	17.19	56.30	74.00	-17.70	PK
H	7311.00	26.06	17.19	43.25	54.00	-10.75	AV
H	15450.00	29.92	20.59	50.51	74.00	-23.49	PK

operation frequency:2462

V	4924.00	41.36	19.47	60.83	74.00	-13.17	PK
V	4924.00	28.38	19.47	47.85	54.00	-6.15	AV
V	7386.00	37.86	17.22	55.08	74.00	-18.92	PK
V	7386.00	27.38	17.22	44.60	54.00	-9.40	AV
V	15450.00	31.47	20.59	52.06	74.00	-21.94	PK
H	4924.00	41.98	19.47	61.45	74.00	-12.55	PK
H	4924.00	28.12	19.47	47.59	54.00	-6.41	AV
H	7386.00	38.07	17.22	55.29	74.00	-18.71	PK
H	7386.00	28.76	17.22	45.98	54.00	-8.02	AV
H	15450.00	29.74	20.59	50.33	74.00	-23.67	PK

Remark:

1. Emission Level = Meter Reading + Factor, Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



802.11n(40MHz)

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:2422							
V	4844.000	39.35	19.37	58.72	74.00	-15.28	PK
V	4844.000	28.96	19.37	48.33	54.00	-5.67	AV
V	7266.000	39.55	17.18	56.73	74.00	-17.27	PK
V	7266.000	29.03	17.18	46.21	54.00	-7.79	AV
V	15450.00	31.29	20.59	51.88	74.00	-22.12	PK
H	4844.000	39.39	19.37	58.76	74.00	-15.24	PK
H	4844.000	28.78	19.37	48.15	54.00	-5.85	AV
H	7266.000	39.33	17.18	56.51	74.00	-17.49	PK
H	7266.000	29.29	17.18	46.47	54.00	-7.53	AV
H	15450.00	29.55	20.59	50.14	74.00	-23.86	PK

operation frequency:2437

V	4874.00	41.41	19.42	60.83	74.00	-13.17	PK
V	4874.00	28.39	19.42	47.81	54.00	-6.19	AV
V	7311.00	39.48	17.19	56.67	74.00	-17.33	PK
V	7311.00	26.37	17.19	43.56	54.00	-10.44	AV
V	15450.00	31.23	20.59	51.82	74.00	-22.18	PK
H	4874.00	41.33	19.42	60.75	74.00	-13.25	PK
H	4874.00	26.22	19.42	45.64	54.00	-8.36	AV
H	7311.00	38.55	17.19	55.74	74.00	-18.26	PK
H	7311.00	25.71	17.19	42.90	54.00	-11.10	AV
H	15450.00	29.49	20.59	50.08	74.00	-23.92	PK

operation frequency:2452

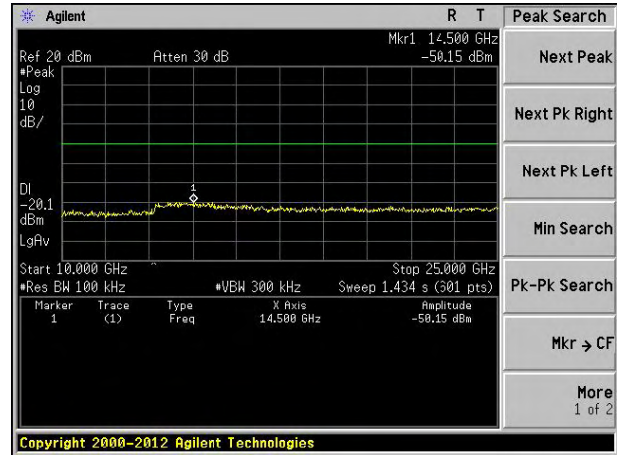
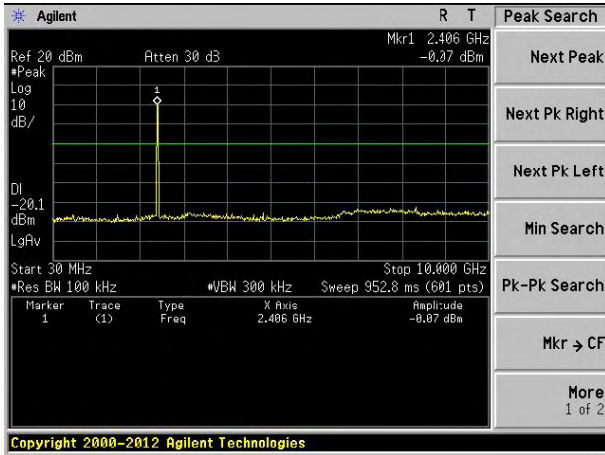
V	4904.00	40.86	19.44	60.30	74.00	-13.70	PK
V	4904.00	28.05	19.44	47.49	54.00	-6.51	AV
V	7356.00	37.40	17.21	54.61	74.00	-19.39	PK
V	7356.00	27.06	17.21	44.27	54.00	-9.73	AV
V	15450.00	31.09	20.59	51.68	74.00	-22.32	PK
H	4904.00	41.48	19.44	60.92	74.00	-13.08	PK
H	4904.00	27.77	19.44	47.21	54.00	-6.79	AV
H	7356.00	37.61	17.21	54.82	74.00	-19.18	PK
H	7356.00	28.41	17.21	45.62	54.00	-8.38	AV
H	15450.00	29.39	20.59	49.98	74.00	-24.02	PK

