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检测
TESTING
CNAS L5313



Test Report

FCC Part15 Subpart C

Product Name : AC1200 Wireless Dual Band Gigabit
Router

Model No. : Archer C1200

FCC ID : TE7C1200

Applicant : TP-LINK TECHNOLOGIES CO., LTD.

Address : Building 24(floors1,3,4,5) and 28(floors1-4) Central
Science and Technology Park, Shennan Rd, Nanshan,
Shenzhen, China

Date of Receipt : Mar. 16, 2016

Test Date : Mar. 22, 2016~May 14, 2016

Issued Date : Jun. 30, 2016

Report No. : 1632069R-RF-US-P06V01

Report Version : V1.1

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

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Test Report Certification

Issued Date : Jun. 30, 2016
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Product Name : AC1200 Wireless Dual Band Gigabit Router
Applicant : TP-LINK TECHNOLOGIES CO., LTD.
Address : Building 24(floors1,3,4,5) and 28(floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Manufacturer : TP-LINK TECHNOLOGIES CO., LTD.
Address : Building 24(floors1,3,4,5) and 28(floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Model No. : Archer C1200
FCC ID : TE7C1200
EUT Voltage : AC 100-240V, 50/60Hz
Brand Name : TP-LINK
Applicable Standard : FCC CFR Title 47 Part 15 Subpart C: 2014
ANSI C63.4:2014;
ANSI C63.10:2013;
KDB 558074 D01v03r05
KDB 662911 D01 Multiple Transmitter Output v02r01
Test Result : Complied
Performed Location : Quietek Corporation - Suzhou EMC Laboratory
No.99 Hongye Rd., Suzhou Industrial Park, Suzhou, 215006, Jiangsu, China
TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098
FCC Registration Number: 800392

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Laboratory Information

We, **Quietek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

Taiwan R.O.C.	:	BSMI, NCC, TAF
USA	:	FCC
Japan	:	VCCI
China	:	CNAS

The related certificate for our laboratories about the test site and management system can be downloaded from Quietek Corporation's Web Site : <http://www.quietek.com/english/about/certificates.aspx?bval=5>

The address and introduction of Quietek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/index_en.aspx

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History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
1632069R-RF-US-P06V01	V1.0	Initial Issued Report	Jun. 01, 2016
1632069R-RF-US-P06V01	V1.1	<ol style="list-style-type: none"> 1. Added the 6dB bandedge plots for other modes 2. Modified the directional gain 3. Modified the correct VBW 	Jun. 30, 2016

1. General Information

1.1. EUT Description

Product Name	AC1200 Wireless Dual Band Gigabit Router
Brand Name	TP-LINK
Model No.	Archer C1200
EUT Voltage	AC 100-240V, 50/60Hz
Frequency Range	For 2.4GHz Band 802.11b/g/n(20MHz): 2412~2462MHz 802.11n(40MHz): 2422~2452MHz
Channel Number	For 2.4GHz Band 802.11b/g/n(20MHz): 11 802.11n(40MHz): 7
Type of Modulation	802.11b: DSSS 802.11g: OFDM
Data Rate	802.11g: 6/9/12/18/24/36/48/54 Mbps 802.11b: 1/2/5.5/11 Mbps 802.11n: up to 300 Mbps
Channel Control	Auto

1.2. Working Frequency of Each Channel:

802.11b/g/n(20MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412 MHz	02	2417 MHz	03	2422 MHz	04	2427 MHz
05	2432 MHz	06	2437 MHz	07	2442 MHz	08	2447 MHz
09	2452 MHz	10	2457 MHz	11	2462 MHz	N/A	N/A
802.11n(40MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
03	2422 MHz	04	2427 MHz	05	2432 MHz	06	2437 MHz
07	2442 MHz	08	2447 MHz	09	2452 MHz	N/A	N/A

1.3. Antenna information

Model No.	N/A					
Antenna manufacturer	TP-LINK					
Antenna Delivery	<input type="checkbox"/>	1*TX+1*RX	<input checked="" type="checkbox"/>	2*TX+2*RX	<input type="checkbox"/>	3*TX+3*RX
Antenna technology	<input type="checkbox"/>	SISO				
	<input checked="" type="checkbox"/>	MIMO	<input type="checkbox"/>	Basic		
			<input checked="" type="checkbox"/>	CDD		
			<input type="checkbox"/>	Beam-forming		
Antenna Type	<input checked="" type="checkbox"/>	External	<input checked="" type="checkbox"/>	Dipole		
	<input type="checkbox"/>	Internal	<input type="checkbox"/>	PIFA		
			<input type="checkbox"/>	PCB		
			<input type="checkbox"/>	Ceramic Chip Antenna		
			<input type="checkbox"/>	Metal plate type F antenna		
Antenna Gain	ANT0:1.63dBi, ANT1:1.95dBi					
Directional Gain	For other modes: 1.95dBi for Power test, 4.80dBi for PSD test.					

1.4. Mode of Operation

Test Modes List
Mode 1: Transmit by 802.11b
Mode 2: Transmit by 802.11g with CDD
Mode 3: Transmit by 802.11n(20MHz) with CDD
Mode 4: Transmit by 802.11n(40MHz) with CDD

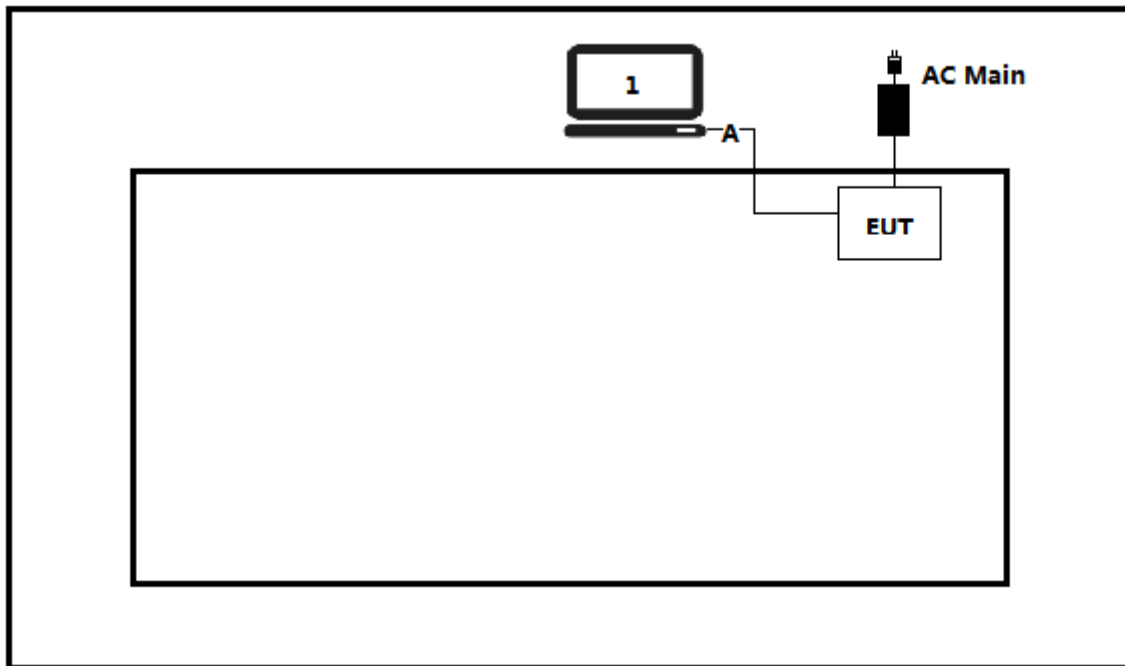
1.5. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

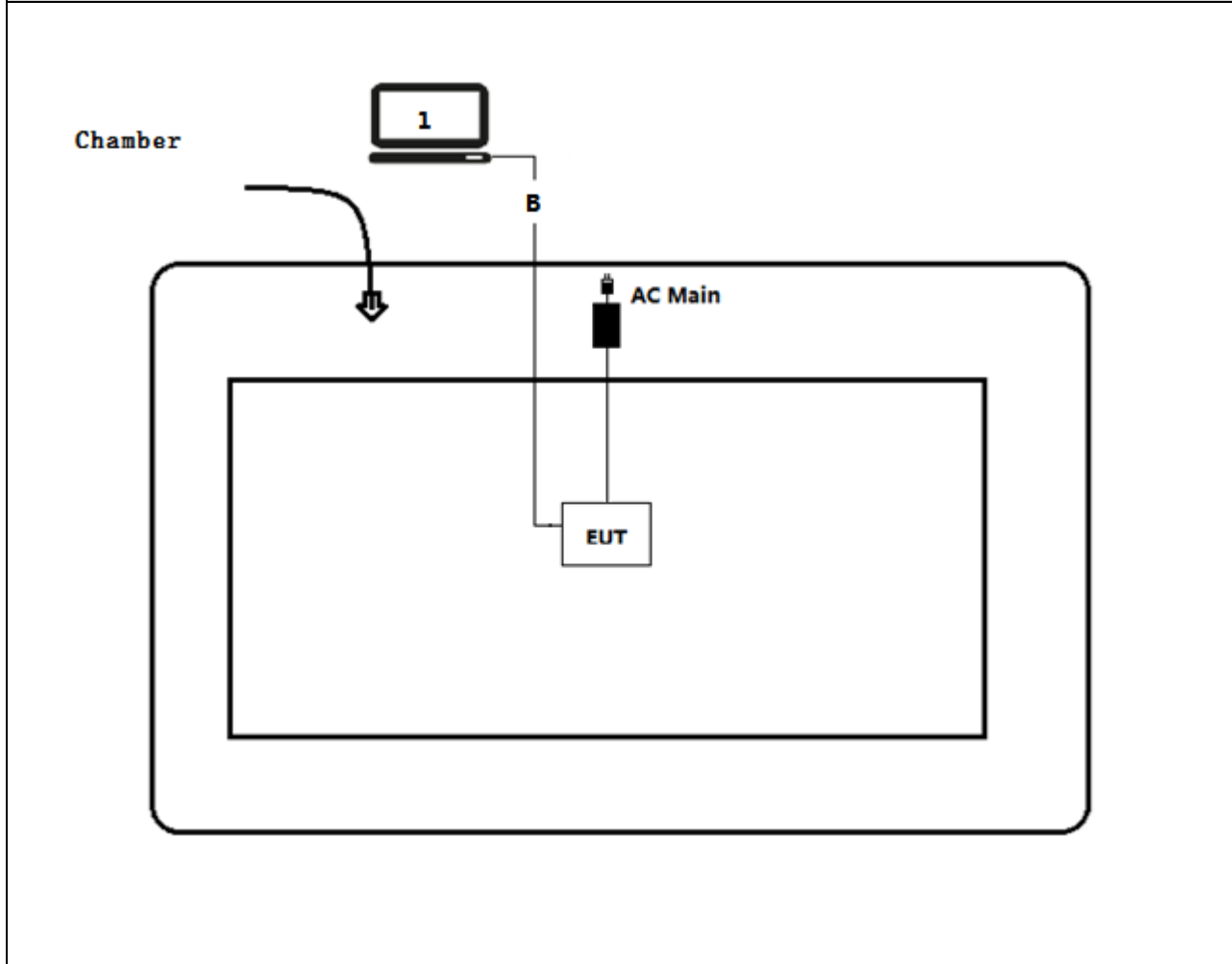
No.	Product	Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook	Lenovo	Think pad x220	SUA0600195	Non-shielded
A	LAN cable	N/A	N/A	N/A	Non-shielded,1.5m
B	LAN cable	N/A	N/A	N/A	Non-shielded,10m

1.6. Configuration of Tested System

Test setup Diagram- AC Line Conducted Emission Test



Test setup Diagram- Radiated Emission



2. Technical Test

2.1. Summary of Test Result

Performed Test Item	Normative References	Limit	Result
AC Power Line Conducted Emission	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.207	FCC 15.207	PASS
Emissions in restricted frequency bands	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.209	FCC 15.209	PASS
Emissions in non-restricted frequency bands	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(d)	$\geq 30\text{dBc}$	PASS
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart C: 2015 15.247(d)	FCC 15.209	PASS
Occupied Bandwidth	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(a)(2)	$\geq 500\text{kHz}$	PASS
Fundamental emission output power	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(b)(3)	$\leq 30\text{dBm}$	PASS
Power Spectral Density	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(e)	$\leq 8\text{dBm}/3\text{kHz}$	PASS

2.2. Test Frequency configuration:

Modulation Mode	Channel	Frequency	Channel	Frequency	Channel	Frequency
802.11b	01	2412 MHz	06	2437 MHz	11	2462MHz
802.11g	01	2412 MHz	06	2437 MHz	11	2462MHz
802.11n(20MHz)	01	2412 MHz	06	2437 MHz	11	2462MHz
802.11n(40MHz)	03	2422 MHz	06	2437 MHz	09	2452MHz

2.3. Power setting parameter

CDD Mode:

Test Software	ART 2		
Modulation Mode	Test Frequency	Ant 0	Ant 1
802.11b	2412	106	×
	2437	120	×
	2462	100	×
802.11g	2412	80	80
	2437	109	109
	2462	80	80
802.11n(20MHz)	2412	76	76
	2437	108	108
	2462	70	70
802.11n(40MHz)	2422	47	47
	2437	84	84
	2452	48	48

2.4. Power vs Data Rate

MCS Index	Spatial Streams	Data Rate (Mbps)						
		802.11b	802.11g		20MHz Bandwidth		40MHz Bandwidth	
					800ns GI	400ns GI	800ns GI	400ns GI
1	1	1	6	---	13.0	14.4	27.0	30.0
2	1	2	9	---	26.0	28.9	54.0	60.0
3	1	5.5	12	---	39.0	43.3	81.0	90.0
4	1	11	18	---	52.0	57.8	108.0	120.0
5	1	---	24	---	78.0	86.7	162.0	180.0
6	1	---	36	---	104.0	115.6	216.0	240.0
7	1	---	48	---	117.0	130.0	243.0	270.0
8	1	---	54	---	130.0	144.0	270.0	300.0

Note 1 : The blue form is the maximum power data rate

MCS Index	Spatial Streams	Data Rate (Mbps)						
		802.11b	802.11g		20MHz Bandwidth		40MHz Bandwidth	
					800ns GI	400ns GI	800ns GI	400ns GI
1	2	1	6	---	13.0	14.4	27.0	30.0
2	2	2	9	---	26.0	28.9	54.0	60.0
3	2	5.5	12	---	39.0	43.3	81.0	90.0
4	2	11	18	---	52.0	57.8	108.0	120.0
5	2	---	24	---	78.0	86.7	162.0	180.0
6	2	---	36	---	104.0	115.6	216.0	240.0
7	2	---	48	---	117.0	130.0	243.0	270.0
8	2	---	54	---	130.0	144.0	270.0	300.0

Note 1 : The blue form is the maximum power data rate

2.5. Test Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	21
Humidity (%RH)	25-75	50
Barometric pressure (mbar)	860-1060	950-1000

2.6. Measurement Uncertainty

Test Items	Uncertainty
AC Power Line Conducted Emission	$\pm 2.02\text{dB}$
Radiated Emission	Below 1GHz $\pm 3.8\text{ dB}$
	Above 1GHz $\pm 3.9\text{ dB}$
RF Antenna Port Conducted Emission	$\pm 1.27\text{dB}$
Radiated Emission Band Edge	$\pm 3.9\text{dB}$
Occupied Bandwidth	$\pm 1\text{kHz}$
Power Spectral Density	$\pm 1.27\text{dB}$

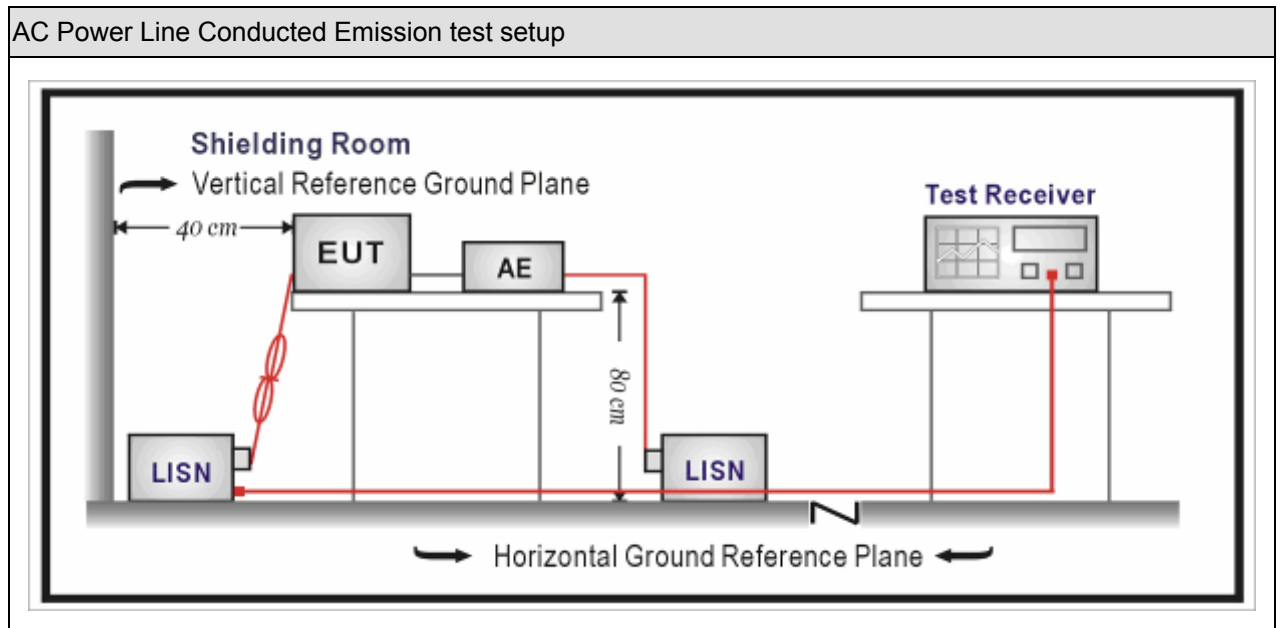
3. AC Power Line Conducted Emission

3.1. Test Equipment

AC Power Line Conducted Emission / TR-1					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100726	2016.03.29	2017.03.28
Two-Line V-Network	R&S	ENV216	100043	2016.03.29	2017.03.28
Two-Line V-Network	R&S	ENV216	100044	2015.09.17	2016.09.16
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2016.03.02	2017.03.01
50ohm Termination	SHX	TF2	07081401	2015.09.17	2016.09.16
Temperature/Humidity Meter	zhichen	ZC1-2	TR1-TH	2016.01.04	2017.01.03

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

3.2. Test Setup



3.3. Limit

Frequency of Emission (MHz)	Conducted Limit	
	Quasi-peak (dB μ V)	Average (dB μ V)
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

Note 1: The lower limit shall apply at the transition frequencies.
 Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

3.4. Test Procedure

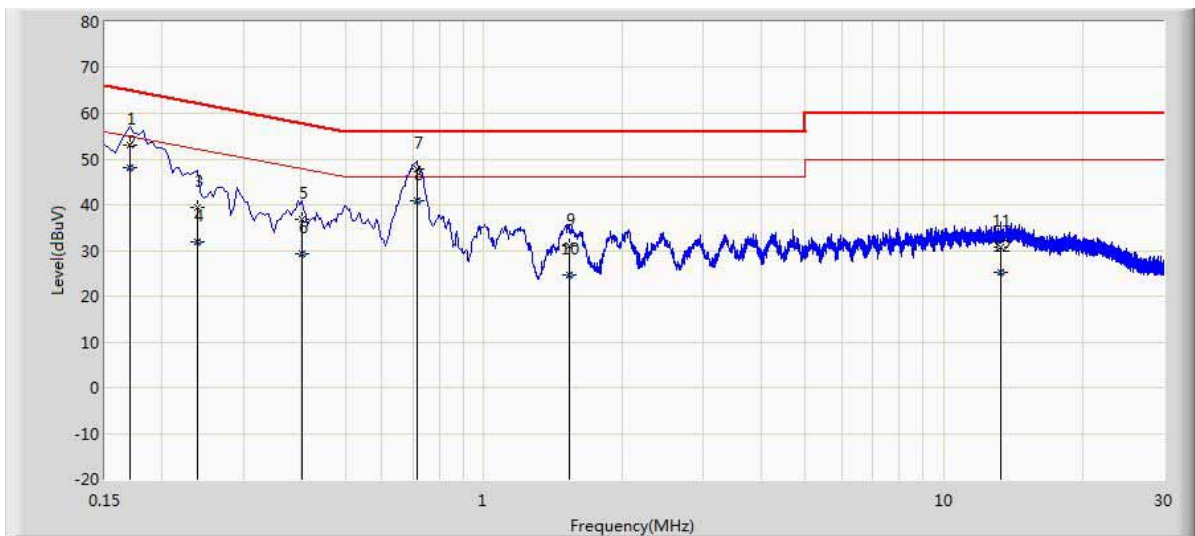
Test Method			
	References Rule	Chapter	Item
<input checked="" type="checkbox"/>	ANSI C63.10-2013	6.2	Standard test method for ac power-line conducted emissions from unlicensed wireless devices
<input checked="" type="checkbox"/>	ANSI C63.4-2014	7	AC power-line conducted emission measurements

