



ADDENDUM TO INNCOM INTERNATIONAL, INC. TEST REPORT FC08-082

FOR THE

INNCOM TXR, 02-9994

**FCC PART 15 SUBPART B SECTIONS 15.107 AND 15.109 CLASS A,
SUBPART C SECTION 15.247 AND RSS-210 ISSUE 7**

TESTING

DATE OF ISSUE: DECEMBER 24, 2009

PREPARED FOR:

INNCOM International, Inc.
277 W. Main St.
Niantic, CT 06357

PREPARED BY:

Dianne Dudley
CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

W.O. No.: 88333

Date of test: July 28 - August 14, 2008

Report No.: FC08-082A

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ADMINISTRATIVE INFORMATION

DATE OF TEST: July 28 - August 14, 2008

DATE OF RECEIPT: July 28, 2008

REPRESENTATIVE: Ryan Gardner

MANUFACTURER:

INNCOM International, Inc.
277 W. Main St.
Niantic, CT 06357

TEST LOCATION:

CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

TEST METHOD: ANSI C63.4 (2003), RSS-210 Issue 7 and RSS-GEN Issue 2

PURPOSE OF TEST:

Original Report: To perform the testing of the INNCOM TXR, 02-9994 with the requirements for FCC Part 15 Subpart B Sections 15.107 & 15109 Class A, Subpart C Section 15.247 and RSS-210 devices.

Addendum A: To add FCC 15.31(e) Voltage Variations information to page 4 and to correct the Resolution Bandwidth test conditions on page 24.

APPROVALS

QUALITY ASSURANCE:

Steve Behm, Director of Engineering Services

TEST PERSONNEL:



Mike Wilkinson, Senior EMC Engineer/Lab Manager

SUMMARY OF RESULTS

Test	Specification/Method	Results
Mains Conducted Emissions	FCC Part 15 Subpart B Section 15.107 Class A	Pass
Radiated Emissions	FCC Part 15 Subpart B Section 15.109 Class A	Pass
6 dB Bandwidth	FCC Part 15.247(a)(2)	Pass
RF Power Output	FCC Part 15.247(b)(3)	Pass
OATS Radiated Spurious Emissions	FCC Part 15.247(d)	Pass
Band Edge	FCC Part 15.247(d)	Pass
Peak Power Spectral Density	FCC Part 15.247(e)	Pass
99% Bandwidth	RSS-210	Pass
Site Filing Nos.	FCC Site No. 784962 Industry of Canada File No. IC 3082A-1	

CONDITIONS DURING TESTING

No modifications to the EUT were necessary during testing.

FCC 15.31(e) Voltage Variations

The EUT operates at 12 VDC only to be supplied by a battery or an OEM supplier..

FCC 15.31(m) Number Of Channels

This device was tested on three channels.

FCC 15.33(a) Frequency Ranges Tested

15.107 Conducted Emissions: 150 kHz – 30 MHz

15.109 Radiated Emissions: 30 kHz – 12500 MHz

15.247 Radiated Emissions: 30 kHz – 25000 MHz

FCC 15.203 Antenna Requirements

The antenna is an integral part of the EUT and is non-removable; therefore the EUT complies with Section 15.203 of the FCC rules.

EUT Operating Frequency

The EUT was operating at 2405 MHz – 2480 MHz.

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The customer declares the EUT tested by CKC Laboratories was representative of a production unit.

EQUIPMENT UNDER TEST

INNCOM TXR

Manuf: INNCOM International
Model: 02-9994
Serial: NA
FCC ID: pending

Break Out Board

Manuf: INNCOM International
Model: 02-9995
Serial: NA
FCC ID: NA

PERIPHERAL DEVICES

The EUT was tested with the following peripheral device(s):

Power Supply

Manuf: Amplus
Model: 0299-120133U
Serial: NA
FCC ID: NA

REPORT OF EMISSIONS MEASUREMENTS

TESTING PARAMETERS

TEMPERATURE AND HUMIDITY DURING TESTING

The temperature during testing was within +15°C and + 35°C.

The relative humidity was between 20% and 75%.

The cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. Cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the setup photographs. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables.

The emissions data was taken with a spectrum analyzer or receiver. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the table below. The corrected data was then compared to the applicable emission limits. Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in dB μ V/m, the spectrum analyzer reading in dB μ V was corrected by using the following formula. This reading was then compared to the applicable specification limit.

SAMPLE CALCULATIONS	
Meter reading	(dB μ V)
+	Antenna Factor (dB)
+	Cable Loss (dB)
-	Distance Correction (dB)
-	Preamplifier Gain (dB)
=	Corrected Reading (dB μ V/m)

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed were used to collect the emissions data. A spectrum analyzer or receiver was used for all measurements. The following table shows the measuring equipment bandwidth settings that were used in designated frequency bands. For testing emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used. When conducted emissions testing was performed, a 10 dB external attenuator was used with internal offset correction in the analyzer.

MEASURING EQUIPMENT BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1000 MHz	>1 GHz	1 MHz

SPECTRUM ANALYZER/RECEIVER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the emissions tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "Peak" mode. Whenever a "Quasi-Peak" or "Average" reading is listed as one of the highest readings, this is indicated as a "QP" or an "Ave" on the appropriate rows of the data sheets. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

Peak

In this mode, the spectrum analyzer/receiver readings were recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature of the measuring device called "peak hold," the measuring device had the ability to measure transients or low duty cycle transient emission peak levels. In this mode the measuring device made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

When the true peak values exceeded or were within 2 dB of the specification limit, quasi-peak measurements were taken using the quasi-peak detector.

Average

For certain frequencies, average measurements may be made using the spectrum analyzer/receiver. To make these measurements, the test engineer reduces the video bandwidth on the measuring device until the modulation of the signal is filtered out. At this point the measuring device is set into the linear mode and the scan time is reduced.

FCC 15.107 AC CONDUCTED EMISSIONS

Test Setup Photos



Test Data Sheets

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 209 966-5240

Customer: **INNCOM International**
 Specification: **FCC 15.107(b) Class A - AVE**
 Work Order #: **88333** Date: **8/13/2008**
 Test Type: **Conducted Emissions** Time: **1:22:23 PM**
 Equipment: **INNCOM TXR** Sequence#: **4**
 Manufacturer: **INNCOM International** Tested By: **Mike Wilkinson**
 Model: **02-9994** **120V 60Hz**
 S/N: **None**

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4446A SA	US44300407	01/03/2007	01/03/2009	02660
150kHz HP Filter TTE	G7754	01/22/2008	01/22/2010	02608
LISN, 8028-50-TS-24-BNC	8379276, 280	05/07/2007	05/07/2009	1248 & 1249
Site D Conducted Cable	N/A	03/06/2008	03/06/2010	CAB-SITE INT LISN 100k-30M

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
INNCOM TXR*	INNCOM International	02-9994	None
Break Out Board	INNCOM International	02-9995	None

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Amplus	0299-120133U	

Test Conditions / Notes:

The TXR is installed directly on the Break-Out board and the Break-Out board is powered from the power supply. EUT is a Zigbee transceiver set to receive only. EUT clocks are 32.768 kHz and 32 MHz. Highest frequency generated is 2500 MHz. Frequency range investigated: 150 kHz to 30 MHz. The temperature was 23.3°C and the humidity was 43%. RBW= 9 kHz VBW= 30 kHz.

