



China

Report Number: 64.790.14.02064.01

FCC/IC - TEST REPORT

Report Number : **64.711.14.04572.01** Date of Issue: January 22, 2015

Model : OSK101, SK101

Product Type : Smart Kit


Applicant : GD Midea Air-conditioning Equipment Co.,Ltd.

Address : Midea Industrial District , Beijiao ,Shunde, Foshan, Guangdong, People's Republic of China

Production Facility : GD Midea Air-conditioning Equipment Co.,Ltd.

Address : Midea Industrial District , Beijiao ,Shunde, Foshan, Guangdong, People's Republic of China

Test Result : **Positive** **Negative**



Total pages including Appendices : 42

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2 Details about the Test Laboratory

Details about the Test Laboratory

Test Site 1

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch
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P.R.China

Telephone: +86 20 3832 0668
Fax: +86 20 3832 0478

Test site 2:

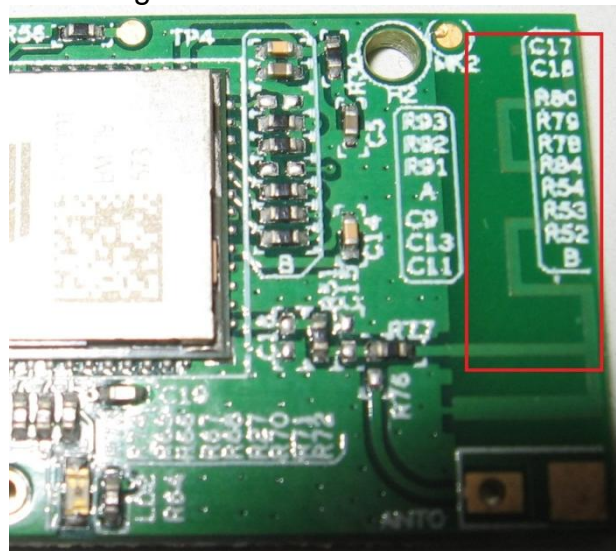
Company name: BTL inc.
Add: No.3, Jinshagang 1st Road, ShiXia, Dalang Town, DongGuan,
China.

Telephone: +86-769-83183000
Fax: +86-769-83196000
FCC Registration
Number: 319330
IC Company
Number: 4428B-3

3 Description of the Equipment Under Test

Product: Smart Kit
 Model no.: OSK101, SK101
 FCC ID: 2ADQOMDNA14
 IC: 12575A-MDNA14
 Options and accessories: NIL
 Rating: 5.0V DC
 RF Transmission Frequency: WIFI 802.11b/g: 2412~2462MHz
 Modulation: DSSS(CCK/QPSK/BPSK)
 Antenna Type: PCB
 Antenna Gain: Antenna for WIFI

Antenna gain: 2.0dBi



Description of the EUT: The Equipment Under Test (EUT) is a WIFI adaptor.

4 Summary of Test Standards

Test Standards	
FCC Part 15 Subpart C 10-1-2013 Edition	PART 15 - RADIO FREQUENCY DEVICES Subpart C - Intentional Radiators
RSS-Gen Issue 4 November 2014	General Requirements and Information for the Certification of Radio Apparatus
RSS-210 Issue 8 December 2010	RSS-210 — Licence-exempt Radio Apparatus (All Frequency Bands): Category I Equipment

All the test methods were according to procedures KDB 558074 v03r02 (June 5, 2014) and C63.10 (2013).

5 Summary of Test Results

Technical Requirements					
FCC Part 15 Subpart C, RSS-Gen, RSS-210					
Test Condition			Pages	Test Site	Test Result
Conducted Emissions at Mains Terminals	FCC PART 15 C section 15.207 & RSS-Gen clause 8.8	ANSI C63.10: Clause 6.2	10	Site 2	Pass
Antenna Requirement	FCC PART 15 C section 15.247 (c) and Section 15.203 & RSS-Gen clause 6.7	FCC PART 15 C section 15.247 (c) and Section 15.203	(Note 1)		Pass
6 dB Bandwidth	FCC PART 15 C section 15.247 (a)(2) & RSS-210 A8.2(a)	ANSI C63.10: Clause 6.9.1	15	Site 2	Pass
Maximum Peak Output Power	FCC PART 15 C section 15.247(b)(3) & RSS-210 A8.4(4)	FCC/KDB-558074 D01 v03r01 Clause 9.1.2	13	Site 2	Pass
Peak Power Spectral Density	FCC PART 15 C section 15.247(e) & RSS-210 A8.2(b)	ANSI C63.10: Clause 6.11.2.3	30	Site 2	Pass
Conducted Spurious Emission	FCC PART 15 C section 15.209 & 15.247(d) & RSS-210 A8.5	ANSI C63.10: Clause 6.7	19	Site 2	Pass
Radiated Spurious Emission	FCC PART 15 C section 15.209 & 15.247(d) & RSS-210 A8.5	ANSI C63.10: Clause 6.4, 6.5 and 6.6	26	Site 2	Pass
Band Edges Measurement	FCC PART 15 C section 15.247 (d) & 15.205 & RSS-210 A8.5	ANSI C63.10: Clause 6.9.2	23	Site 2	Pass

Note 1: The EUT uses PCB layout antenna, the maximum antenna gain is 2.0dBi. In accordance to §15.203, It is considered sufficiently to comply with the provisions of this section.



China

6 General Remarks

Remarks

OSK101 and SK101 are identical except appearance, so only OSK101 test was performed. This submittal(s) (test report) is intended for FCC ID: 2ADQOMDNA14, IC: 12575A-MDNA14 complies with Section 15.207, 15.209, 15.247 of the FCC Part 15, Subpart C Rules and RSS-210.

SUMMARY:

All tests according to the regulations cited on page 5 were

- Performed

- **Not** Performed

The Equipment Under Test

- **Fulfills** the general approval requirements.

- **Does not** fulfill the general approval requirements.

Sample Received Date: November 14, 2014

Testing Start Date: December 17, 2014

Testing End Date: December 26, 2014

- TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch -

Reviewed by:

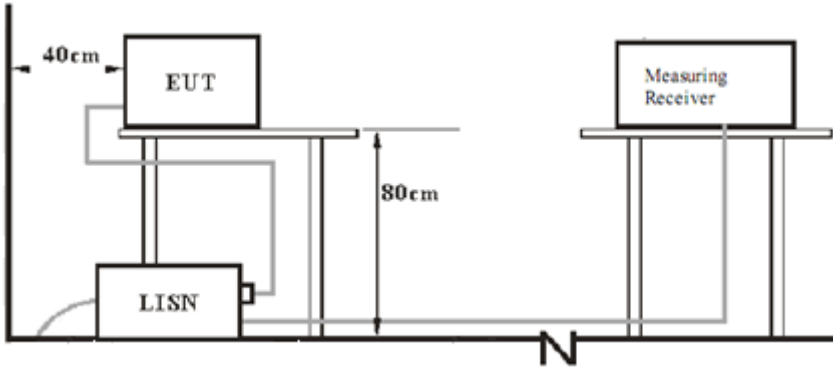
Prepared by:

Tony Liu

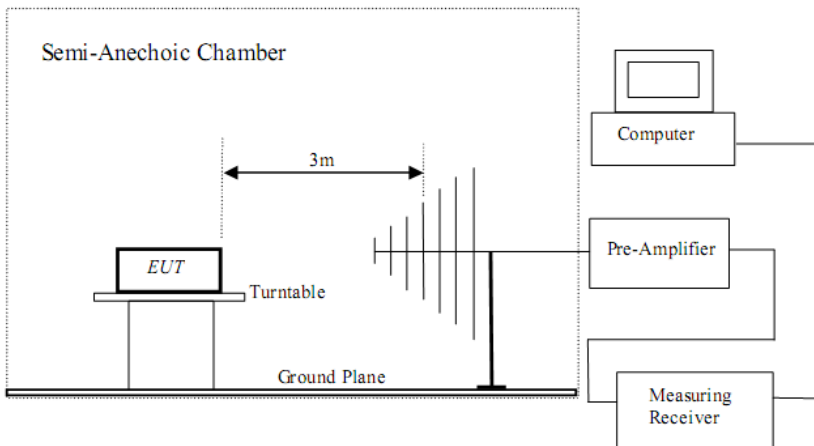
Storm Shu

7 Test Setups

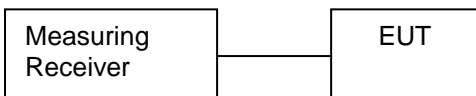
7.1 AC Power Line Conducted Emission test setups



7.2 Radiated test setups



7.3 Conducted RF test setups



8 Systems test configuration

Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.(SHIELD)	S/N(LENGTH)
PC	ASUS	X80L	--
Air-conditioner	Midea	--	--
Mobile phone	Samsung	i9300	--
WIFI router	TP-LINK	TL-WR745N	--

Test software: "USI WIFI mfg_test tool" for WIFI are used to control the EUT in continues transmitting mode.

The system was configured to operate at a signal channel transmitting. The test software allows the configuration and operation at the worst-case duty and the highest transmit power.

Test software: "MSmart" for WIFI are used to control the EUT in normal operation mode. This software could be remote control air-conditioning by Mobile phone and WIFI router.

9 Technical Requirement

9.1 Conducted Emission

Test Method

1. The EUT was placed on a table, which is 0.8m above ground plane
2. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.).
3. Maximum procedure was performed to ensure EUT compliance
4. A EMI test receiver is used to test the emissions from both sides of AC line

Limit

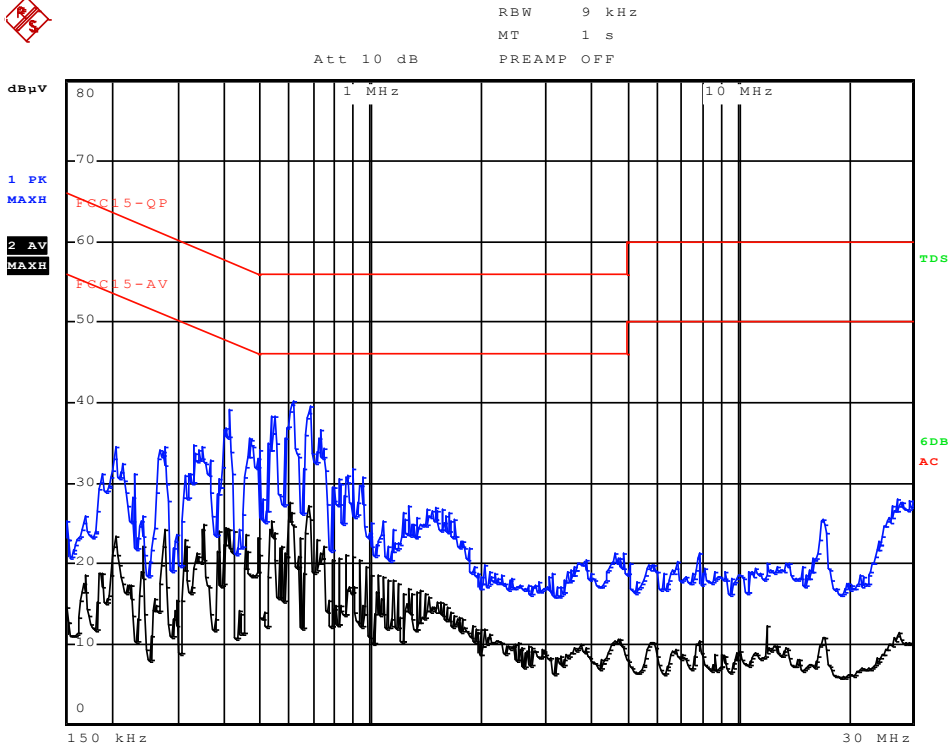
According to §15.207 & RSS-GEN A7.2.4, conducted emissions limit as below:

