CFR 47 FCC Part 15.247

TEST REPORT

Product： **Zigbee Efridge Bridge**

Trade Name： Bartech

Model Number： ZIGB-BRDG-K00-0

Prepared for

Bartech Automatic Systems

251 Najoles Road, Suite A, Millersville, Maryland 21108

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Prepared by

Interocean EMC Technology Corp.

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Remark：

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The test results in the report only to the tested sample.

Statement of Compliance

Applicant: Bartech Automatic Systems

Manufacturer: MASTER PROSPEROUS INDUSTRIAL CO., LTD.

Product: Zigbee Efridge Bridge

Model No.: ZIGB-BRDG-K00-0

Tested Power Supply: DC 5V

Date of Final Test: Jun. 23, 2008

Configuration of Measurements and Standards Used :

FCC Rules and Regulations Part 15 Subpart C

I HEREBY CERTIFY THAT: The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements, and the energy emitted by the device was founded to be within the limits applicable. I assume full responsibility for accuracy and completeness of these data.

Note: 1. The result of the testing report relate only to the item tested.
2. The testing report shall not be reproduced expect in full, without the written approval of IETC

Report Issued : 2008/09/08

Project Engineer : Anya Lee Approved : Jerry Liu

Table of Contents

1 General Information

1.1 Description of Equipment Under Test

Product : Zigbee Efridge Bridge

Model Number : ZIGB-BRDG-K00-0

Applicant : **Bartech Automatic Systems**
251 Najoles Road, Suite A, Millersville, Maryland 21108

Manufacturer : **MASTER PROSPEROUS INDUSTRIAL CO., LTD.**
No.17, Lane 8, Chengtian Rd., Tucheng City, Taipei County

Power Supply : DC 5V

Operating Frequency : 2405 ~ 2475MHz

Channel Number : 15 Channels

Freq. of each channel : 2405+5kMHz, k=0 ~14

Type of Modulation : OQPSK

Antenna description :

	Ant. type	Antenna Gain	Connector type
Internal	Chip	1dBi	N/A
External	Dipole	2.2dBi	RP-SMA

Sample Receive date : Jun. 06, 2008

Date of Test : Jun.06 ~ 23, 2008

1.2 Technical Specifications

Zigbee Module Features

- 2 antenna options: Integrated ceramic antenna, RP-SMA external antenna
- Integrated power amplifier.
- XAP16b micro-controller with non-intrusive debug interface (SIF)
- 128k flash and 5kbytes of SRAM
- Designed to perform the tasks of a Zigbee Router.
- Firmware upgrades over the air (password protected)
- Hardware supported encryption (AES-128)
- Operating temperature range: -40° C to +85° C
- Based on the Ember EM250 single chip Zigbee TM/IEEE802.15.4 solution
- 2.4GHz ISM Band
- 15channels (802.15.4 Channel 11 to25)
- High sensitivity of –98dBm typ. At 1% packet error rate
- Hardware acceleration for IEEE 802.15.4 compliant transmissions

1.3 Test Facility

Site Description : ☒RF Test Room ☒CHAMBER 2 ☒Conduction 2

Name of Firm : Interocean EMC Technology Corp.

Company web : http://www.ietc.com.tw

Site 1, 2 Location : No.5-2, Lin 1, Tin-Fu Tsun, Lin-Kou Hsiang,
Taipei County, Taiwan, R.O.C.

Site 3, 4 Location : No. 12, Ruei-Shu Valley, Ruei-Ping Tsun, Lin-Kou Hsiang,
Taipei County, Taiwan, R.O.C.

Site Filing :

- Federal Communication Commissions – USA
  Registration No.: 96399 (OATS 1 & 2)
  Registration No.: 518958 (OATS 3 & 4)
- Voluntary Control Council for Interference by Information Technology Equipment (VCCI) – Japan
  Registration No. (Conducted Room): C-1094
  Registration No. (Conducted Room): T-271
  Registration No. (OATS 1): R-1040
  Registration No. (OATS 2): R-1041
- Industry Canada (IC)
  Submission: 113543
- Japan Electrical Safety & Environment Technology Laboratories (JET)
  Registration No.: 04S03-01

Site Accreditation :

- Bureau of Standards and Metrology and Inspection (BSMI) – Taiwan, R.O.C.
  Accreditation No.:
  SL2-IN-E-0026 for CNS13438 / CISPR22
  SL2-R1-E-0026 for CNS13439 / CISPR13
  SL2-R2-E-0026 for CNS13439 / CISPR13
  SL2-A1-E-0026 for CNS13783-1 / CISPR14-1
- TüV NORD
  Certificate No: TNTW0801R
- Taiwan Accreditation Foundation (TAF)
  Accrdition No.: 1113

1.4 Test Equipment

Instrument	Manufacturer	Model	Serial No.	Next Cal. Date
Spectrum Analyzer	R&S	FSP30	100002	2008/12/14
Spectrum Analyzer	Agilent	8564EC	4046A00331	2009/04/11
Preamplifier	Agilent	8449B	3008A01434	2009/03/31
Preamplifier	Agilent	83050A	3950A00225	2008/08/02
Preamplifier	SCHAFFNER	CA30100	2	2008/10/21
Horn Antenna	COM-POWER	AH-118	10081	2010/05/12
Horn Antenna	Schwarzbeck	BBHA 9120	9120D-583	2008/12/17
Horn Antenna	Schwarzbeck	BBHA 9170	213	2010/06/08
Wide Bandwidth Sensor	Anritsu	MA2491A	728133	2008/10/18
Power Meter	Anritsu	ML2495A	736010	2008/10/28
Temp & Humidity chamber	GIAN FORCE	GTH-150-40-2P-U	MAA0305-012	2009/05/14
Signal Generator	Agilent	E8254A	US41140164	2009/05/21

Note: The above equipments are within the valid calibration period.

1.5 Summary of Measurement

Report Clause	Test Parameter	Reference Document CFR47 Part15	Results
2	RF Radiated spurious emission test	§15.205, 15.209	Pass
3	RF Conducted spurious emission	§15.247	Pass
4	Maximum Peak output power test	§15.247(b)	Pass
5	6dB Bandwidth	§15.247(a)(2)	Pass
6	Power spectral density	§15.247(e)	Pass
7	Emission on the Band Edge	§15.247(d)	Pass
8	AC Power Line Conducted Emission test	§15.247(b)	Pass

1.6 Test description

Mode	Description
1	Internal antenna, no power amplifier, power boost off and tone mode
2	Internal antenna, no power amplifier, power boost off and stream mode
3	Internal antenna, enable power amplifier, power boost off and tone mode
4	Internal antenna, enable power amplifier, power boost off and stream mode
5	Internal antenna, no power amplifier, power boost on and tone mode
6	Internal antenna, no power amplifier, power boost on and stream mode
7	Internal antenna, enable power amplifier, power boost on and tone mode
8	Internal antenna, enable power amplifier, power boost on and stream mode
9	External antenna, no power amplifier, power boost off and tone mode
10	External antenna, no power amplifier, power boost off and stream mode
11	External antenna, enable power amplifier, power boost off and tone mode
12	External antenna, enable power amplifier, power boost off and stream mode
13	External antenna, no power amplifier, power boost on and tone mode
14	External antenna, no power amplifier, power boost on and stream mode
15	External antenna, enable power amplifier, power boost on and tone mode
16	External antenna, enable power amplifier, power boost on and stream mode

Remark: After verify those modes above, the worst case the setting of EUT is external antenna, enable power amplifier, power boost on and stream mode (Mode 16).

1.7 Justification

The test of radiated measurements according to FCC Part15 Section 15.33(a) had been conducted and the field strength of the frequency band were all arrive limit requirement, thus we evaluate the EUT pass the specified test.

2 RF Radiated spurious emission test

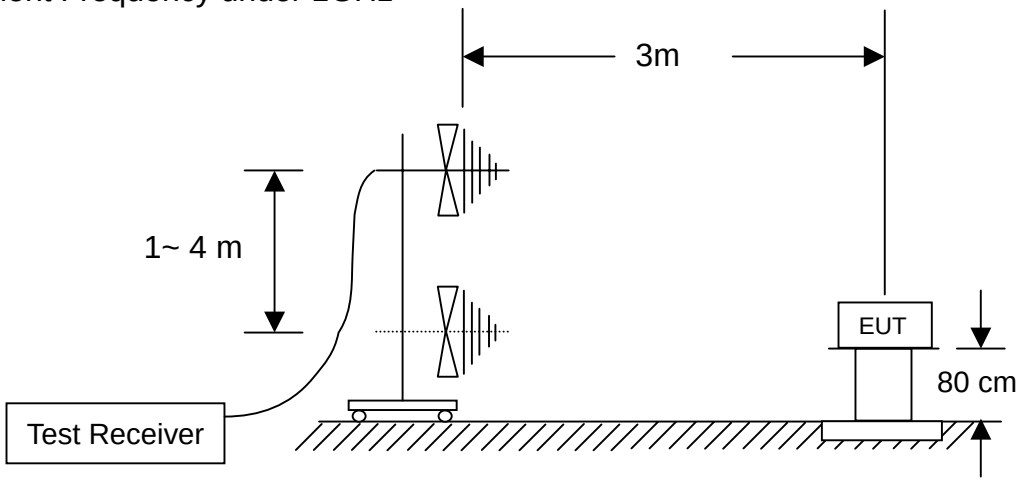
2.1 Limits

For intentional radiator, the radiated emission shall comply with §15.209(a).
For intentional radiators, according to §15.247 (a), operation under this provision is limited to frequency hopping and direct sequence spread spectrum, and the out band emission shall be comply with §15.247 (c)