Remark:

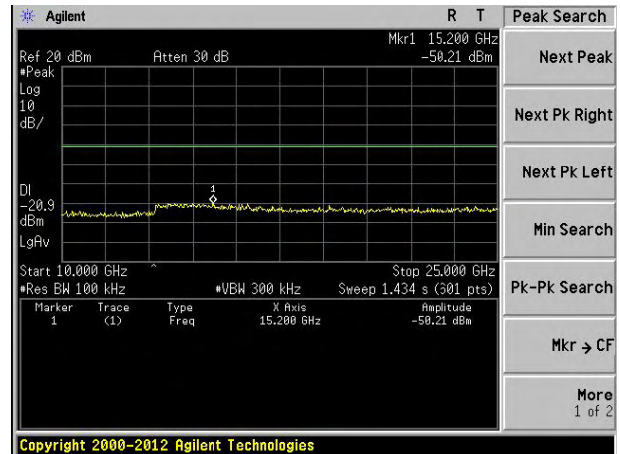
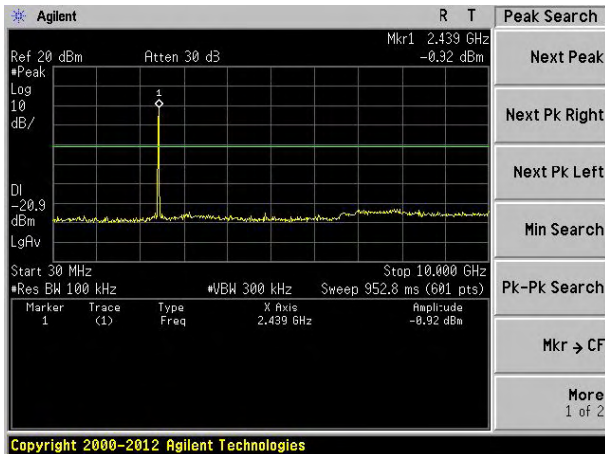
1. Emission Level = Meter Reading + Factor, Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