Transducer Legend:

T1=LISN -280 - BK-AN1248	T2=CAB-SITED INT LISN 100k-30M
T3=Filter 150kHz HP AN02608	

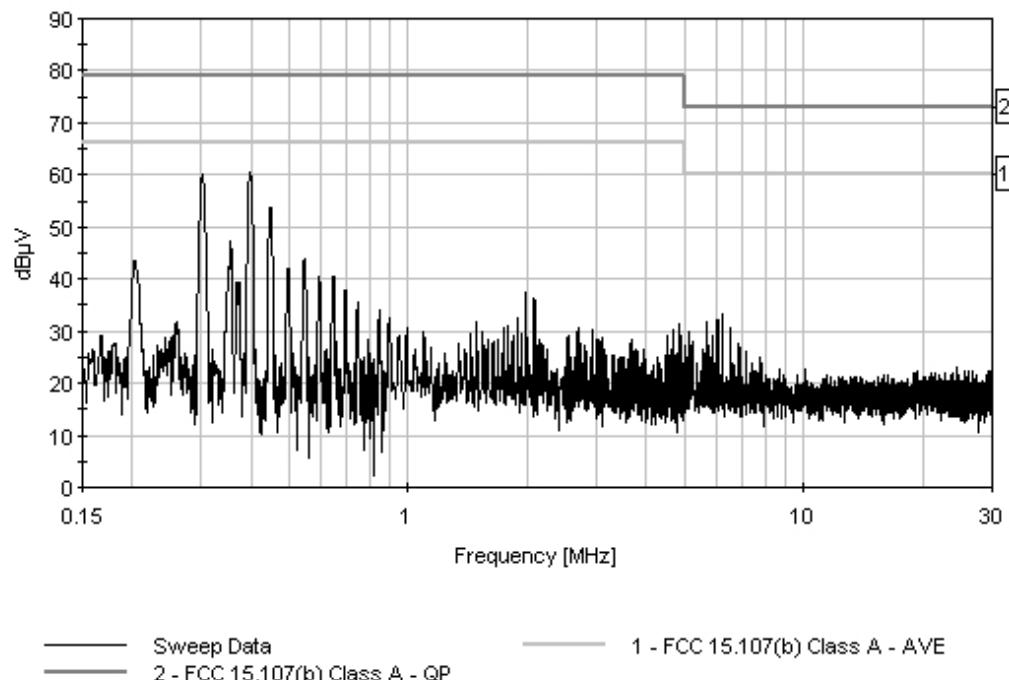
Measurement Data:

#	Freq MHz	Reading listed by margin.					Test Lead: Black				
		Rdng dB μ V	T1 dB	T2 dB	T3 dB	Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant	
1	397.250k	48.1	+0.2	+12.0	+0.2	+0.0	60.5	66.0	-5.5	Black	
2	301.259k	47.8	+0.2	+11.9	+0.2	+0.0	60.1	66.0	-5.9	Black	
3	448.154k	41.3	+0.2	+11.9	+0.2	+0.0	53.6	66.0	-12.4	Black	
4	355.799k	35.0	+0.2	+12.0	+0.2	+0.0	47.4	66.0	-18.6	Black	

5	545.600k	31.5	+0.2	+11.8	+0.3	+0.0	43.8	66.0	-22.2	Black
6	203.813k	31.3	+0.2	+11.8	+0.2	+0.0	43.5	66.0	-22.5	Black
7	496.877k	29.6	+0.2	+11.9	+0.3	+0.0	42.0	66.0	-24.0	Black
8	593.596k	28.3	+0.2	+11.8	+0.3	+0.0	40.6	66.0	-25.4	Black
9	645.955k	28.3	+0.2	+11.8	+0.3	+0.0	40.6	66.0	-25.4	Black
10	369.616k	27.1	+0.2	+12.0	+0.2	+0.0	39.5	66.0	-26.5	Black
11	6.211M	22.0	+0.3	+10.9	+0.1	+0.0	33.3	60.0	-26.7	Black
12	6.058M	20.9	+0.3	+10.9	+0.1	+0.0	32.2	60.0	-27.8	Black
13	693.950k	25.6	+0.2	+11.8	+0.3	+0.0	37.9	66.0	-28.1	Black
14	5.716M	20.5	+0.3	+10.9	+0.1	+0.0	31.8	60.0	-28.2	Black
15	1.987M	25.6	+0.2	+11.4	+0.2	+0.0	37.4	66.0	-28.6	Black
16	6.562M	19.1	+0.4	+10.9	+0.1	+0.0	30.5	60.0	-29.5	Black
17	2.085M	24.5	+0.2	+11.4	+0.2	+0.0	36.3	66.0	-29.7	Black
18	5.117M	18.4	+0.3	+10.9	+0.1	+0.0	29.7	60.0	-30.3	Black
19	744.855k	23.1	+0.2	+11.8	+0.3	+0.0	35.4	66.0	-30.6	Black
20	5.869M	17.8	+0.3	+10.9	+0.1	+0.0	29.1	60.0	-30.9	Black
21	844.482k	21.7	+0.2	+11.8	+0.3	+0.0	34.0	66.0	-32.0	Black
22	5.220M	16.6	+0.3	+10.9	+0.1	+0.0	27.9	60.0	-32.1	Black
23	6.806M	16.1	+0.4	+10.9	+0.1	+0.0	27.5	60.0	-32.5	Black
24	5.019M	15.9	+0.3	+10.9	+0.1	+0.0	27.2	60.0	-32.8	Black
25	6.905M	15.6	+0.4	+10.9	+0.1	+0.0	27.0	60.0	-33.0	Black
26	894.216k	20.5	+0.2	+11.8	+0.2	+0.0	32.7	66.0	-33.3	Black
27	1.889M	20.8	+0.2	+11.4	+0.2	+0.0	32.6	66.0	-33.4	Black

28	5.562M	15.3	+0.3	+10.9	+0.1		+0.0	26.6	60.0	-33.4	Black
29	7.157M	14.9	+0.4	+10.8	+0.1		+0.0	26.2	60.0	-33.8	Black
30	260.535k	19.4	+0.2	+11.9	+0.3		+0.0	31.8	66.0	-34.2	Black