3.5. Test Result

Product Name	: AC1200 Wireless Dual Band Gigabit Router	Polarity	: Line
Test Item	: AC Power Line Conducted Emission	Power	: AC 120V/60Hz
Test Site	: TR1	Test Mode	: Mode 1

No	Frequency (MHz)	Measure Level (dB μ V)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V)	Probe (dB)	Cable (dB)	Type
1	0.170	53.033	43.310	-11.927	64.960	9.663	0.060	QP
2	0.170	48.123	38.400	-6.837	54.960	9.663	0.060	AV
3	0.238	39.513	29.803	-22.653	62.166	9.650	0.060	QP
4	0.238	31.851	22.141	-20.315	52.166	9.650	0.060	AV
5	0.402	36.928	27.225	-20.884	57.812	9.639	0.064	QP
6	0.402	29.374	19.671	-18.438	47.812	9.639	0.064	AV
7	0.714	47.763	38.073	-8.237	56.000	9.620	0.070	QP
8	0.714	40.910	31.220	-5.090	46.000	9.620	0.070	AV
9	1.534	31.121	21.391	-24.879	56.000	9.640	0.090	QP
10	1.534	24.723	14.993	-21.277	46.000	9.640	0.090	AV
11	13.318	30.611	20.491	-29.389	60.000	9.790	0.330	QP
12	13.318	25.226	15.106	-24.774	50.000	9.790	0.330	AV

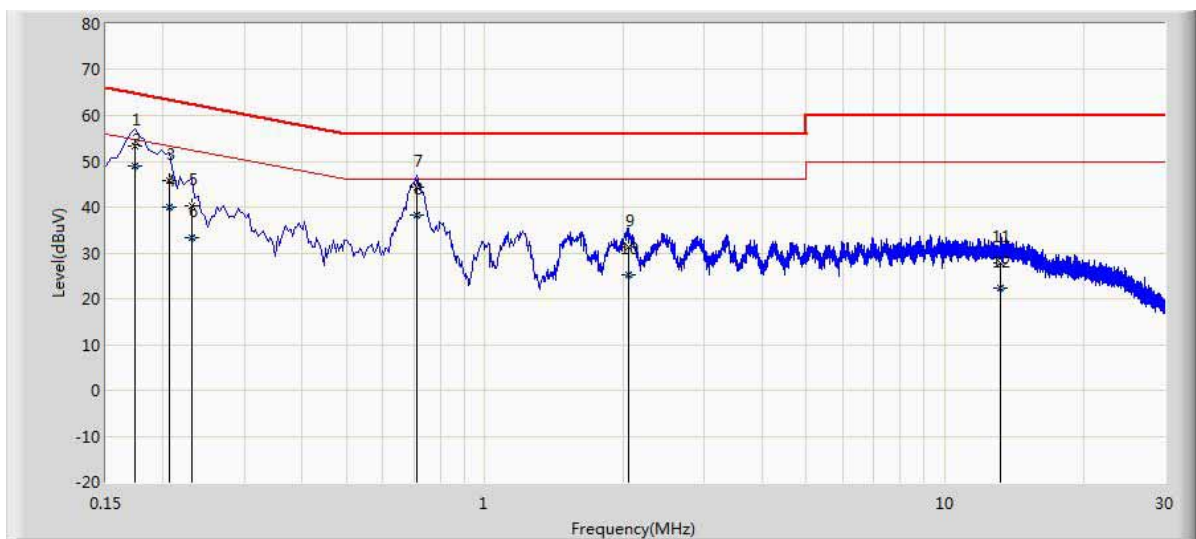
Polarity: Line



Product Name	: AC1200 Wireless Dual Band Gigabit Router	Polarity	: Neutral
Test Item	: AC Power Line Conducted Emission	Power	: AC 120V/60Hz
Test Site	: TR1	Test Mode	: Mode 1

No	Frequency (MHz)	Measure Level (dB μ V)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V)	Probe (dB)	Cable (dB)	Type
1	0.174	53.395	43.670	-11.372	64.767	9.665	0.060	QP
2	0.174	48.988	39.263	-5.779	54.767	9.665	0.060	AV
3	0.206	45.862	36.142	-17.503	63.365	9.660	0.060	QP
4	0.206	40.080	30.360	-13.285	53.365	9.660	0.060	AV
5	0.230	40.210	30.490	-22.240	62.450	9.660	0.060	QP
6	0.230	33.358	23.638	-19.092	52.450	9.660	0.060	AV
7	0.710	44.478	34.768	-11.522	56.000	9.640	0.070	QP
8	0.710	38.365	28.655	-7.635	46.000	9.640	0.070	AV
9	2.054	31.335	21.595	-24.665	56.000	9.640	0.100	QP
10	2.054	25.274	15.534	-20.726	46.000	9.640	0.100	AV
11	13.170	27.812	17.692	-32.188	60.000	9.790	0.330	QP
12	13.170	22.304	12.184	-27.696	50.000	9.790	0.330	AV

Polarity: Neutral



4. Emissions in restricted frequency bands

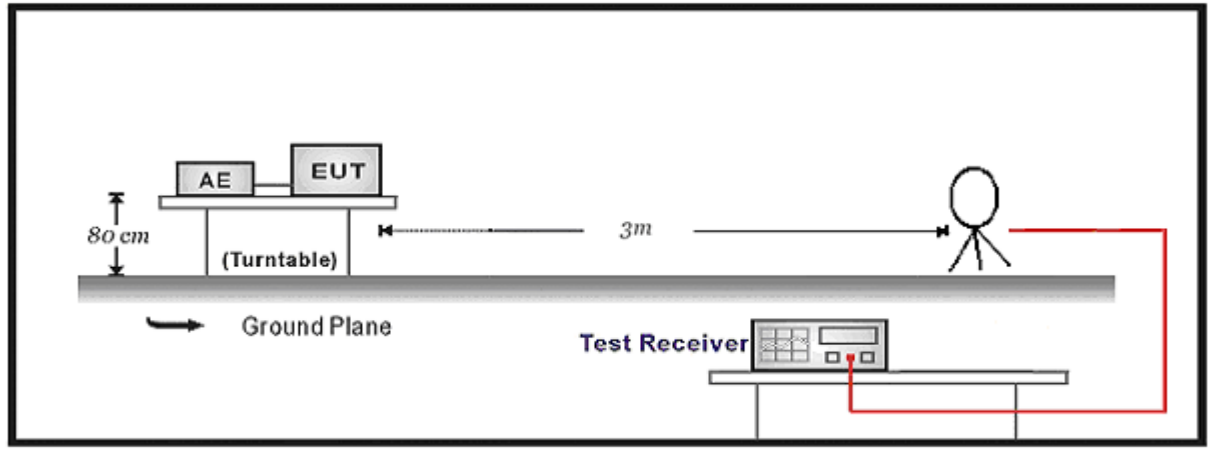
4.1. Test Equipment

Radiated Emission(Below 1GHz) / AC-2					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100573	2016.03.29	2017.03.28
Loop Antenna	R&S	HFH2-Z2	833799/003	2015.11.16	2016.11.17
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2015.10.16	2016.10.15
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2016.03.02	2017.03.01
Temperature/Humidity Meter	Zhichen	ZC1-2	AC2-TH	2016.01.04	2017.01.03
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

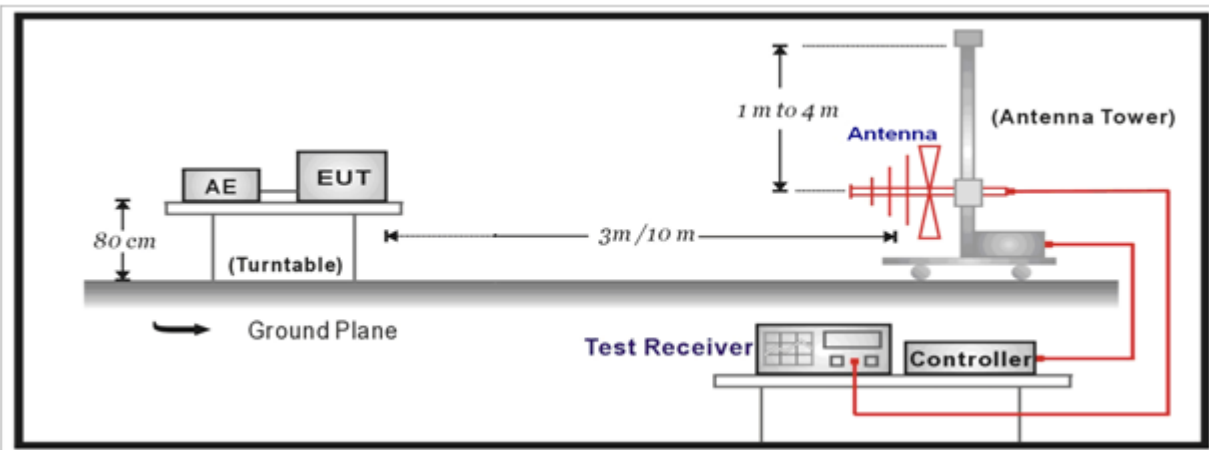
Radiated Emission(Above 1GHz) / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2016.01.04	2017.01.03
Preamplifier	Miteq	NSP1800-25	1364185	2015.05.06	2016.05.05
Preamplifier	Quietek	AP-040G	CHM-0906001	2015.05.06	2016.05.05
DRG Horn	ETS-Lindgren	3117	00123988	2016.01.22	2017.01.21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2014.11.25	2015.11.24
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2016.03.02	2017.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2016.03.02	2017.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2016.03.02	2017.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2015.06.10	2016.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2016.01.04	2017.01.03
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

4.2. Test Setup

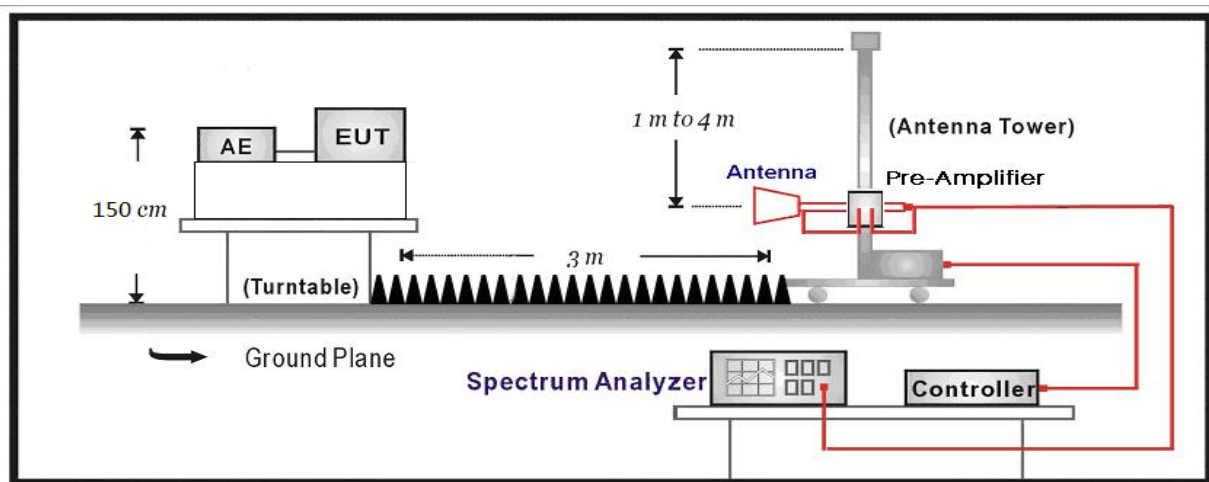
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limit

Restricted Bands of operation			
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
0.495 – 0.505	16.69475 – 16.69525	608 – 614	5.35 – 5.46
2.1735 – 2.1905	16.80425 – 16.80475	960 – 1240	7.25 – 7.75
4.125 – 4.128	25.5 – 25.67	1300 – 1427	8.025 – 8.5
4.17725 – 4.17775	37.5 – 38.25	1435 – 1626.5	9.0 – 9.2
4.20725 – 4.20775	73 – 74.6	1645.5 – 1646.5	9.3 – 9.5
6.215 – 6.218	74.8 – 75.2	1660 – 1710	10.6 – 12.7
6.26775 – 6.26825	108 – 121.94	1718.8 – 1722.2	13.25 – 13.4
6.31175 – 6.31225	123 – 138	2200 – 2300	14.47 – 14.5
8.291 – 8.294	149.9 – 150.05	2310 – 2390	15.35 – 16.2
8.362 – 8.366	156.52475 – 156.52525	2483.5 – 2500	17.7 – 21.4
8.37625 – 8.38675	156.7 – 156.9	2690 – 2900	22.01 – 23.12
8.81425 – 8.81475	162.0125 – 167.17	3260 – 3267	23.6 – 24.0
12.29 – 12.293	167.72 – 173.2	3332 – 3339	31.2 – 31.8
12.51975 – 12.52025	240 – 285	3345.8 – 3358	36.43 – 36.5
12.57675 – 12.57725	322 – 335.4	3600 – 4400	
13.36 – 13.41			

Restricted Band Emissions Limit			
Frequency (MHz)	Field strength (μ V/m)	Field strength (dB μ V/m)	Measurement distance (m)
0.009 - 0.49	2400/F(kHz)	48.5 – 13.8	300 _(Note 1)
0.49 - 1.705	24000/F(kHz)	33.8 - 23	30 _(Note 1)
1.705 - 30	30	29.5	30 _(Note 1)
30 - 88	100	40	3 _(Note 2)
88 - 216	150	43.5	3 _(Note 2)
216 - 960	200	46	3 _(Note 2)
Above 960	500	54	3 _(Note 2)

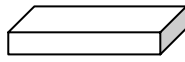
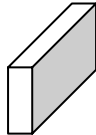
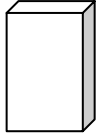
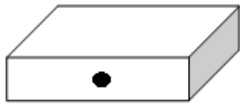

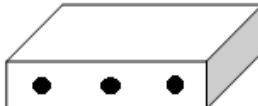
Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

4.4. Test Procedure

Test Method			
	References Rule	Chapter	Description
<input type="checkbox"/>	ANSI C63.10	11.11	Emissions in non-restricted frequency bands
	<input type="checkbox"/> ANSI C63.10	11.11.2	Reference level measurement
	<input type="checkbox"/> ANSI C63.10	11.11.3	Emission level measurement
<input checked="" type="checkbox"/>	ANSI C63.10	11.12	Emissions in restricted frequency bands
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.1	Radiated emission measurements
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.2.7	Radiated spurious emission test
	<input checked="" type="checkbox"/> ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
	<input checked="" type="checkbox"/> ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
	<input checked="" type="checkbox"/> ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz
<input type="checkbox"/>	ANSI C63.10	11.12.2	Antenna-port conducted measurements
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.2.3	Quasi-peak measurement procedure
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.2.4	Peak power measurement procedure
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.2.5	Average power measurement procedures
	<input type="checkbox"/> ANSI C63.10	11.12.2.5.1	Trace averaging with continuous EUT transmission at full power
	<input type="checkbox"/> ANSI C63.10	11.12.2.5.2	Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.2.5.3	Reduced VBW averaging across ON and OFF times of the EUT transmissions with max hold

4.5. EUT test Axis definition

Item	Emissions in restricted frequency bands			
Device Category	<input checked="" type="checkbox"/>	Fixed position use		
	<input type="checkbox"/>	Mobile position use		
Test mode	Mode 1~4			
Test method	<input checked="" type="checkbox"/>	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>	Worst Axis <input checked="" type="checkbox"/>
	<input type="checkbox"/>	Conducted		
	<input type="checkbox"/>	Chain 0		
				
	<input type="checkbox"/>	Chain 0	Chain 1	
				
		Worst Chain <input type="checkbox"/>	Worst Chain <input type="checkbox"/>	
	<input type="checkbox"/>	Chain 0	Chain 1	Chain 2
				
	Worst Chain <input type="checkbox"/>	Worst Chain <input type="checkbox"/>	Worst Chain <input type="checkbox"/>	

4.6. Test Result

Product Name	:	AC1200 Wireless Dual Band Gigabit Router	Power	:	AC 120V/60Hz
Test Mode	:	Mode 1	Test Site	:	AC-5

Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measured Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
Ant 0+1	1	H	4824.0	34.0	8.0	42.0	54(note3)	12.0	PK
		H	7236.0	32.3	13.0	45.3	54(note3)	8.7	PK
		H	9648.0	29.4	16.2	45.6	54(note3)	8.4	PK
		V	4824.0	34.6	8.0	42.6	54(note3)	11.4	PK
		V	7236.0	33.7	12.9	46.6	54(note3)	7.4	PK
		V	9648.0	30.7	16.2	46.9	54(note3)	7.1	PK
	6	H	4874.0	33.9	8.1	42.0	54(note3)	12.0	PK
		H	7312.0	32.8	12.6	45.4	54(note3)	8.6	PK
		H	9748.0	30.2	16.1	46.3	54(note3)	7.7	PK
		V	4874.0	35.1	8.1	43.2	54(note3)	10.8	PK
		V	7312.0	32.2	12.6	44.8	54(note3)	9.2	PK
		V	9748.0	30.1	16.1	46.2	54(note3)	7.8	PK
	11	H	4924.0	34.7	8.2	42.9	54(note3)	11.1	PK
		H	7386.0	32.7	12.6	45.3	54(note3)	8.7	PK
		H	9848.0	29.7	16.5	46.2	54(note3)	7.8	PK
		V	4924.0	35.1	8.2	43.3	54(note3)	10.7	PK
		V	7386.0	32.1	12.6	44.7	54(note3)	9.3	PK
		V	9848.0	30.2	16.5	46.7	54(note3)	7.3	PK

Note: 1. Measure Level = Reading Level + Factor.
 Note: 2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.
 Note: 3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.
 Note: 4. The RBW setting, see Clause 6.6.

Product Name	:	AC1200 Wireless Dual Band Gigabit Router	Power	:	AC 120V/60Hz
Test Site	:	Mode 2	Test Site	:	AC-5

Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measured Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
Ant 0+1	1	H	4824.0	34.9	8.0	42.9	54(note3)	11.1	PK
		H	7236.0	31.8	12.9	44.8	54(note3)	9.2	PK
		H	9648.0	29.6	16.2	45.8	54(note3)	8.2	PK
		V	4824.0	34.3	8.0	42.3	54(note3)	11.7	PK
		V	7236.0	32.0	12.9	44.9	54(note3)	9.1	PK
		V	9648.0	30.2	16.2	46.4	54(note3)	7.6	PK
	6	H	4874.0	33.5	8.1	41.6	54(note3)	12.4	PK
		H	7312.0	32.3	12.6	44.9	54(note3)	9.1	PK
		H	9748.0	30.8	16.1	46.9	54(note3)	7.1	PK
		V	4874.0	34.0	8.1	42.1	54(note3)	11.9	PK
		V	7312.0	33.0	12.6	45.6	54(note3)	8.4	PK
		V	9748.0	31.3	16.1	47.4	54(note3)	6.6	PK
	11	H	4924.0	34.4	8.2	42.6	54(note3)	11.4	PK
		H	7386.0	32.1	12.6	44.7	54(note3)	9.3	PK
		H	9848.0	29.5	16.5	46.0	54(note3)	8.0	PK
		V	4924.0	34.5	8.2	42.7	54(note3)	11.3	PK
		V	7386.0	32.7	12.6	45.3	54(note3)	8.7	PK
		V	9848.0	31.2	16.5	47.7	54(note3)	6.3	PK

Note: 1. Measure Level = Reading Level + Factor.
 Note: 2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.
 Note: 3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.
 Note: 4. The RBW setting, see Clause 6.6.

Product Name	:	AC1200 Wireless Dual Band Gigabit Router	Power	:	AC 120V/60Hz
Test Site	:	Mode 3	Test Site	:	AC-5

Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measured Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
Ant 0+1	1	H	4824.0	33.9	8.0	41.9	54(note3)	12.1	PK
		H	7236.0	31.8	12.9	44.8	54(note3)	9.2	PK
		H	9648.0	29.8	16.2	46.0	54(note3)	8.0	PK
		V	4824.0	34.9	8.0	42.9	54(note3)	11.1	PK
		V	7236.0	32.1	12.9	45.0	54(note3)	9.0	PK
		V	9648.0	29.9	16.2	46.1	54(note3)	7.9	PK
	6	H	4874.0	34.5	8.1	42.6	54(note3)	11.4	PK
		H	7312.0	32.5	12.6	45.1	54(note3)	8.9	PK
		H	9748.0	30.1	16.1	46.2	54(note3)	7.8	PK
		V	4874.0	33.8	8.1	41.9	54(note3)	12.1	PK
		V	7312.0	32.4	12.6	45.0	54(note3)	9.0	PK
		V	9748.0	30.3	16.1	46.4	54(note3)	7.6	PK
	11	H	4924.0	34.8	8.2	43.0	54(note3)	11.0	PK
		H	7386.0	31.7	12.6	44.3	54(note3)	9.7	PK
		H	9848.0	29.7	16.5	46.2	54(note3)	7.8	PK
		V	4924.0	34.2	8.2	42.4	54(note3)	11.6	PK
		V	7386.0	32.4	12.6	45.0	54(note3)	9.0	PK
		V	9848.0	29.9	16.5	46.4	54(note3)	7.6	PK

Note: 1. Measure Level = Reading Level + Factor.