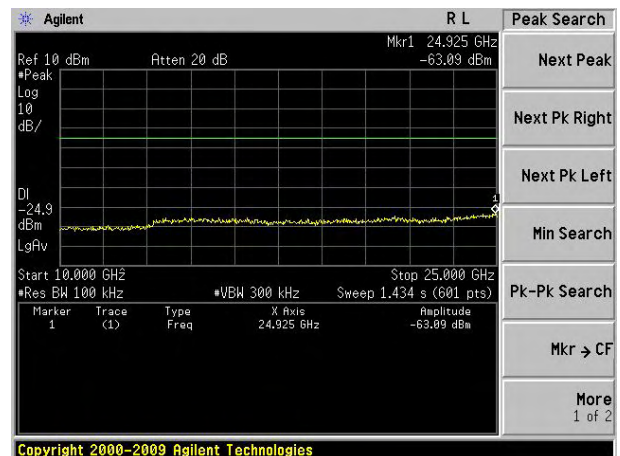
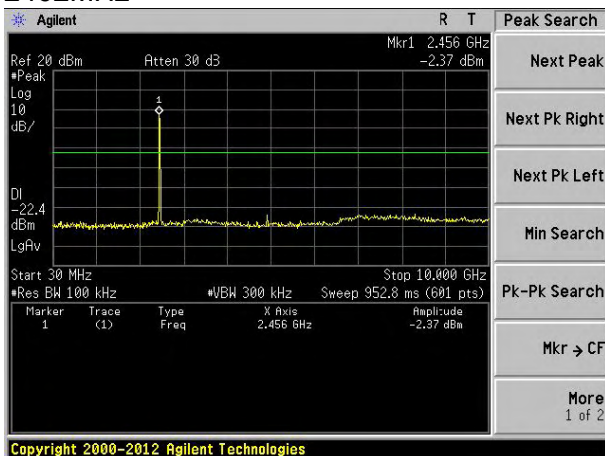
For Conducted
802.11b
2412MHz



2437MHz

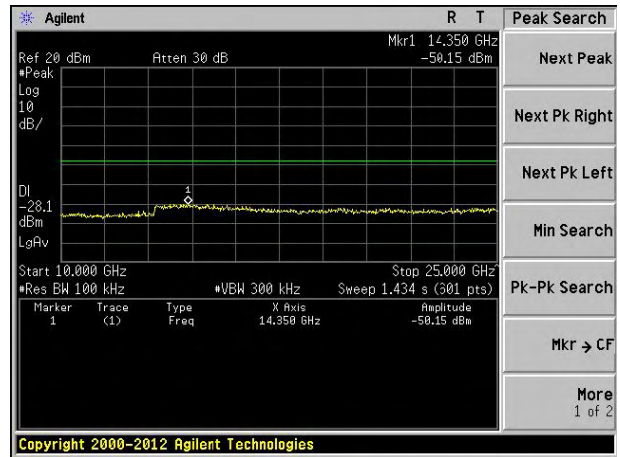
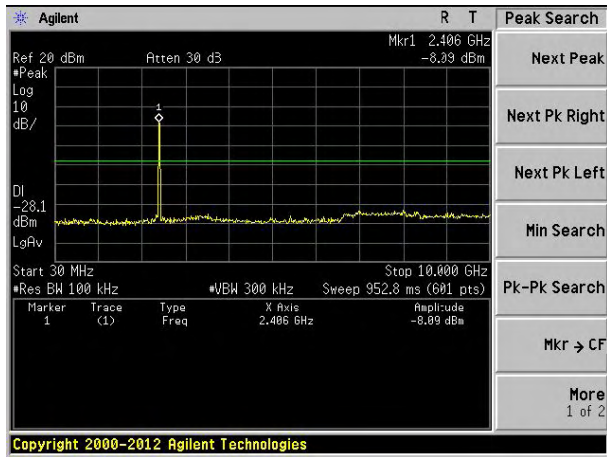


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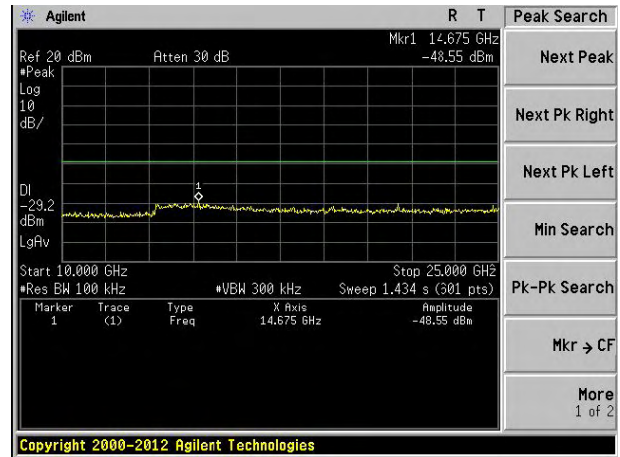
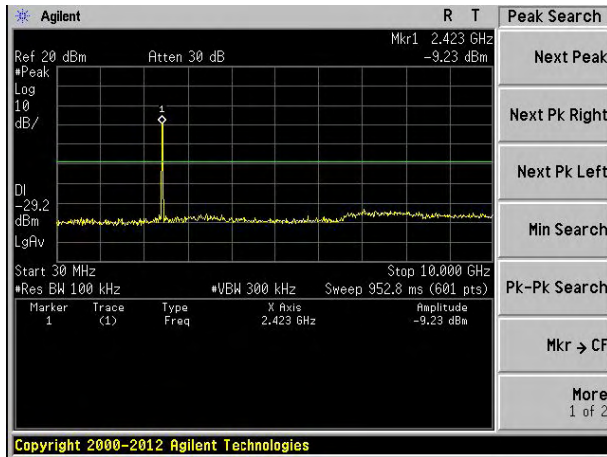