CKC Laboratories, Inc. Date: 8/13/2008 Time: 1:22:23 PM INNCON International WO#: 88333
 FCC 15.107(b) Class A - AVE Test Lead: Black 120V 60Hz Sequence#: 4 Ext ATTN: (EXTATTN)



Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 209 966-5240

Customer: **INNCOM International**
 Specification: **FCC 15.107(b) Class A - AVE**
 Work Order #: **88333** Date: **8/13/2008**
 Test Type: **Conducted Emissions** Time: **1:24:21 PM**
 Equipment: **INNCOM TXR** Sequence #: **5**
 Manufacturer: **INNCOM International** Tested By: **Mike Wilkinson**
 Model: **02-9994** 120V 60Hz
 S/N: **None**

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4446A SA	US44300407	01/03/2007	01/03/2009	02660
150kHz HP Filter TTE	G7754	01/22/2008	01/22/2010	02608
LISN, 8028-50-TS-24-BNC	8379276, 280	05/07/2007	05/07/2009	1248 & 1249
Site D Conducted Cable	N/A	03/06/2008	03/06/2010	CAB-SITE INT LISN 100k-30M

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
INNCOM TXR*	INNCOM International	02-9994	None
Break Out Board	INNCOM International	02-9995	None

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Amplus	0299-120133U	

Test Conditions / Notes:

The TXR is installed directly on the Break-Out board and the Break-Out board is powered from the power supply. EUT is a Zigbee transceiver set to receive only. EUT clocks are 32.768 kHz and 32 MHz Highest frequency generated is 2500 MHz. Frequency range investigated: 150 kHz to 30 MHz. The temperature was 23.3°C and the humidity was 43%. RBW= 9 kHz VBW= 30 kHz.

Transducer Legend:

T1=LISN -276 - WT-AN01248	T2=CAB-SITED INT LISN 100k-30M
T3=Filter 150kHz HP AN02608	

Measurement Data:

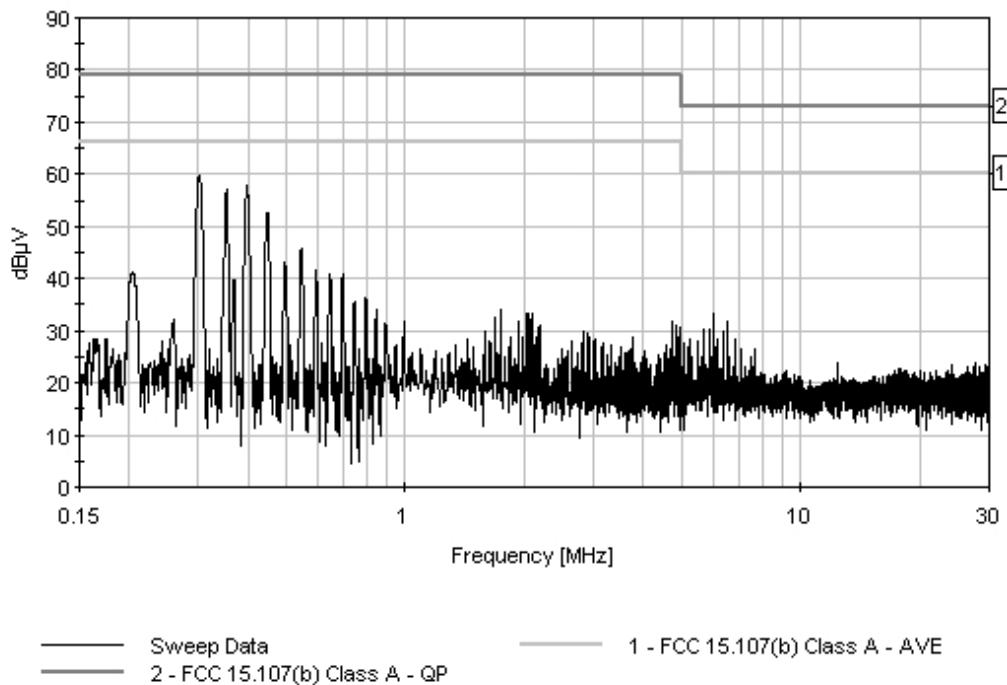
Reading listed by margin.

Test Lead: White

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	301.259k	47.8	+0.0	+11.9	+0.2	+0.0	59.9	66.0	-6.1	White
2	397.977k	45.7	+0.1	+12.0	+0.2	+0.0	58.0	66.0	-8.0	White
3	352.891k	44.7	+0.1	+12.0	+0.2	+0.0	57.0	66.0	-9.0	White
4	447.427k	40.4	+0.2	+11.9	+0.2	+0.0	52.7	66.0	-13.3	White
5	545.600k	33.4	+0.2	+11.8	+0.3	+0.0	45.7	66.0	-20.3	White

6	496.150k	30.6	+0.2	+11.9	+0.3	+0.0	43.0	66.0	-23.0	White
7	595.777k	29.4	+0.1	+11.8	+0.3	+0.0	41.6	66.0	-24.4	White
8	205.268k	29.0	+0.1	+11.8	+0.2	+0.0	41.1	66.0	-24.9	White
9	645.227k	28.7	+0.1	+11.8	+0.3	+0.0	40.9	66.0	-25.1	White
10	695.405k	28.6	+0.1	+11.8	+0.3	+0.0	40.8	66.0	-25.2	White
11	369.616k	27.4	+0.1	+12.0	+0.2	+0.0	39.7	66.0	-26.3	White
12	6.013M	21.7	+0.6	+10.9	+0.1	+0.0	33.3	60.0	-26.7	White
13	6.508M	20.0	+0.7	+10.9	+0.1	+0.0	31.7	60.0	-28.3	White
14	5.661M	18.8	+0.6	+10.9	+0.1	+0.0	30.4	60.0	-29.6	White
15	792.850k	24.0	+0.1	+11.8	+0.3	+0.0	36.2	66.0	-29.8	White
16	5.869M	18.5	+0.6	+10.9	+0.1	+0.0	30.1	60.0	-29.9	White
17	744.127k	23.5	+0.1	+11.8	+0.3	+0.0	35.7	66.0	-30.3	White
18	6.355M	18.1	+0.6	+10.9	+0.1	+0.0	29.7	60.0	-30.3	White
19	5.265M	17.0	+0.5	+10.9	+0.1	+0.0	28.5	60.0	-31.5	White
20	6.166M	16.7	+0.6	+10.9	+0.1	+0.0	28.3	60.0	-31.7	White
21	6.860M	16.6	+0.7	+10.9	+0.1	+0.0	28.3	60.0	-31.7	White
22	843.755k	22.0	+0.1	+11.8	+0.3	+0.0	34.2	66.0	-31.8	White
23	5.517M	16.5	+0.6	+10.9	+0.1	+0.0	28.1	60.0	-31.9	White
24	1.741M	22.0	+0.2	+11.5	+0.2	+0.0	33.9	66.0	-32.1	White
25	5.066M	16.2	+0.5	+10.9	+0.1	+0.0	27.7	60.0	-32.3	White
26	2.038M	21.5	+0.2	+11.4	+0.2	+0.0	33.3	66.0	-32.7	White
27	2.089M	21.3	+0.2	+11.4	+0.2	+0.0	33.1	66.0	-32.9	White
28	5.166M	15.2	+0.5	+10.9	+0.1	+0.0	26.7	60.0	-33.3	White
29	6.067M	15.1	+0.6	+10.9	+0.1	+0.0	26.7	60.0	-33.3	White
30	1.689M	20.6	+0.2	+11.5	+0.2	+0.0	32.5	66.0	-33.5	White