Frequency MHz	QP Limit dB μ V	AV Limit dB μ V
0.150-0.500	66-56*	56-46*
0.500-5	56	46
5-30	60	50

Decreasing linearly with logarithm of the frequency

Conducted Emission

Product Type : Smart Kit
 M/N : OSK101
 Operating Condition : WIFI function on
 Test Specification : Live
 Comment : AC 120V/60Hz

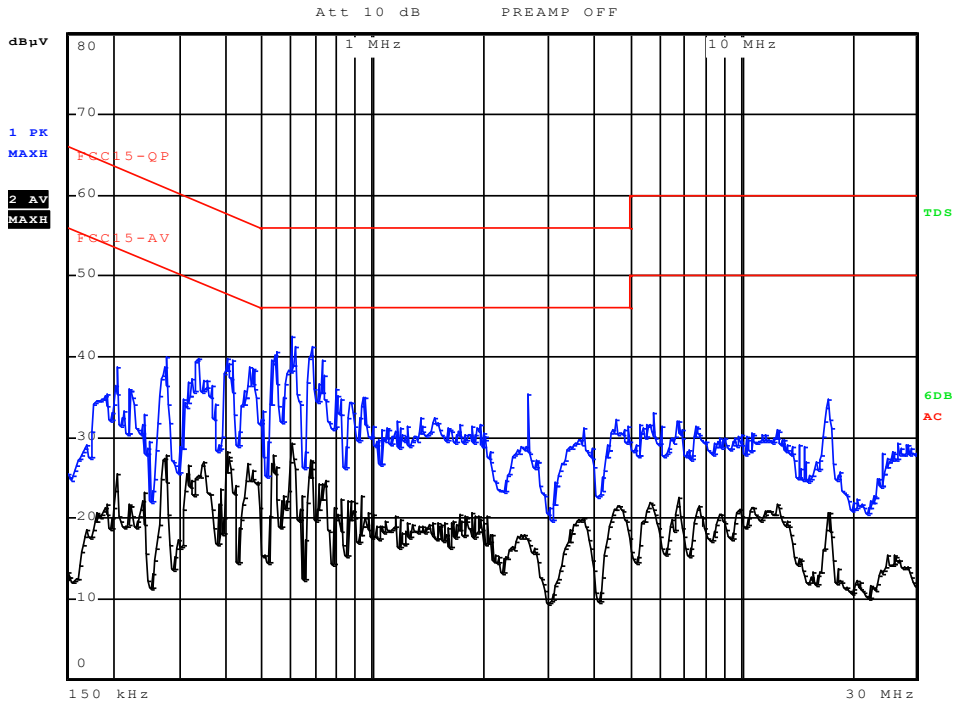


Conducted Emission

Product Type : Smart Kit
 M/N : OSK101
 Operating Condition : WIFI function on
 Test Specification : Neutral
 Comment : AC 120V/60Hz



RBW 9 kHz
 MT 20 ms
 PREAMP OFF



9.2 Conducted peak output power

Test Method

1. Use the following spectrum analyzer settings:
Span = approximately 5 times the 20 dB bandwidth, centered on a hopping channel
RBW > the 20 dB bandwidth of the emission being measured, VBW \geq RBW,
Sweep = auto, Detector function = peak, Trace = max hold
2. Add a correction factor to the display.
3. Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power

Limits

According to §15.247 (b) (1) and RSS-210 A8.4, conducted peak output power limit as below:

Frequency Range MHz	Limit W	Limit dBm
2400-2483.5	≤ 1	≤ 30

Conducted peak output power

WIFI				
Frequency (MHz)	Mode	Measurement (dBm)	Limit	Result
2412	802.11b	18.81	≤ 30dBm	Pass
2437		19.03		Pass
2462		19.59		Pass
2412	802.11g	19.32		Pass
2437		19.48		Pass
2462		19.15		Pass

9.3 6 dB Bandwidth and 99% Occupied Bandwidth

Test Method

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
3. Measure the frequency difference of two frequencies that were attenuated 6 dB from the reference level. Record the frequency difference as the emission bandwidth.
4. Repeat above procedures until all frequencies measured were complete.

Limit

Limit [kHz]

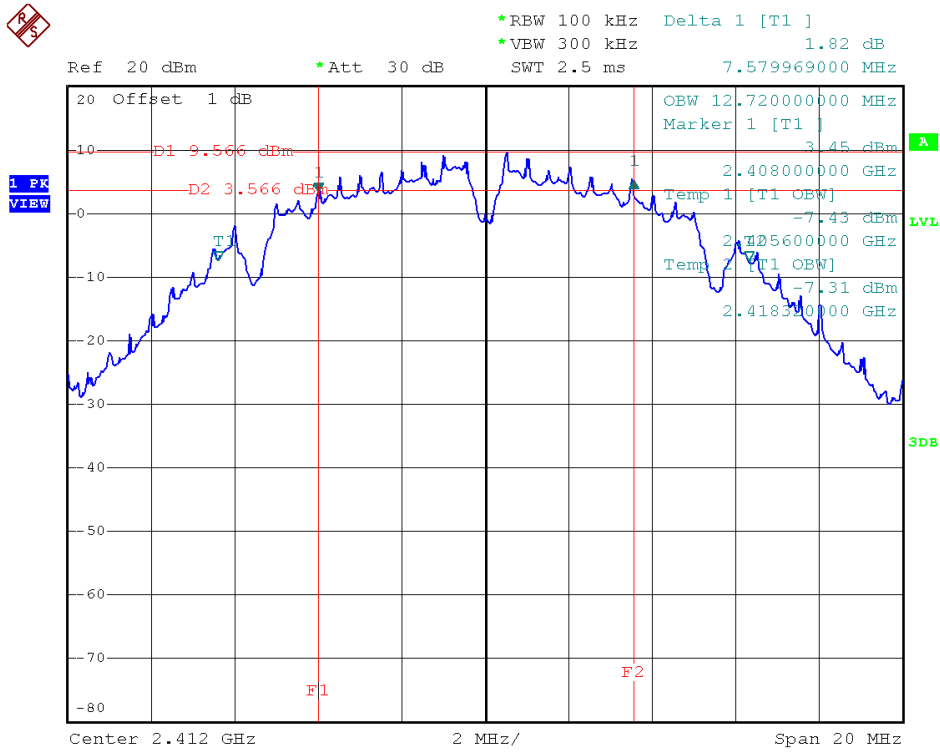
≥ 500

Result:

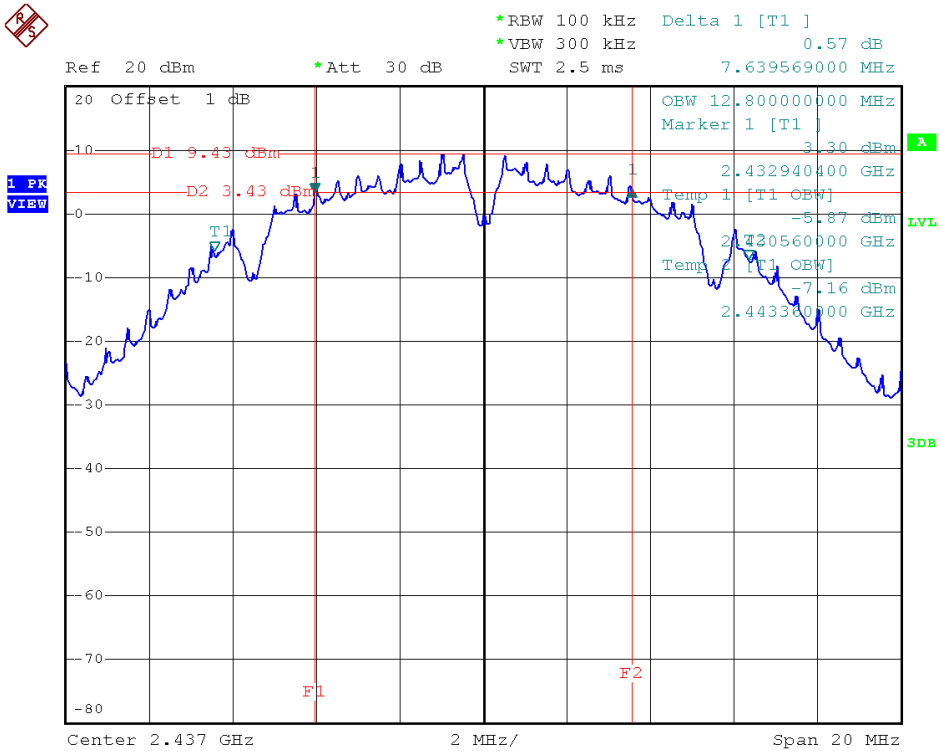
WIFI			
Frequency (MHz)	Mode	6 dB Bandwidth	Result
2412	802.11b	7.58	Pass
2437		7.64	Pass
2462		8.56	Pass
2412	802.11g	15.18	Pass
2437		15.19	Pass
2462		14.76	Pass

WIFI			
Frequency (MHz)	Mode	99% Bandwidth	Result
2412	802.11b	12.72	Pass
2437		12.80	Pass
2462		12.84	Pass
2412	802.11g	16.32	Pass
2437		16.32	Pass
2462		16.36	Pass