Note: 2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.

Note: 3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Note: 4. The RBW setting, see Clause 6.6.

Product Name	:	AC1200 Wireless Dual Band Gigabit Router	Power	:	AC 120V/60Hz
Test Site	:	Mode 4	Test Site	:	AC-5

Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measured Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
Ant 0	3	H	4844.0	34.2	8.3	42.5	54(note3)	11.5	PK
		H	7266.0	32.8	12.7	45.5	54(note3)	8.5	PK
		H	9688.0	30.0	15.9	45.9	54(note3)	8.1	PK
		V	4844.0	33.9	8.3	42.2	54(note3)	11.8	PK
		V	7266.0	33.3	12.7	46.0	54(note3)	8.0	PK
		V	9688.0	30.2	15.9	46.1	54(note3)	7.9	PK
	6	H	4874.0	34.3	8.1	42.4	54(note3)	11.6	PK
		H	7311.0	32.8	12.6	45.4	54(note3)	8.6	PK
		H	9748.0	30.4	16.1	46.5	54(note3)	7.5	PK
		V	4874.0	34.1	8.1	42.2	54(note3)	11.8	PK
		V	7311.0	32.2	12.6	44.8	54(note3)	9.2	PK
		V	9748.0	30.7	16.1	46.8	54(note3)	7.2	PK
	9	H	4904.0	34.4	8.2	42.6	54(note3)	11.4	PK
		H	7356.0	32.5	13.2	45.7	54(note3)	8.3	PK
		H	9808.0	29.9	16.1	46.0	54(note3)	8.0	PK
		V	4904.0	34.2	8.2	42.4	54(note3)	11.6	PK
		V	7356.0	33.1	13.2	46.3	54(note3)	7.7	PK
		V	9808.0	30.2	16.1	46.3	54(note3)	7.7	PK

Note: 1. Measure Level = Reading Level + Factor.

Note: 2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.

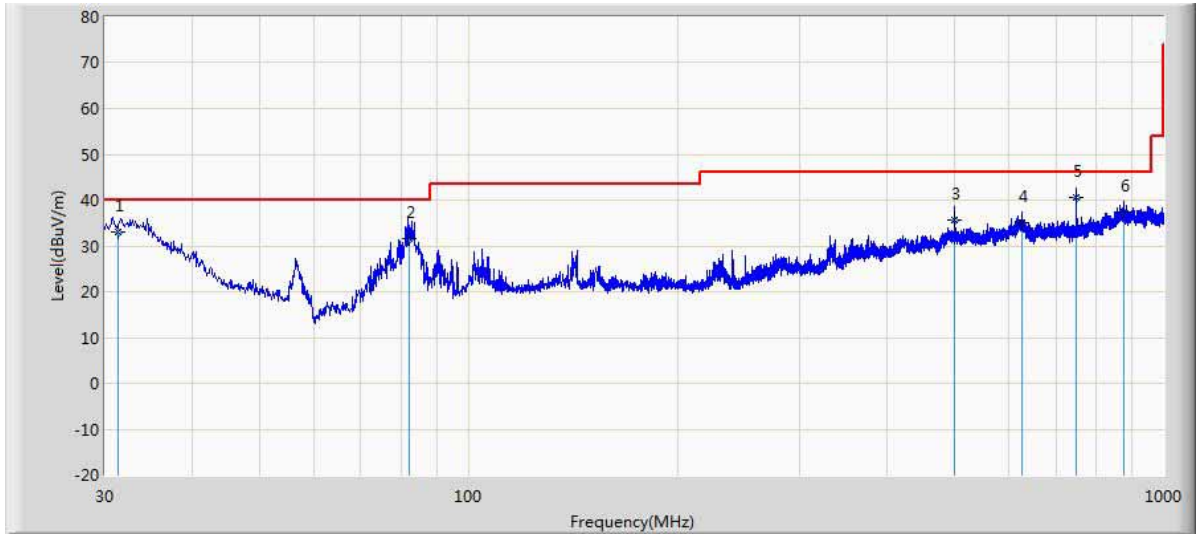
Note: 3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Note: 4. The RBW setting, see Clause 6.6.

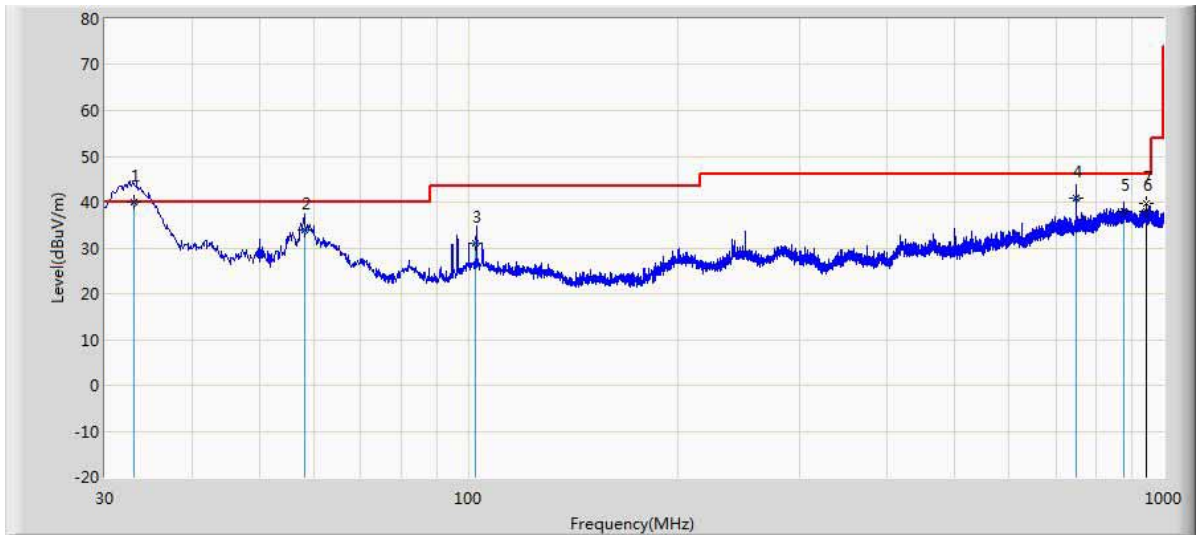
The worst case of Radiated Emission below 1GHz:

Chain	CH	Antenna Polarity	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measured Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
Ant 0+1	1	H	31.353	37.381	-4.479	32.902	40.000	7.098	QP
		H	82.252	46.132	-14.658	31.474	43.500	12.026	QP
		H	499.863	38.051	-2.54	35.511	46.000	10.489	QP
		H	625.023	35.977	-0.796	35.181	46.000	10.819	QP
		H	750.352	40.511	0.19	40.701	46.000	5.299	QP
		H	875.252	36.335	1.051	37.386	46.000	8.614	QP
		V	33.078	45.475	-5.489	39.986	40.000	0.014	QP
		V	58.236	49.282	-15.409	33.873	40.000	6.127	QP
		V	102.523	41.825	-10.712	31.113	43.500	12.387	QP
		V	750.232	40.640	0.189	40.829	46.000	5.171	QP
		V	875.263	36.963	1.051	38.014	46.000	7.986	QP
		V	945.526	36.127	1.892	38.019	46.000	7.981	QP

Polarity: Horizontal



Polarity: Vertical



5. Emissions in non-restricted frequency bands

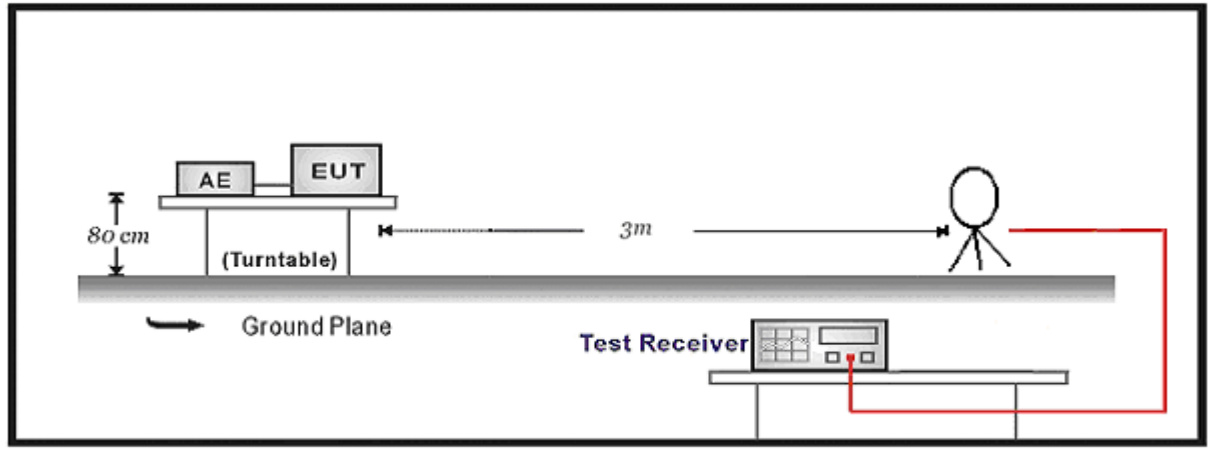
5.1. Test Equipment

Radiated Emission(Below 1GHz) / AC-2					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100573	2016.03.29	2017.03.28
Loop Antenna	R&S	HFH2-Z2	833799/003	2015.11.16	2016.11.17
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2015.10.16	2016.10.15
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2016.03.02	2017.03.01
Temperature/Humidity Meter	Zhichen	ZC1-2	AC2-TH	2016.01.04	2017.01.03
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

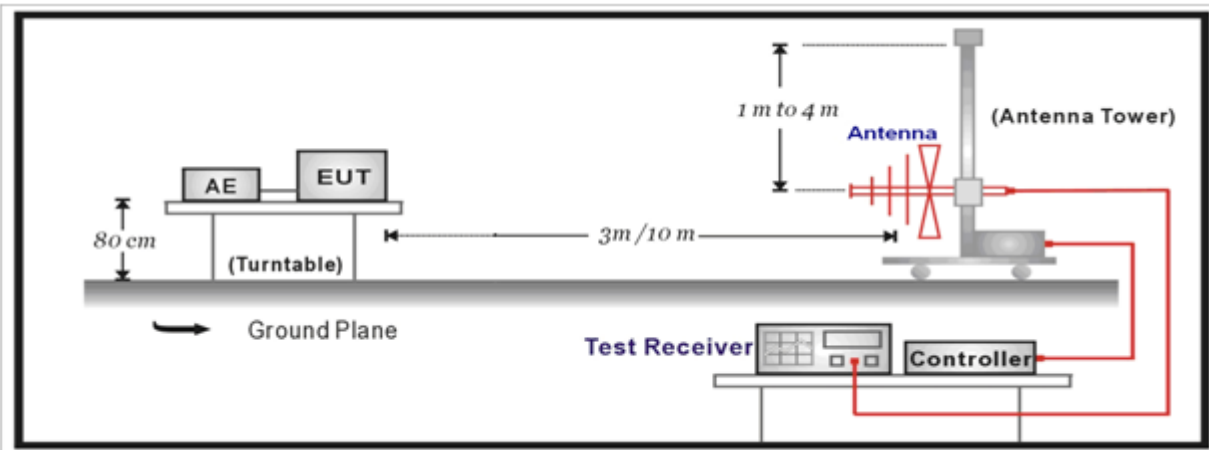
Radiated Emission(Above 1GHz) / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100159	2016.03.29	2017.03.28
Spectrum Analyzer	Agilent	E4446A	MY45300103	2016.01.04	2017.01.03
Preamplifier	Miteq	NSP1800-25	1364185	2015.05.06	2016.05.05
Preamplifier	Quietek	AP-040G	CHM-0906001	2015.05.06	2016.05.05
DRG Horn	ETS-Lindgren	3117	00123988	2016.01.22	2017.01.21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2014.11.25	2015.11.24
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2016.03.02	2017.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2016.03.02	2017.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2016.03.02	2017.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2015.06.10	2016.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2016.01.04	2017.01.03
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

5.2. Test Setup

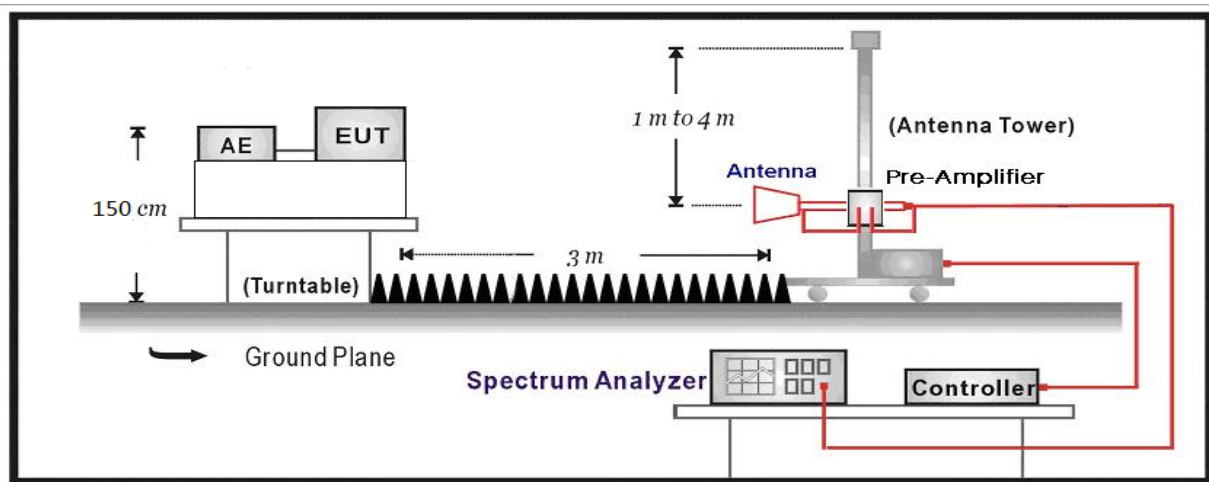
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



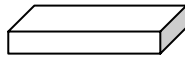
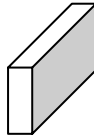
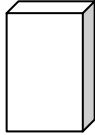
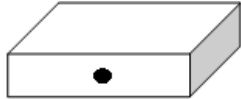


5.3. Limit

Un-Restricted Band Emissions Limit	
RF Output power (Detection methods)	Limit(dB)
RF Output power(Average detector)	30c(Note1)
RF Output power(PK detector)	20c(Note2)
<p>Note 1: If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc).</p> <p>Note 2: If the maximum peak conducted output power procedure was used, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 20 dBc).</p>	

5.4. Test Procedure

Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	11.11	Emissions in non-restricted frequency bands
	<input checked="" type="checkbox"/> ANSI C63.10	11.11.2	Reference level measurement
	<input checked="" type="checkbox"/> ANSI C63.10	11.11.3	Emission level measurement
<input type="checkbox"/>	ANSI C63.10	11.12	Emissions in restricted frequency bands
	<input type="checkbox"/> ANSI C63.10	11.12.1	Radiated emission measurements
	<input type="checkbox"/> ANSI C63.10	11.12.2.7	Radiated spurious emission test
<input checked="" type="checkbox"/>	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
<input checked="" type="checkbox"/>	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
<input checked="" type="checkbox"/>	ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.2	Antenna-port conducted measurements
	<input type="checkbox"/> ANSI C63.10	11.12.2.3	Quasi-peak measurement procedure
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.2.4	Peak power measurement procedure
	<input type="checkbox"/> ANSI C63.10	11.12.2.5	Average power measurement procedures
	<input type="checkbox"/> ANSI C63.10	11.12.2.5.1	Trace averaging with continuous EUT transmission at full power
	<input type="checkbox"/> ANSI C63.10	11.12.2.5.2	Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction
	<input type="checkbox"/> ANSI C63.10	11.12.2.5.3	Reduced VBW averaging across ON and OFF times of the EUT transmissions with max hold

5.5. EUT test Axis definition

Item	Emissions in non-restricted frequency bands			
Device Category	<input checked="" type="checkbox"/>	Fixed position use		
	<input type="checkbox"/>	Mobile position use		
Test mode	Mode 1 ~ Mode 4			
Test method	<input type="checkbox"/>	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>
	<input checked="" type="checkbox"/>	Conducted		
	<input type="checkbox"/>	Chain 0		
				
	<input checked="" type="checkbox"/>	Chain 0	Chain 1	
				
		Worst Chain <input type="checkbox"/>	Worst Chain <input type="checkbox"/>	
<input type="checkbox"/>	Chain 0	Chain 1	Chain 2	
				
	Worst Chain <input type="checkbox"/>	Worst Chain <input type="checkbox"/>	Worst Chain <input type="checkbox"/>	

5.6. Test Result

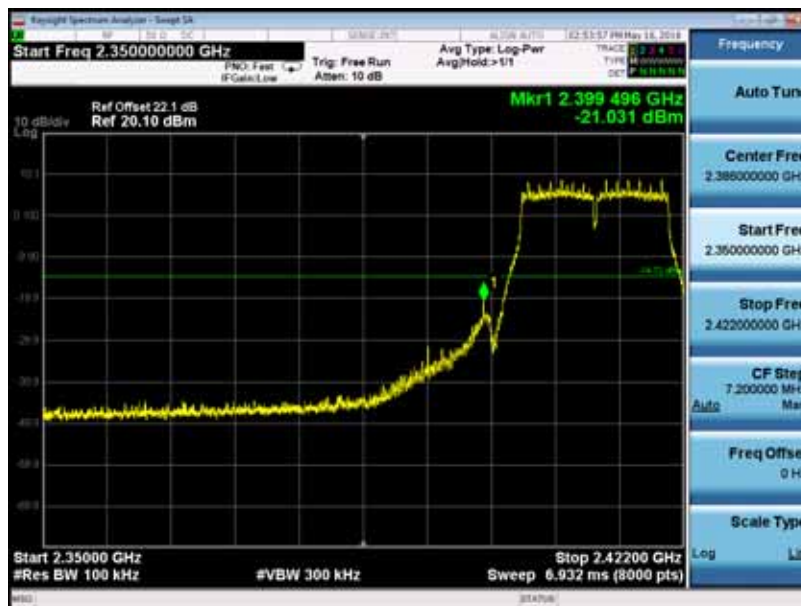
Product Name	: AC1200 Wireless Dual Band Gigabit Router	Test Power	: AC 120V/60Hz
Test Site	: TR8		

Chain 0

Mode	Channel	Test Frequency (MHz)	In-Band PSD[a] (dBm/100kHz)	Frequency (MHz)	Out-Band PSD[b] (dBm/100kHz)	[a]-[b] (dB)	Limit (dB)	Result
1	01	2412	20.78	2400.00	-20.17	40.95	>30	Pass
1	11	2462	20.78	2483.50	-36.39	57.17	>30	Pass
2	01	2412	15.28	2399.50	-21.03	36.31	>30	Pass
2	11	2462	15.28	2483.50	-42.04	57.32	>30	Pass
3	01	2412	15.60	2400.00	-21.55	37.15	>30	Pass
3	11	2462	15.60	2483.50	-40.99	56.59	>30	Pass
4	03	2422	9.17	2400.00	-27.99	37.16	>30	Pass
4	09	2452	9.17	2483.50	-42.46	51.63	>30	Pass

Note: The worst case of emissions in non-restricted frequency bands as below:

Mode 2 CH01(2412MHz)

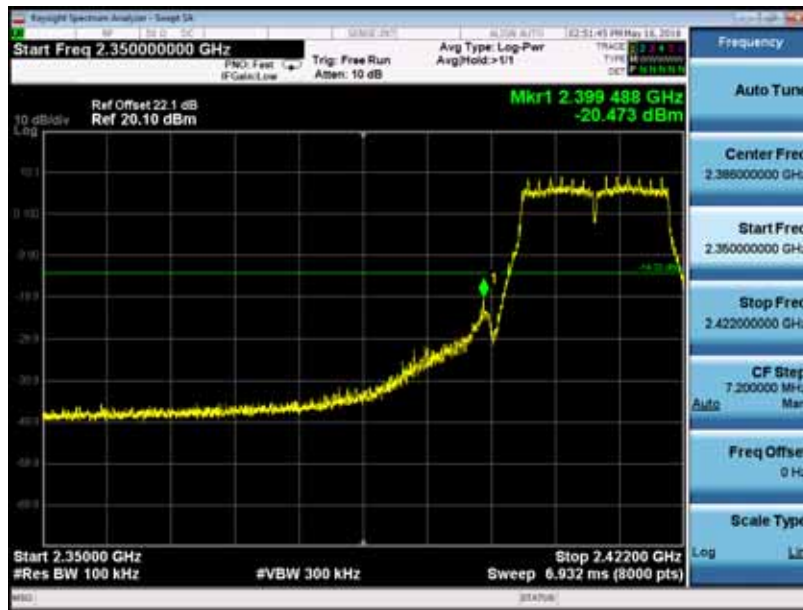


Chain 1

Mode	Channel	Test Frequency (MHz)	In-Band PSD[a] (dBm/100kHz)	Frequency (MHz)	Out-Band PSD[b] (dBm/100kHz)	[a]-[b] (dB)	Limit (dB)	Result
2	01	2412	15.67	2400.00	-20.47	36.14	>30	Pass
2	11	2462	15.67	2483.50	-40.45	56.12	>30	Pass
3	01	2412	15.83	2400.00	-22.07	37.90	>30	Pass
3	11	2462	15.83	2483.50	-40.66	56.49	>30	Pass
4	03	2422	8.26	2400.00	-28.93	37.19	>30	Pass
4	09	2452	8.26	2483.50	-41.79	50.05	>30	Pass