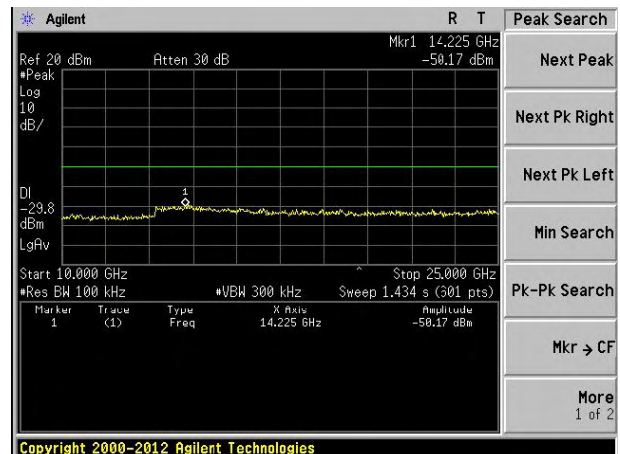
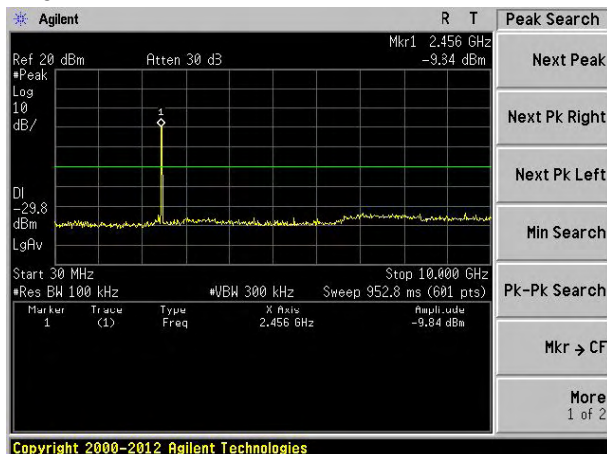
802.11g
2412MHz



2437MHz

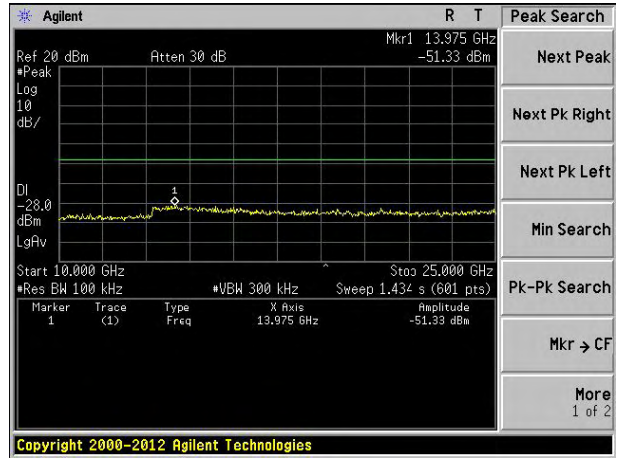
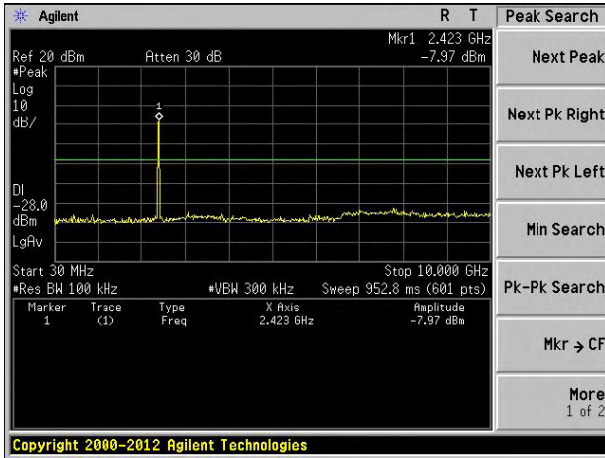