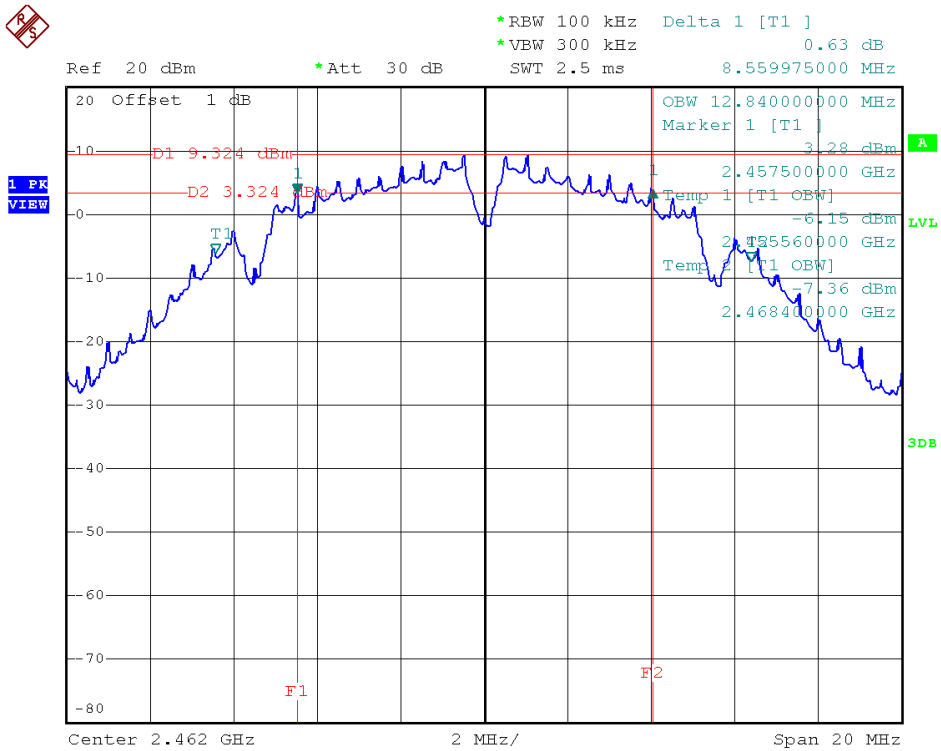
802.11b 2412MHz



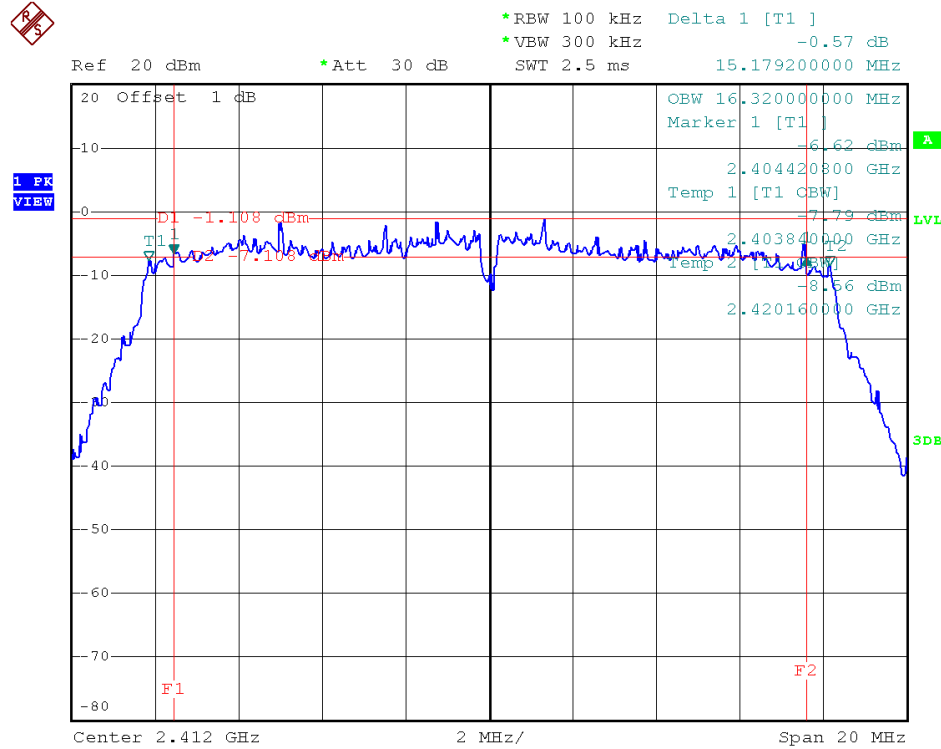
2437MHz



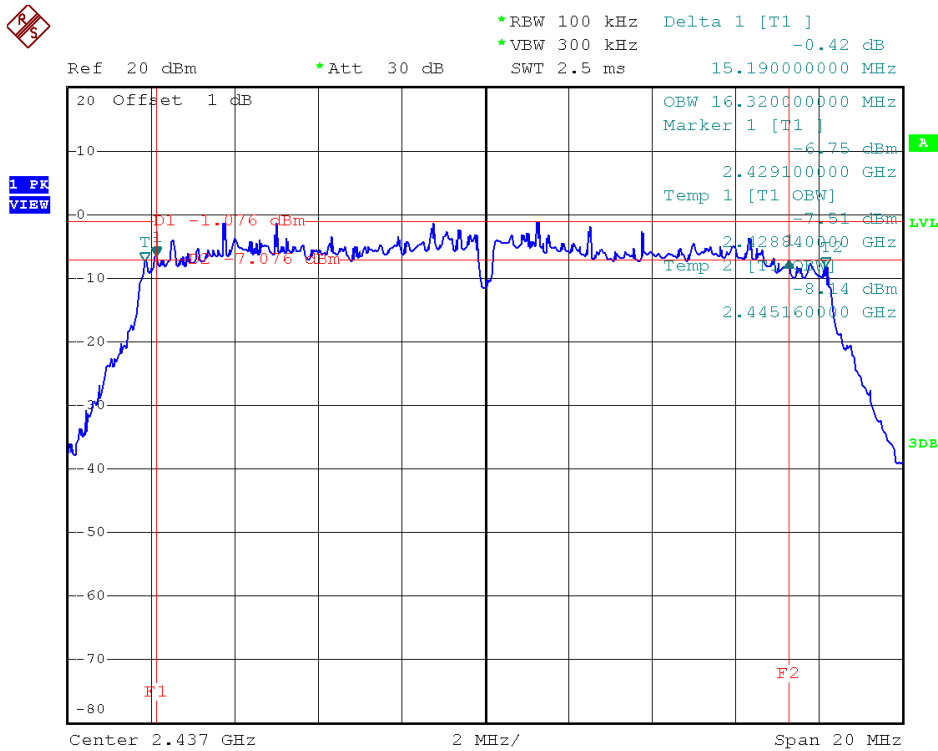
2462MHz



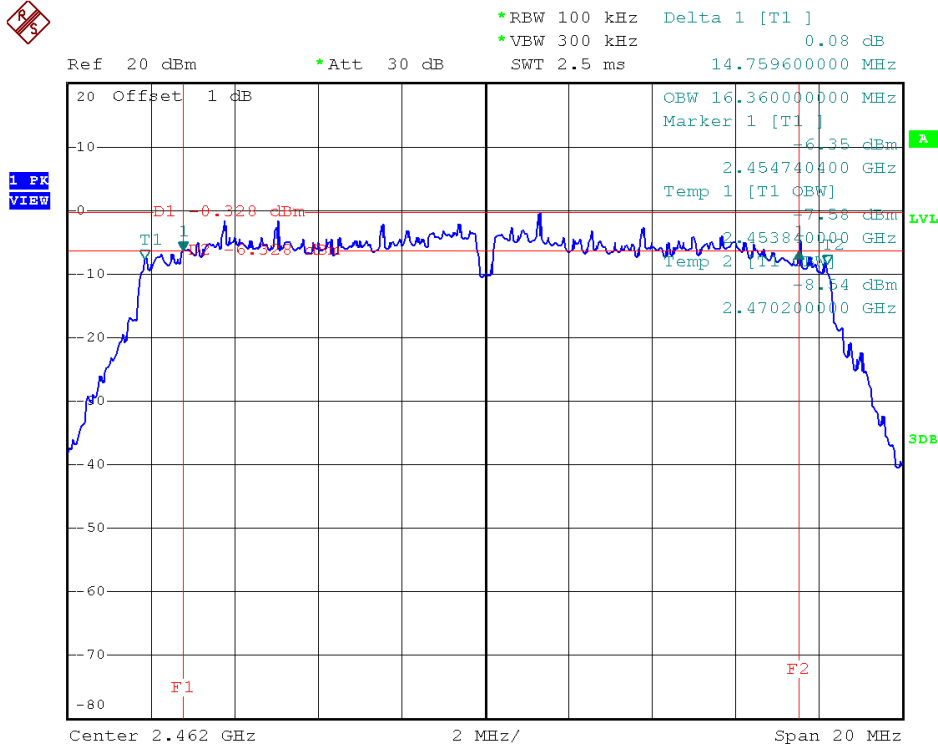
802.11g 2412MHz



2437MHz



2462MHz



9.4 Spurious RF conducted emissions

Test Method

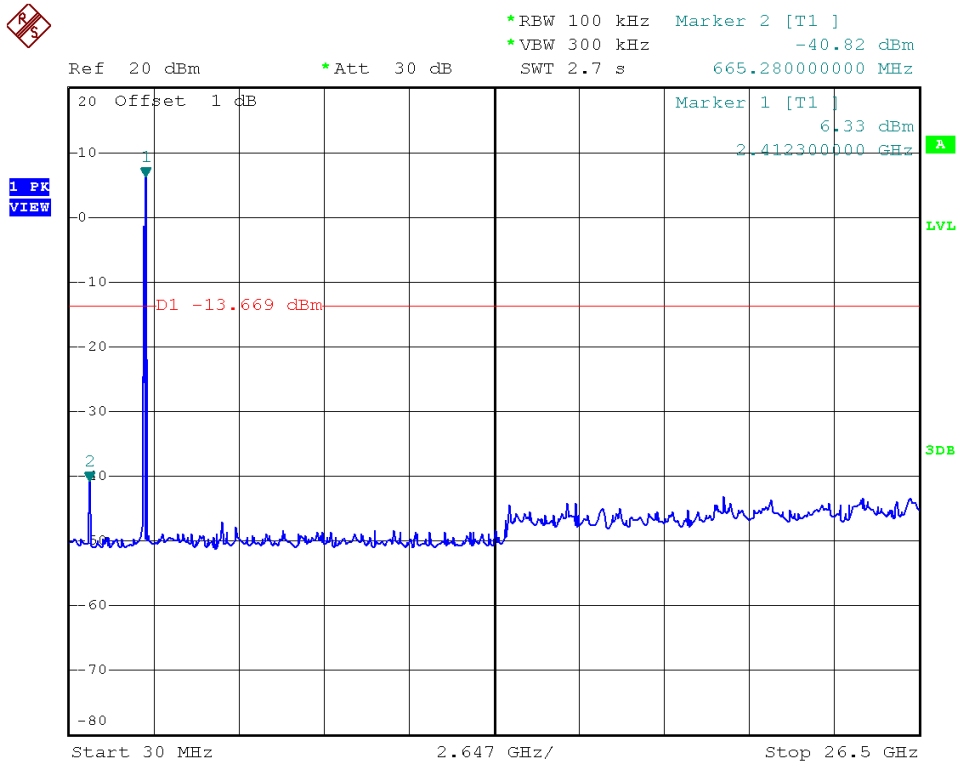
1. Use the following spectrum analyzer settings:
Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.
RBW = 100 kHz, VBW \geq RBW, Sweep = auto, Detector function = peak, Trace = max hold
2. Allow the trace to stabilize. Set the marker on the peak of any spurious emission recorded.
3. The level displayed must comply with the limit specified in this Section. Submit these plots.
4. Repeat above procedures until all frequencies measured were complete.