Note: The worst case of emissions in non-restricted frequency bands as below:

Mode 2 CH01(2412MHz)

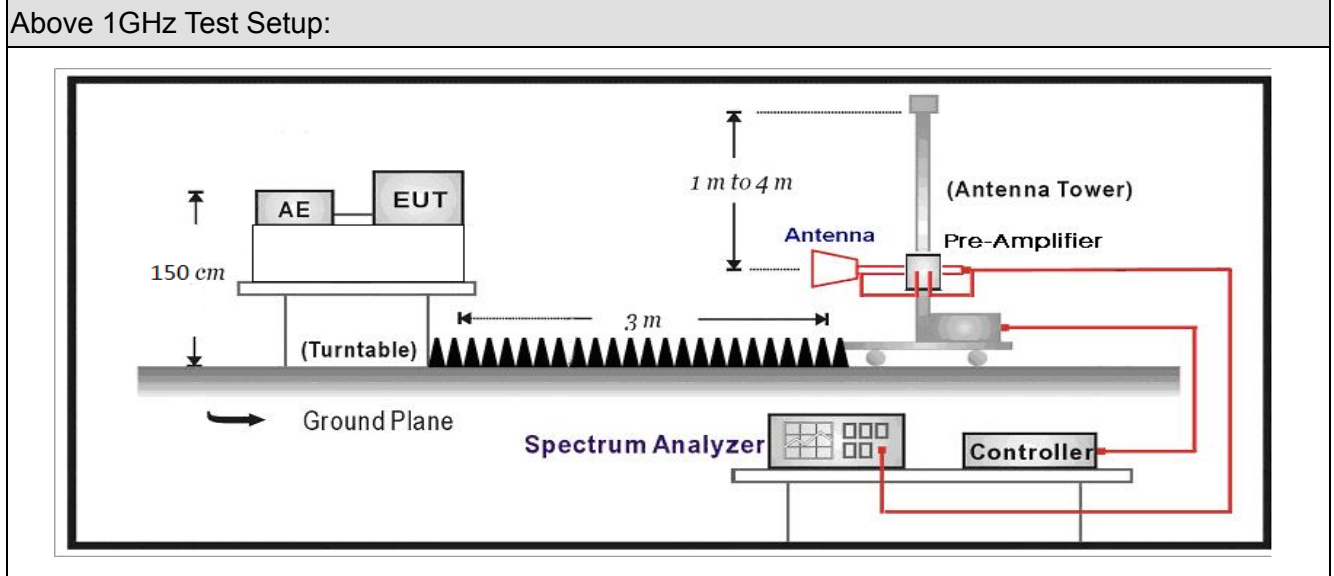


6. Radiated Emission Band Edge

6.1. Test Equipment

Radiated Emission(Above 1GHz) / AC-5					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2016.01.04	2017.01.03
Preamplifier	Miteq	NSP1800-25	1364185	2015.05.06	2016.05.05
Preamplifier	Quietek	AP-040G	CHM-0906001	2015.05.06	2016.05.05
DRG Horn	ETS-Lindgren	3117	00123988	2016.01.22	2017.01.21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2014.11.25	2015.11.24
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2016.03.02	2017.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2016.03.02	2017.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2016.03.02	2017.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2015.06.10	2016.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2016.01.04	2017.01.03
Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.					

6.2. Test Setup



6.3. Limit

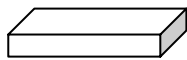
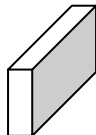
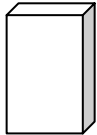



Band edge Limit				
Frequency bands (MHz)	Detector	Limit (dB μ V/m)	RBW (MHz)	Distance (m)
2310-2390	PK	74	1	3
2483.5-2500	AV	54	1	3

Note: The field strength of emissions appearing within these frequency bands shall not exceed the limits.

6.4. Test Procedure

Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	6.10	Band-edge testing
	<input checked="" type="checkbox"/> ANSI C63.10	6.10.5	Restricted-band band-edge measurements
	<input type="checkbox"/> ANSI C63.10	6.10.6	Marker-delta method
<input checked="" type="checkbox"/>	ANSI C63.10	11.12	Emissions in restricted frequency bands
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.1	Radiated emission measurements
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.2.7	Radiated spurious emission test
<input type="checkbox"/>	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
<input type="checkbox"/>	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
<input checked="" type="checkbox"/>	ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz
	<input type="checkbox"/> ANSI C63.10	11.12.2	Antenna-port conducted measurements
	<input type="checkbox"/> ANSI C63.10	11.12.2.3	Quasi-peak measurement procedure
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.2.4	Peak power measurement procedure
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.2.5	Average power measurement procedures
	<input type="checkbox"/> ANSI C63.10	11.12.2.5.1	Trace averaging with continuous EUT transmission at full power
	<input type="checkbox"/> ANSI C63.10	11.12.2.5.2	Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.2.5.3	Reduced VBW averaging across ON and OFF times of the EUT transmissions with max hold

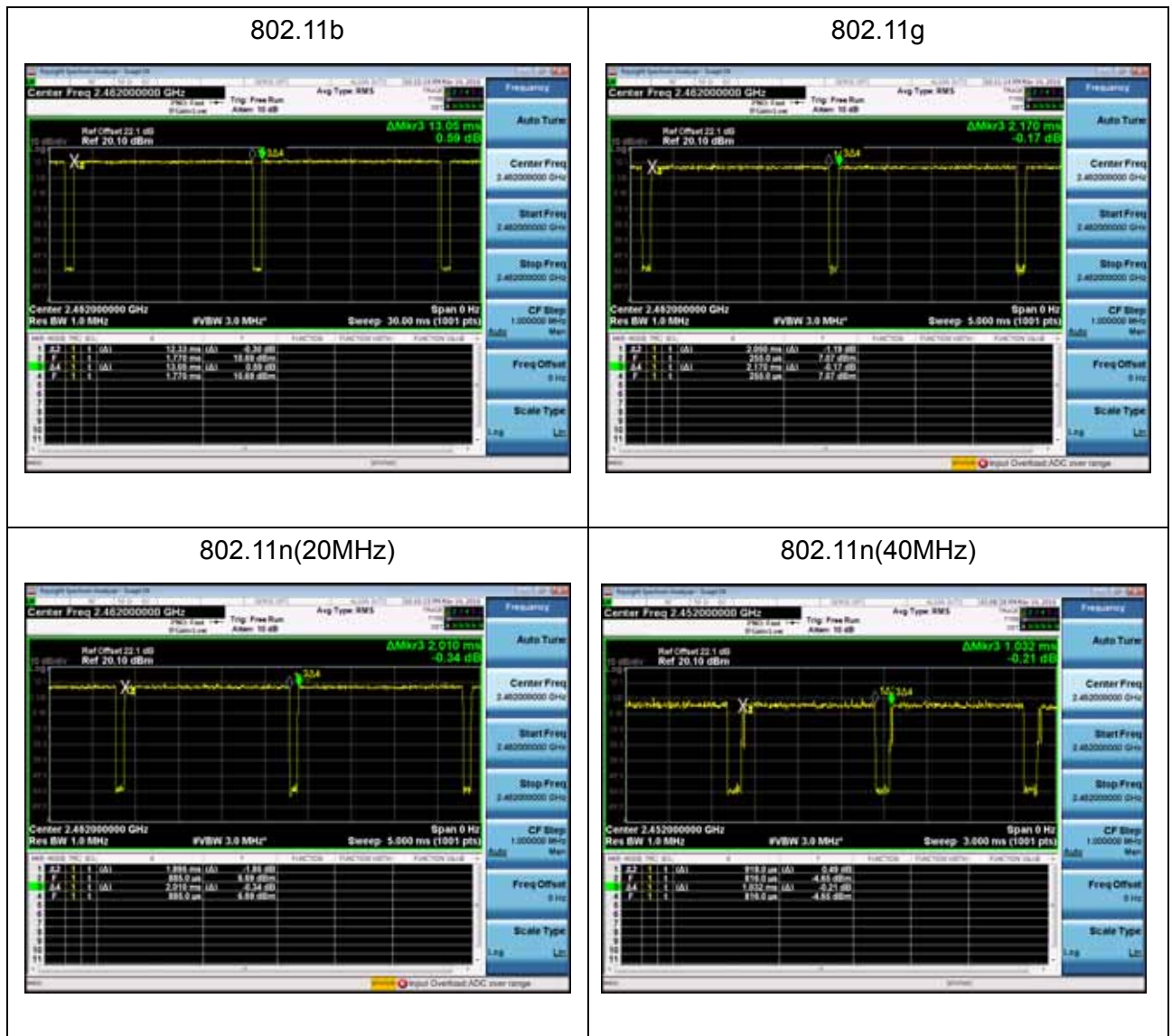
6.5. EUT test definition

Item	Emissions in non-restricted frequency bands			
Device Category	<input checked="" type="checkbox"/>	Fixed position use		
	<input type="checkbox"/>	Mobile position use		
Test mode	Mode 1~4			
Test method	<input checked="" type="checkbox"/>	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>	Worst Axis <input checked="" type="checkbox"/>
	<input type="checkbox"/>	Conducted		
	<input type="checkbox"/>	Chain 0		
				
	<input checked="" type="checkbox"/>	Chain 0	Chain 1	
				
		Worst Chain <input type="checkbox"/>	Worst Chain <input type="checkbox"/>	
	<input type="checkbox"/>	Chain 0	Chain 1	Chain 2
				
	Worst Chain <input type="checkbox"/>	Worst Chain <input type="checkbox"/>	Worst Chain <input type="checkbox"/>	

6.6. Duty Cycle

CDD mode:

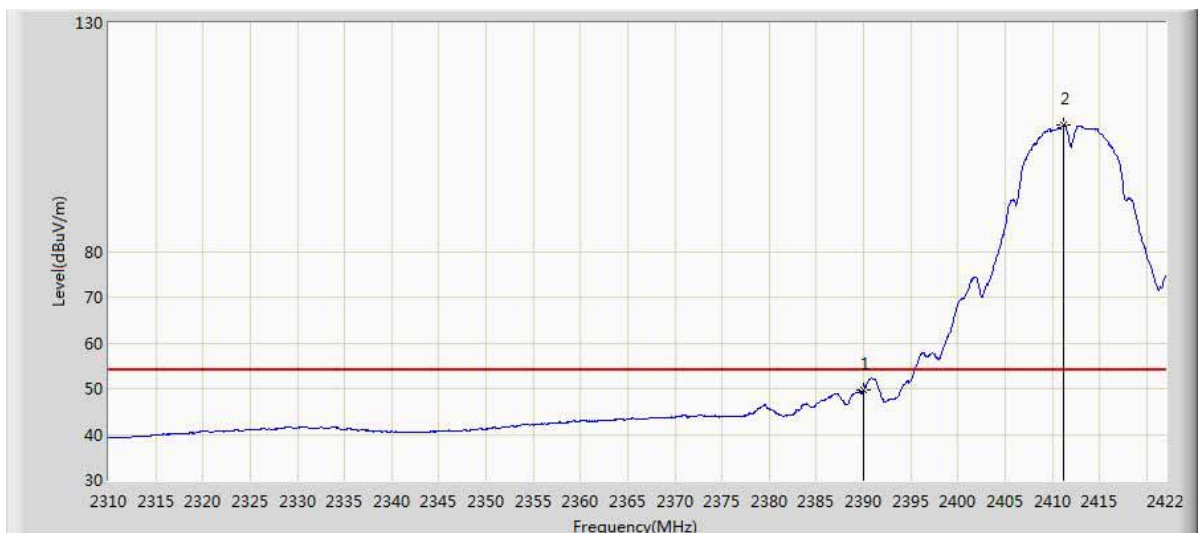
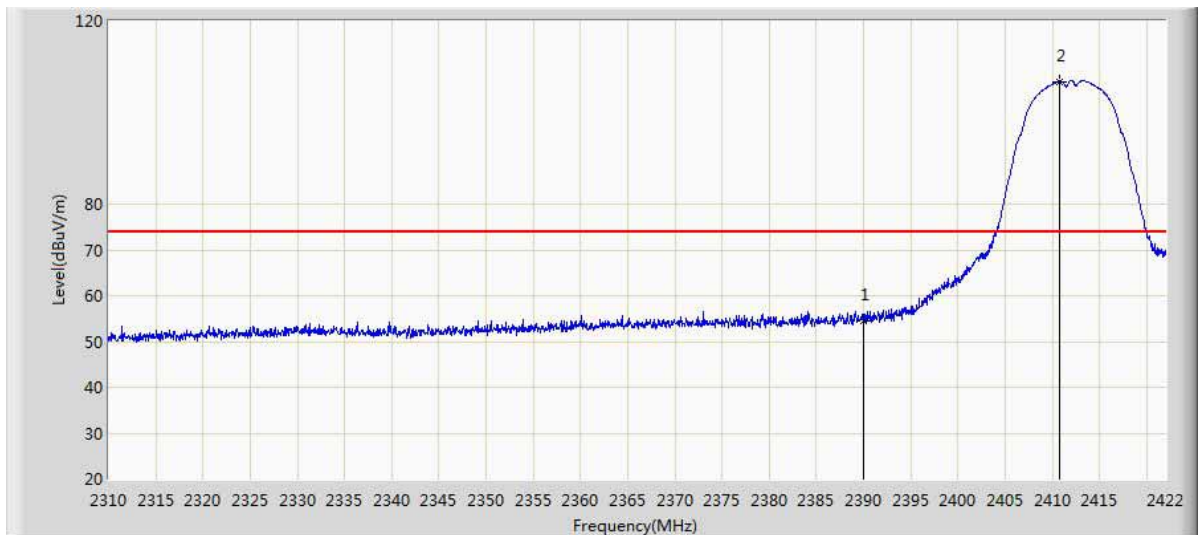
Test Mode	Tx On (ms)	Tx Off (ms)	VBW	Tx On + Tx Off (ms)	Duty Cycle
802.11b	12.33	0.72	82Hz	13.05	94.48%
802.11g	2.050	0.12	510Hz	2.170	94.47%
802.11n(20MHz)	1.895	0.206	560Hz	2.010	94.28%
802.11n(40MHz)	0.918	0.114	1.1kHz	1.032	88.95%



Test Result

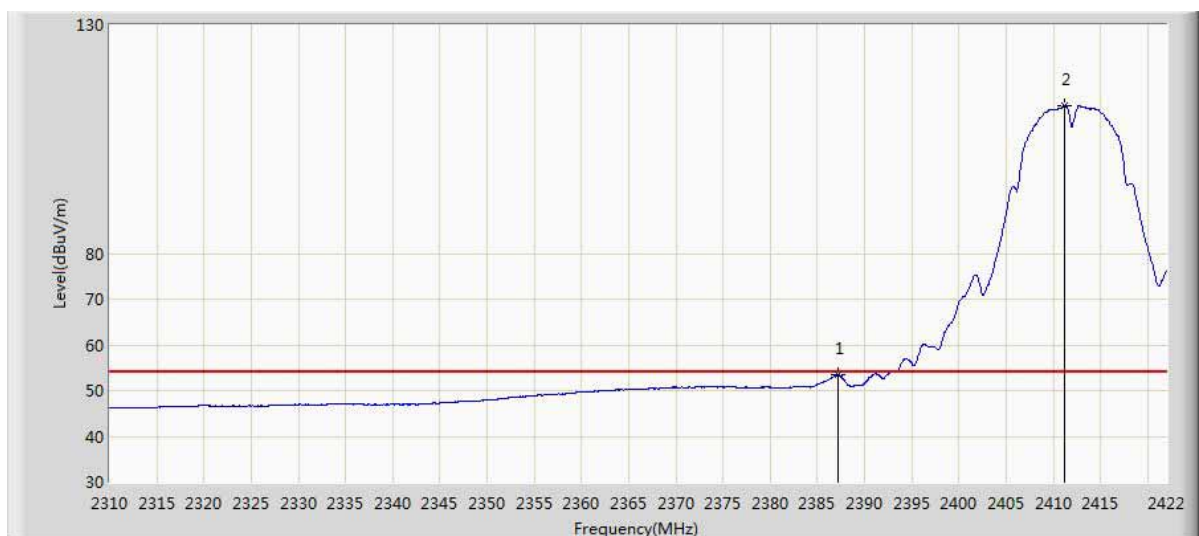
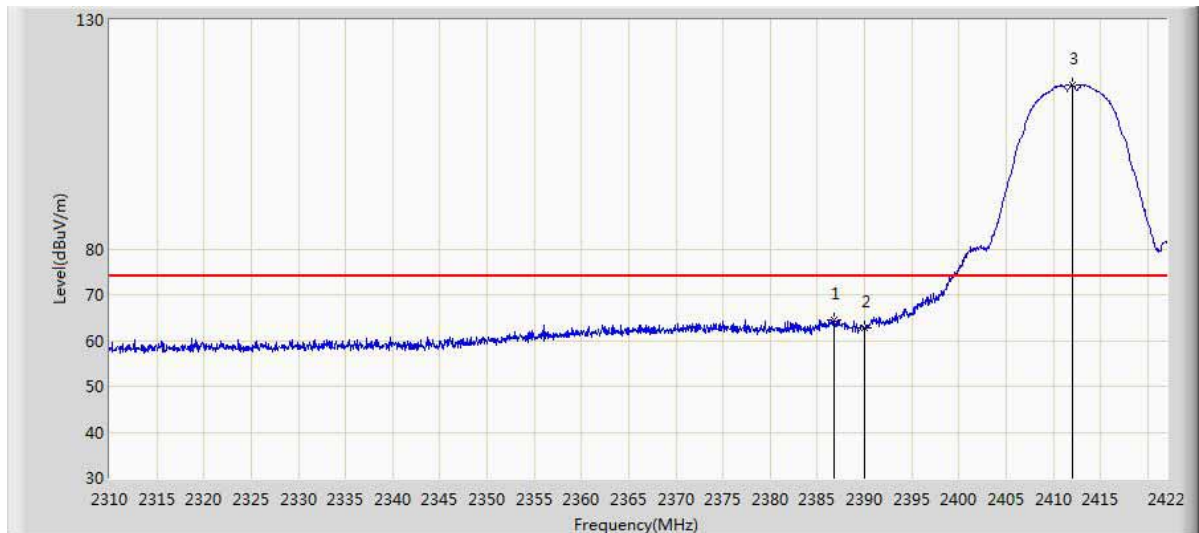
Product Name	: AC1200 Wireless Dual Band Gigabit Router	Polarity	: Horizontal
Test Mode	: Mode 1	Power	: AC 120V/60Hz
Test CH/Freq	: CH01/2412MHz	Test Site	: AC5

No	Frequency (MHz)	Measured Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor (dB)	Type
1	2390.000	54.629	17.274	-19.371	74.000	37.355	PK
2	2410.744	106.803	69.475	N/A	N/A	37.328	PK
1	2390.000	49.707	12.352	-4.293	54.000	37.355	AV
2	2411.136	107.543	70.215	N/A	N/A	37.328	AV



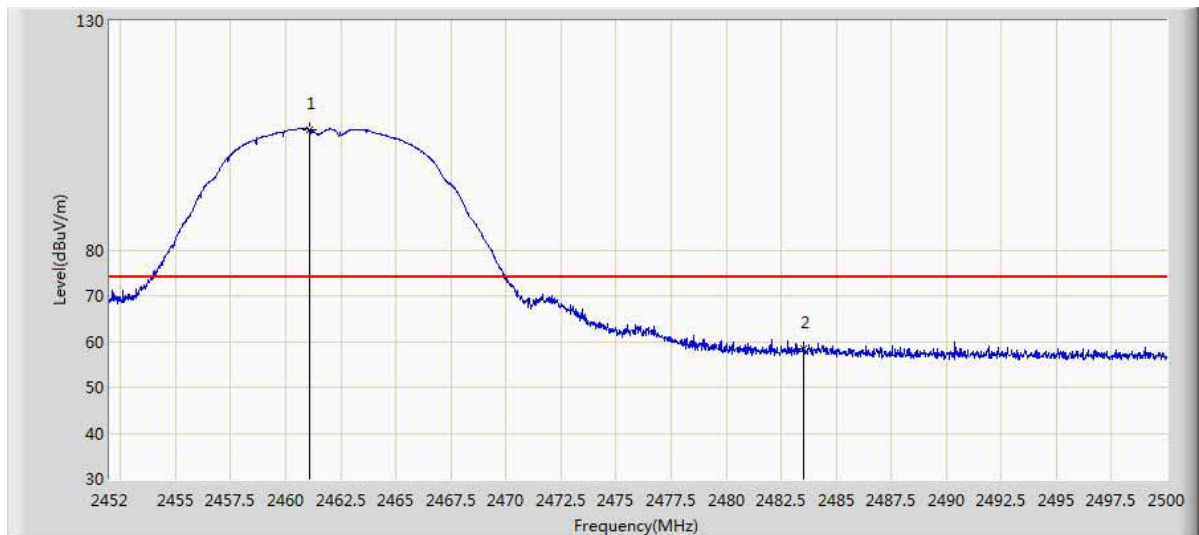
Product Name	: AC1200 Wireless Dual Band Gigabit Router	Polarity	: Vertical
Test Mode	: Mode 1	Power	: AC 120V/60Hz
Test CH/Freq	: CH01/2412MHz	Test Site	: AC5