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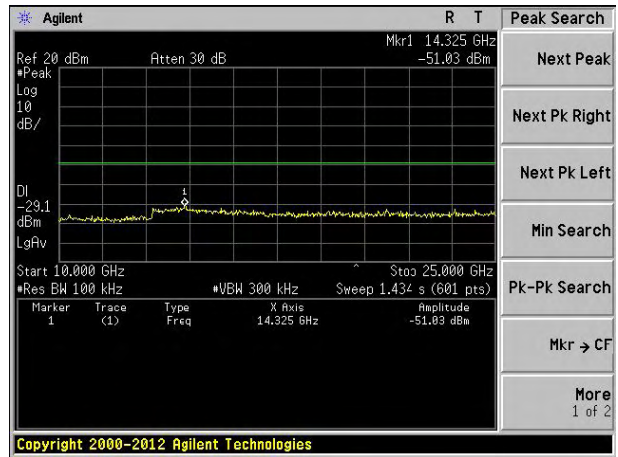
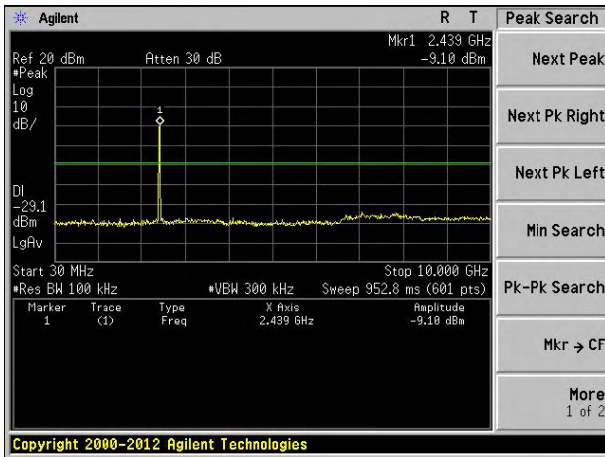




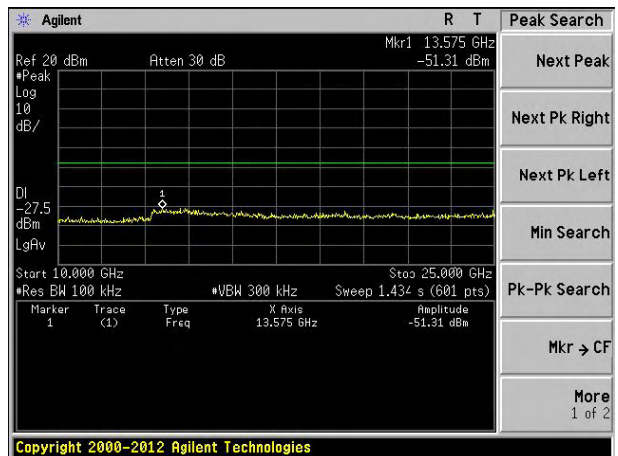
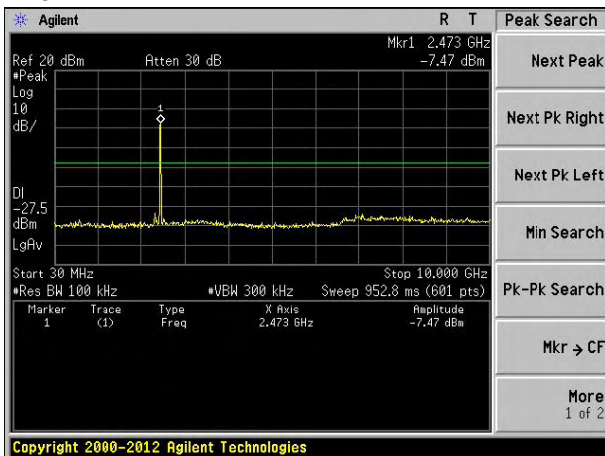
802.11n 20MHz
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2437MHz