Limit

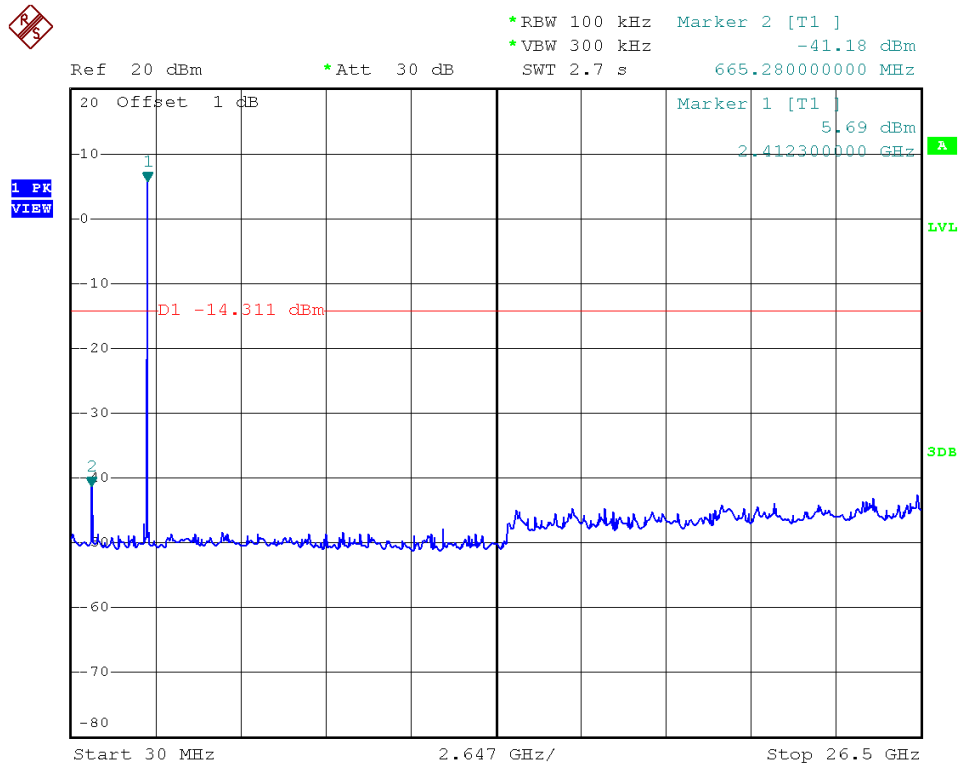
Frequency Range MHz	Limit (dBc)
30-25000	-20