CKC Laboratories, Inc. Date: 8/13/2008 Time: 1:24:21 PM INNCON International WO#: 88333
FCC 15.107(b) Class A - AVE Test Lead: White 120V 60Hz Sequence#: 5 Ext ATTN: (EXTATTN)



FCC 15.109 RADIATED EMISSIONS

Test Setup Photos



Test Data Sheets

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 209 966-5240

Customer: **INNCOM International**
 Specification: **15.109 CLASS A**
 Work Order #: **88333** Date: **8/13/2008**
 Test Type: **Maximized Emissions** Time: **11:40:22**
 Equipment: **INNCOM TXR** Sequence#: **3**
 Manufacturer: **INNCOM International** Tested By: **Mike Wilkinson**
 Model: **02-9994**
 S/N: **None**

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4446A SA	US44300407	01/03/2007	01/03/2009	02660
Chase CBL6111C Bilog	2456	12/30/2006	12/30/2008	01991
EMCO 3115 Horn Antenna	9307-4085	03/17/2007	03/17/2009	00656
EMCO Loop Antenna	1074	05/01/2007	05/01/2009	00226
HP 8447D Preamp	1937A02604	03/14/2007	03/14/2009	00099
HP 8449B Preamp	3008A00301	12/13/2006	12/13/2008	2010
3M SITE CABLE 20GHZ	NA	03/06/2008	03/06/2010	SITED3M1
Cable 2' 40 GHz Astrolab	NA	01/15/2008	01/15/2010	AN03008
Cable 2' 40 GHz Astrolab	NA	01/15/2008	01/15/2010	AN03011
Andrews Hardline (25')	CKC 1012	04/23/2007	04/23/2009	P01012

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
INNCOM TXR*	INNCOM International	02-9994	None
Break Out Board	INNCOM International	02-9995	None

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Amplus	0299-120133U	

Test Conditions / Notes:

The TXR is installed directly on the Break-Out board and the Break-Out board is powered from the power supply. EUT is a Zigbee transceiver set to receive only. EUT clocks are 32.768 kHz and 32 MHz. Highest frequency generated is 2500 MHz. Frequency range investigated: 30 kHz to 12500 MHz. The temperature was 23.3°C and the humidity was 43%. RBW= 9 kHz 9kHz to 30 MHz, 120 kHz 30 to 1000 MHz, 1 MHz above 1000 MHz VBW= 3 x RBW.

Transducer Legend:

T1=AMP AN00099	T2=ANT AN01991 25-1000MHz
T3=CAB-SITED3M1 9k - 20G	T4=CAB-AN03008-40GHZ-2FT
T5=CAB-AN03011-40GHZ-2FT	T6=Cable P01012

Measurement Data: Reading listed by margin. **Test Distance:** 3 Meters

#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6			Table	dB μ V/m	dB μ V/m		
	MHz	dB μ V	dB	dB	dB	dB				dB	Ant
1	32.072M	32.6	-27.2	+17.9	+0.4	+0.1	-10.0	14.2	39.1	-24.9	Vert
			+0.1	+0.3							

2	168.062M	37.2	-26.8 +0.1	+9.9 +0.5	+1.1	+0.1	-10.0	12.1	43.5	-31.4	Vert
3	288.007M	31.3	-26.4 +0.2	+13.2 +0.8	+1.4	+0.2	-10.0	10.7	46.4	-35.7	Vert
4	191.987M	29.8	-26.7 +0.1	+9.1 +0.6	+1.2	+0.1	-10.0	4.2	43.5	-39.3	Horiz
5	192.072M	29.1	-26.7 +0.1	+9.1 +0.6	+1.2	+0.1	-10.0	3.5	43.5	-40.0	Vert
6	200.072M	28.3	-26.7 +0.1	+9.1 +0.6	+1.2	+0.1	-10.0	2.7	43.5	-40.8	Vert
7	256.007M	26.7	-26.4 +0.2	+12.6 +0.7	+1.3	+0.2	-10.0	5.3	46.4	-41.1	Horiz
8	312.007M	24.5	-26.5 +0.2	+13.7 +0.8	+1.5	+0.2	-10.0	4.4	46.4	-42.0	Horiz
9	264.072M	25.2	-26.4 +0.2	+12.8 +0.7	+1.4	+0.2	-10.0	4.1	46.4	-42.3	Vert
10	216.072M	27.8	-26.6 +0.1	+10.3 +0.6	+1.3	+0.1	-10.0	3.6	46.4	-42.8	Vert
11	208.072M	24.7	-26.6 +0.1	+9.7 +0.6	+1.2	+0.1	-10.0	-0.2	43.5	-43.7	Vert

FCC PART 15.247(a)(2) 6dB BANDWIDTH

Test Conditions

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 209 966-5240

Customer: **INNCON International**
 Specification: **15.247(a)(2) 6dB Bandwidth Compliance**
 Work Order #: **88333**
 Test Type: **Maximized Emissions**
 Equipment: **INNCOM TXR**
 Manufacturer: INNCOM International
 Model: 02-9994
 S/N: None
 Tested By: Mike Wilkinson

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8593EM SA	3624A00159	03/23/2007	03/23/2009	02111
EMCO 3115 Horn Antenna	9307-4085	03/17/2007	03/17/2009	00656
HP 8449B Preamp	3008A00301	12/13/2006	12/13/2008	2010
3M SITE CABLE 20GHZ	NA	03/06/2008	03/06/2010	SITED3M1
Cable 2' 40 GHz Astrolab	NA	01/15/2008	01/15/2010	AN03008
Cable 2' 40 GHz Astrolab	NA	01/15/2008	01/15/2010	AN03011
Andrews Hardline (25')	CKC 1012	04/23/2007	04/23/2009	P01012