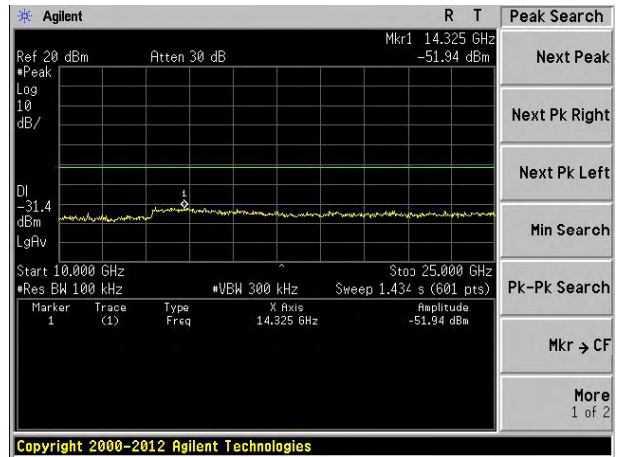
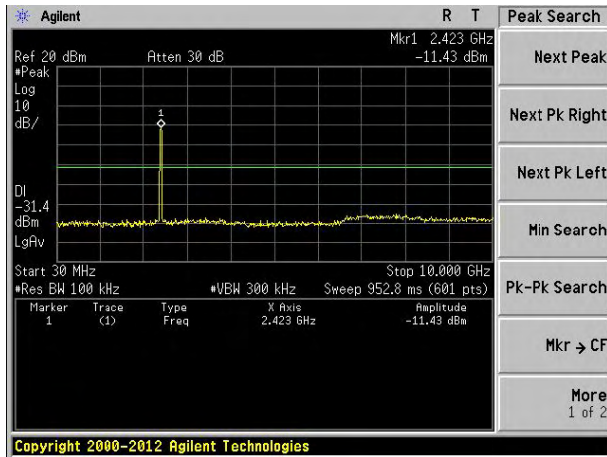


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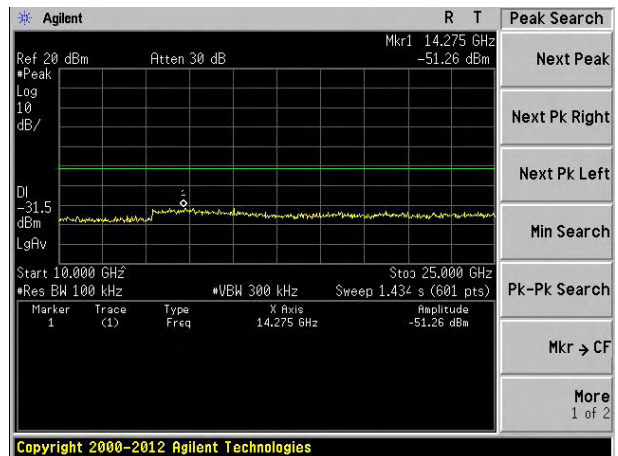
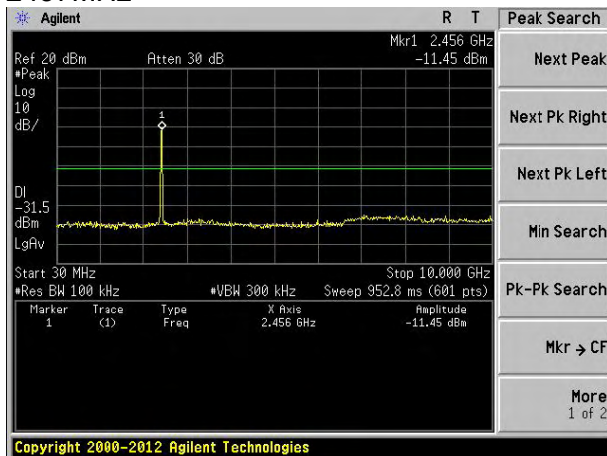




802.11n 40MHz
2422MHz



2437MHz



2452MHz