Spurious RF conducted emissions

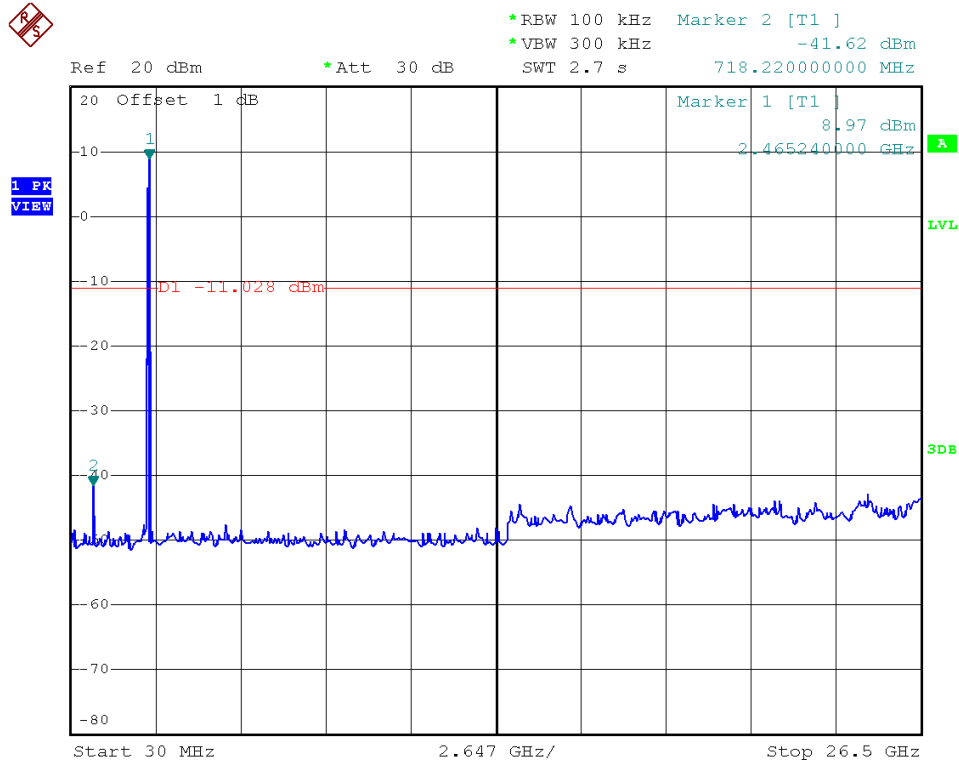
802.11b
2412MHz



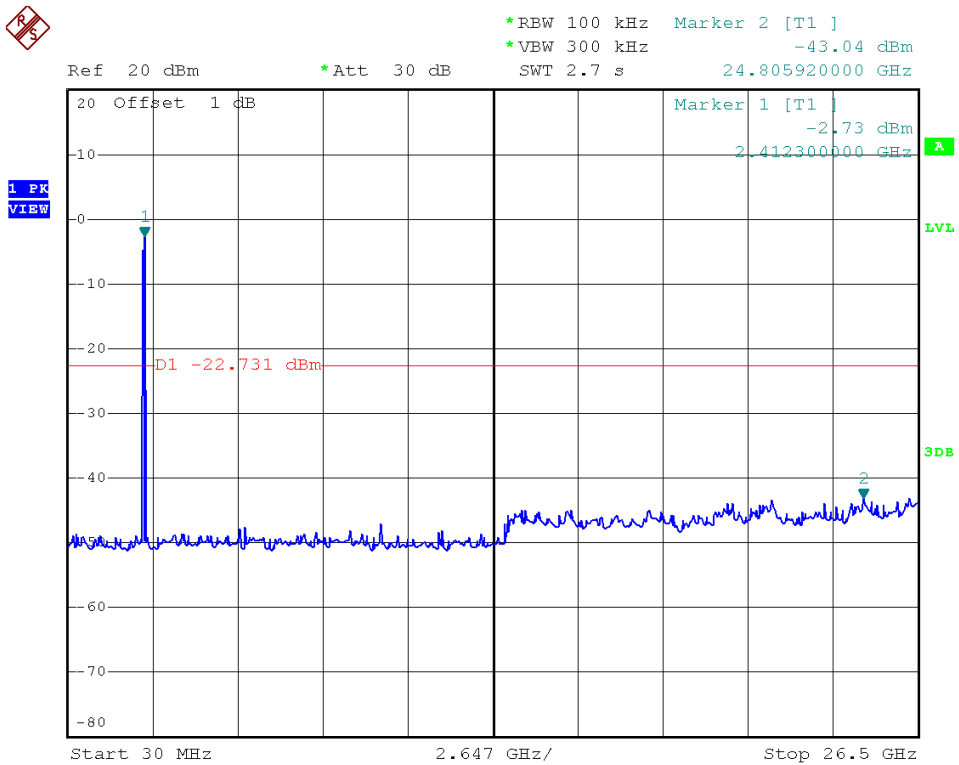
2437MHz



2462MHz



802.11g 2412MHz



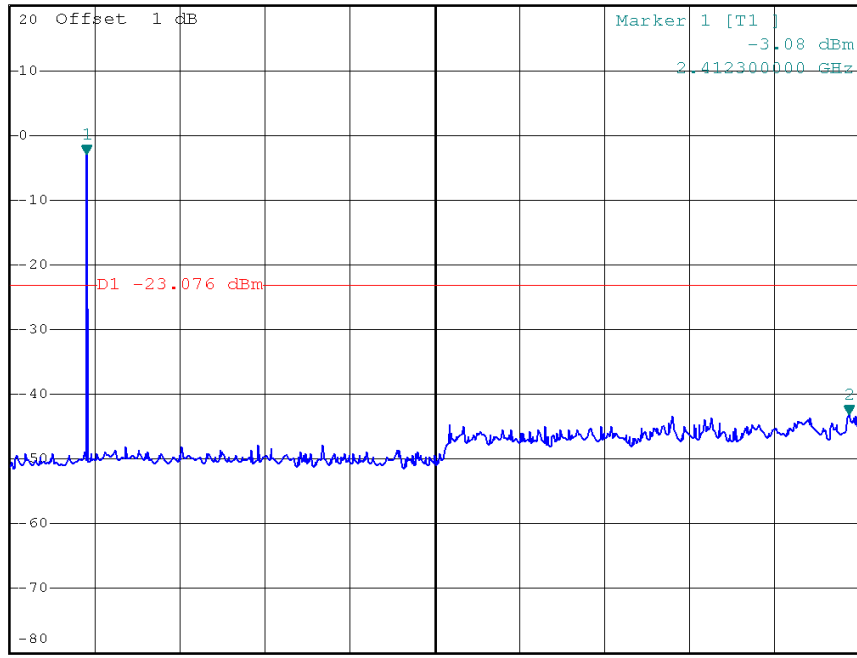
2437MHz



*RBW 100 kHz Marker 2 [T1]
 *VBW 300 kHz -43.09 dBm
 SWT 2.7 s 26.182360000 GHz

Ref 20 dBm *Att 30 dB

1 PK
VIEW



Start 30 MHz 2.647 GHz/ Stop 26.5 GHz

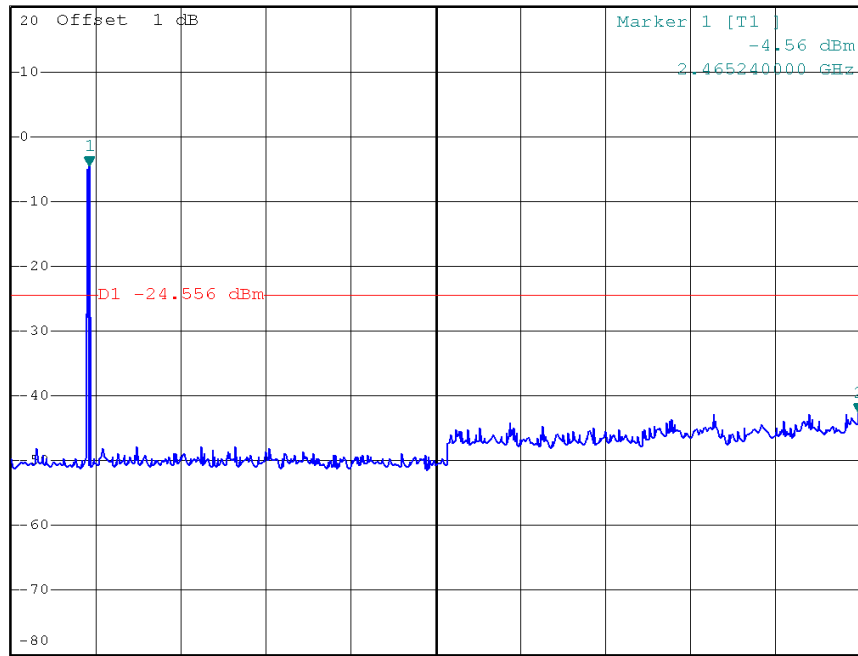
2462MHz



*RBW 100 kHz Marker 2 [T1]
 *VBW 300 kHz -42.66 dBm
 SWT 2.7 s 26.447060000 GHz

Ref 20 dBm *Att 30 dB

1 PK
VIEW



Start 30 MHz 2.647 GHz/ Stop 26.5 GHz

9.5 Band edge testing

Test Method

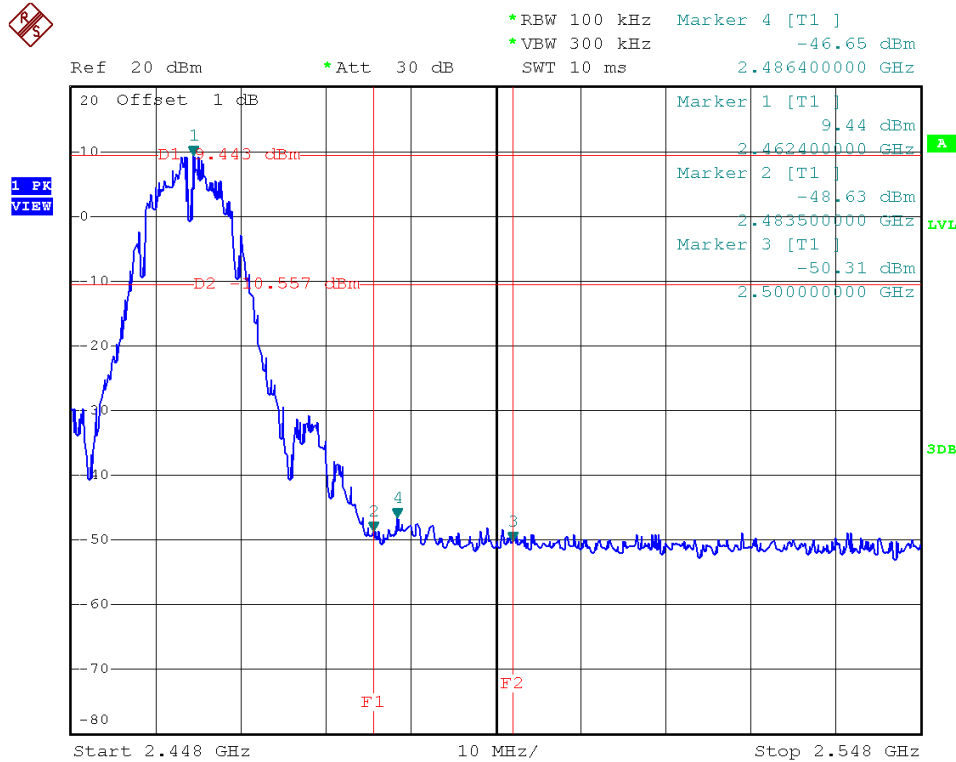
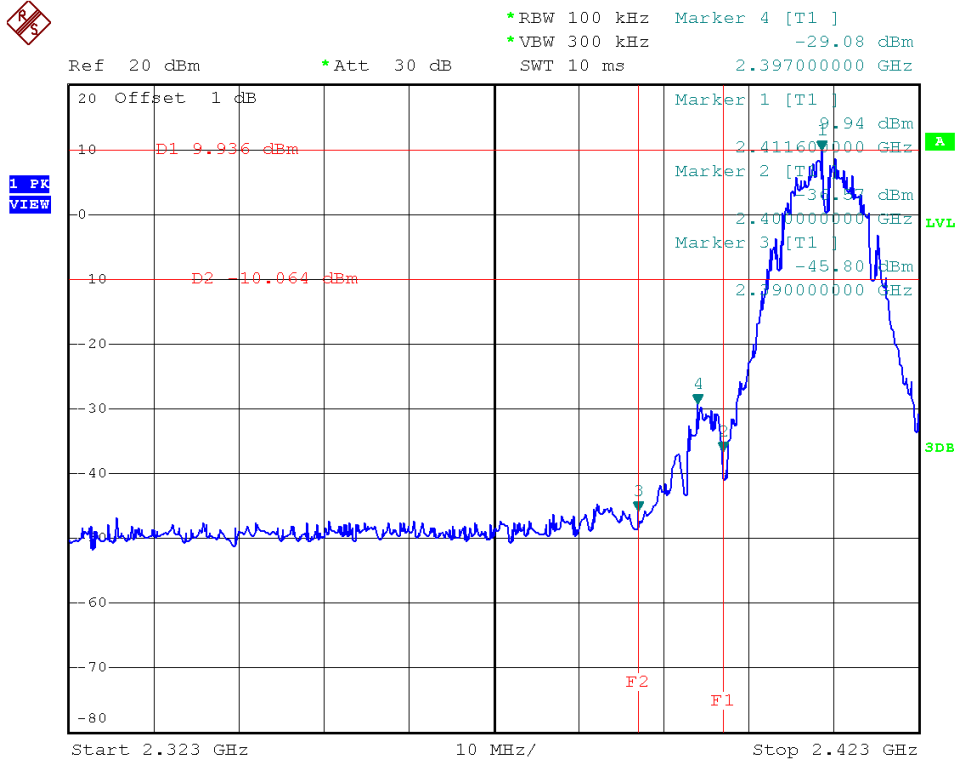
- 1 Use the following spectrum analyzer settings:
Span = wide enough to capture the peak level of the in-band emission and all spurious
RBW = 100 kHz, VBW \geq RBW, Sweep = auto, Detector function = peak, Trace = max hold
- 2 Allow the trace to stabilize, use the peak and delta measurement to record the result.
- 3 The level displayed must comply with the limit specified in this Section. .

Limit:

According to §15.247(d) and RSS-210 A8.5, in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a) and RSS-Gen7.2.2, must also comply with the radiated emission limits specified in 15.209(a) (see Section 15.205(c)) and RSS-Gen.

Band edge testing

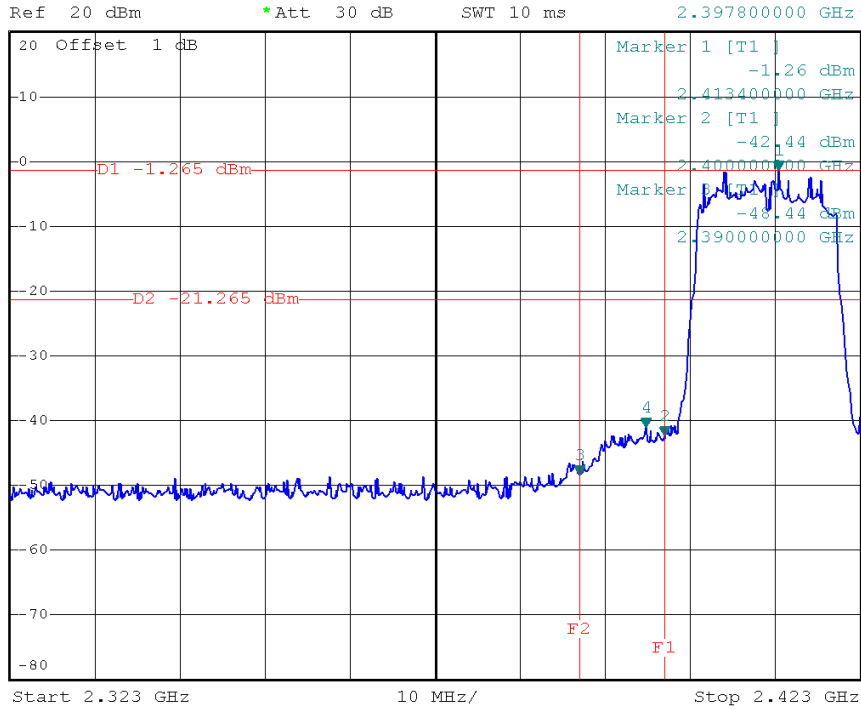
802.11b



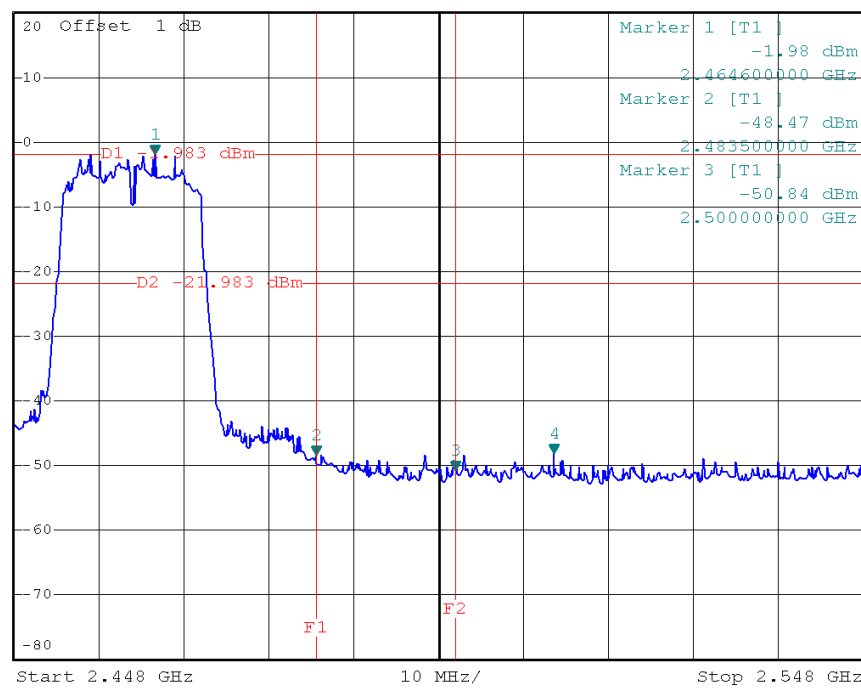
802.11g



*RBW 100 kHz Marker 4 [T1]
 *VBW 300 kHz -41.12 dBm
 *Att 30 dB
 SWT 10 ms 2.397800000 GHz



*RBW 100 kHz Marker 4 [T1]
 *VBW 300 kHz -48.05 dBm
 *Att 30 dB
 SWT 10 ms 2.511600000 GHz



9.6 Spurious radiated emissions for transmitter and receiver

Test Method

1. The EUT is placed on a turntable, which is 0.8m above ground plane.
2. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
3. Use the following spectrum analyzer settings:
Span = wide enough to fully capture the emission being measured, RBW = 1 MHz for $f \geq 1$ GHz, 100 kHz for $f < 1$ GHz, VBW \geq RBW, Sweep = auto, Detector function = peak, Trace = max hold
4. Follow the guidelines in ANSI C63.4-2009 with respect to maximizing the emission by rotating the EUT, adjusting the measurement antenna height and polarization, etc.
The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, submit this data. Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
5. Set the VBW to 10 Hz, while maintaining all of the other instrument settings. This peak level, once corrected, must comply with the limit specified in Section 15.209. If the duty cycle per channel of the hopping signal is less than 100 ms, then the reading obtained with the 10 Hz VBW may be further adjusted by a "duty cycle correction factor", derived from $20\log(\text{duty cycle}/100 \text{ ms})$, in an effort to demonstrate compliance with the 15.209 limit. Submit this data.