No	Frequency (MHz)	Measured Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor (dB)	Type
1	2386.832	64.398	27.042	-9.602	74.000	37.356	PK
2	2390.000	62.818	25.463	-11.182	74.000	37.355	PK
3	2411.976	115.880	78.546	N/A	N/A	37.334	
1	2387.224	53.537	16.181	-0.463	54.000	37.357	AV
2	2411.248	112.420	75.091	58.420	54.000	37.329	AV



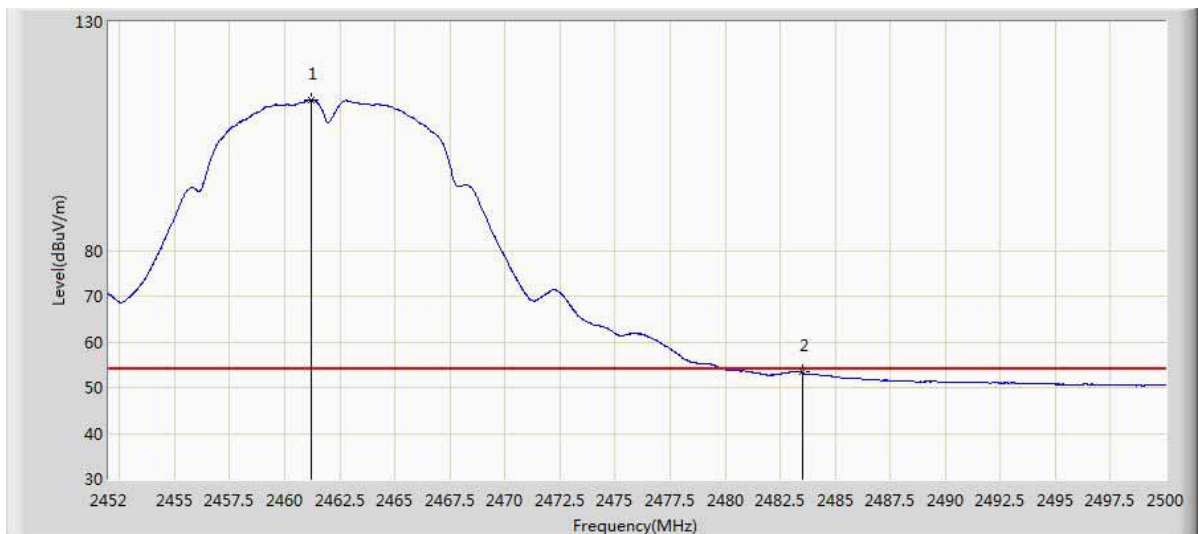
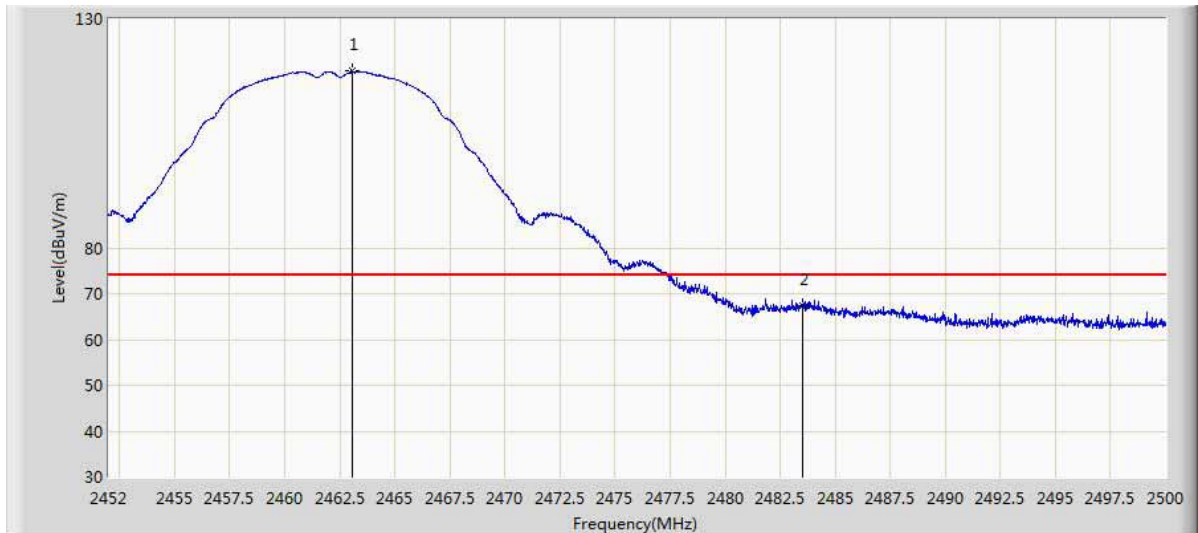
Product Name	: AC1200 Wireless Dual Band Gigabit Router	Polarity	: Horizontal
Test Mode	: Mode 1	Power	: AC 120V/60Hz
Test CH/Freq	: CH11/2462MHz	Test Site	: AC5

No	Frequency (MHz)	Measured Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor (dB)	Type
1	2461.072	106.310	68.889	N/A	N/A	37.421	PK
2	2483.500	58.468	20.957	-15.532	74.000	37.511	PK
1	2461.360	103.236	65.815	N/A	N/A	37.421	AV
2	2483.500	47.344	9.833	-6.656	54.000	37.511	AV



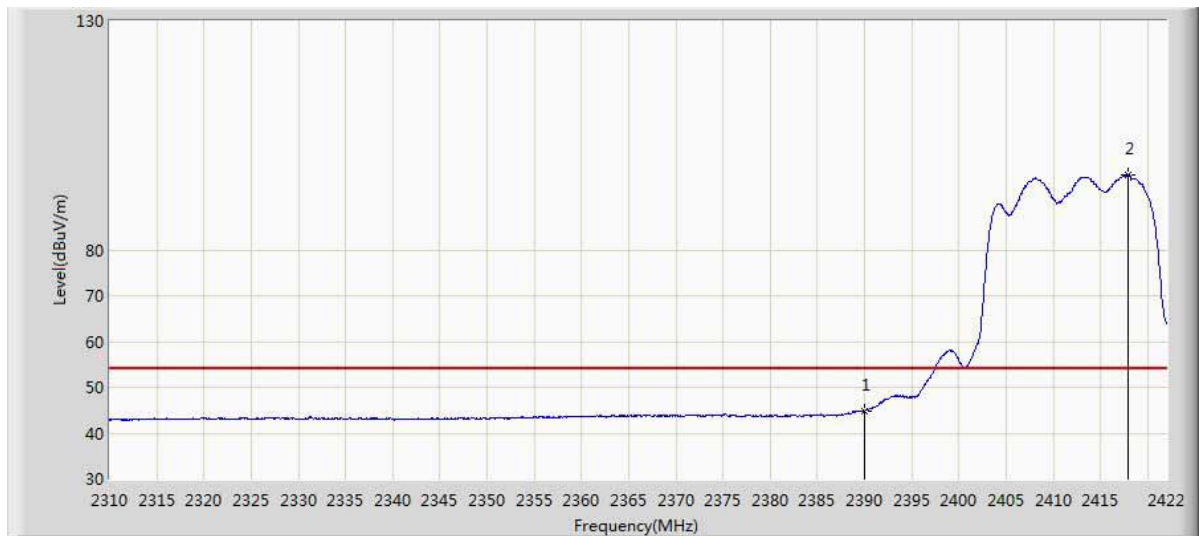
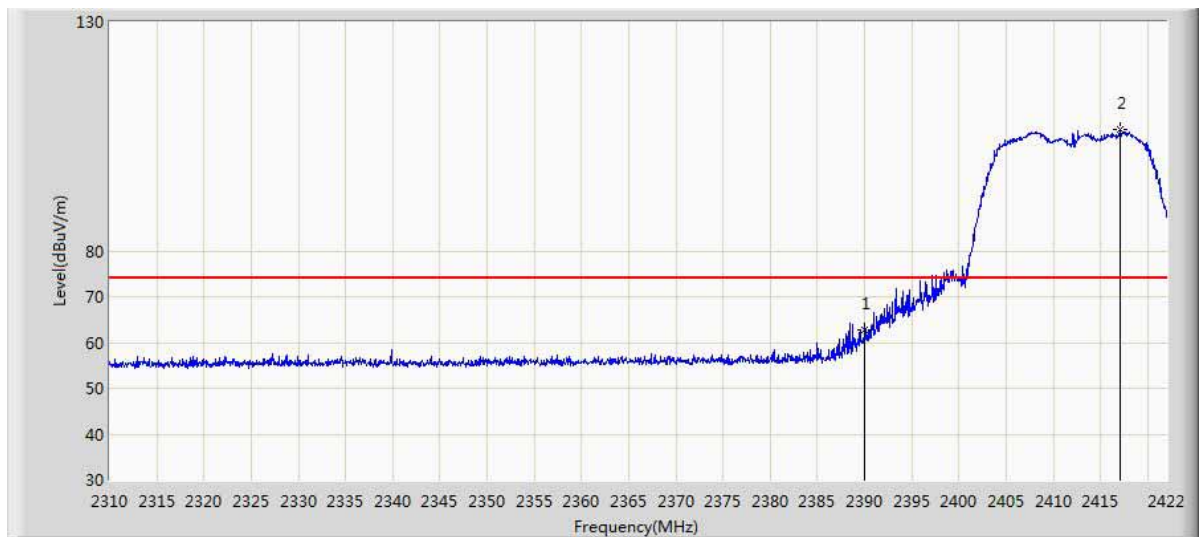
Product Name	: AC1200 Wireless Dual Band Gigabit Router	Polarity	: Vertical
Test Mode	: Mode 1	Power	: AC 120V/60Hz
Test CH/Freq	: CH11/2462MHz	Test Site	: AC5

No	Frequency (MHz)	Measured Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor (dB)	Type
1	2463.040	118.697	81.273	N/A	N/A	37.424	PK
2	2483.500	67.452	29.941	-6.548	74.000	37.511	PK
1	2461.216	113.033	75.612	N/A	N/A	37.421	AV
2	2483.500	53.343	15.832	-0.657	54.000	37.511	AV



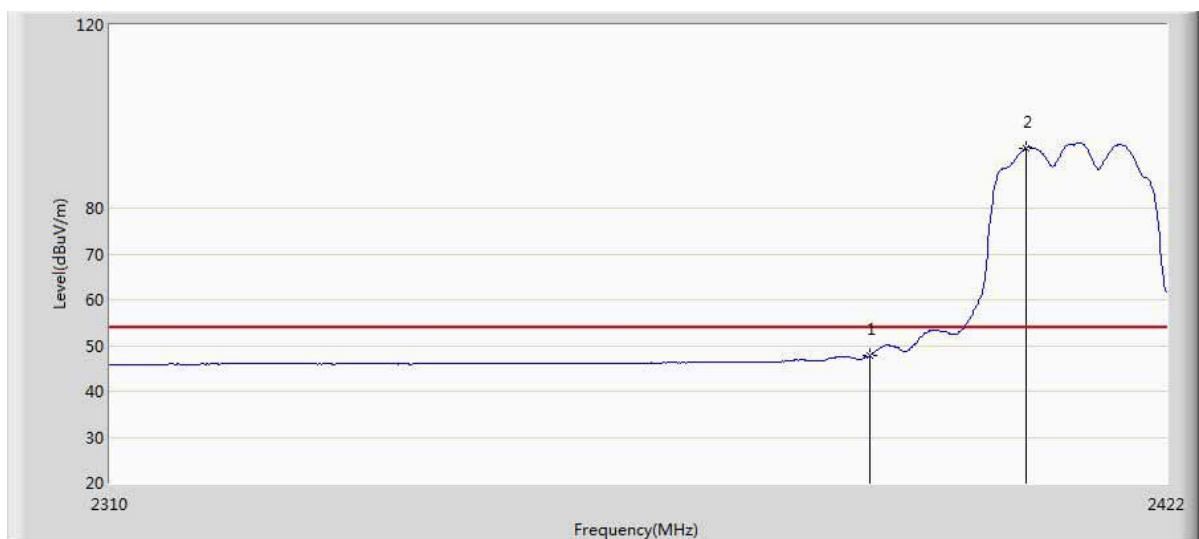
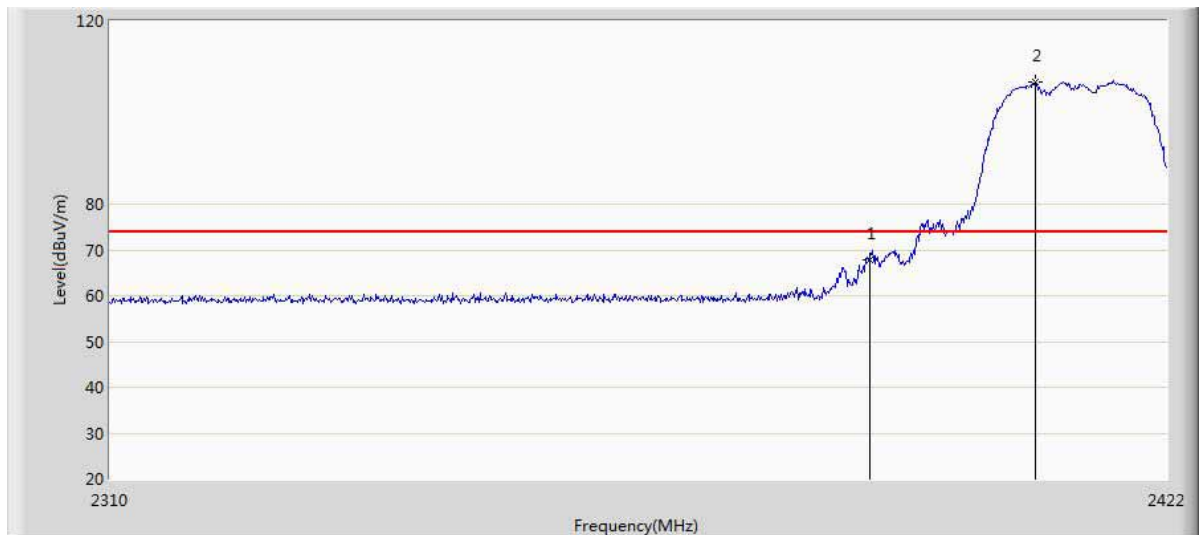
Product Name	: AC1200 Wireless Dual Band Gigabit Router	Polarity	: Horizontal
Test Mode	: Mode 2	Power	: AC 120V/60Hz
Test CH/Freq	: CH01/2412MHz	Test Site	: AC5

No	Frequency (MHz)	Measured Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1	2390.000	62.861	25.506	-11.139	74.000	37.355	PK
2	2417.128	106.466	69.097	N/A	N/A	37.369	PK
1	2390.000	44.771	7.416	-9.229	54.000	37.355	AV
2	2417.912	96.391	59.017	N/A	N/A	37.375	AV



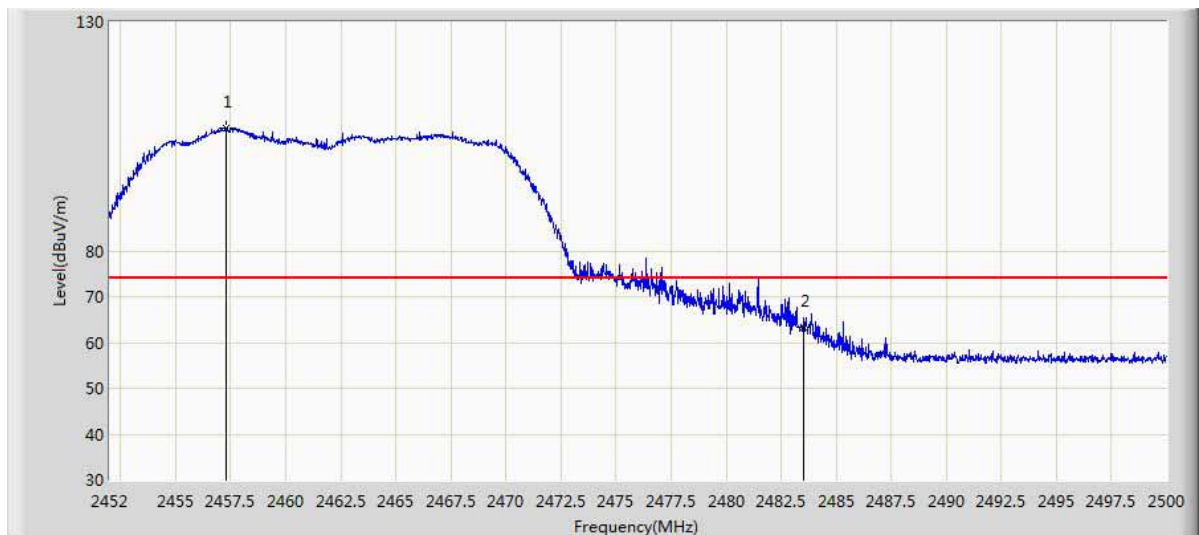
Product Name	: AC1200 Wireless Dual Band Gigabit Router	Polarity	: Vertical
Test Mode	: Mode 2	Power	: AC 120V/60Hz
Test CH/Freq	: CH01/2412MHz	Test Site	: AC5

No	Frequency (MHz)	Measured Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1	2389.744	73.819	36.463	-0.181	74.000	37.356	PK
2	2410.296	113.352	76.023	N/A	N/A	37.328	PK
1	2390.000	52.658	15.303	-1.342	54.000	37.355	AV
2	2409.904	103.474	66.145	N/A	N/A	37.330	AV



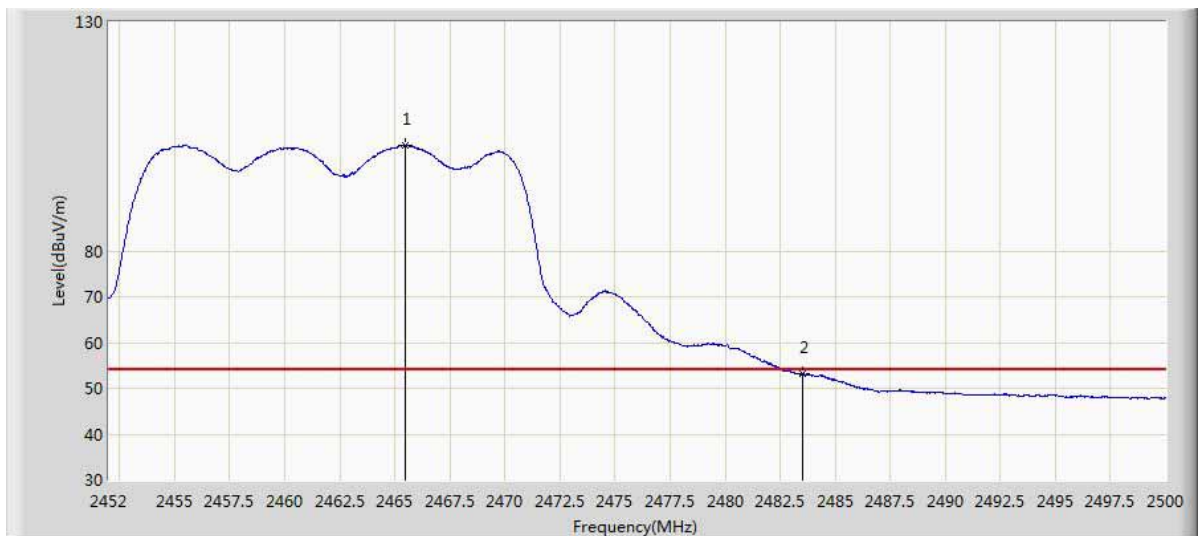
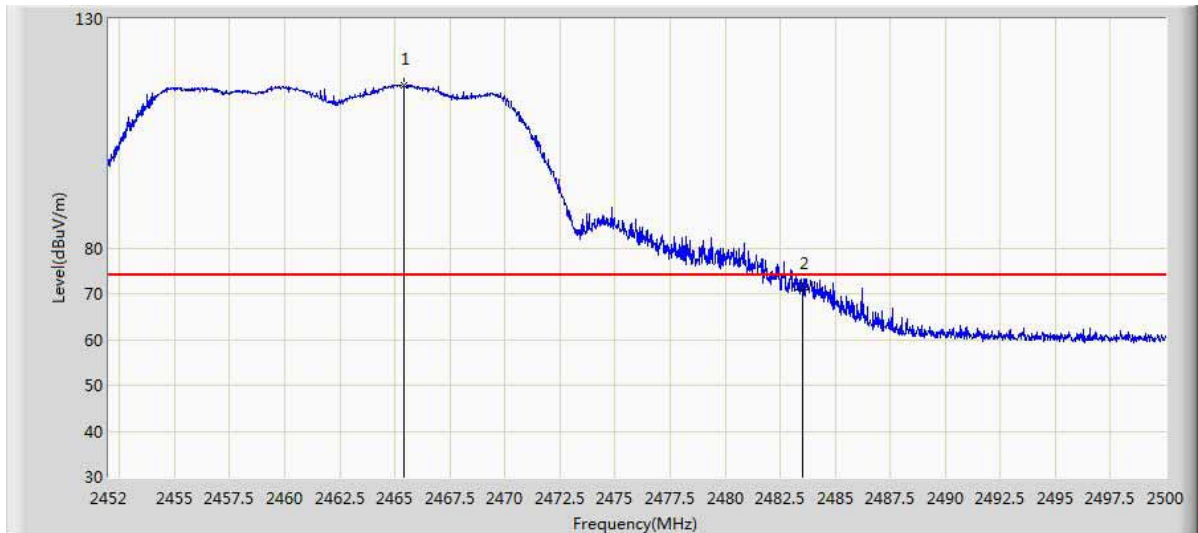
Product Name	: AC1200 Wireless Dual Band Gigabit Router	Polarity	: Horizontal
Test Mode	: Mode 2	Power	: AC 120V/60Hz
Test CH/Freq	: CH11/2462MHz	Test Site	: AC5