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
INNCOM TXR*	INNCOM International	02-9994	None
Break Out Board	INNCOM International	02-9995	None

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Amplus	0299-120133U	

Test Conditions / Notes:

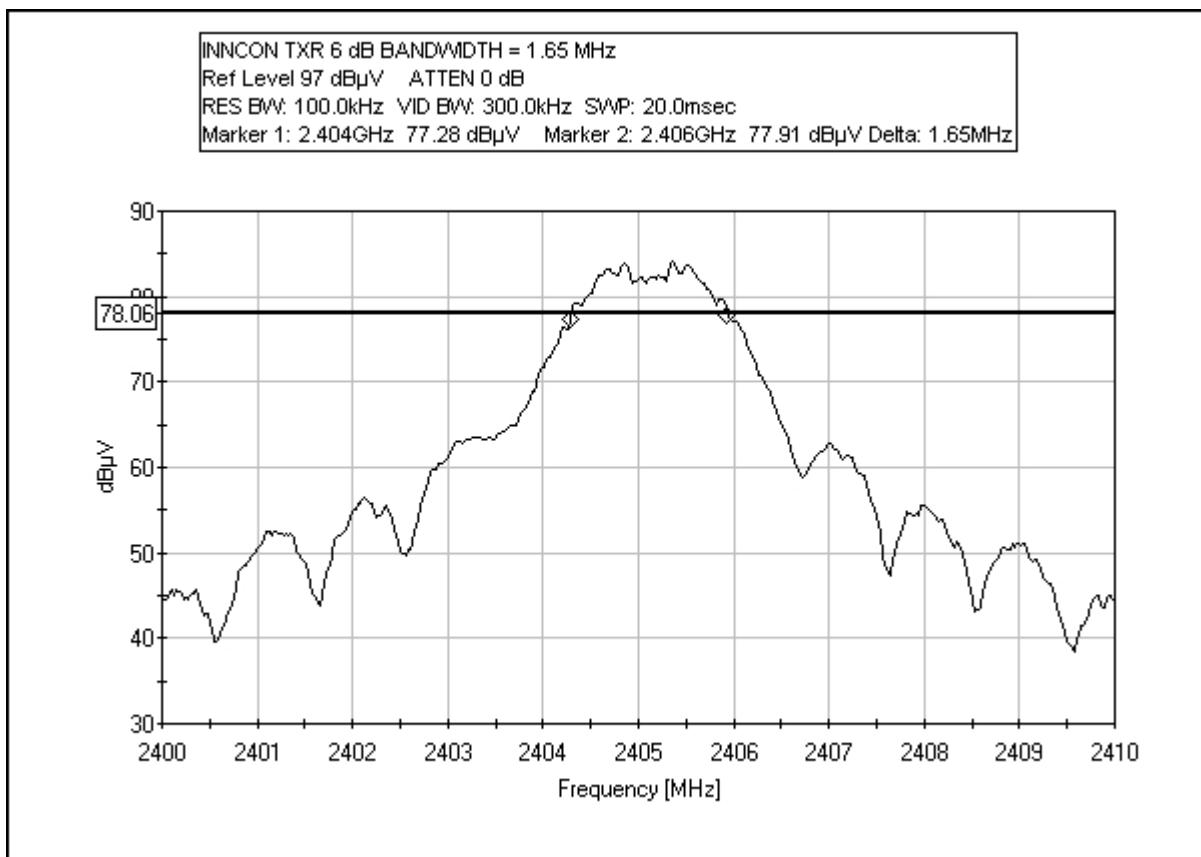
The TXR is installed directly on the Break-Out board and the Break-Out board is powered from the power supply. EUT is a Zigbee transceiver transmitting from 2405 MHz to 2480 MHz. EUT clocks are 32.768 kHz and 32 MHz. Highest frequency generated is 2500 MHz. Frequency range investigated: Carrier. The temperature was 23.3°C and the humidity was 43%. 6 dB Bandwidth Compliance measurements made as radiated field strength at 3 meters.