Limit

According to part 15.247(d), the radio emission outside the operating frequency band shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power. Radiated emissions which fall in the restricted bands, as defined in section 15.205, must comply with the radiated emission limits specified in section 15.209.

Frequency MHz	Field Strength uV/m	Field Strength dB μ V/m	Detector
30-88	100	40	QP
88-216	150	43.5	QP
216-960	200	46	QP
960-1000	500	54	QP
Above 1000	500	54	AV
Above 1000	5000	74	PK

Spurious radiated emissions for transmitter and receiver

According to C63.10, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement, so AV emission value did not show in below table if the peak value complies with average limit.

Only data of the worst case was reported.

Transmitting spurious emission test result as below:

802.11b - 2412MHz Test Result

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB)	Emission Level (dBuV/m)	Limit (dBμV/m)	Detector	Antenna Polarity	Result
47.46	40.97	-13.09	27.88	40	QP	V	Pass
288.02	51.68	-12.26	39.42	46	QP	H	Pass
2390	26.09	33.35	59.44	74	PK	V	Pass
2390	15.74	33.35	49.09	54	AV	V	Pass
4804	79.10	-32.98	46.12	74	PK	V	Pass
4804	68.54	-32.98	35.56	54	AV	V	Pass
2390	27.04	33.35	60.39	74	PK	H	Pass
2390	15.73	33.35	49.08	54	AV	H	Pass
4804	83.16	-32.98	50.18	74	PK	H	Pass
4804	72.62	-32.98	39.64	54	AV	H	Pass

802.11b - 2437MHz Test Result

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB)	Emission Level (dBuV/m)	Limit (dBμV/m)	Detector	Antenna Polarity	Result
288.02	51.68	-12.26	39.42	46	QP	H	Pass
47.46	41.51	-13.09	28.42	40	QP	V	Pass
4880	82.05	-32.95	49.10	74	PK	V	Pass
4880	69.25	-32.95	36.30	54	AV	V	Pass
4880	79.07	-32.95	46.12	74	PK	H	Pass
4880	69.88	-32.95	36.93	54	AV	H	Pass

802.11b - 2462MHz Test Result

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB)	Emission Level (dBuV/m)	Limit (dBμV/m)	Detector	Antenna Polarity	Result
45.52	36.86	-12.82	24.04	40	QP	V	Pass
288.02	49.95	-12.26	37.69	46	QP	H	Pass
2483.5	28.41	33.37	61.78	74	PK	V	Pass
2483.5	17.01	33.37	50.38	54	AV	V	Pass
4960	76.08	-32.92	43.16	74	PK	V	Pass
4960	67.83	-32.92	34.91	54	AV	V	Pass
2483.5	28.10	33.37	61.47	74	PK	H	Pass
2483.5	17.00	33.37	50.37	54	AV	H	Pass
4960	82.05	-32.92	49.13	74	PK	H	Pass
4960	70.16	-32.92	37.24	54	AV	H	Pass

802.11g - 2412MHz Test Result

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Detector	Antenna Polarity	Result
45.52	37.45	-12.82	24.63	40	QP	V	Pass
288.02	49.79	-12.26	37.53	46	QP	H	Pass
2390	27.12	33.35	60.47	74	PK	H	Pass
2390	15.84	33.35	49.19	54	AV	H	Pass
4824	83.14	-32.97	50.17	74	PK	H	Pass
4824	70.65	-32.97	37.68	54	AV	H	Pass
2390	26.09	33.35	59.44	74	PK	V	Pass
2390	15.79	33.35	49.14	54	AV	V	Pass
4824	85.87	-32.97	52.90	74	PK	V	Pass
4824	72.43	-32.97	39.46	54	AV	V	Pass

802.11g - 2437MHz Test Result

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Detector	Antenna Polarity	Result
384.05	47.21	-10.88	36.33	46	QP	H	Pass
45.52	35.41	-12.82	22.59	40	QP	V	Pass
4874	84.25	-32.95	51.30	74	PK	V	Pass
4874	71.07	-32.95	38.12	54	AV	V	Pass
4874	85.64	-32.95	52.69	74	PK	H	Pass
4874	73.72	-32.95	40.77	54	AV	H	Pass

802.11g - 2462MHz Test Result

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Detector	Antenna Polarity	Result
45.52	34.98	-12.82	22.16	40	QP	V	Pass
288.02	49.94	-12.26	37.68	46	QP	H	Pass
2483.5	23.56	33.37	55.57	74	PK	H	Pass
2483.5	13.73	33.37	45.74	54	AV	H	Pass
4924	83.22	-32.93	50.29	74	PK	H	Pass
4924	71.42	-32.93	38.49	54	AV	H	Pass
2483.5	29.41	33.37	61.42	74	PK	V	Pass
2483.5	13.72	33.37	45.73	54	AV	V	Pass
4924	84.12	-32.93	51.19	74	PK	V	Pass
4924	71.13	-32.93	38.20	54	AV	V	Pass

Remark:

- (1) QP Emission Level= Antenna Factor +Cable Loss + Reading
 PK Emission Level= Antenna Factor +Cable Loss - Amp. factor + Reading
 AV Emission Level= PK Emission Level+20log(dutycycle)
- (2) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20db below the permissible limits or the field strength is too small to be measured.
- (3) "*" means the emission(s) appear within the restrict bands shall follow the requirement of section 15.205.

Receiving emission test result as below:

Frequency (MHz)	Reading (dBUV)	Correct Factor (dB)	Emission Level (dBUV/m)	Limit (dB μ V/m)	Detector	Antenna Polarity	Result
47.46	40.97	-13.09	27.88	40	QP	V	Pass
103.72	46.41	-15.64	30.77	43.5	QP	V	Pass
45.52	34.92	-12.82	22.10	40	QP	H	Pass
384.05	46.94	-10.88	36.06	46	QP	H	Pass
1000-25000	--	--	--	74	AV	H	Pass
1000-25000	--	--	--	74	PK	V	Pass

Remark:

- (1) QP Emission Level= Antenna Factor +Cable Loss + Reading
 PK Emission Level= Antenna Factor +Cable Loss - Amp. factor + Reading
 AV Emission Level= PK Emission Level+20log (duty cycle)
- (2) Data of measurement within this frequency range shown "--" in the table above means the reading of emissions are the noise floor or attenuated more than 20db below the permissible limits or the field strength is too small to be measured.
- (3) "*" means the emission(s) appear within the restrict bands shall follow the requirement of section RSS-Gen.

9.7 Power Spectral Density

Test Method

5. Use the following spectrum analyzer settings:
Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.
RBW = 3 kHz, VBW ≥ RBW, Sweep = auto, Detector function = peak, Trace = max hold
6. Allow the trace to stabilize. Set the marker on the peak of the maximum emission recorded.
7. The level displayed must comply with the limit specified in this Section. Submit these plots.
8. Repeat above procedures until all frequencies measured were complete.

Limit

Limit
PSD

≤ 8dBm/3KHz

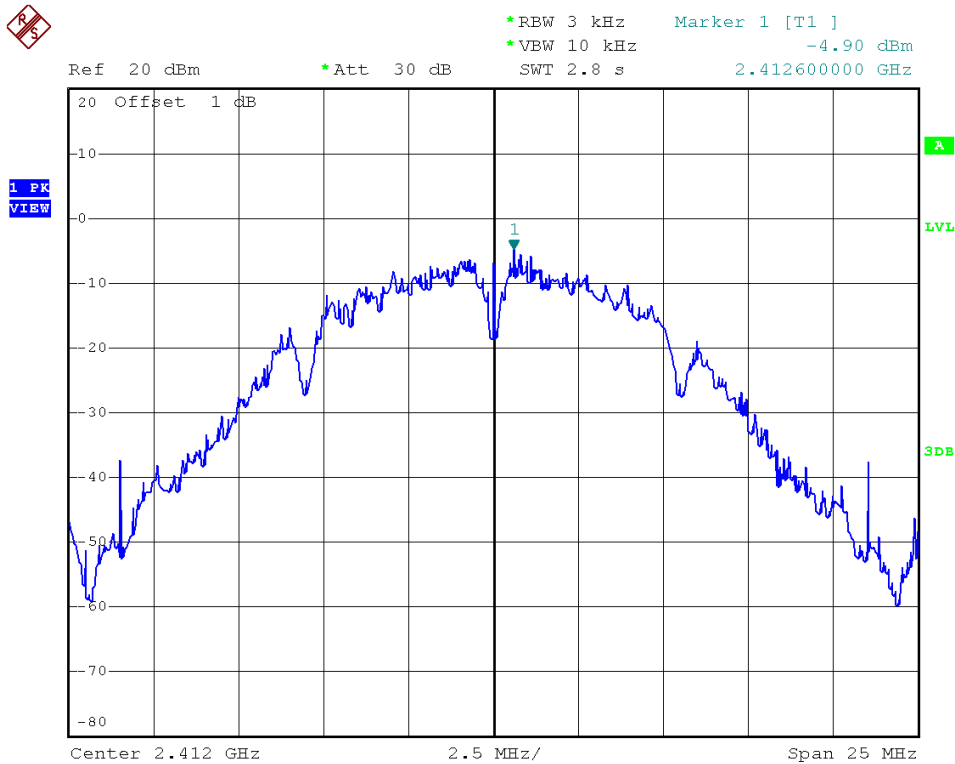
Power spectral density

Test result:

Frequency (MHz)	Mode	Measurement (dBm/3KHz)	Limit	Result
2402	802.11b	-4.90	≤ 8dBm/3KHz	Pass
2440		-4.83		Pass
2480		-4.79		Pass
2412	802.11g	-15.65		Pass
2437		-13.28		Pass
2462		-13.66		Pass

Plots:

802.11b
2412MHz



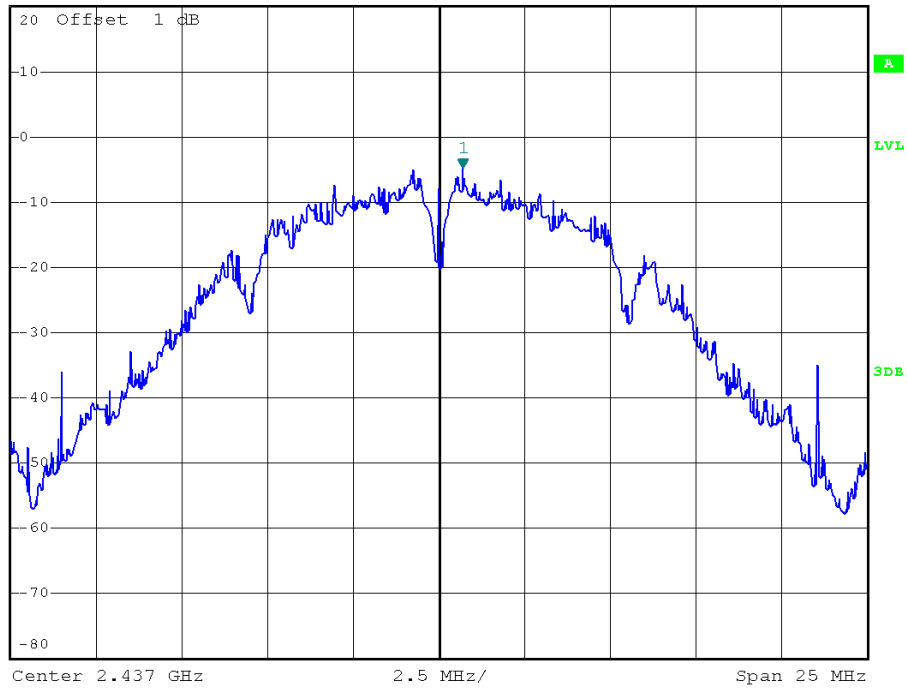
2437MHz



*RBW 3 kHz Marker 1 [T1]
*VBW 10 kHz -4.83 dBm
SWT 2.8 s 2.437700000 GHz

Ref 20 dBm *Att 30 dB

1 PK
VIEW



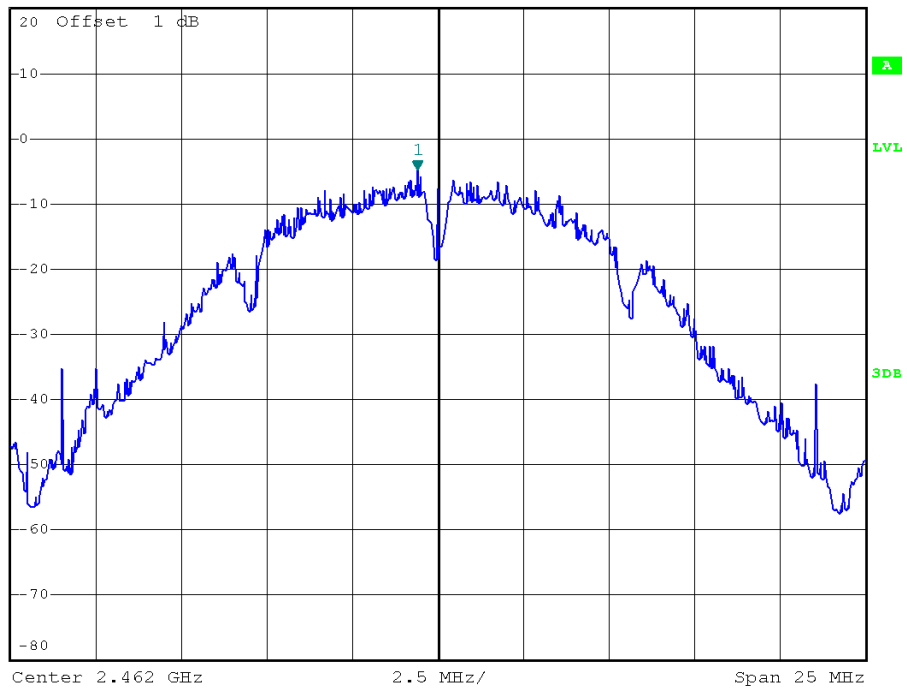
2462MHz



*RBW 3 kHz Marker 1 [T1]
*VBW 10 kHz -4.79 dBm
SWT 2.8 s 2.461400000 GHz

Ref 20 dBm *Att 30 dB

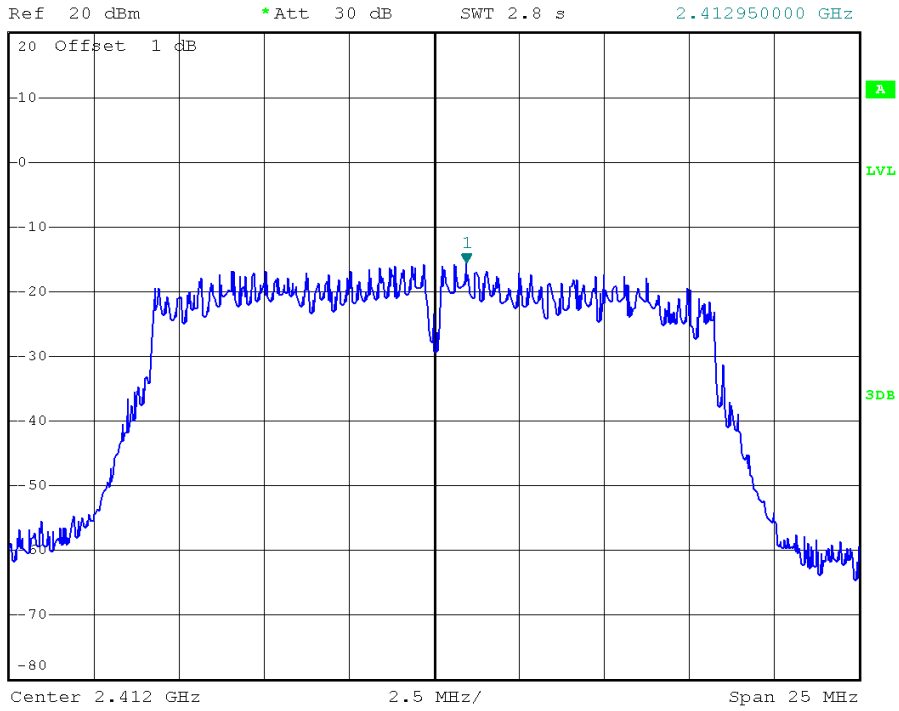
1 PK
VIEW



802.11g 2412MHz



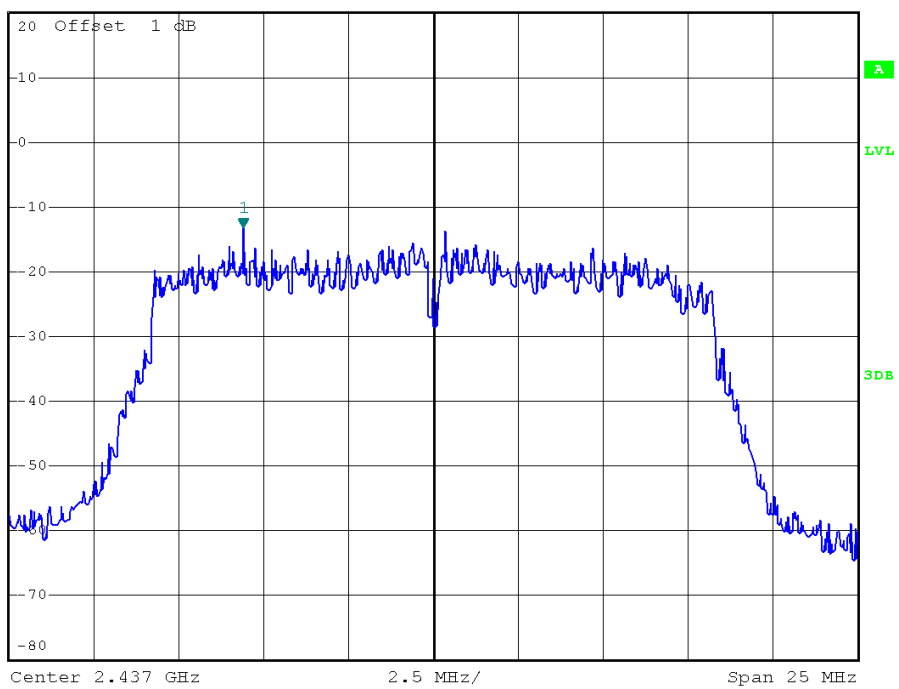
*RBW 3 kHz Marker 1 [T1]
 *VBW 10 kHz -15.65 dBm
 *Att 30 dB SWT 2.8 s 2.412950000 GHz



2437MHz



*RBW 3 kHz Marker 1 [T1]
 *VBW 10 kHz -13.28 dBm
 *Att 30 dB SWT 2.8 s 2.431400000 GHz



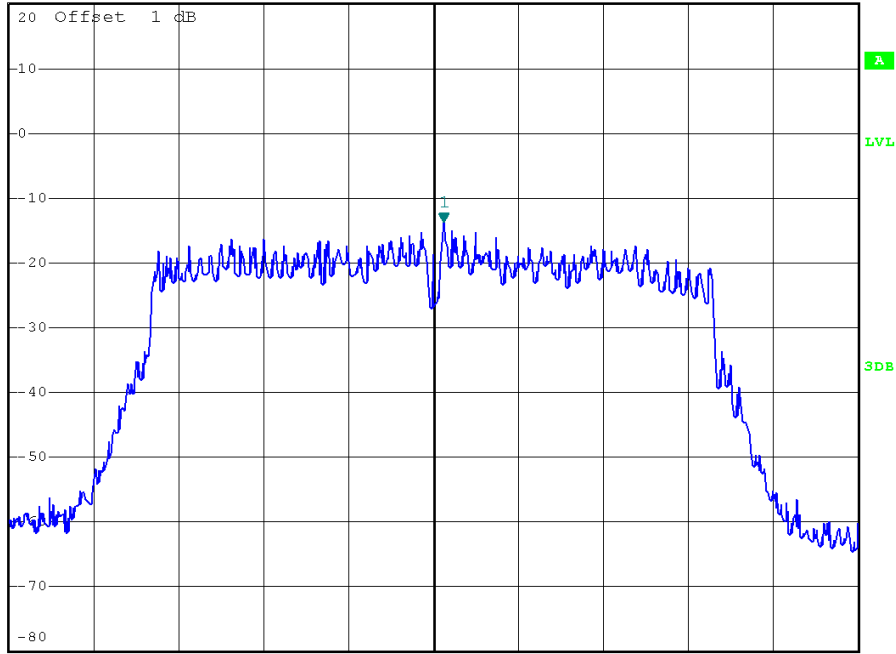
2462MHz



*RBW 3 kHz Marker 1 [T1]
*VBW 10 kHz -13.66 dBm
SWT 2.8 s 2.462300000 GHz

Ref 20 dBm *Att 30 dB

1 PK
VIEW



10 Test Equipment List

List of Test Instruments

	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE	
CE	LISN	EMCO	3816/2	00052765	Mar. 29, 2015	<input type="checkbox"/>
	LISN	R&S	ENV216	101447	Mar. 29, 2015	<input checked="" type="checkbox"/>
	Test Cable	N/A	C_17	N/A	Mar. 14, 2015	<input checked="" type="checkbox"/>
	EMI TEST RECEIVER	R&S	ESCS30	833364/017	Mar. 29, 2015	<input checked="" type="checkbox"/>
	50Ω Terminator	SHX	TF2-3G-A	08122902	Mar. 29, 2015	<input checked="" type="checkbox"/>
C	Spectrum Analyzer	R&S	FSP 40	100185	Nov. 11, 2014	<input checked="" type="checkbox"/>
RE < 1 GHz	Antenna	Schwarzbeck	VULB9160	9160-3232	Mar. 29, 2015	<input checked="" type="checkbox"/>
	Amplifier	HP	8447D	2944A09673	Mar. 29, 2015	<input checked="" type="checkbox"/>
	Receiver	AGILENT	N9038A	MY52130039	Aug. 23, 2015	<input checked="" type="checkbox"/>
	Test Cable	N/A	C-01_CB03	N/A	Jul. 01, 2015	<input checked="" type="checkbox"/>
	Controller	CT	SC100	N/A	N/A	<input checked="" type="checkbox"/>
RE > 1 GHz	Antenna	ETS	3115	00075789	Mar. 29, 2015	<input checked="" type="checkbox"/>
	Amplifier	Agilent	8449B	3008A02274	Mar. 29, 2015	<input checked="" type="checkbox"/>
	Receiver	AGILENT	N9038A	MY52130039	Aug. 23, 2015	<input checked="" type="checkbox"/>
	Test Cable	HUBER+SUHNER	C-48	N/A	Apr. 30, 2015	<input checked="" type="checkbox"/>
	Controller	CT	SC100	N/A	N/A	<input checked="" type="checkbox"/>
	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Feb. 22, 2015	<input type="checkbox"/>
	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC26540 45	980039 & HA01	Feb. 22, 2015	<input type="checkbox"/>
	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Mar. 29, 2015	<input type="checkbox"/>