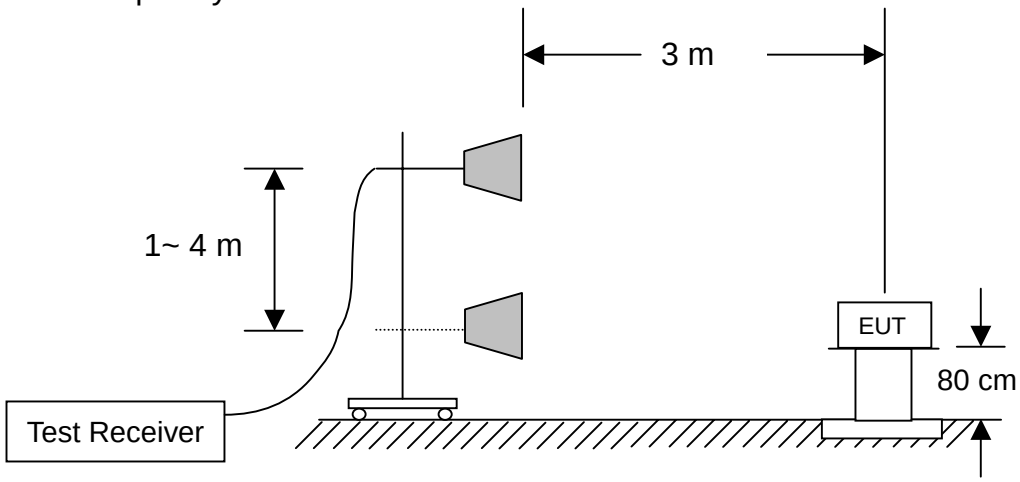
Frequency (MHz)	Field strength dB(μV/m)	Measurement distance (meters)
1.705~30.0	29.5	30
30 ~ 88	40	3
88~216	43.5	3
216~960	46	3
Above 960	54	3

2.2 Configuration of Measurement

Measurement Frequency under 1GHz



Measurement Frequency above 1GHz



2.3 Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Radiated emission measurements were performed from 30MHz to 25GHz. Spectrum Analyzer Resolution Bandwidth is 100kHz or greater for frequencies 30MHz to 1GHz, and set 1MHz – for frequencies above 1GHz.

The EUT for testing is arranged on a wooden turntable. If some peripherals apply to the EUT, the peripherals will be connected to EUT and the whole system. During the test, all cables were arranged to produce worst-case emissions. The signal is maximized through rotation. The height of antenna and polarization is changing constantly for exploring for maximum signal level. The height of antenna can be up to 4 meter and down to 1 meter.

2.4 Test Result

PASS.

The final test data is shown on as following pages.

Radiated spurious emission

Test Environment

Ambient temperature ： 23℃

Relative humidity ： 54%

Radiated Emission below 1GHz

Worse Case: CH11

Frequency (MHz)	Antenna Polarization	Reading (dBμV)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Det. Mode
125.000	H	35.25	28.81	12.23	18.67	43.50	-24.83	QP
217.270	H	39.22	28.86	11.74	22.10	46.00	-23.90	QP
264.100	H	38.25	28.82	16.66	26.09	46.00	-19.91	QP
314.900	H	38.27	28.97	17.10	26.40	46.00	-19.60	QP
420.400	H	35.25	29.06	21.03	27.22	46.00	-18.78	QP
720.251	H	25.21	28.25	28.95	25.91	46.00	-20.09	QP
125.000	V	36.21	28.81	13.24	20.64	43.50	-22.86	QP
249.700	V	37.25	28.84	15.38	23.79	46.00	-22.21	QP
349.100	V	38.21	29.06	18.74	27.89	46.00	-18.11	QP
480.251	V	35.25	29.12	22.85	28.98	46.00	-17.02	QP
720.251	V	26.25	28.25	28.59	26.59	46.00	-19.41	QP
960.250	V	22.25	28.36	33.63	27.52	46.00	-18.48	QP

Remark ： Corrected Level = Reading + Correction Factor – Preamp
Correction Factor = Antenna Factor + Cable Loss

Radiated spurious emission

Radiated Emission above 1GHz

CH11								
Frequency (MHz)	Antenna Polarization	Reading (dB μV)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μV/m)	Limits (dB μV/m)	Margin (dB)	Det. Mode
4810.92	H	53.76	35.59	37.48	55.65	74	-18.35	PK
4810.92	H	43.44	35.59	37.48	45.33	54	-8.67	AV
7213.24	H	53.86	36.67	42.89	60.08	74	-13.92	PK
7213.24	H	42.88	36.67	42.89	49.10	54	-4.90	AV
4810.92	V	59.10	35.59	37.48	60.99	74	-13.01	PK
4810.92	V	48.50	35.59	37.48	50.39	54	-3.61	AV
7216.48	V	55.85	36.68	42.89	62.06	74	-11.94	PK
4216.48	V	45.33	36.68	42.89	51.54	54	-2.46	AV

CH18								
Frequency (MHz)	Antenna Polarization	Reading (dB μV)	Preamp (dB)	Correction Factor (dB/m)	Corrected Level (dB μV/m)	Limits (dB μV/m)	Margin (dB)	Det. Mode
4880.88	H	57.12	35.39	37.59	59.32	74	-14.68	PK
4880.88	H	47.82	35.39	37.59	50.02	54	-3.98	AV
7321.32	H	52.37	36.84	43.14	58.67	74	-15.33	PK
7321.32	H	41.58	36.84	43.14	47.88	54	-6.12	AV
4878.80	V	58.31	35.39	37.59	60.51	74	-13.49	PK
4878.80	V	50.36	35.39	37.59	52.56	54	-1.44	AV
7321.28	V	56.73	36.84	43.14	63.03	74	-10.97	PK
7321.28	V	45.60	36.84	43.14	51.90	54	-2.10	AV

CH25								
Frequency	**Antenna Polarization**	**Reading**	**Preamp**	**Correction Factor**	**Corrected Level**	**Limits**	**Margin**	**Det. Mode**
(MHz)		**(dB μV)**	**(dB)**	**(dB/m)**	**(dB μV/m)**	**(dB μV/m)**	**(dB)**	
4949.04	H	55.88	35.68	37.71	57.91	74	-16.09	PK
4949.04	H	47.20	35.68	37.71	49.23	54	-4.77	AV
7426.44	H	51.25	36.58	43.39	58.06	74	-15.94	PK
7426.44	H	41.00	36.58	43.39	47.81	54	-6.19	AV
4950.84	V	56.69	35.69	37.71	58.71	74	-15.29	PK
4950.84	V	50.18	35.69	37.71	52.20	54	-1.80	AV
7423.74	V	56.63	36.56	43.39	63.46	74	-10.54	PK
7423.74	V	45.96	36.56	43.39	52.79	54	-1.21	AV

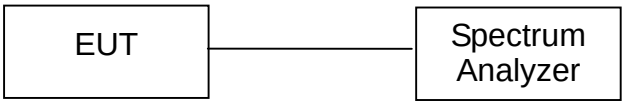
Remark ： Corrected Level = Reading + Correction Factor – Preamp
Correction Factor = Antenna Factor + Cable Loss

3 RF Conducted spurious emission

3.1 Limits

According to 15.247(d) requirement：
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated 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.

3.2 Configuration of Measurement



3.3 Test Procedure

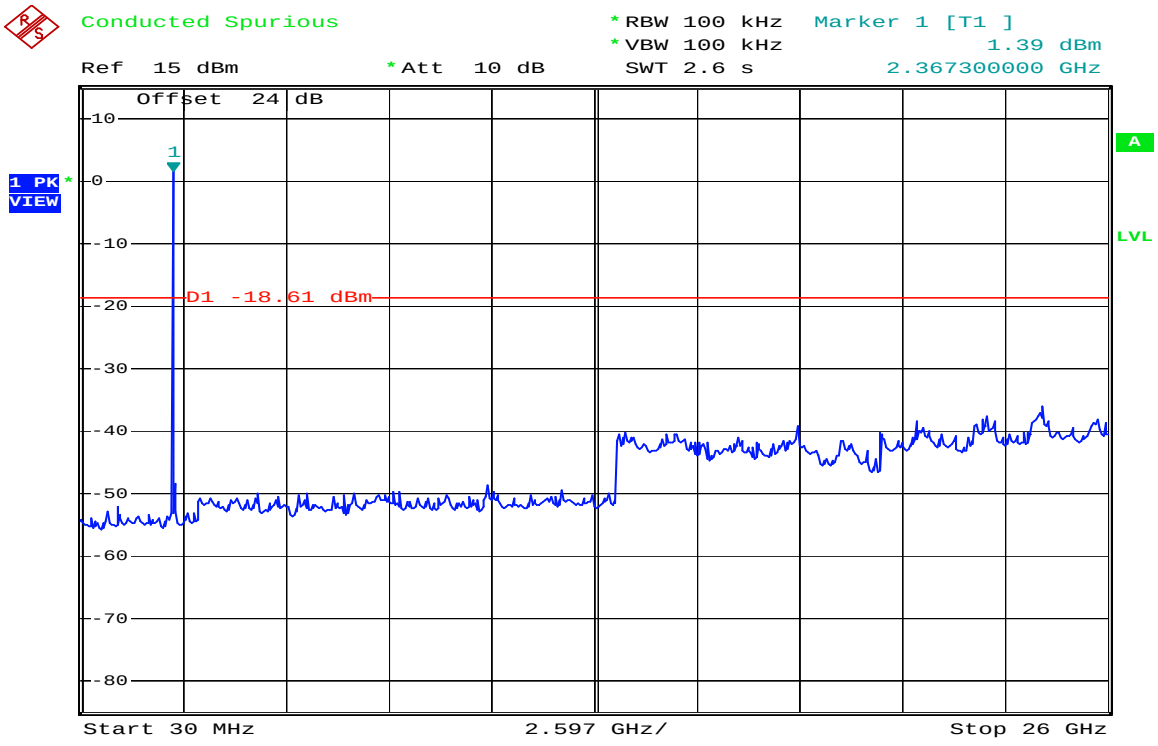
The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The measurements were performed from 30MHz to 40GHz RF antenna conducted per FCC 15.247 (c) was measured from the EUT antenna port using a 50ohm spectrum analyzer with the resolution bandwidth set at 100 kHz, and the video bandwidth set at 100 kHz.
Harmonics and spurious noise must be at least 20dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW. The table below is the results from the highest emission for each channel within the authorized band. This table was used to determine the spurious limits for each channel.

3.4 Test Result

PASS.
The final test data is shown on as following pages.