No	Frequency (MHz)	Measured Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1	2457.304	106.864	69.440	N/A	N/A	37.424	PK
2	2483.500	63.304	25.793	-10.696	74.000	37.511	PK
1	2457.448	97.555	60.131	N/A	N/A	37.424	AV
2	2483.500	49.061	11.550	-4.939	54.000	37.511	AV



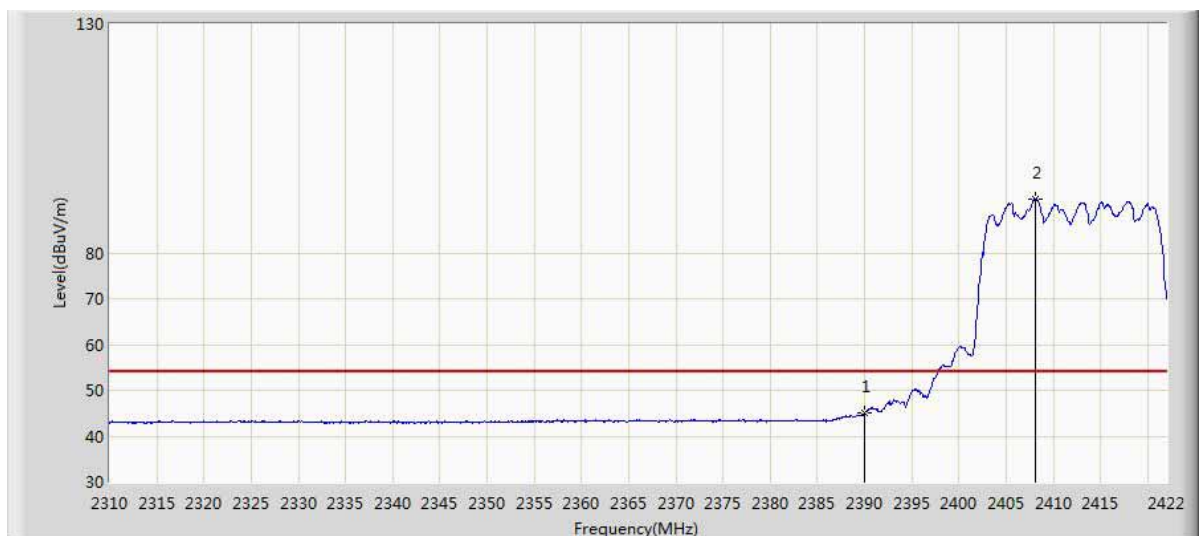
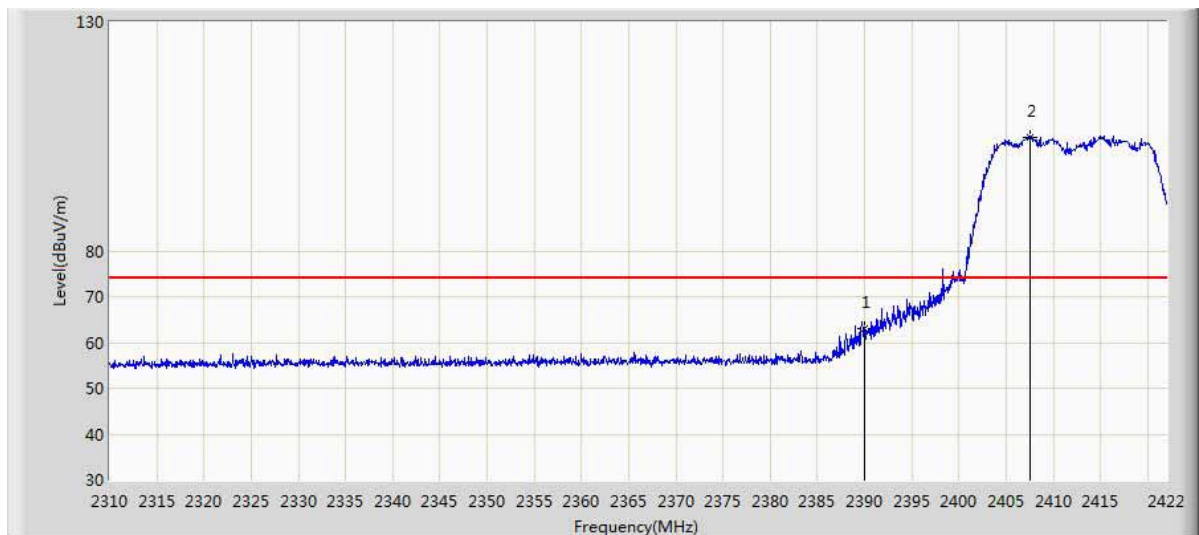
Product Name	: AC1200 Wireless Dual Band Gigabit Router	Polarity	: Vertical
Test Mode	: Mode 2	Power	: AC 120V/60Hz
Test CH/Freq	: CH11/2462MHz	Test Site	: AC5

No	Frequency (MHz)	Measured Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1	2465.416	115.574	78.142	N/A	N/A	37.432	PK
2	2483.500	70.747	33.236	-3.253	74.000	37.511	PK
1	2465.488	102.912	65.480	N/A	N/A	37.432	AV
2	2483.500	53.083	15.572	-0.917	54.000	37.511	AV



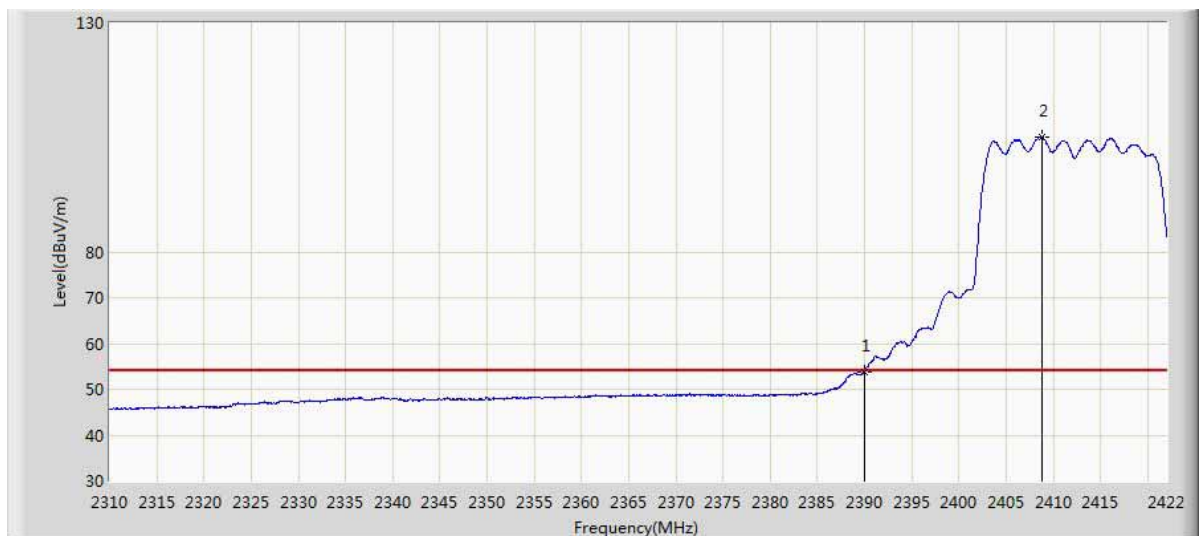
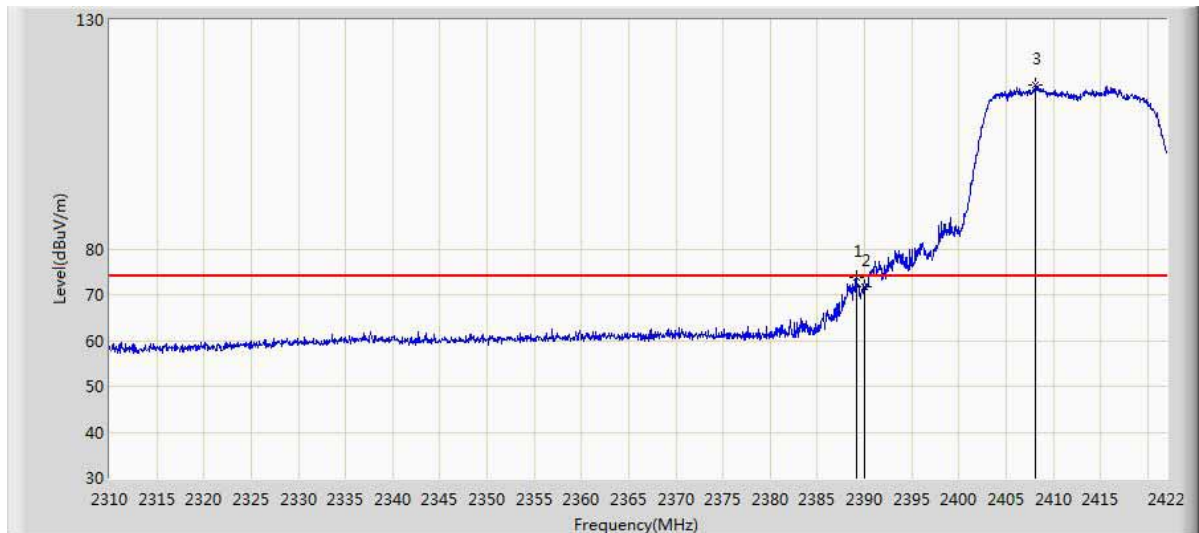
Product Name	: AC1200 Wireless Dual Band Gigabit Router	Polarity	: Horizontal
Test Mode	: Mode 3	Power	: AC 120V/60Hz
Test CH/Freq	: CH01/2412MHz	Test Site	: AC5

No	Frequency (MHz)	Measured Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1	2390.000	63.062	25.707	-10.938	74.000	37.355	PK
2	2407.608	104.703	67.370	N/A	N/A	37.333	PK
1	2390.000	45.050	7.695	-8.950	54.000	37.355	AV
2	2408.112	91.798	54.466	N/A	N/A	37.332	AV



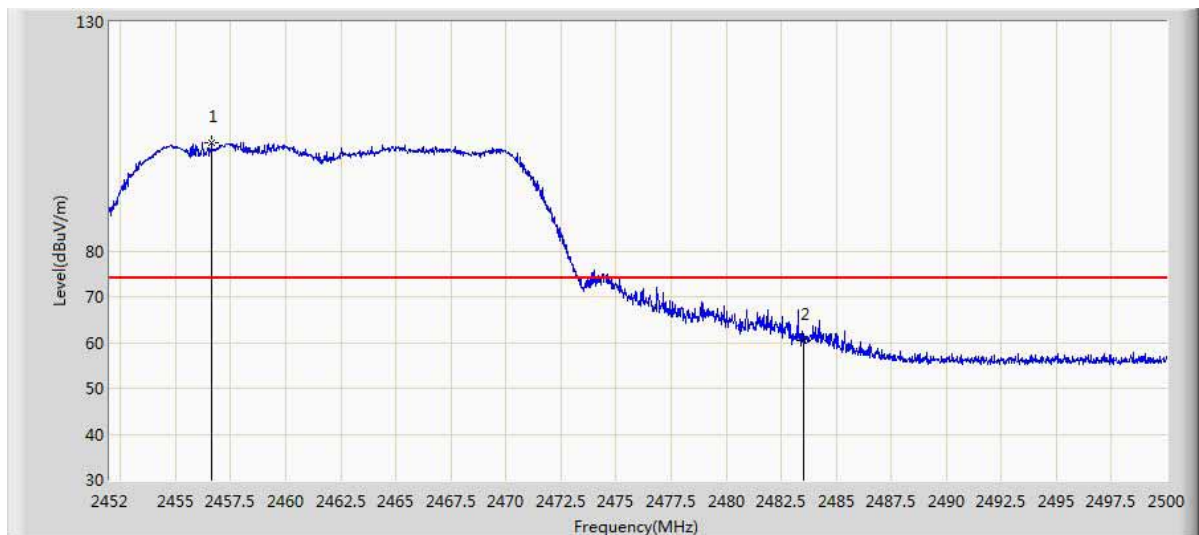
Product Name	: AC1200 Wireless Dual Band Gigabit Router	Polarity	: Vertical
Test Mode	: Mode 3	Power	: AC 120V/60Hz
Test CH/Freq	: CH01/2412MHz	Test Site	: AC5

No	Frequency (MHz)	Measured Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor (dB)	Type
1	2389.128	73.778	36.422	-0.222	74.000	37.356	PK
2	2390.000	71.622	34.267	-2.378	74.000	37.355	PK
3	2408.168	115.676	78.344	N/A	N/A	37.332	PK
1	2390.000	53.867	16.512	-0.133	54.000	37.355	AV
2	2408.784	105.052	67.721	N/A	N/A	37.331	AV



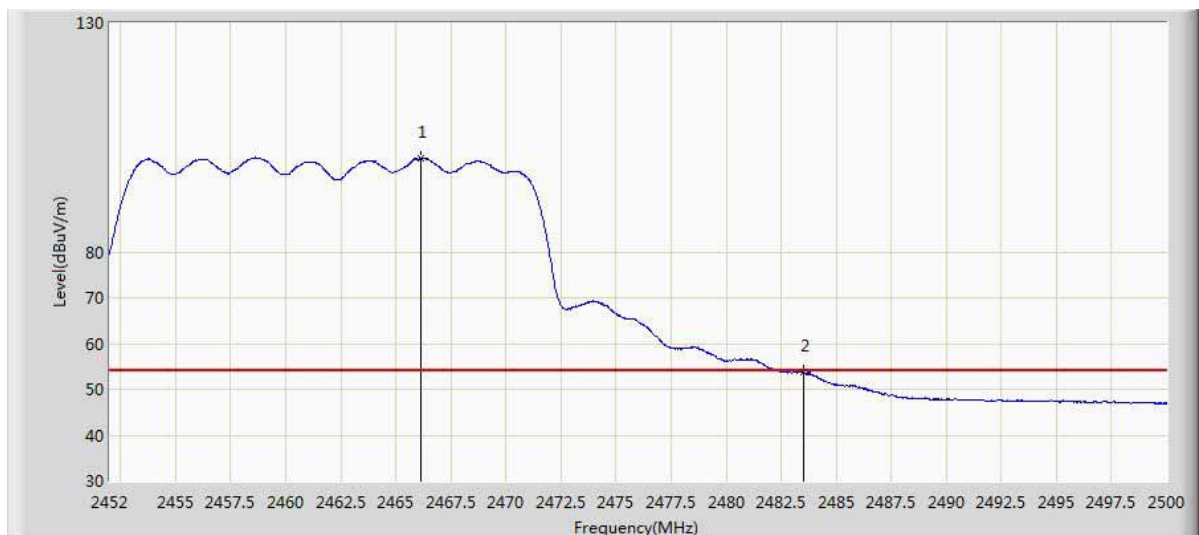
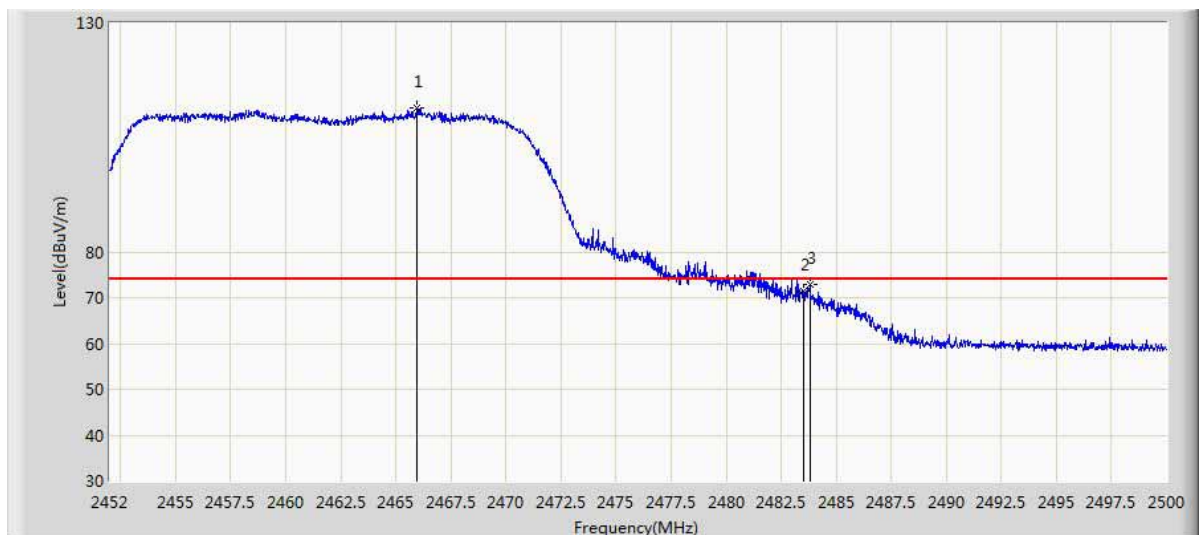
Product Name	: AC1200 Wireless Dual Band Gigabit Router	Polarity	: Horizontal
Test Mode	: Mode 3	Power	: AC 120V/60Hz
Test CH/Freq	: CH11/2462MHz	Test Site	: AC5

No	Frequency (MHz)	Measured Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1	2456.632	103.762	66.337	N/A	N/A	37.425	PK
2	2483.500	60.500	22.989	-13.500	74.000	37.511	PK
1	2470.456	86.605	49.156	N/A	N/A	37.449	AV
2	2483.500	44.042	6.531	-9.958	54.000	37.511	AV