C - Conducted RF tests

- Conducted peak output power
- 6dB bandwidth
- 20dB bandwidth and 99% Occupied Bandwidth
- Carrier frequency separation
- Number of hopping frequencies
- Dwell Time
- Power spectral density*
- Spurious RF conducted emissions
- Band edge

11 System Measurement Uncertainty

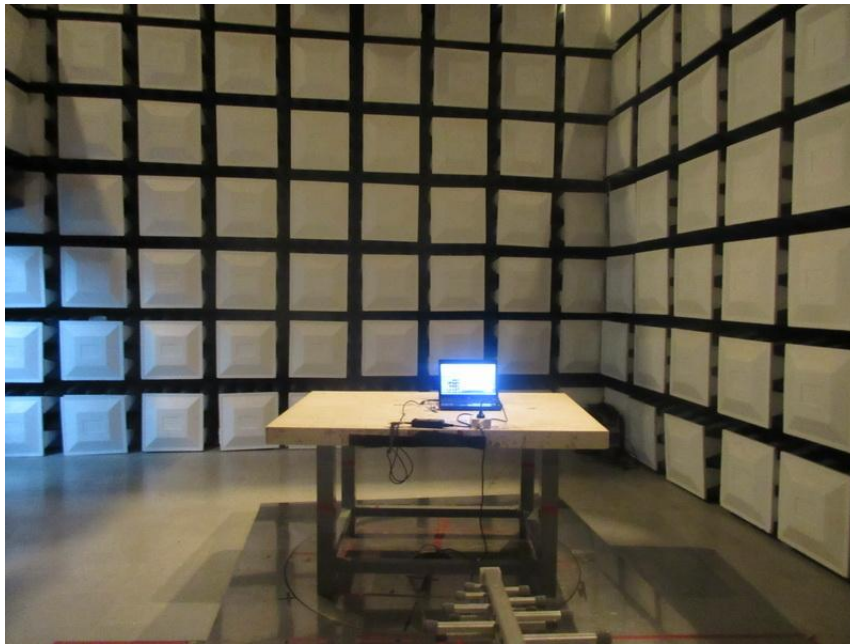
For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 were:

System Measurement Uncertainty

Items	Extended Uncertainty
Radiated spurious emission	4.32dB (30MHz-1GHz) 2.27dB (1GHz -25GHz)
Conducted spurious emission	2.10dB(30MHz-25GHz)
Bandwidth test	1×10^{-9}
Conducted emission	2.4dB

Annex A: Test Setup Photos

Radiated emission



Conducted emission



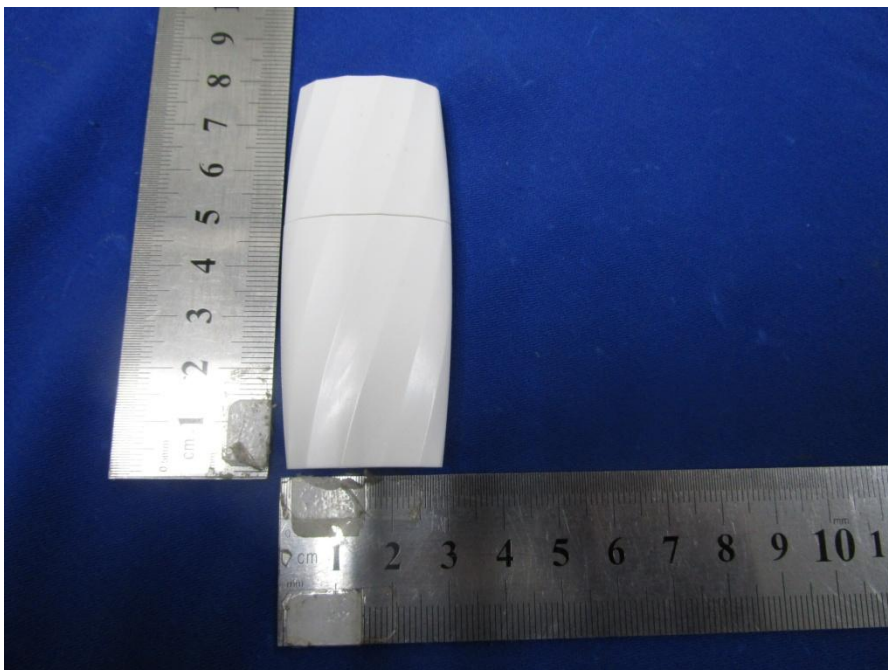
Annex B: EUT Photos

Speaker

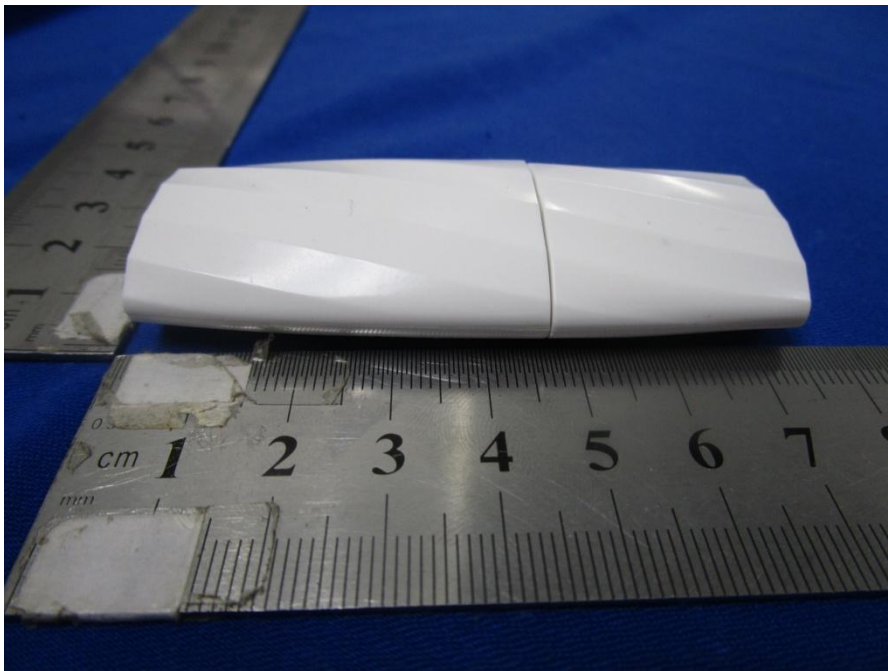
Top view

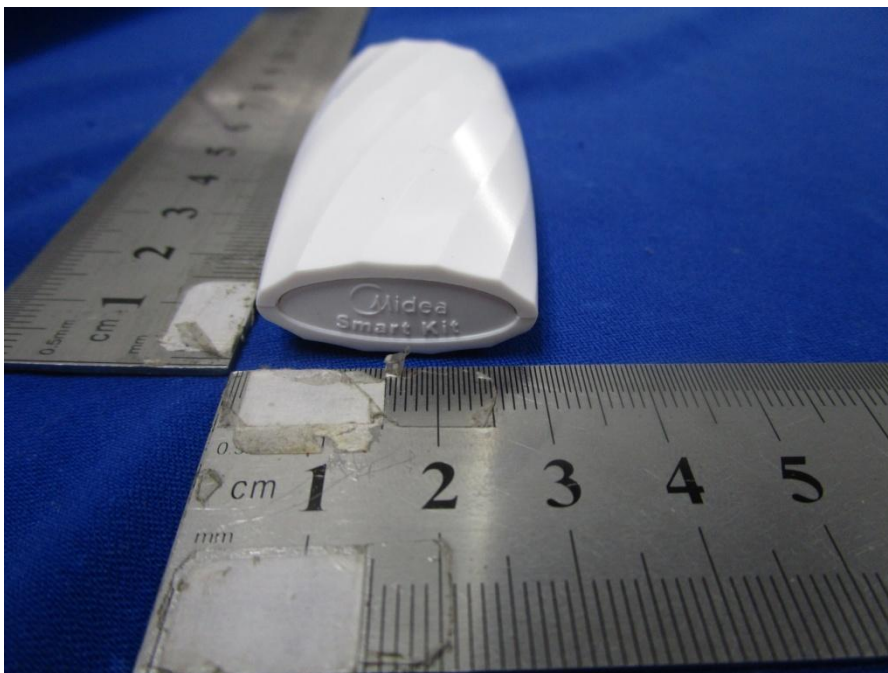
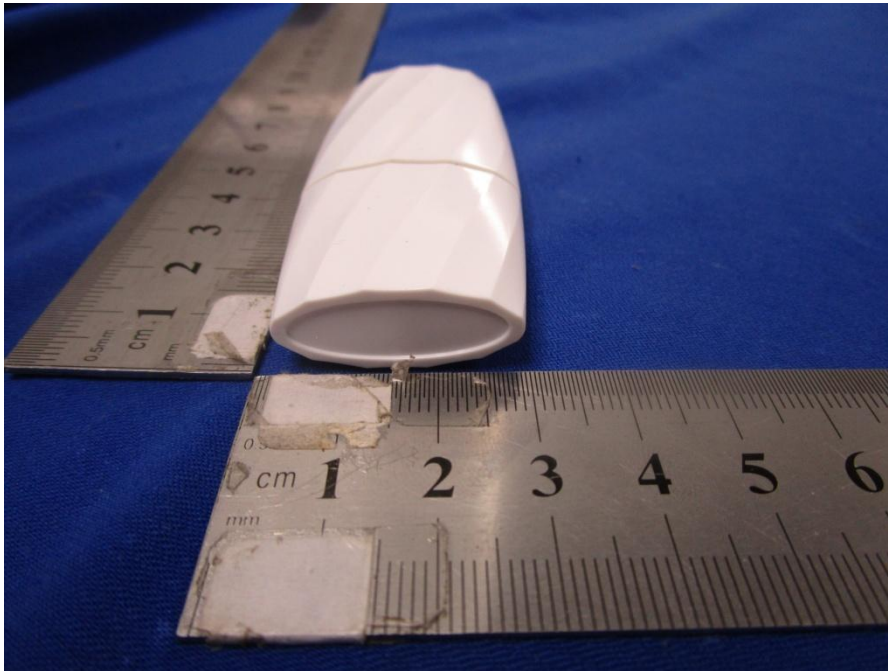


Bottom view



Side view





Internal Photos