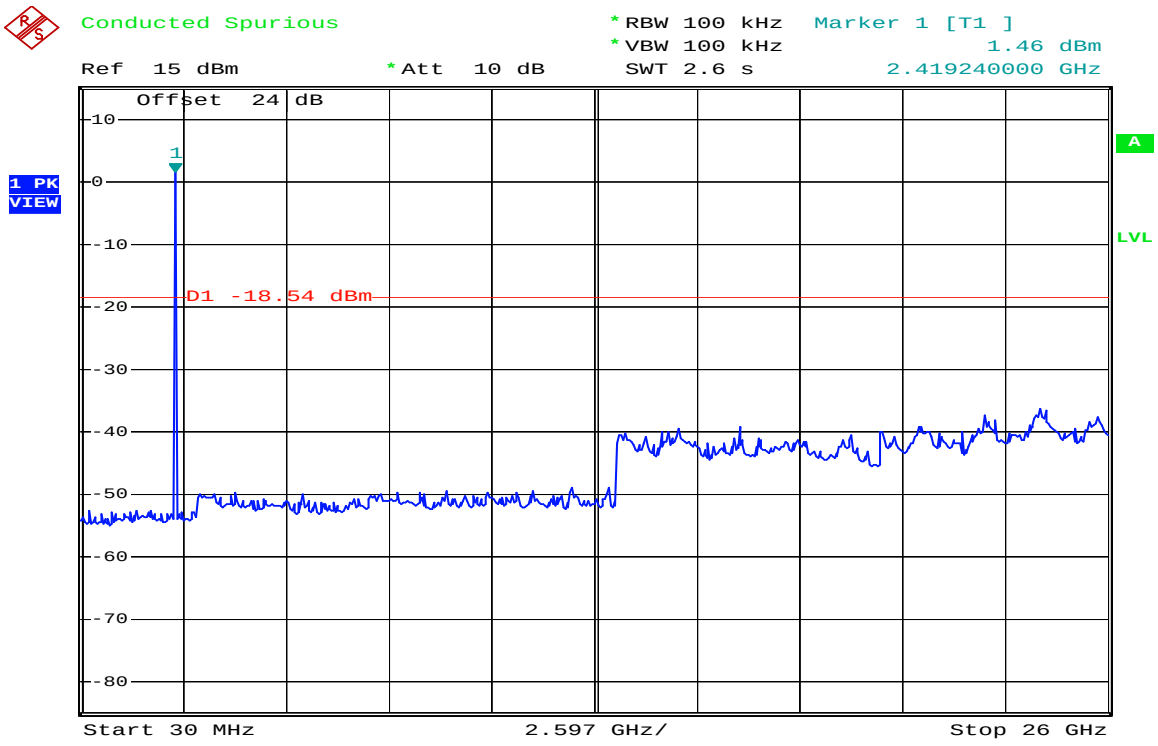
Conducted spurious emission

2405MHz



Comment: Zigbee Bridge 2405MHz
Date: 20.JUN.2008 14:05:10

2440MHz



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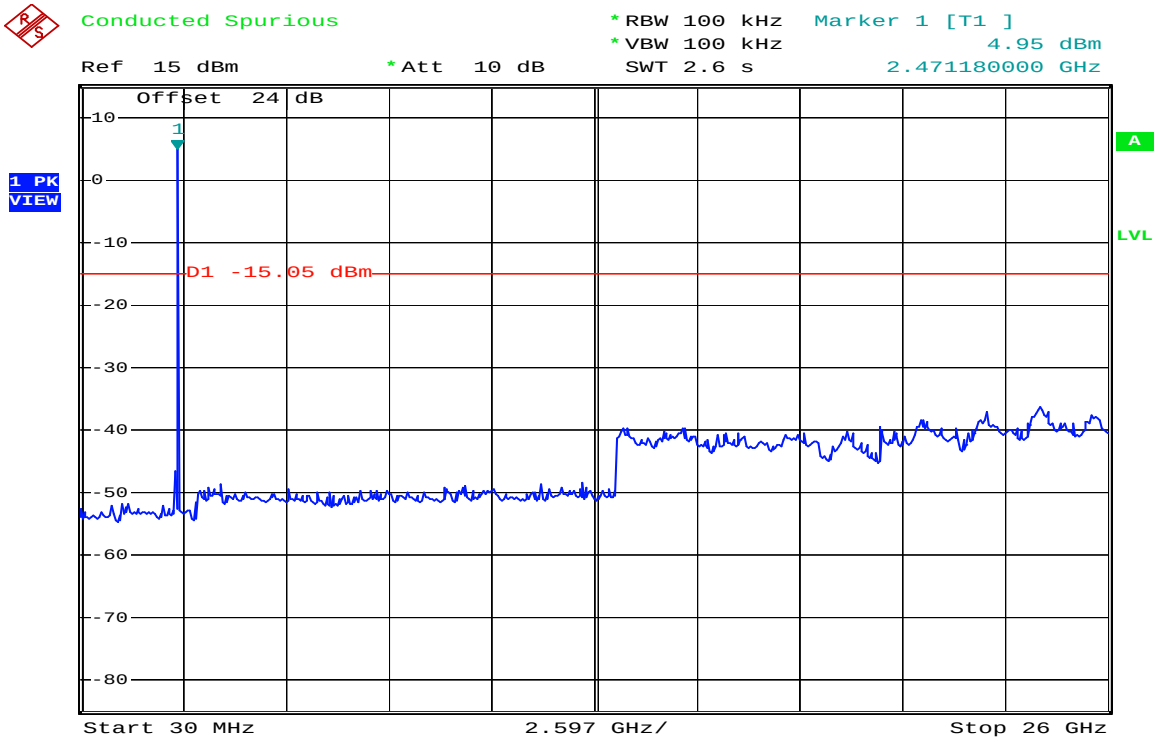
Date: 20.JUN.2008 14:07:01

2475MHz



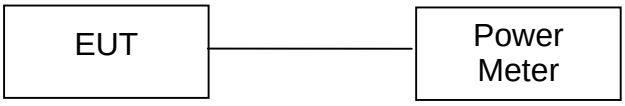
Comment: Zigbee Bridge 2475MHz
Date: 20.JUN.2008 14:08:30

4 Maximum Peak output power test

4.1 Limits

According to FCC Part15.247 (b)(3) requirement：
For systems using digital modulation in the 2400–2483.5 MHz bands: The maximum conducted output power shall be less than 1Watt.

4.2 Configuration of Measurement



4.3 Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
For FCC §15.247(b) the power output was measured on the EUT using a 50 ohm SMA cable connected to peak power meter via power sensor. Peak output power was read directly from power meter. The test was performed at 3 channels (lowest, middle and highest).

4.4 Test Result

PASS.
The final test data is shown on as following pages.

Maximum transmit power

CH	Temp.	Test Voltage	Maximum transmit power	Limit	Margin
	(℃)	(Vdc)	(dBm)	(dBm)	(dB)
11	25	5	9.84	30	-20.16
18	25	5	9.97	30	-20.03
25	25	5	10.58	30	-19.42

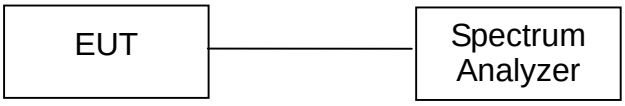
5 6dB Bandwidth

5.1 Limits

According to FCC Part15.247 (a)(2) requirement：

Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6dB bandwidth shall be at least 500 kHz.

5.2 Configuration of Measurement



5.3 Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The minimum 6dB bandwidth was measured using a 50 ohm spectrum analyzer with resolutions bandwidth set at 100kHz, video bandwidth set ≧RBW, and SPAN>>RBW. The test was performed at 3 channels (lowest, middle and highest).

5.4 Test Result

PASS.

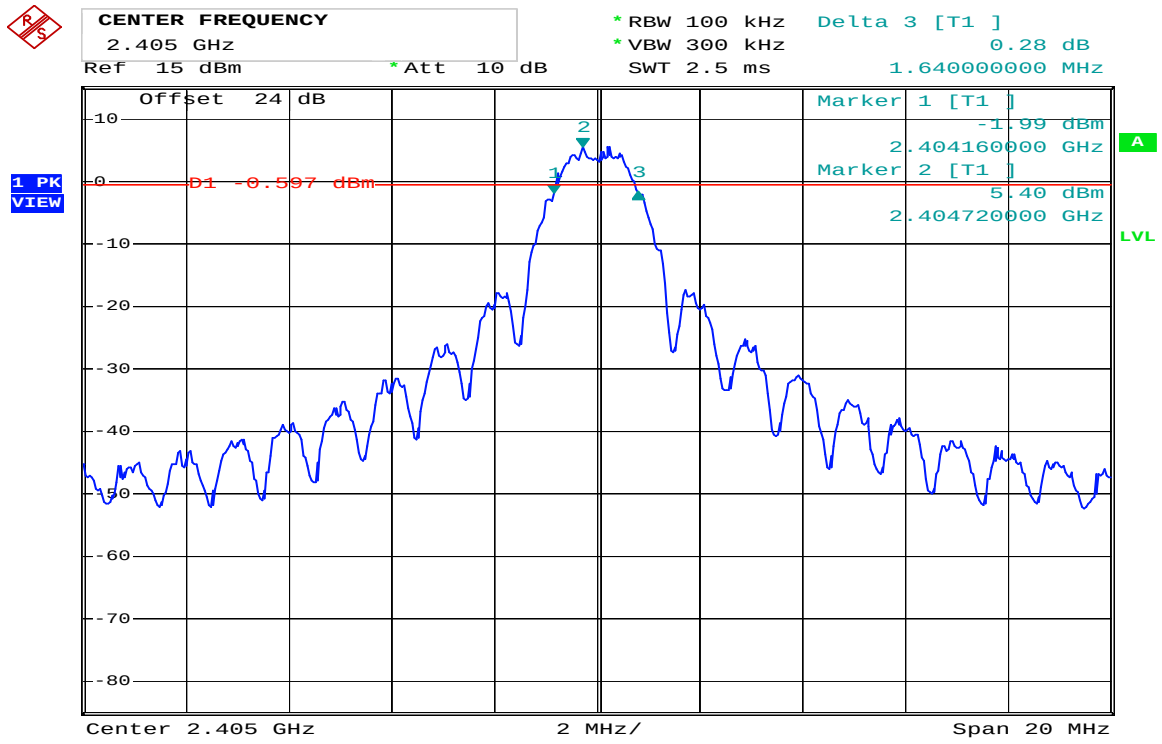
The final test data is shown on as following pages.