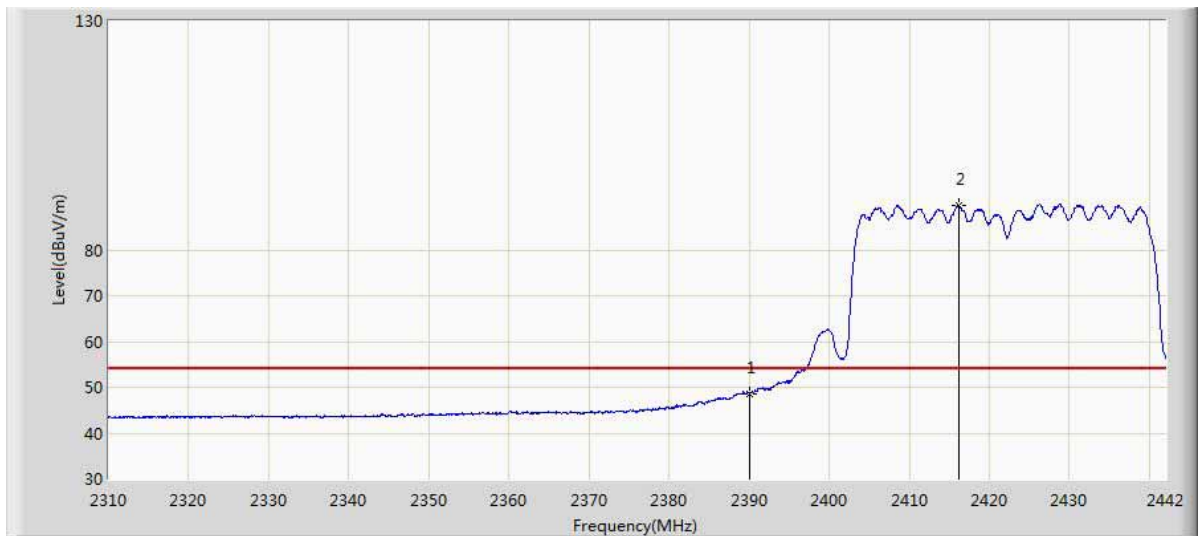
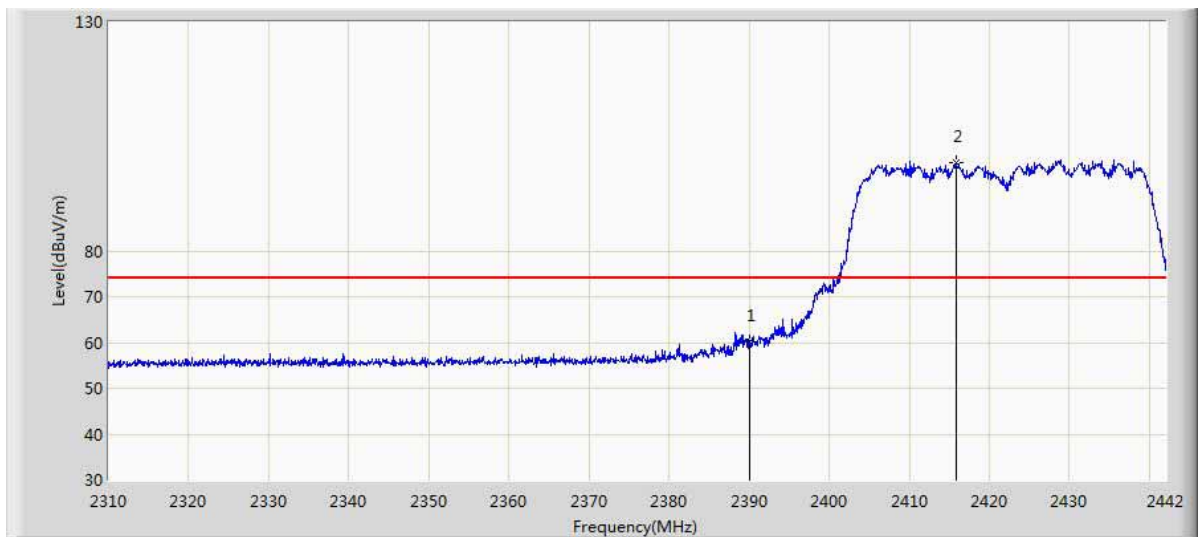
Product Name	: AC1200 Wireless Dual Band Gigabit Router	Polarity	: Vertical
Test Mode	: Mode 3	Power	: AC 120V/60Hz
Test CH/Freq	: CH11/2462MHz	Test Site	: AC5

No	Frequency (MHz)	Measured Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor (dB)	Type
1	2465.944	111.376	73.942	N/A	N/A	37.434	PK
2	2483.500	71.560	34.049	-2.440	74.000	37.511	PK
3	2483.824	72.858	35.344	-1.142	74.000	37.514	PK
1	2466.112	100.380	62.945	N/A	N/A	37.434	AV
2	2483.500	53.632	16.121	-0.368	54.000	37.511	AV



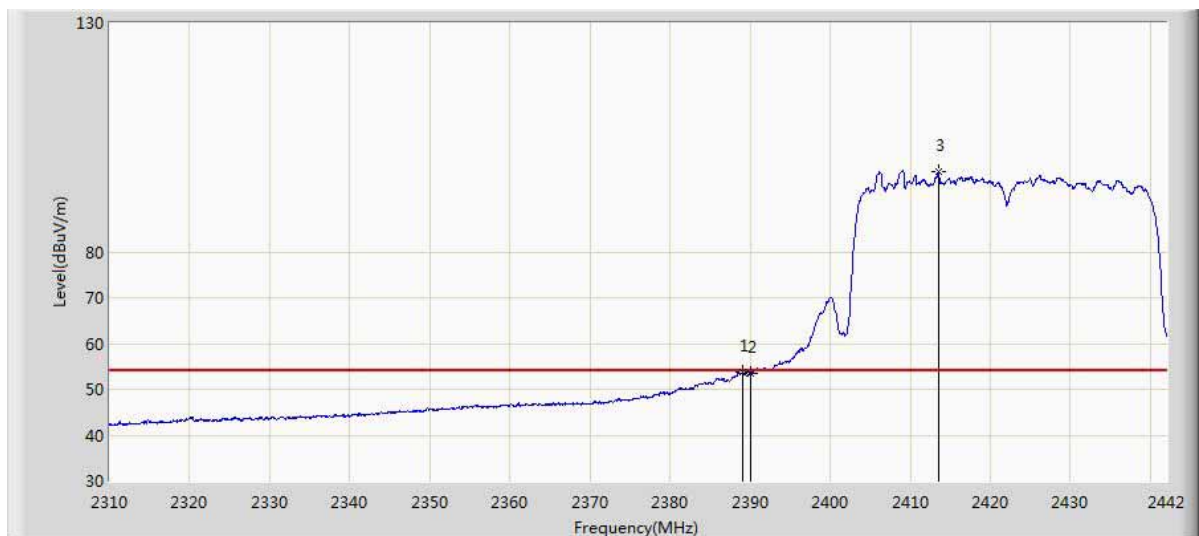
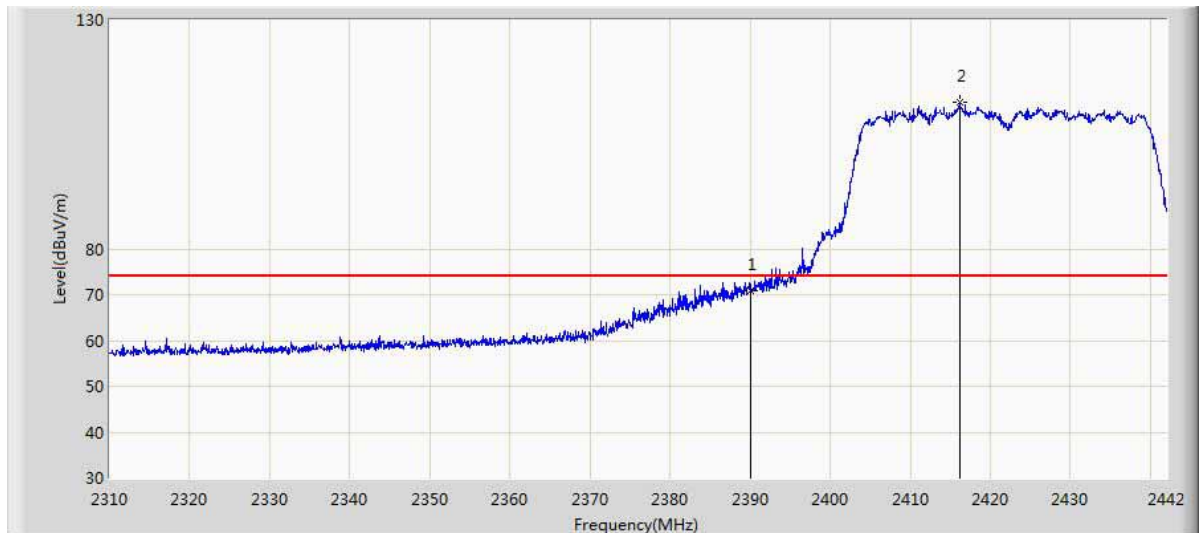
Product Name	: AC1200 Wireless Dual Band Gigabit Router	Polarity	: Horizontal
Test Mode	: Mode 4	Power	: AC 120V/60Hz
Test CH/Freq	: CH03/2422MHz	Test Site	: AC5

No	Frequency (MHz)	Measured Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1	2390.000	60.204	22.849	-13.796	74.000	37.355	PK
2	2415.798	99.388	62.028	N/A	N/A	37.360	PK
1	2390.000	48.440	11.085	-5.560	54.000	37.355	AV
2	2416.194	89.842	52.479	N/A	N/A	37.362	AV



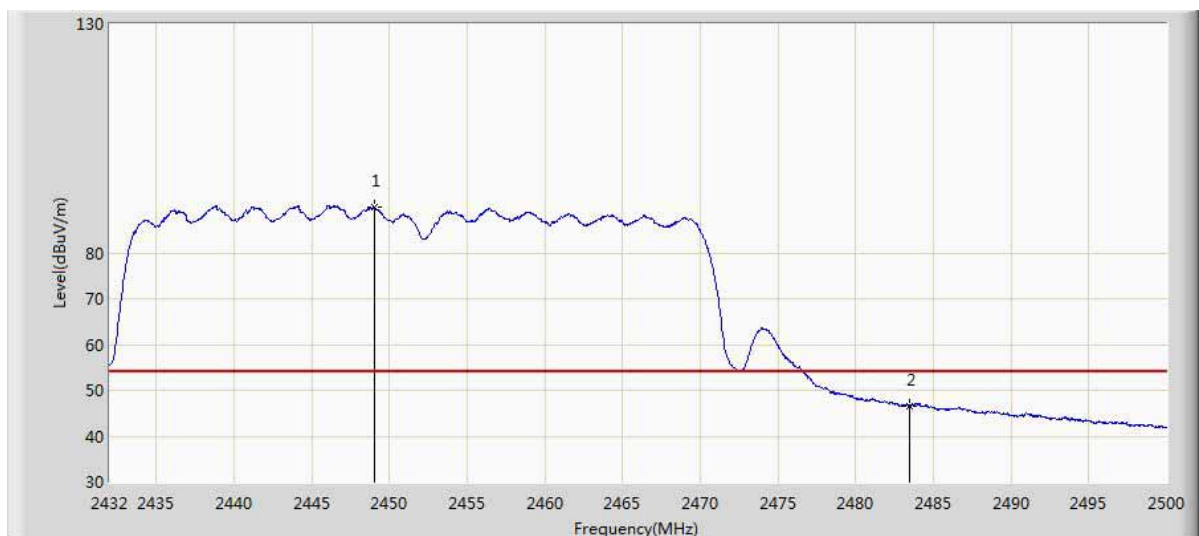
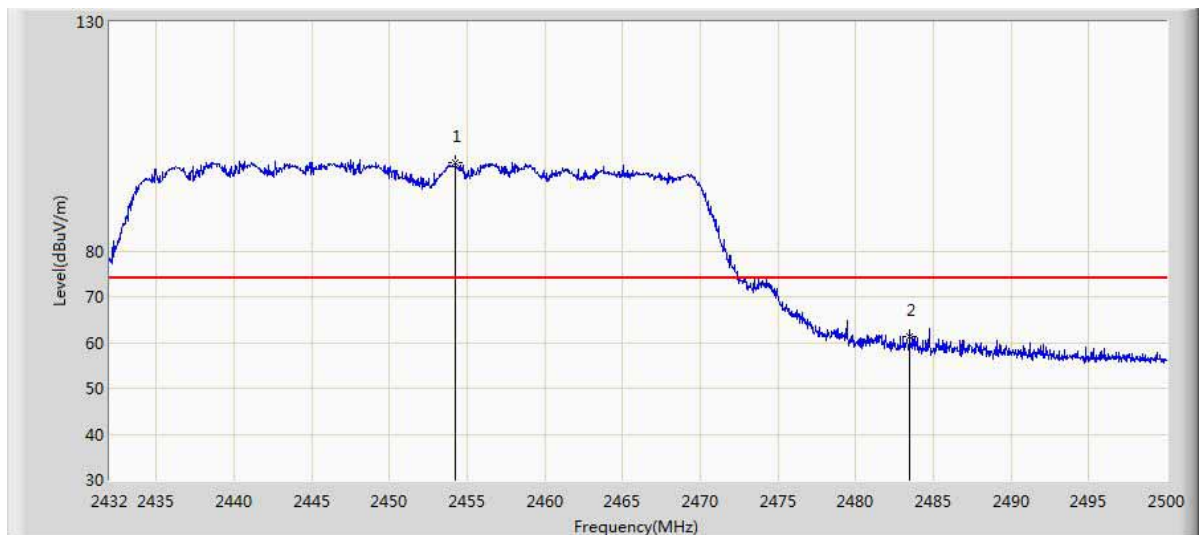
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Test Mode	: Mode 4	Power	: AC 120V/60Hz
Test CH/Freq	: CH03/2422MHz	Test Site	: AC5

No	Frequency (MHz)	Measured Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor (dB)	Type
1	2390.000	70.749	33.394	-3.251	74.000	37.355	PK
2	2416.128	112.089	74.727	N/A	N/A	37.362	PK
1	2389.068	53.912	16.556	-0.088	54.000	37.356	AV
2	2390.000	53.604	16.249	-0.396	54.000	37.355	AV
3	2413.620	97.488	60.143	N/A	N/A	37.345	AV



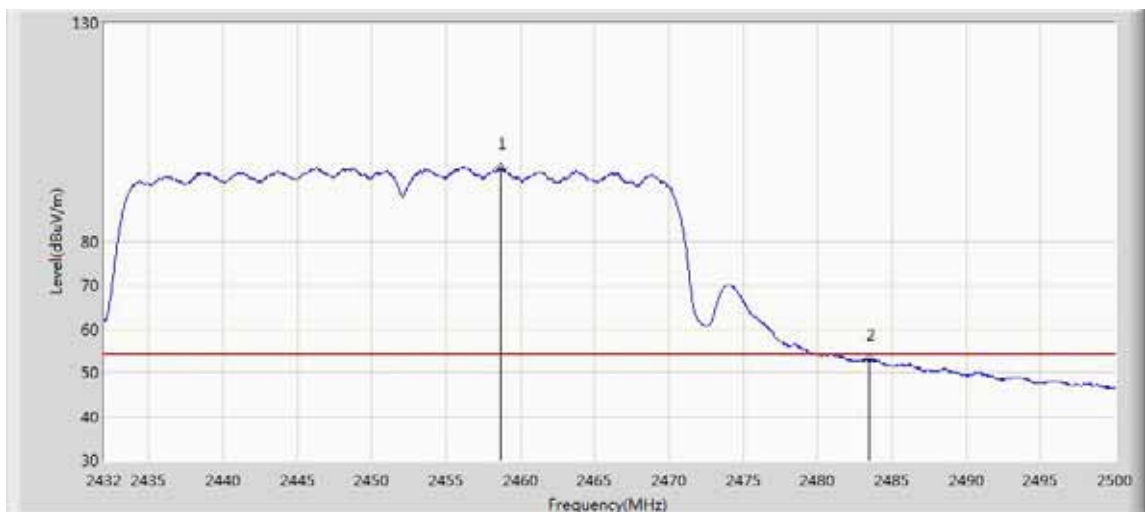
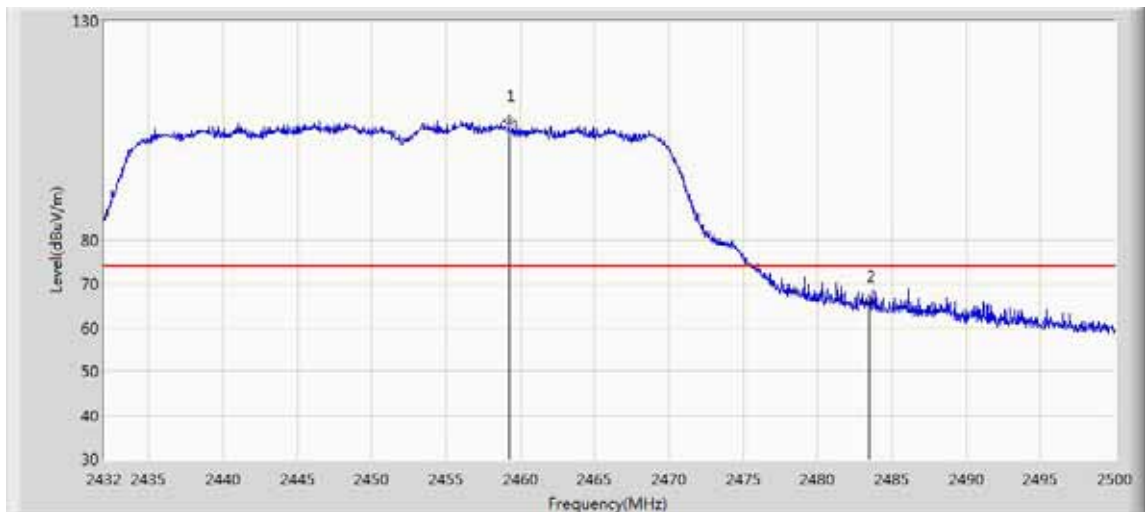
Product Name	: AC1200 Wireless Dual Band Gigabit Router	Polarity	: Horizontal
Test Mode	: Mode 4	Power	: AC 120V/60Hz
Test CH/Freq	: CH09/2452MHz	Test Site	: AC5

No	Frequency (MHz)	Measured Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1	2454.270	99.155	61.729	N/A	N/A	37.426	PK
2	2483.500	61.298	23.787	-12.702	74.000	37.511	PK
1	2449.034	90.107	52.677	N/A	N/A	37.431	AV
2	2483.500	46.603	9.092	-7.397	54.000	37.511	AV



Product Name	: AC1200 Wireless Dual Band Gigabit Router	Polarity	: Vertical
Test Mode	: Mode 4	Power	: AC 120V/60Hz
Test CH/Freq	: CH09/2452MHz	Test Site	: AC5

No	Frequency (MHz)	Measured Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor (dB)	Type
1	2459.268	106.998	69.576	N/A	N/A	37.423	PK
2	2483.500	65.803	28.292	-8.197	74.000	37.511	PK
1	2458.656	96.663	59.240	N/A	N/A	37.423	AV
2	2483.500	52.886	15.375	-1.114	54.000	37.511	AV



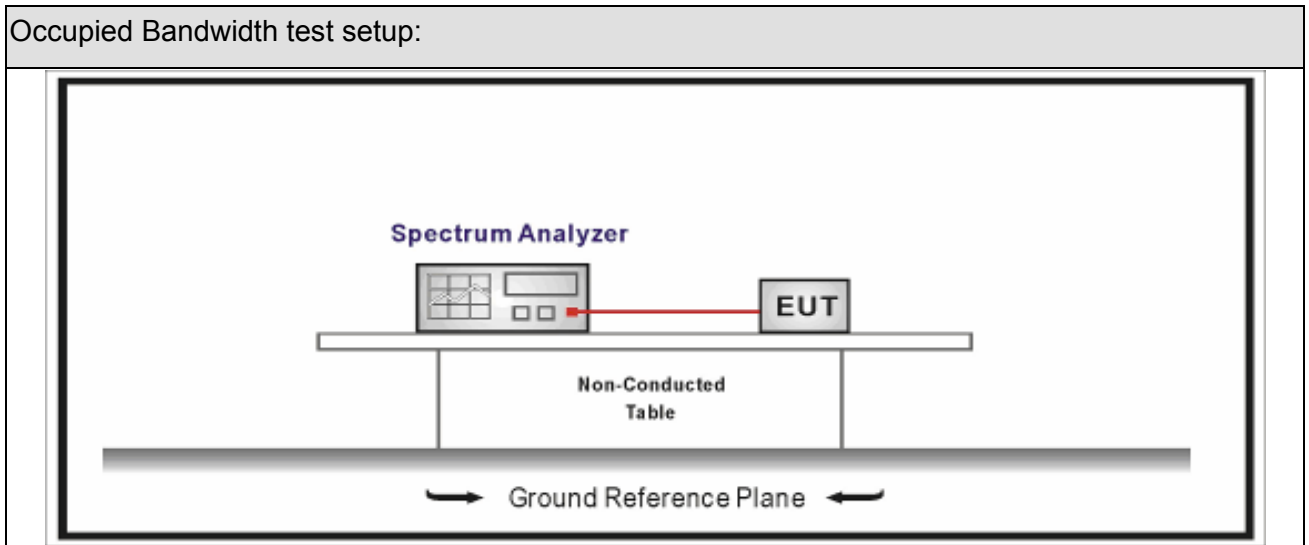
7. Occupied Bandwidth

7.1. Test Equipment

Occupied Bandwidth / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2016.01.04	2017.01.03
Spectrum Analyzer	Agilent	N9010A	MY48030494	2016.03.11	2017.03.10
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2015.04.10	2016.04.09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

7.2. Test Setup



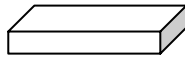
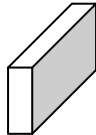
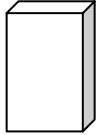



7.3. Limit

Occupied Bandwidth
Systems using digital modulation techniques operate in the 2400-2483.5 MHz. The minimum 6 dB bandwidth shall be at least 500 kHz

7.4. Test Procedure

Test Method			
	Reference Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	11.8	DTS bandwidth
	<input type="checkbox"/> ANSI C63.10	11.8.1	Option 1
	<input checked="" type="checkbox"/> ANSI C63.10	11.8.2	Option 2