Test Setup Photos

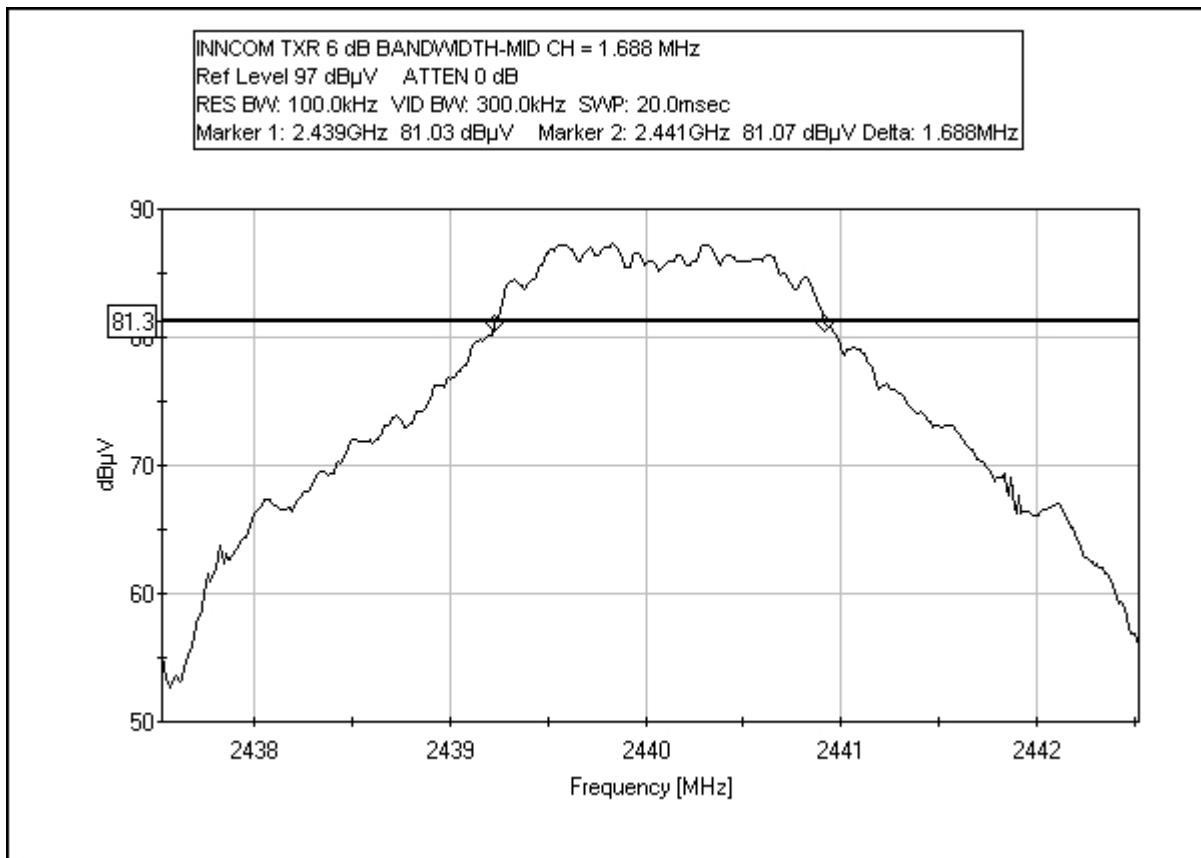


Test Plots

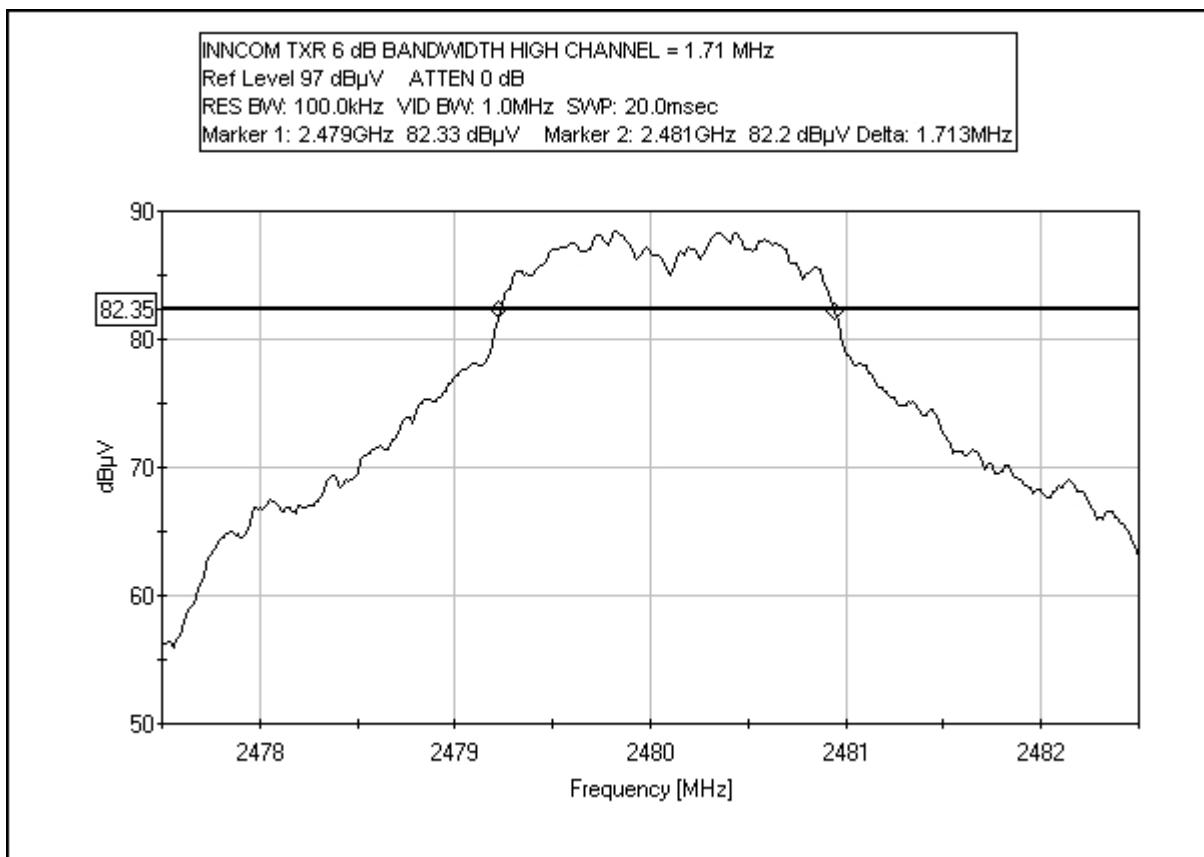
FCC 15.247(a) 6dB BANDWIDTH LOW CHANNEL



FCC 15.247(a) 6dB BANDWIDTH MID CHANNEL



FCC 15.247(a) 6dB BANDWIDTH HIGH CHANNEL



FCC 15.247(b)(3) RF POWER OUTPUT

Test Setup Photos



Test Data Sheets

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 209 966-5240

Customer: **INNCON International**
 Specification: **15.247(b)(3)**
 Work Order #: **88333** Date: **8/4/2008**
 Test Type: **Maximized Emissions**
 Equipment: **INNCOM TXR**
 Manufacturer: **INNCOM International** Sequence#: **1**
 Model: **02-9994** Tested By: **Mike Wilkinson**
 S/N: **None**

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8593EM SA	3624A00159	03/23/2007	03/23/2009	02111
EMCO 3115 Horn Antenna	9307-4085	03/17/2007	03/17/2009	00656
HP 8449B Preamp	3008A00301	12/13/2006	12/13/2008	2010
3M SITE CABLE 20GHZ	NA	03/06/2008	03/06/2010	SITED3M1
Cable 2' 40 GHz Astrolab	NA	01/15/2008	01/15/2010	AN03008
Cable 2' 40 GHz Astrolab	NA	01/15/2008	01/15/2010	AN03011
Andrews Hardline (25')	CKC 1012	04/23/2007	04/23/2009	P01012

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
INNCOM TXR*	INNCOM International	02-9994	None
Break Out Board	INNCOM International	02-9995	None

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Amplus	0299-120133U	

Test Conditions / Notes:

The TXR is installed directly on the Break-Out board and the Break-Out board is powered from the power supply. EUT is a Zigbee transceiver transmitting from 2405 MHz to 2480 MHz. EUT clocks are 32.768 kHz and 32 MHz. Highest frequency generated is 2500 MHz. All measurements made in the worst case position of vertical which was based on preliminary investigation of 3 orthogonals. Frequency range investigated: Carrier. Measurements are field strength at 3 meters and corrected for measurement antenna, cables and preamp as follows: 1.5 dB for 2405 MHz. 1.7 dB for 2440 MHz. 2.0 dB for 2480 MHz. EUT antenna is 1 dBi. The temperature was 23.3°C and the humidity was 43%. RBW = 5MHz w/VBW 3X RBW.