6dB Bandwidth

Test CH		6dB Bandwidth (MHz)	Limit (kHz)
CH No.	Freq. (MHz)		
11	2405	1.64	>500
18	2440	1.64	>500
25	2475	1.68	>500

6dB Bandwidth

2405MHz



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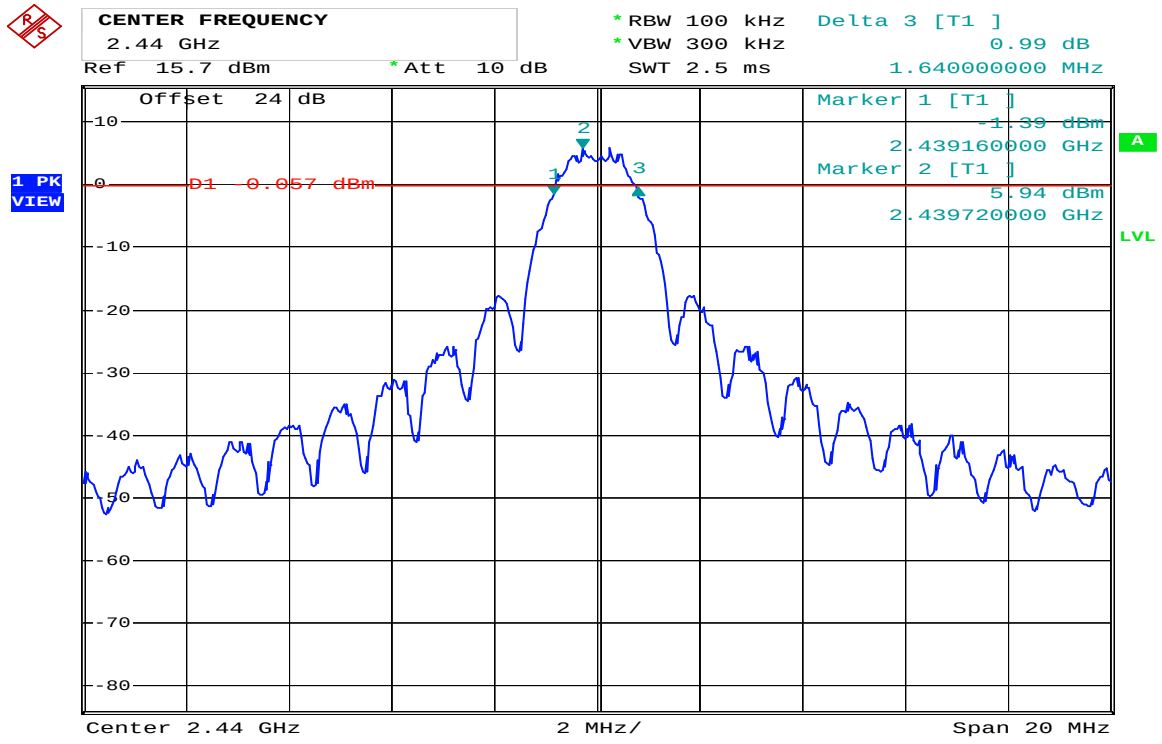
2440MHz



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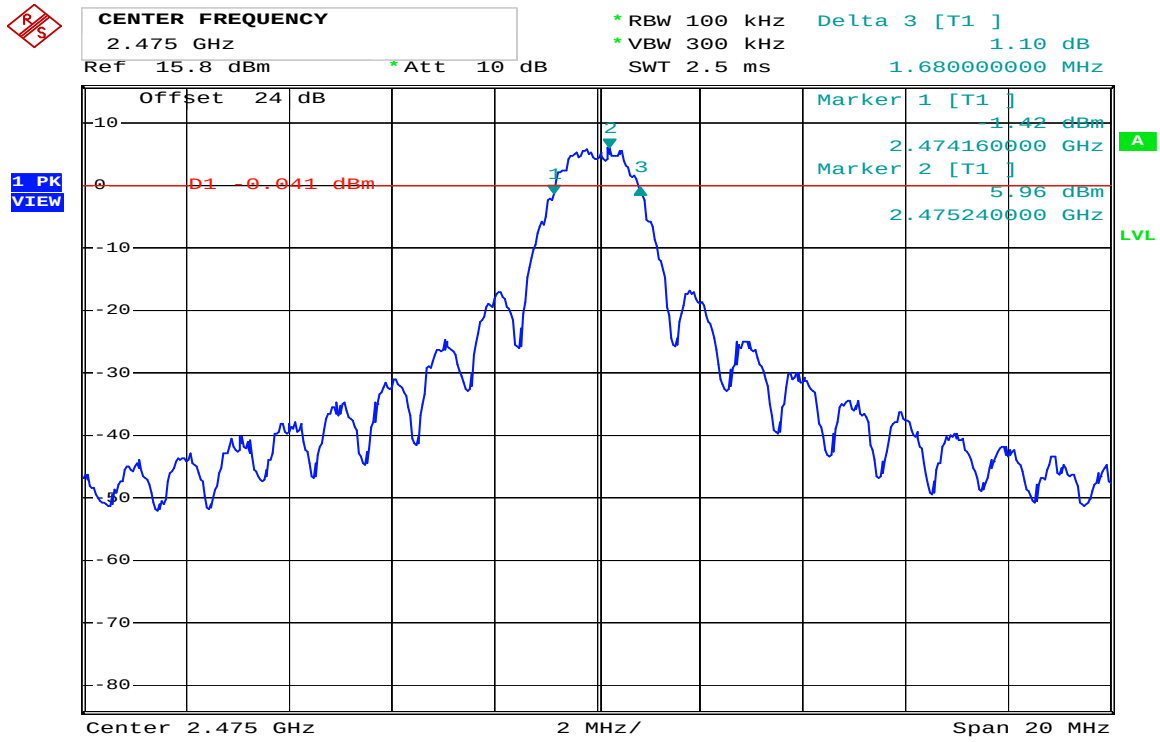
2475MHz



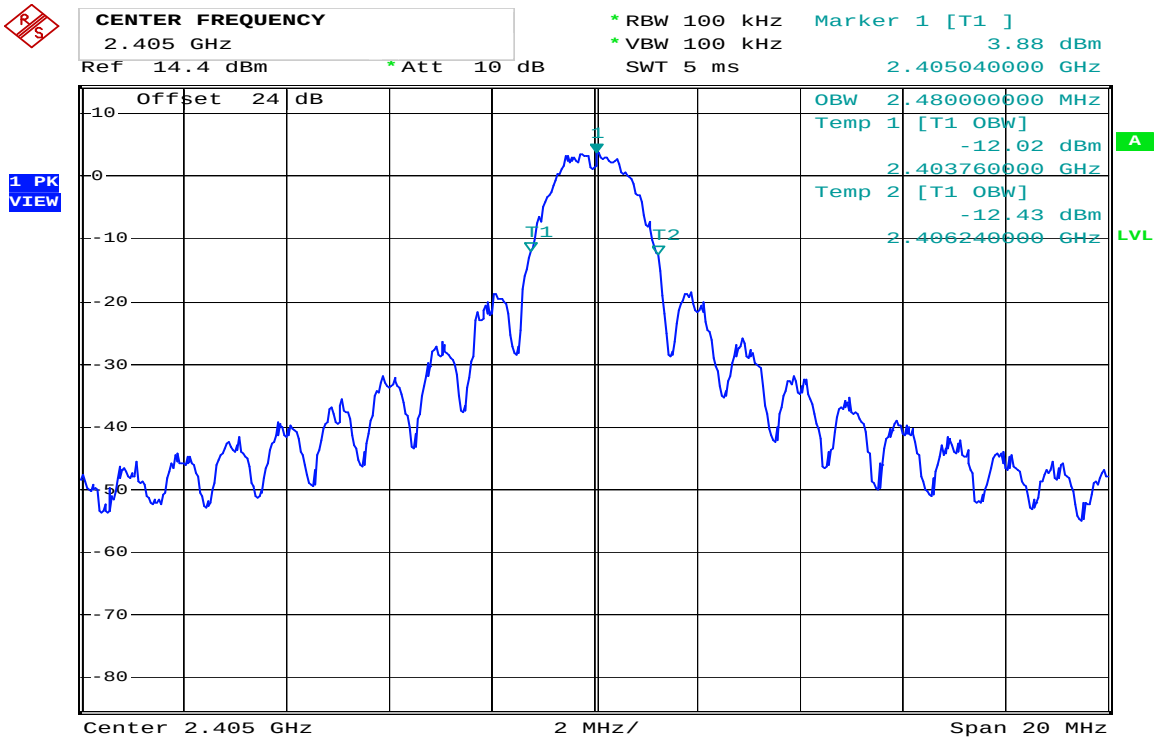
Comment: Zigbee 2475MHz
Date: 20.JUN.2008 11:49:46

99%Occupied bandwidth

Test CH		Occupied Bandwidth (MHz)
CH No.	Freq. (MHz)	
11	2405	2.48
18	2440	2.40
25	2475	2.44