7.5. EUT test definition

Item	Occupied Bandwidth			
Device Category	<input checked="" type="checkbox"/>	Fixed position use		
	<input type="checkbox"/>	Mobile position use		
Test mode	Mode 1~4			
Test method	<input type="checkbox"/>	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>
	<input checked="" type="checkbox"/>	Conducted		
	<input type="checkbox"/>	Chain 0		
				
	<input checked="" type="checkbox"/>	Chain 0	Chain 1	
				
		Worst Chain <input type="checkbox"/>	Worst Chain <input type="checkbox"/>	
<input type="checkbox"/>	Chain 0	Chain 1	Chain 2	
				
	Worst Chain <input type="checkbox"/>	Worst Chain <input type="checkbox"/>	Worst Chain <input type="checkbox"/>	

7.6. Test Result

Product Name	:	AC1200 Wireless Dual Band Gigabit Router	Test Power	:	AC 120V/60Hz
Test Site	:	TR-8			

Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (MHz)		6dB Occupied Bandwidth (MHz)		Limit (kHz)	Result
			Ant 0	Ant 1	Ant 0	Ant 1		
1	01	2412	10.581	N/A	8.110	N/A	>500	Pass
1	06	2437	12.644	N/A	9.091	N/A	>500	Pass
1	11	2462	10.201	N/A	8.106	N/A	>500	Pass
2	01	2412	16.530	16.541	16.44	16.42	>500	Pass
2	06	2437	18.010	17.994	16.39	16.39	>500	Pass
2	11	2462	16.545	16.547	16.43	16.43	>500	Pass
3	01	2412	17.663	17.680	17.63	17.64	>500	Pass
3	06	2437	18.630	18.681	17.60	17.59	>500	Pass
3	11	2462	17.688	17.682	17.64	17.63	>500	Pass
4	03	2422	36.078	36.051	35.11	35.51	>500	Pass
4	06	2437	36.043	36.047	35.47	35.37	>500	Pass
4	09	2452	36.007	35.987	35.87	35.54	>500	Pass

Mode 1 CH01 (2412MHz) Ant 0



Mode 1 CH06 (2437MHz) Ant 0



Mode 1 CH11 (2462MHz) Ant 0



Mode 2 CH01 (2412MHz) Ant 0



Mode 2 CH01 (2412MHz) Ant 1



Mode 2 CH06 (2437MHz) Ant 0



Mode 2 CH06 (2437MHz) Ant 1



Mode 2 CH11 (2462MHz) Ant 0



Mode 2 CH11 (2462MHz) Ant 1



Mode 3 CH01 (2412MHz) Ant 0



Mode 3 CH01 (2412MHz) Ant 1



Mode 3 CH06 (2437MHz) Ant 0



Mode 3 CH06 (2437MHz) Ant 0



Mode 3 CH11 (2462MHz) Ant 0



Mode 3 CH11 (2462MHz) Ant 1



Mode 4 CH01 (2422MHz) Ant 0



Mode 4 CH01 (2422MHz) Ant 1



Mode 4 CH06 (2437MHz) Ant 0



Mode 4 CH06 (2437MHz) Ant 1



Mode 4 CH09 (2452MHz) Ant 0



Mode 4 CH09 (2452MHz) Ant 1



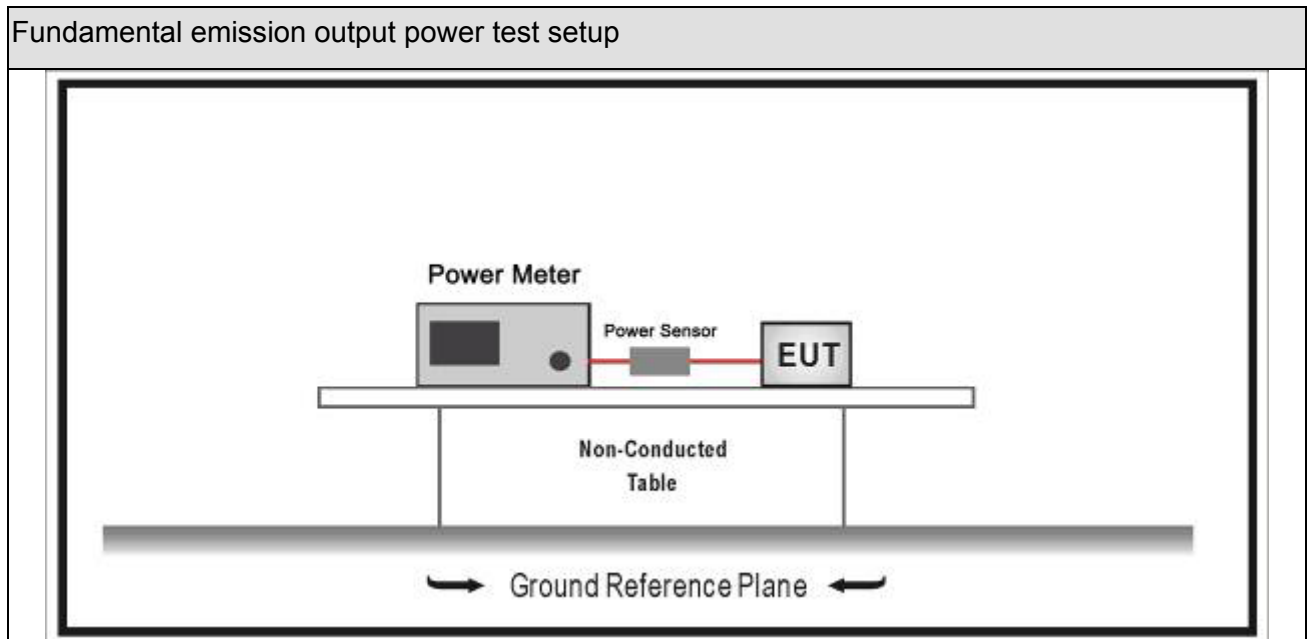
8. Fundamental emission output power

8.1. Test Equipment

Fundamental emission output power/ TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2016.01.04	2017.01.03
Spectrum Analyzer	Agilent	N9010A	MY48030494	2016.03.11	2017.03.10
Wideband Peak Power Meter	Anritsu	ML2495A	0905006	2015.11.11	2016.11.10
Power Sensor	Anritsu	MA2411B	0846014	2015.11.11	2016.11.10
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2016.04.10	2017.04.09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

8.2. Test Setup



8.3. Limit

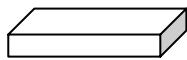
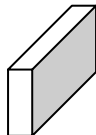
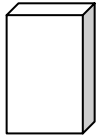



Fundamental emission output power Limit		
<input type="checkbox"/>	$G_{TX} < 6\text{dBi}$	$P_{out} \leq 30\text{dBm}$
<input checked="" type="checkbox"/>	$G_{TX} > 6\text{dBi}$	
	<input checked="" type="checkbox"/> Non-Fix point-point	$P_{out} \leq 30 - (G_{TX} - 6)$
	<input type="checkbox"/> Fix point-point	$P_{out} \leq 30 - [(G_{TX} - 6)]/3$
	<input type="checkbox"/> Point-to-multipoint	$P_{out} \leq 30 - (G_{TX} - 6)$
	<input type="checkbox"/> Overlap Beams	$P_{out} \leq 30 - [(G_{TX} - 6)]/3$
	<input type="checkbox"/> Aggregate power transmitted simultaneously on all beams	$P_{out} \leq 30 - [(G_{TX} - 6)]/3$
	<input type="checkbox"/> single directional beam	$P_{out} \leq 30 - [(G_{TX} - 6)]/3 + 8\text{dB}$
Note 1 : G_{TX} directional gain of transmitting antennas. Note 2 : P_{out} is maximum peak conducted output power .		

8.4. Test Procedure

Fundamental emission output power Test Method					
	References Rule		Chapter	Description	
<input checked="" type="checkbox"/>	ANSI C63.10		11.9	Fundamental emission output power	
<input type="checkbox"/>	ANSI C63.10		11.9.1	Maximum peak conducted output power	
	<input type="checkbox"/>	ANSI C63.10	11.9.1.1	RBW \geq DTS bandwidth	
	<input type="checkbox"/>	ANSI C63.10	11.9.1.2	Integrated band power method	
	<input type="checkbox"/>	ANSI C63.10	11.9.1.3	PKPM1 Peak power meter method	
<input checked="" type="checkbox"/>	ANSI C63.10		11.9.2	Maximum conducted (average) output power	
	<input type="checkbox"/>	ANSI C63.10		11.9.2.2	Measurement using a spectrum analyzer (SA)
		<input type="checkbox"/>	ANSI C63.10	11.9.2.2.2	Method AVGSA-1(Duty cycle \geq 98%)
		<input type="checkbox"/>	ANSI C63.10	11.9.2.2.3	Method AVGSA-1A(Duty cycle \geq 98%)
		<input type="checkbox"/>	ANSI C63.10	11.9.2.2.4	Method AVGSA-2(Duty cycle \leq 98%)
		<input type="checkbox"/>	ANSI C63.10	11.9.2.2.5	Method AVGSA-2A(Duty cycle \leq 98%)
		<input type="checkbox"/>	ANSI C63.10	11.9.2.2.4	Method AVGSA-3
		<input type="checkbox"/>	ANSI C63.10	11.9.2.2.5	Method AVGSA-3A
	<input checked="" type="checkbox"/>	ANSI C63.10		11.9.2.3	Measurement using a power meter (PM)
		<input checked="" type="checkbox"/>	ANSI C63.10	11.9.2.3.1	Method AVGPM
		<input type="checkbox"/>	ANSI C63.10	11.9.2.3.2	Method AVGPM-G

Directional Gain Calculations for In-Band test method			
	References Rule	Chapter	Description
<input type="checkbox"/>	KDB 662911	F2)a)	Basic methodology with NANT transmit antennas
	<input type="checkbox"/> KDB 662911	F2)a) (i)	transmit signals are correlated
	<input type="checkbox"/> KDB 662911	F2)a) (ii)	transmit signals are uncorrelated
<input type="checkbox"/>	KDB 662911	F2)b)	Sectorized antenna systems.
<input type="checkbox"/>	KDB 662911	F2)c)	Cross-polarized antennas
	<input type="checkbox"/> ANSI C63.10	F2)c) (i)	Cross-polarized antennas with NANT = 2.
	<input type="checkbox"/> ANSI C63.10	F2)c) (ii)	Multiple antennas
<input type="checkbox"/>	KDB 662911	F2)d)	Sectorized antenna systems.
	<input type="checkbox"/> KDB 662911	F2)d) (i)	transmit signals are correlated
	<input type="checkbox"/> KDB 662911	F2)d) (ii)	transmit signals are uncorrelated
<input type="checkbox"/>	KDB 662911	F2)e)	Sectorized antenna systems.
	<input type="checkbox"/> KDB 662911	F2)e) (i)	Antennas have the same gain
	<input type="checkbox"/> KDB 662911	F2)e) (ii)	Antenna have the different gain with one spatial stream
	<input type="checkbox"/> KDB 662911	F2)e) (iii)	Antenna have the different gain with more than one spatial stream
<input checked="" type="checkbox"/>	KDB 662911	F2)f)	Cyclic Delay Diversity (CDD)
	<input type="checkbox"/> KDB 662911	F2)f) (i)	Antennas have the same gain
	<input type="checkbox"/> KDB 662911	F2)f) (ii)	Antenna have the different gain with one spatial stream
	<input checked="" type="checkbox"/> KDB 662911	F2)f) (ii)	Antenna have the different gain with more than one spatial stream

8.5. EUT test definition

Item	Fundamental emission output power			
Device Category	<input checked="" type="checkbox"/>	Fixed position use		
	<input type="checkbox"/>	Mobile position use		
Test mode	Mode 1~4			
Test method	<input type="checkbox"/>	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>
	<input checked="" type="checkbox"/>	Conducted		
	<input type="checkbox"/>	Chain 0		
				
	<input checked="" type="checkbox"/>	Chain 0	Chain 1	
				
		Worst Chain <input type="checkbox"/>	Worst Chain <input type="checkbox"/>	
<input type="checkbox"/>	Chain 0	Chain 1	Chain 2	
				
	Worst Chain <input type="checkbox"/>	Worst Chain <input type="checkbox"/>	Worst Chain <input type="checkbox"/>	

8.6. Test Result

Product Name	:	AC1200 Wireless Dual Band Gigabit Router	Test Power	:	AC 120V/60Hz
Test Site	:	TR8			

CDD mode:

Mode	Channel	Test Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Directional Gain (dBi)	Limit (dBm)	Result
			Ant 0	Ant 1				
1	01	2412	23.61	N/A	23.61	1.63	30	Pass
1	06	2437	27.93	N/A	27.93	1.63	30	Pass
1	11	2462	24.13	N/A	24.13	1.63	30	Pass
2	01	2412	19.95	20.06	23.02	1.95	30	Pass
2	06	2437	26.86	26.99	29.94	1.95	30	Pass
2	11	2462	19.63	19.67	22.66	1.95	30	Pass
3	01	2412	18.37	18.77	21.58	1.95	30	Pass
3	06	2437	26.65	26.91	29.79	1.95	30	Pass
3	11	2462	17.41	17.56	20.50	1.95	30	Pass
4	03	2422	14.05	14.17	17.12	1.95	30	Pass
4	06	2437	21.64	21.71	24.69	1.95	30	Pass
4	09	2452	14.49	14.64	17.58	1.95	30	Pass

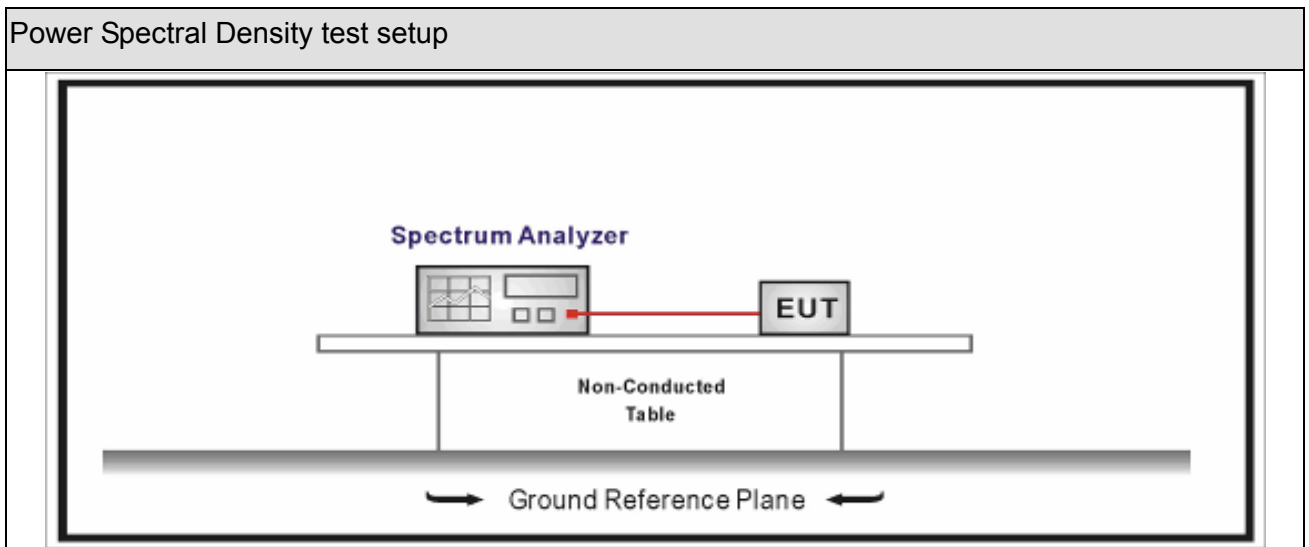
9. Power Spectral Density

9.1. Test Equipment

Power Spectral Density / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2016.01.04	2017.01.03
Spectrum Analyzer	Agilent	N9010A	MY48030494	2016.03.11	2017.03.10
Temperature/Humidity Meter	zhichen	ZC1-2	TR8-TH	2016.04.10	2017.04.09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

9.2. Test Setup



9.3. Limit

Power Spectral Density Limit

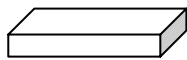
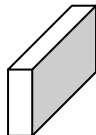
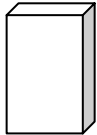



Power Spectral Density $\leq 8\text{dBm}/3\text{kHz}$

9.4. Test Procedure

Power Spectral Density Test Method			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	11.10	Maximum power spectral density level in the fundamental emission
<input checked="" type="checkbox"/>	ANSI C63.10	11.10.2	Method PKPSD (peak PSD)
<input type="checkbox"/>	ANSI C63.10	11.10.3	Method AVGPSD-1(Duty cycle \geq 98%)
<input type="checkbox"/>	ANSI C63.10	11.10.4	Method AVGPSD-1A(Duty cycle \geq 98%)
<input type="checkbox"/>	ANSI C63.10	11.10.5	Method AVGPSD-2(Duty cycle $<$ 98%)
<input type="checkbox"/>	ANSI C63.10	11.10.6	Method AVGPSD-2A(Duty cycle $<$ 98%)
<input type="checkbox"/>	ANSI C63.10	11.10.7	Method AVGPSD-3
<input type="checkbox"/>	ANSI C63.10	11.10.8	Method AVGPSD-3A

Directional Gain Calculations for In-Band test method			
	Referred Rule	Chapter	Description
<input type="checkbox"/>	KDB 662911	F2)a)	Basic methodology with NANT transmit antennas
	<input type="checkbox"/> KDB 662911	F2)a) (i)	transmit signals are correlated
	<input type="checkbox"/> KDB 662911	F2)a) (ii)	transmit signals are uncorrelated
<input type="checkbox"/>	KDB 662911	F2)b)	Sectorized antenna systems.
<input type="checkbox"/>	KDB 662911	F2)c)	Cross-polarized antennas
	<input type="checkbox"/> ANSI C63.10	F2)c) (i)	Cross-polarized antennas with NANT = 2.
	<input type="checkbox"/> ANSI C63.10	F2)c) (ii)	Multiple antennas
<input type="checkbox"/>	KDB 662911	F2)d)	Sectorized antenna systems.
	<input type="checkbox"/> KDB 662911	F2)d) (i)	transmit signals are correlated
	<input type="checkbox"/> KDB 662911	F2)d) (ii)	transmit signals are uncorrelated
<input type="checkbox"/>	KDB 662911	F2)e)	Sectorized antenna systems.
	<input type="checkbox"/> KDB 662911	F2)e) (i)	Antennas have the same gain
	<input type="checkbox"/> KDB 662911	F2)e) (ii)	Antenna have the different gain with one spatial stream
	<input type="checkbox"/> KDB 662911	F2)e) (iii)	Antenna have the different gain with more than one spatial stream
<input checked="" type="checkbox"/>	KDB 662911	F2)f)	Cyclic Delay Diversity (CDD)
	<input type="checkbox"/> KDB 662911	F2)f) (i)	Antennas have the same gain
	<input type="checkbox"/> KDB 662911	F2)f) (ii)	Antenna have the different gain with one spatial stream
	<input checked="" type="checkbox"/> KDB 662911	F2)f) (ii)	Antenna have the different gain with more than one spatial stream

9.5. EUT test definition

Item	Power Spectral Density Test Method			
Device Category	<input checked="" type="checkbox"/>	Fixed position use		
	<input type="checkbox"/>	Mobile position use		
Test mode	Mode 1~4			
Test method	<input type="checkbox"/>	Radiated		
		X Axis	Y Axis	Z Axis
				
		Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>
	<input checked="" type="checkbox"/>	Conducted		
	<input type="checkbox"/>	Chain 0		
				
	<input checked="" type="checkbox"/>	Chain 0	Chain 1	
				
		Worst Chain <input type="checkbox"/>	Worst Chain <input type="checkbox"/>	
<input type="checkbox"/>	Chain 0	Chain 1	Chain 2	
				
	Worst Chain <input type="checkbox"/>	Worst Chain <input type="checkbox"/>	Worst Chain <input type="checkbox"/>	

9.6. Test Result

Product Name	:	AC1200 Wireless Dual Band Gigabit Router	Test Power	:	AC 120V/60Hz
Test Site	:	TR8			

Mode	Channel	Test Frequency (MHz)	Measurement PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	Directional Gain (dBi)	Limit (dBm/3kHz)	Result
			Ant 0	Ant 1				
1	01	2412	4.583	N/A	4.583	1.63	8	Pass
1	06	2437	6.013	N/A	6.013	1.63	8	Pass
1	11	2462	3.354	N/A	3.354	1.63	8	Pass
2	01	2412	-4.392	-5.073	-1.71	4.80	8	Pass
2	06	2437	1.143	2.224	4.73	4.80	8	Pass
2	11	2462	-5.198	-4.437	-1.79	4.80	8	Pass
3	01	2412	-6.04	-6.023	-3.02	4.80	8	Pass
3	06	2437	1.75	1.926	4.85	4.80	8	Pass
3	11	2462	-6.926	-7.192	-4.05	4.80	8	Pass
4	03	2422	-13.922	-13.651	-10.77	4.80	8	Pass
4	06	2437	-5.462	-6.591	-2.98	4.80	8	Pass
4	09	2452	-13.681	-13.68	-10.67	4.80	8	Pass

Mode 1 CH6 (2437MHz)
Ant 0



The End