Frequency MHz	Gain of Antenna in dBi	Numeric Gain	F/S in dBuV/m	F/S in V/m	Test Distance in meters	Power in Watts	Power in dBm	15.247 Limit in dBm	PASS / FAIL
2405	1.00	1.26	86.9	0.0221	3.00	0.00011671	-9.3	36	PASS
2440	1.00	1.26	92.2	0.0407	3.00	0.00039548	-4.0	36	PASS
2480	1.00	1.26	93.8	0.0490	3.00	0.00057164	-2.4	36	PASS

FCC 15.247(d) OATS RADIATED SPURIOUS EMISSIONS

Test Setup Photos



Test Data Sheets

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 209 966-5240

Customer: **INNCOM International**
 Specification: **FCC 15.247 (d) / 15.209 / 15.205**
 Work Order #: **88333** Date: **8/13/2008**
 Test Type: **Maximized Emissions** Time: **10:47:07**
 Equipment: **INNCOM TXR** Sequence#: **2**
 Manufacturer: **INNCOM International** Tested By: **Mike Wilkinson**
 Model: **02-9994**
 S/N: **None**

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4446A SA	US44300407	01/03/2007	01/03/2009	02660
Chase CBL6111C Bilog	2456	12/30/2006	12/30/2008	01991
EMCO 3115 Horn Antenna	9307-4085	03/17/2007	03/17/2009	00656
EMCO Loop Antenna	1074	05/01/2007	05/01/2009	00226
HP 8447D Preamp	1937A02604	03/14/2007	03/14/2009	00099
HP 8449B Preamp	3008A00301	12/13/2006	12/13/2008	2010
3M SITE CABLE 20GHZ	NA	03/06/2008	03/06/2010	SITED3M1
Cable 2' 40 GHz Astrolab	NA	01/15/2008	01/15/2010	AN03008
Cable 2' 40 GHz Astrolab	NA	01/15/2008	01/15/2010	AN03011
Andrews Hardline (25')	CKC 1012	04/23/2007	04/23/2009	P01012

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
INNCOM TXR*	INNCOM International	02-9994	None
Break Out Board	INNCOM International	02-9995	None

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Amplus	0299-120133U	

Test Conditions / Notes:

The TXR is installed directly on the Break-Out board and the Break-Out board is powered from the power supply. EUT is a Zigbee transceiver transmitting from 2405 MHz to 2480 MHz. EUT clocks are 32.768 kHz and 32 MHz. Highest frequency generated is 2500 MHz. Frequency range investigated: 30 kHz to 25000 MHz. The temperature was 23.3°C and the humidity was 43%. RBW= 9 kHz 9kHz to 30 MHz, 120 kHz 30 to 1000 MHz, 1 MHz above 1000 MHz VBW= 3 x RBW.

Transducer Legend:

T1=AMP AN00099	T2=Amp HF - AN02010
T3=ANT AN01991 25-1000MHz	T4=ANT AN00656 900MHz-18.5GHz
T5=CAB-SITED3M1 9k - 20G	T6=CAB-AN03008-40GHZ-2FT
T7=CAB-AN03011-40GHZ-2FT	T8=Cable P01012

#	Freq MHz	Rdng dB μ V	Reading listed by margin.				Test Distance: 3 Meters				
			T1 T5	T2 T6	T3 T7	T4 T8	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	318.825M	35.6	+0.0	-33.5	+0.0	+35.7	+0.0	52.9	54.0	-1.1	Vert
		Ave	+9.4	+0.7	+0.7	+4.3			MID CH		
^	318.830M	45.2	+0.0	-33.5	+0.0	+35.7	+0.0	62.5	54.0	+8.5	Vert
			+9.4	+0.7	+0.7	+4.3			MID CH		
3	7216.730M	35.2	+0.0	-33.3	+0.0	+35.6	+0.0	52.7	54.0	-1.3	Vert
		Ave	+9.5	+0.7	+0.7	+4.3			LOW CH		
^	7216.730M	45.2	+0.0	-33.3	+0.0	+35.6	+0.0	62.7	54.0	+8.7	Vert
			+9.5	+0.7	+0.7	+4.3			LOW CH		
5	4959.100M	40.7	+0.0	-34.0	+0.0	+32.7	+0.0	51.4	54.0	-2.6	Horiz
		Ave	+7.3	+0.6	+0.6	+3.5			HIGH CH		
^	4959.100M	48.2	+0.0	-34.0	+0.0	+32.7	+0.0	58.9	54.0	+4.9	Horiz
			+7.3	+0.6	+0.6	+3.5			HIGH CH		
7	7438.750M	34.0	+0.0	-33.9	+0.0	+35.8	+0.0	50.9	54.0	-3.1	Vert
		Ave	+9.3	+0.7	+0.7	+4.3			HIGH CH		
^	7438.750M	44.8	+0.0	-33.9	+0.0	+35.8	+0.0	61.7	54.0	+7.7	Vert
			+9.3	+0.7	+0.7	+4.3			HIGH CH		
9	4879.238M	39.2	+0.0	-34.1	+0.0	+32.6	+0.0	49.8	54.0	-4.2	Horiz
		Ave	+7.4	+0.6	+0.6	+3.5			MID CH		
^	4879.238M	50.0	+0.0	-34.1	+0.0	+32.6	+0.0	60.6	54.0	+6.6	Horiz
			+7.4	+0.6	+0.6	+3.5			MID CH		
11	7318.825M	32.2	+0.0	-33.5	+0.0	+35.7	+0.0	49.5	54.0	-4.5	Horiz
		Ave	+9.4	+0.7	+0.7	+4.3			MID CH		
^	7318.825M	42.6	+0.0	-33.5	+0.0	+35.7	+0.0	59.9	54.0	+5.9	Horiz
			+9.4	+0.7	+0.7	+4.3			MID CH		
13	7438.500M	32.2	+0.0	-33.9	+0.0	+35.8	+0.0	49.1	54.0	-4.9	Horiz
		Ave	+9.3	+0.7	+0.7	+4.3			HIGH CH		
^	7438.500M	42.7	+0.0	-33.9	+0.0	+35.8	+0.0	59.6	54.0	+5.6	Horiz
			+9.3	+0.7	+0.7	+4.3			HIGH CH		
15	7216.580M	30.7	+0.0	-33.3	+0.0	+35.6	+0.0	48.2	54.0	-5.8	Horiz
		Ave	+9.5	+0.7	+0.7	+4.3			LOW CH		
^	7216.580M	42.9	+0.0	-33.3	+0.0	+35.6	+0.0	60.4	54.0	+6.4	Horiz
			+9.5	+0.7	+0.7	+4.3			LOW CH		
17	4959.080M	37.4	+0.0	-34.0	+0.0	+32.7	+0.0	48.0	54.0	-6.0	Vert
		Ave	+7.3	+0.6	+0.6	+3.5			HIGH CH		
^	4959.080M	45.8	+0.0	-34.0	+0.0	+32.7	+0.0	56.5	54.0	+2.5	Vert
			+7.3	+0.6	+0.6	+3.5			HIGH CH		
19	4811.325M	36.9	+0.0	-33.9	+0.0	+32.5	+0.0	47.5	54.0	-6.5	Horiz
		Ave	+7.4	+0.6	+0.6	+3.4			LOW CH		
^	4811.325M	46.3	+0.0	-33.9	+0.0	+32.5	+0.0	56.9	54.0	+2.9	Horiz
			+7.4	+0.6	+0.6	+3.4			LOW CH		