99%Occupied bandwidth

2405MHz



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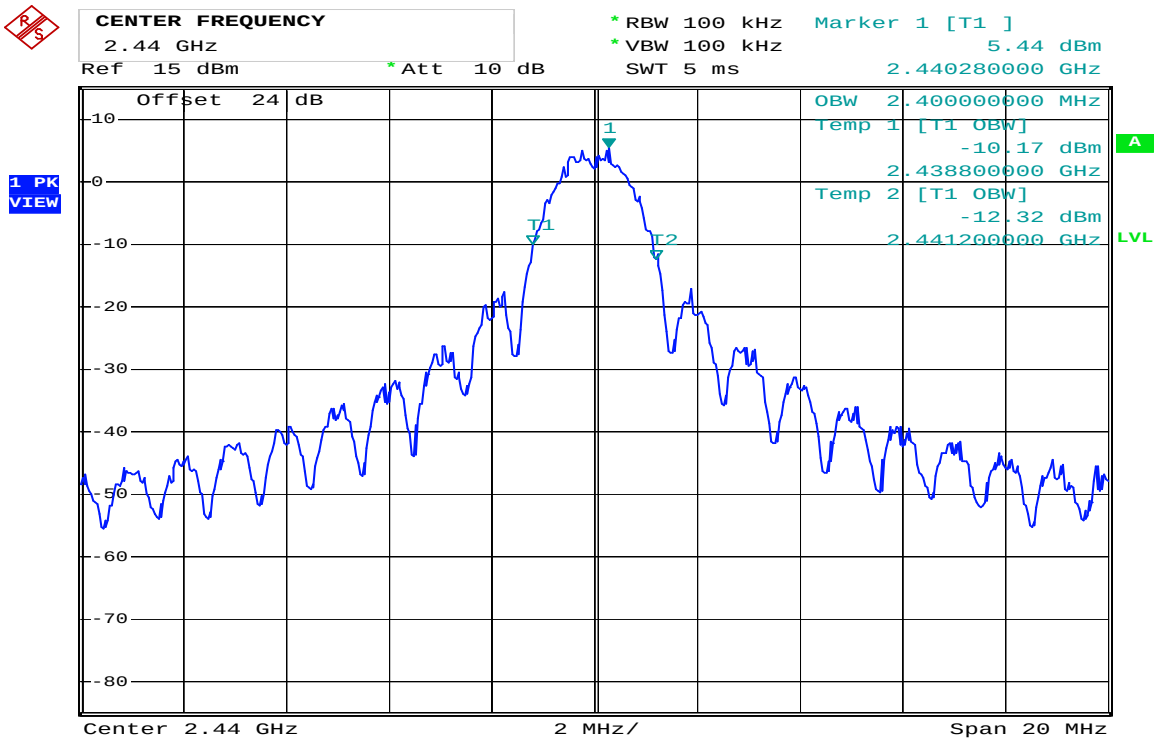
2440MHz



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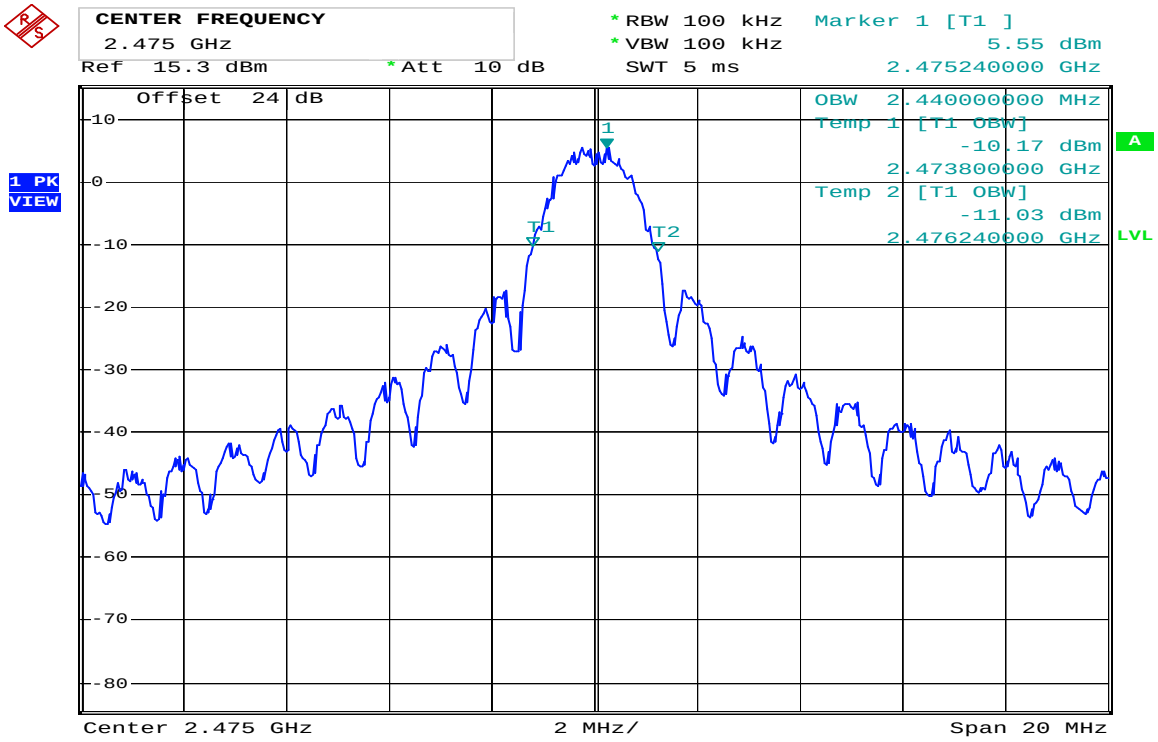
Date: 20.JUN.2008 11:54:41

2475MHz



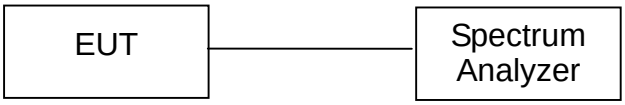
Comment: Zigbee 2475MHz
Date: 20.JUN.2008 11:50:58

6 Power spectral density

6.1 Limits

According to FCC Part15.247 (e) requirement：
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

6.2 Configuration of Measurement



6.3 Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The power spectrum density was measured from the antenna port of the EUT using a 50ohm spectrum analyzer with the resolution bandwidth set at 3kHz, video bandwidth set at 10kHz, span of 1.5MHz, and sweep time set at 500 seconds. Power Density was read directly correction was added to the reading to obtain power at the EUT antenna terminals. The test was performed at 3 channels (lowest, middle and highest).

6.4 Test Result

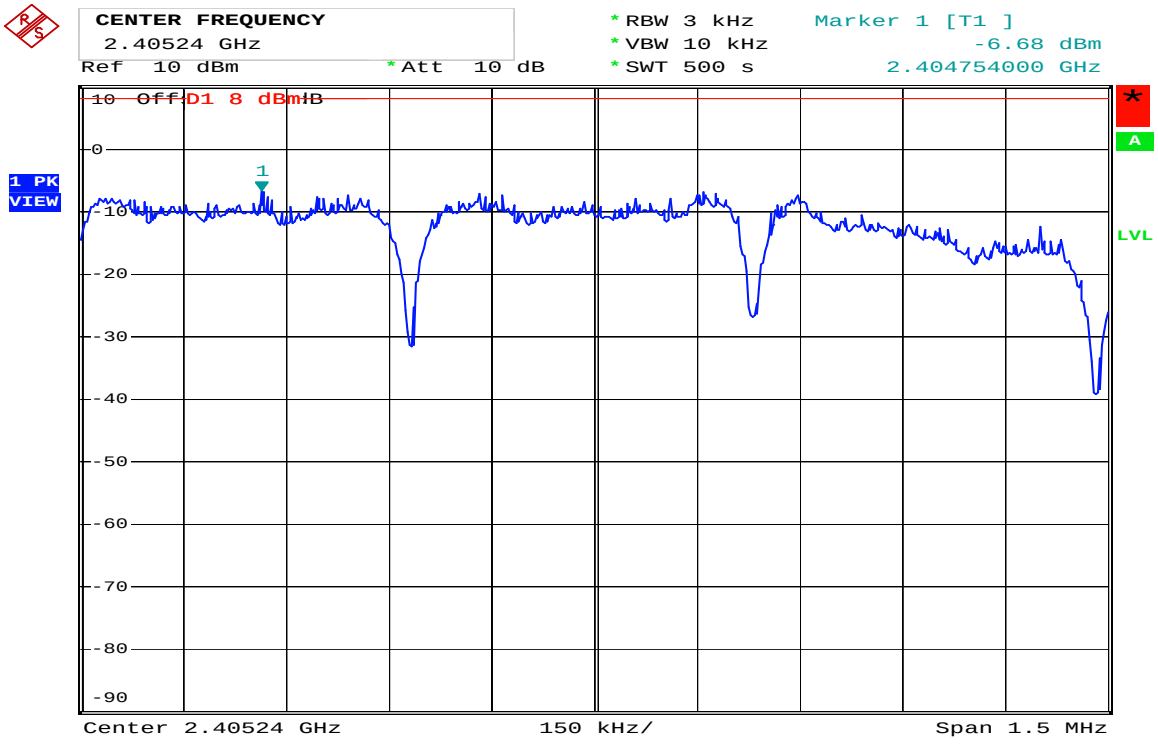
PASS.
The final test data is shown on as following pages.

Power spectral density

CH	Temp.	Test Voltage	Power Spectral Density	Limit	Margin
	(℃)	(Vdc)	(dBm)	(dBm)	(dB)
11	25	5	-6.68	8	-14.68
18	25	5	-5.96	8	-13.96
25	25	5	-6.00	8	-14.00

Power spectral density

2405MHz



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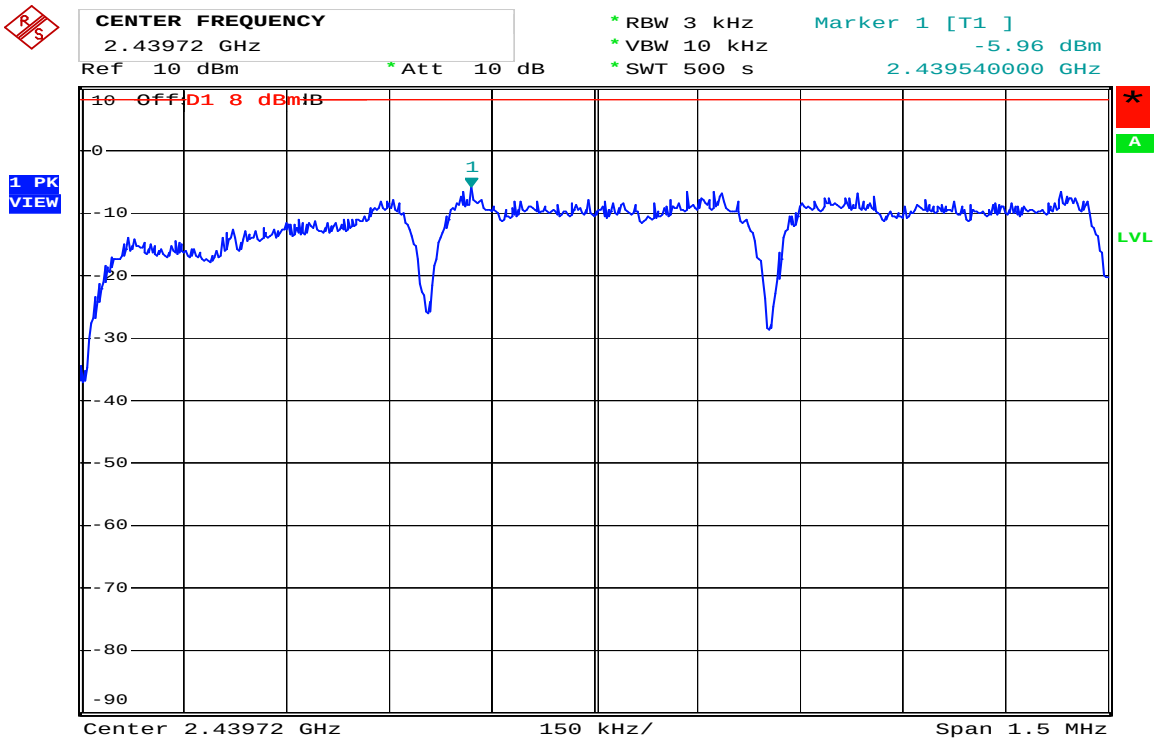
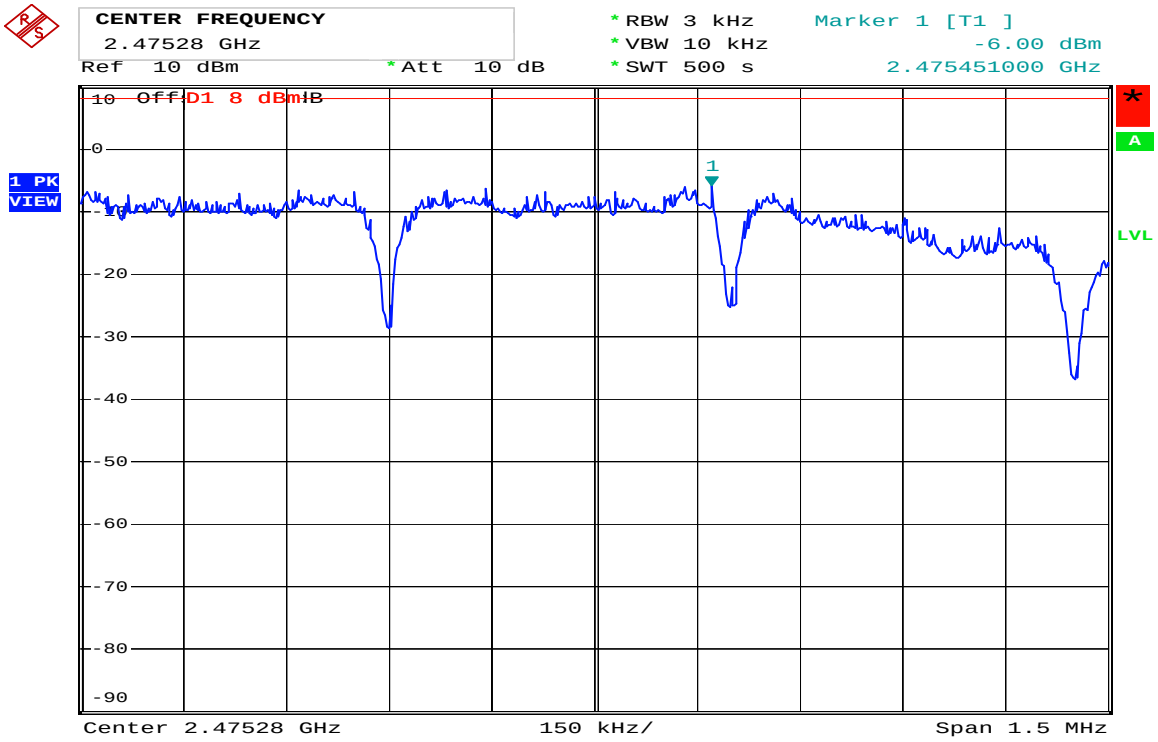
Date: 20.JUN.2008 11:43:47

2440MHz



Comment: Zigbee 2440MHz
Date: 20.JUN.2008 11:54:20

2475MHz



Comment: Zigbee 2475MHz
Date: 20.JUN.2008 11:50:39

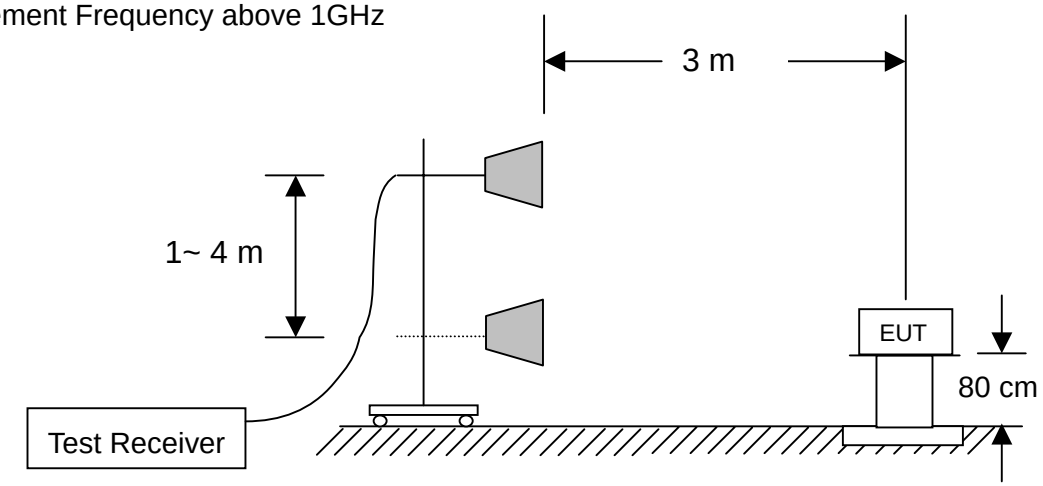
7 Emission on the Band Edge test

7.1 Limits

In any 100kHz bandwidth outside the frequency band 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.

7.2 Configuration of Measurement

Measurement Frequency above 1GHz



7.3 Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW =1M, VBW= RBW for peak, and VBW=10Hz for average.

The EUT for testing is arranged on a wooden turntable. If some peripherals apply to the EUT, the peripherals will be connected to EUT and the whole system. During the test, all cables were arranged to produce worst-case emissions. The signal is maximized through rotation. The height of antenna and polarization is changing constantly for exploring for maximum signal level. The height of antenna can be up to 4 meter and down to 1 meter.

7.4 Test Result

PASS.

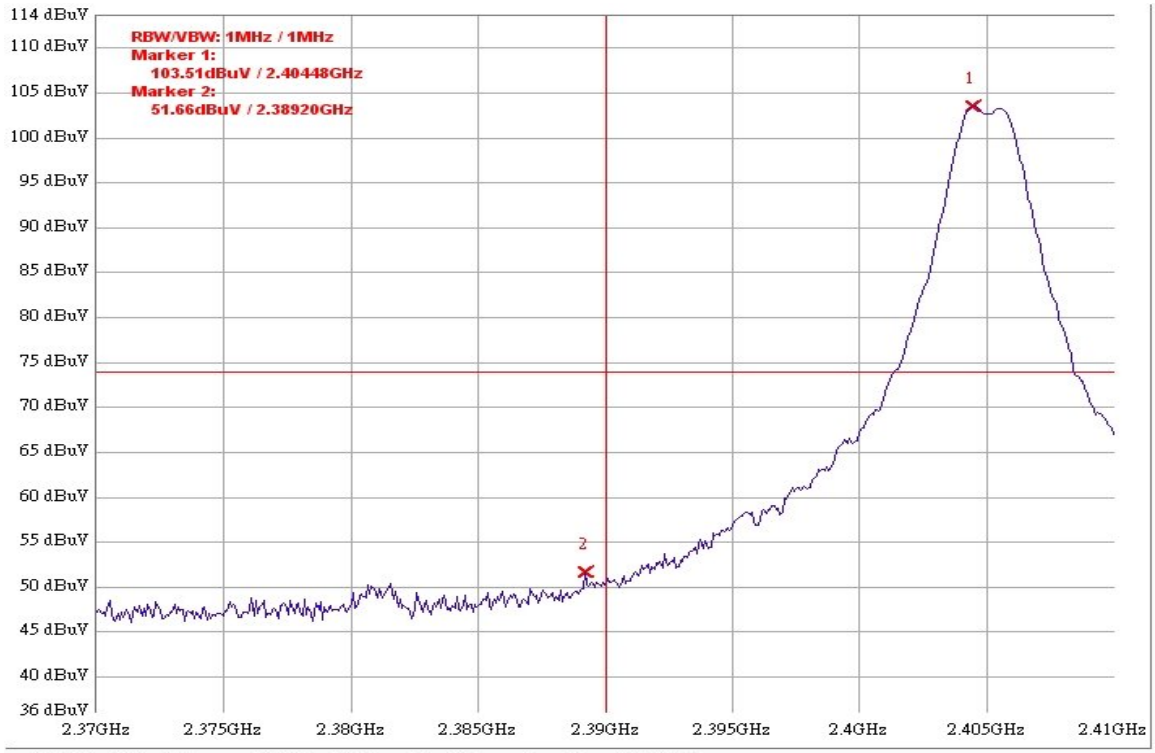
The final test data is shown on as following pages.

Band edge

CH	Restrict Freq. Band	Detector Mode	Maximum level	Limit	Margin
	(MHz)		(dBμV/m)	(dBm)	(dB)
11	2310~2390	PK	51.66	74	-22.34
		AV	39.21	54	-14.79
25	2483.5~2500	PK	58.62	74	-15.38
		AV	47.47	54	-6.53

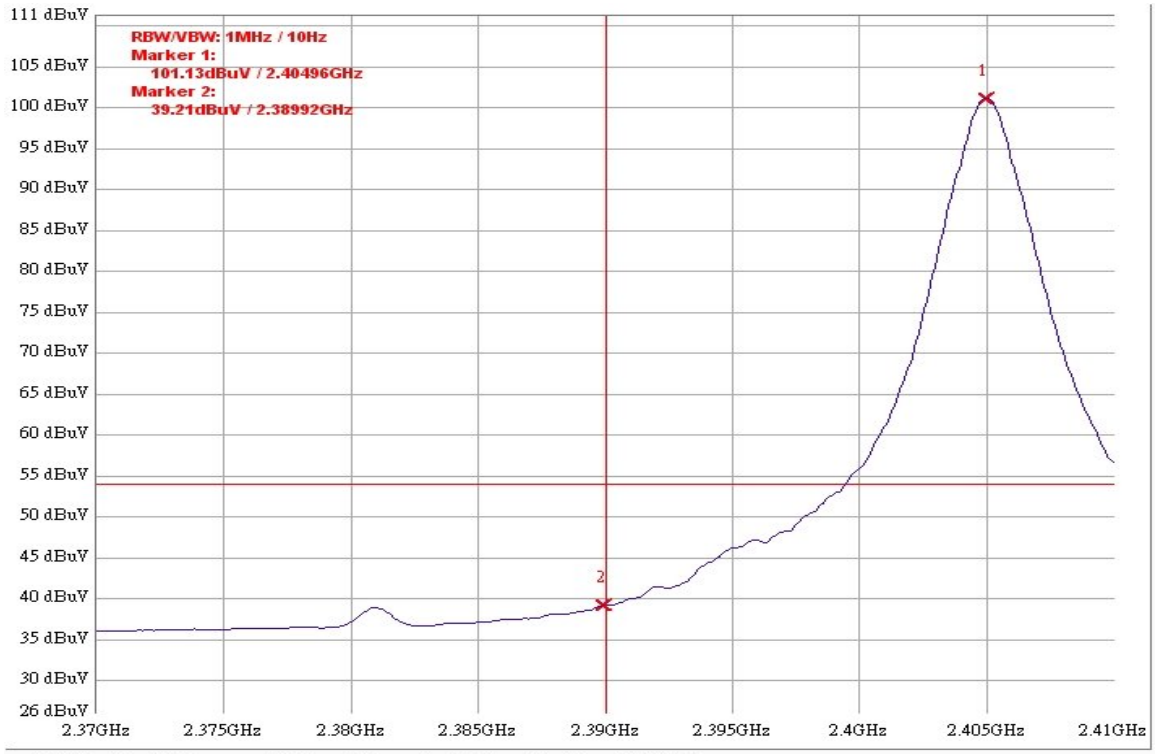
Band edge

CH11 PK



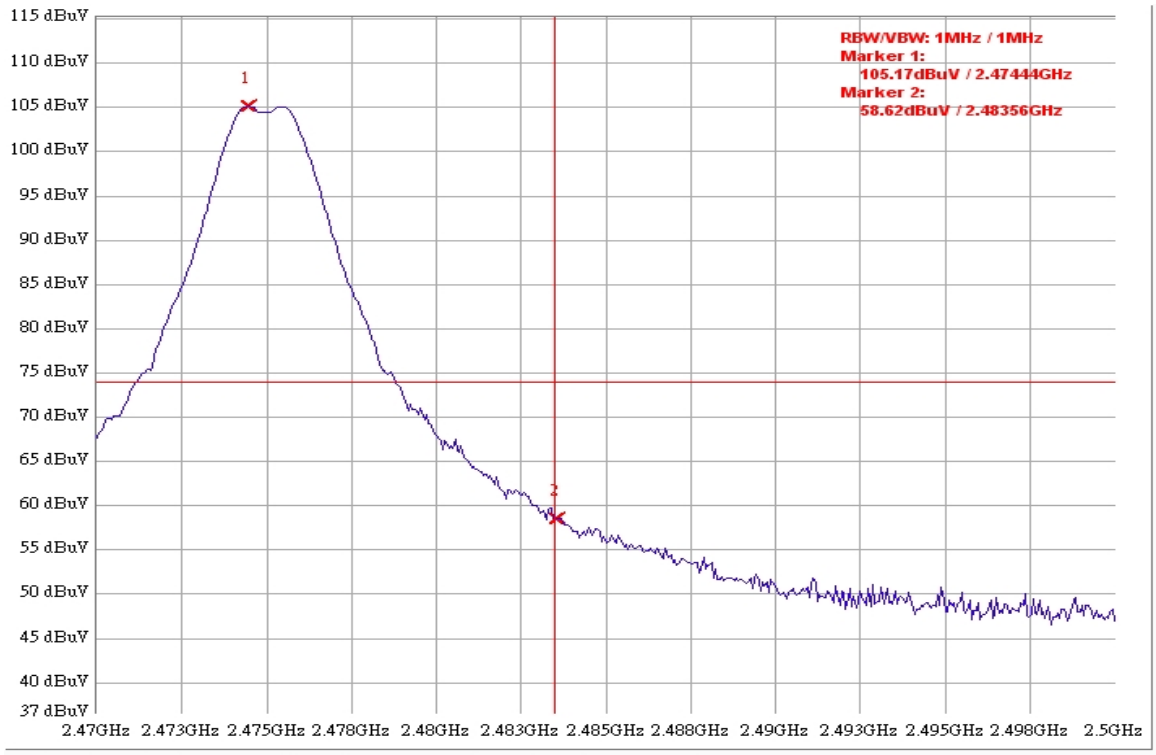
PK Bridge Module Stream mode External Antenna Enable Power Amplifier -3dB CH11

CH11 AV



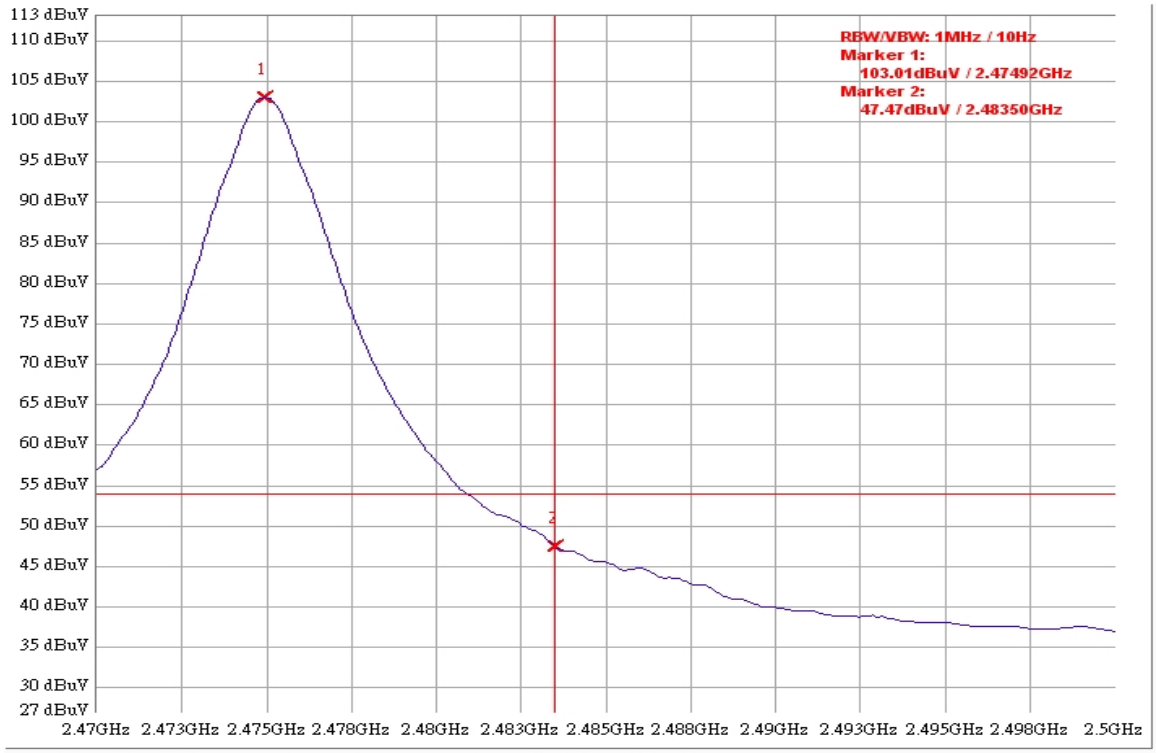
AV Bridge Module Stream mode External Antenna Enable Power Amplifier -3dB CH11

CH25 PK



PK Bridge Module Stream mode External Antenna Enable Power Amplifier -3dB CH25

CH25 AV



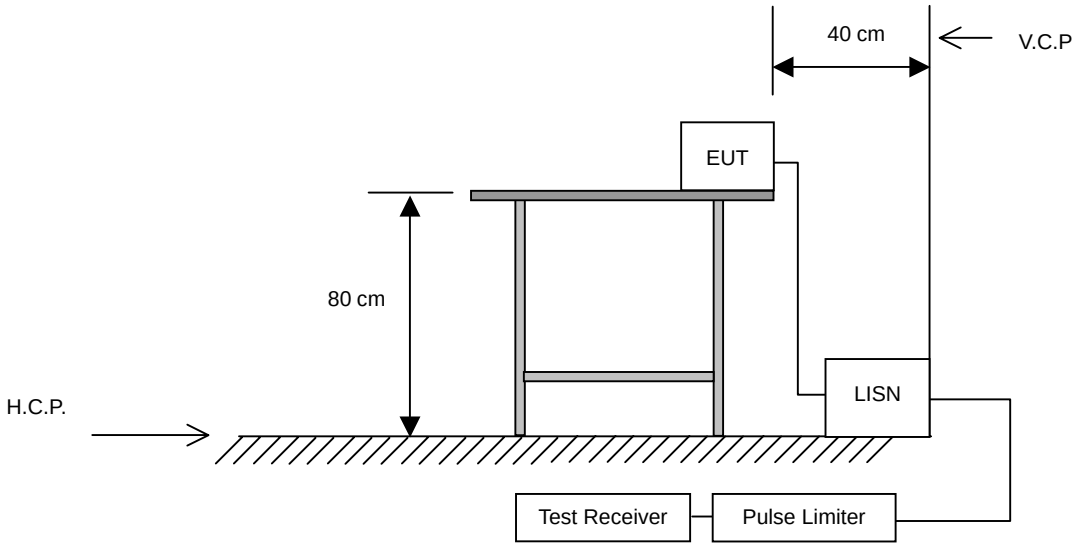
AV Bridge Module Stream mode External Antenna Enable Power Amplifier -3dB CH25

8 AC Power Line Conducted Emission test

8.1 Limits

Frequency (MHz)	Quasi-Peak (dB μV)	Average (dB μV)
0.15 to 0.5	66 to 56	56 to 46
> 0.5 to 5	56	46
> 5 to 30	60	50
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.		

8.2 Configuration of Measurement



8.3 Test Procedures

8.3.1 The EUT was placed 80cm height above ground on a non-conductive table and vertical conducting plane located 40cm to the rear of the EUT.

8.3.2 The EUT was connected to the main power through Line Impedance Stabilization Networks (LISN). This setup provided a 50ohm/50mH coupling impedance for the measuring equipment. The auxiliary equipment will place in secondary LISN.

8.3.3 Both sides (Line and Neutral) of AC line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4/2003 on conducted measurement.

8.3.4 The bandwidth of the field strength meter (R & S Test Receiver ESCS 30) is set at 9kHz.

8.4 Test Result

PASS.

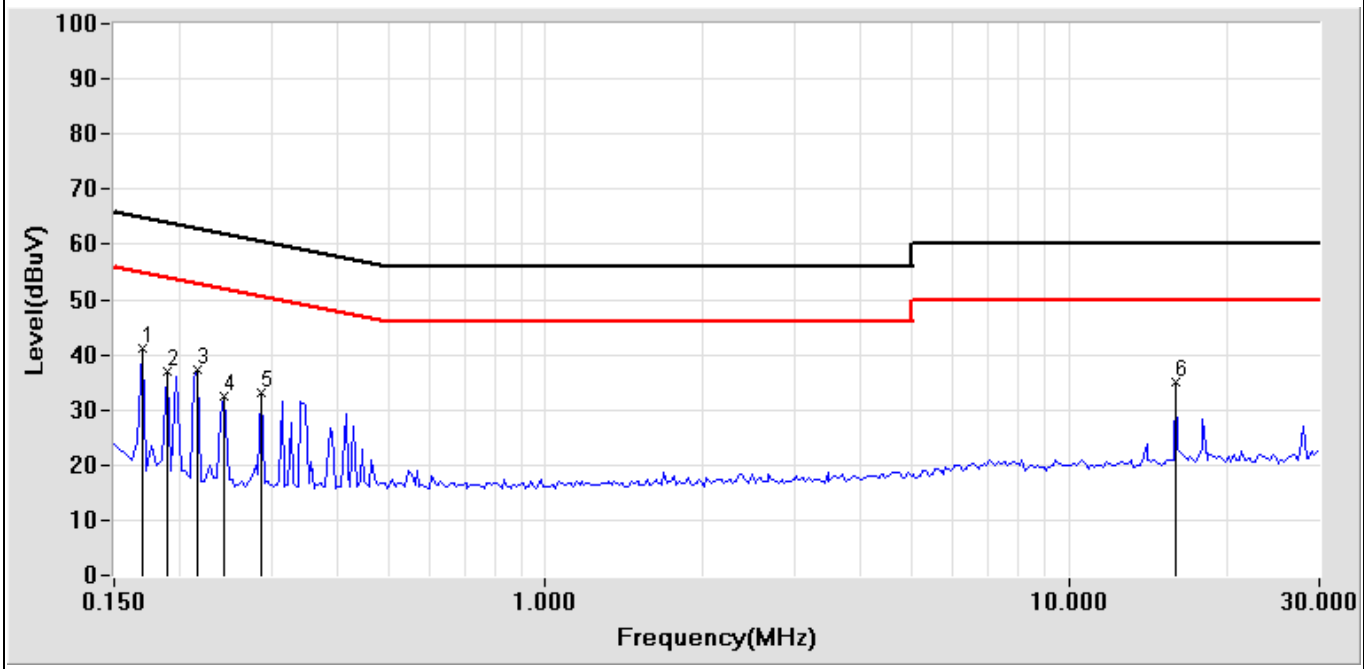
The final test data is shown on as following pages.

Power Line Conducted Test Data

EUT: Zigbee Efridge Bridge	POLARITY: Line
CLIENT: Bartech	DISTANCE:
MODEL: ZIGB-BRDG-K00-0	Serial No.:
RATING: 120V/60Hz	FILE/DATA# Bartech.emi/16
Temperature: 24.0 ℃	OPERATOR: Anya
Humidity: 51 %	TEST SITE: Conduction2

Frequency	Factor	Meter Reading (dBµV)		Emission Level (dBµV)		Limits (dBµV)		Margin (dB)	
(MHz)	(dB)	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.170	0.13	35.51	15.98	35.64	16.11	64.96	54.96	-29.32	-38.85
0.189	0.13	32.02	12.60	32.15	12.73	64.08	54.08	-31.93	-41.35
0.216	0.13	31.11	9.69	31.24	9.82	62.97	52.97	-31.73	-43.15
0.244	0.13	28.89	9.22	29.02	9.35	61.96	51.96	-32.94	-42.61
0.287	0.13	27.55	8.91	27.68	9.04	60.61	50.61	-32.93	-41.57
15.998	0.78	36.91	38.06	37.69	38.84	60.00	50.00	-22.31	-11.16

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



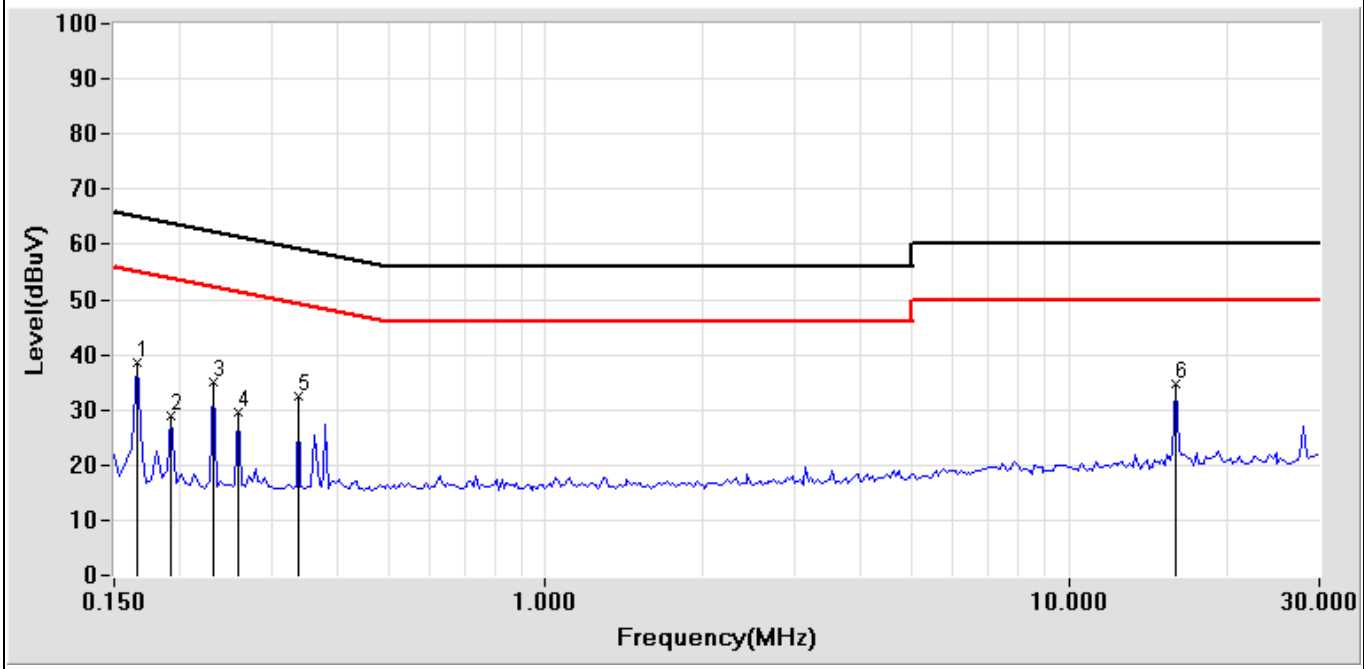
Test Mode: Working Mode

Power Line Conducted Test Data

EUT: Zigbee Efridge Bridge	POLARITY: Neutral
CLIENT: Bartech	DISTANCE:
MODEL: ZIGB-BRDG-K00-0	Serial No.:
RATING: 120V/60Hz	FILE/DATA# Bartech.emi/15
Temperature: 24.0 ℃	OPERATOR: Anya
Humidity: 51 %	TEST SITE: Conduction2

Frequency	Factor	Meter Reading (dBµV)		Emission Level (dBµV)		Limits (dBµV)		Margin (dB)	
(MHz)	(dB)	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.166	0.13	32.69	16.13	32.82	16.26	65.16	55.16	-32.34	-38.90
0.193	0.13	31.82	12.10	31.95	12.23	63.91	53.91	-31.96	-41.68
0.232	0.13	28.60	8.90	28.73	9.03	62.38	52.38	-33.65	-43.35
0.259	0.13	25.28	8.43	25.41	8.56	61.46	51.46	-36.05	-42.90
0.338	0.13	25.64	8.38	25.77	8.51	59.25	49.25	-33.48	-40.74
16.002	0.60	32.20	32.91	32.80	33.51	60.00	50.00	-27.20	-16.49

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



Test Mode: Working Mode