21	4878.975M	34.6	+0.0	-34.1	+0.0	+32.6	+0.0	45.2	54.0	-8.8	Vert
	Ave		+7.4	+0.6	+0.6	+3.5			MID CH		
^	4878.975M	46.5	+0.0	-34.1	+0.0	+32.6	+0.0	57.1	54.0	+3.1	Vert
		+7.4	+0.6	+0.6	+0.6	+3.5			MID CH		
23	31.996M	37.6	-27.2	+0.0	+18.0	+0.0	+0.0	29.3	40.0	-10.7	Vert
		+0.4	+0.1	+0.1	+0.1	+0.3			MID CH		
24	320.016M	44.7	-26.5	+0.0	+14.0	+0.0	+0.0	34.9	46.0	-11.1	Vert
		+1.5	+0.2	+0.2	+0.2	+0.8			LOW CH		
25	4811.080M	31.2	+0.0	-33.9	+0.0	+32.5	+0.0	41.8	54.0	-12.2	Vert
	Ave	+7.4	+0.6	+0.6	+0.6	+3.4			LOW CH		
^	4811.080M	45.9	+0.0	-33.9	+0.0	+32.5	+0.0	56.5	54.0	+2.5	Vert
		+7.4	+0.6	+0.6	+0.6	+3.4			LOW CH		
27	159.996M	45.6	-26.9	+0.0	+10.7	+0.0	+0.0	31.1	43.5	-12.4	Vert
		+1.0	+0.1	+0.1	+0.1	+0.5			MID CH		
28	544.030M	38.4	-27.9	+0.0	+18.9	+0.0	+0.0	32.8	46.0	-13.2	Vert
		+2.0	+0.2	+0.2	+0.2	+1.0			LOW CH		
29	544.013M	37.7	-27.9	+0.0	+18.9	+0.0	+0.0	32.1	46.0	-13.9	Vert
		+2.0	+0.2	+0.2	+0.2	+1.0			MID CH		
30	544.016M	37.6	-27.9	+0.0	+18.9	+0.0	+0.0	32.0	46.0	-14.0	Vert
		+2.0	+0.2	+0.2	+0.2	+1.0			HIGH CH		
31	352.000M	40.5	-26.7	+0.0	+14.8	+0.0	+0.0	31.5	46.0	-14.5	Vert
		+1.6	+0.2	+0.2	+0.2	+0.9			MID CH		
32	480.012M	37.9	-27.6	+0.0	+17.8	+0.0	+0.0	31.4	46.0	-14.6	Vert
		+1.9	+0.2	+0.2	+0.2	+1.0			HIGH CH		
33	320.007M	40.2	-26.5	+0.0	+14.0	+0.0	+0.0	30.4	46.0	-15.6	Horiz
		+1.5	+0.2	+0.2	+0.2	+0.8			MID CH		
34	352.028M	38.9	-26.7	+0.0	+14.8	+0.0	+0.0	29.9	46.0	-16.1	Horiz
		+1.6	+0.2	+0.2	+0.2	+0.9			HIGH CH		
35	720.018M	32.5	-27.8	+0.0	+21.0	+0.0	+0.0	29.7	46.0	-16.3	Vert
		+2.3	+0.2	+0.2	+0.3	+1.2			HIGH CH		
36	192.014M	42.8	-26.7	+0.0	+9.1	+0.0	+0.0	27.2	43.5	-16.3	Vert
		+1.2	+0.1	+0.1	+0.1	+0.6			LOW CH		
37	191.996M	42.4	-26.7	+0.0	+9.1	+0.0	+0.0	26.8	43.5	-16.7	Vert
		+1.2	+0.1	+0.1	+0.1	+0.6			MID CH		
38	319.977M	39.0	-26.5	+0.0	+14.0	+0.0	+0.0	29.2	46.0	-16.8	Horiz
		+1.5	+0.2	+0.2	+0.2	+0.8			HIGH CH		
39	72.000M	42.4	-27.1	+0.0	+6.5	+0.0	+0.0	23.1	40.0	-16.9	Vert
		+0.7	+0.1	+0.1	+0.1	+0.4			HIGH CH		
40	352.016M	37.9	-26.7	+0.0	+14.8	+0.0	+0.0	28.9	46.0	-17.1	Vert
		+1.6	+0.2	+0.2	+0.2	+0.9			LOW CH		
41	192.000M	41.7	-26.7	+0.0	+9.1	+0.0	+0.0	26.1	43.5	-17.4	Vert
		+1.2	+0.1	+0.1	+0.1	+0.6			HIGH CH		
42	512.003M	34.6	-27.7	+0.0	+18.4	+0.0	+0.0	28.6	46.0	-17.4	Vert
		+1.9	+0.2	+0.2	+0.2	+1.0			LOW CH		
43	320.000M	38.3	-26.5	+0.0	+14.0	+0.0	+0.0	28.5	46.0	-17.5	Vert
		+1.5	+0.2	+0.2	+0.2	+0.8			MID CH		
44	360.000M	37.2	-26.8	+0.0	+15.0	+0.0	+0.0	28.3	46.0	-17.7	Vert
		+1.6	+0.2	+0.2	+0.2	+0.9			MID CH		

45	255.996M	39.5	-26.4 +1.3	+0.0 +0.2	+12.6 +0.2	+0.0 +0.7	+0.0 +1.1	28.1	46.0 MID CH	-17.9	Vert
46	576.013M	32.8	-28.0 +2.1	+0.0 +0.2	+19.4 +0.2	+0.0 +0.2	+0.0 +1.1	27.8	46.0 MID CH	-18.2	Vert
47	320.028M	37.2	-26.5 +1.5	+0.0 +0.2	+14.0 +0.2	+0.0 +0.8	+0.0 +1.1	27.4	46.0 LOW CH	-18.6	Horiz
48	576.030M	32.2	-28.0 +2.1	+0.0 +0.2	+19.4 +0.2	+0.0 +0.2	+0.0 +1.1	27.2	46.0 LOW CH	-18.8	Vert
49	256.014M	38.1	-26.4 +1.3	+0.0 +0.2	+12.6 +0.2	+0.0 +0.7	+0.0 +0.7	26.7	46.0 LOW CH	-19.3	Vert
50	71.996M	39.9	-27.1 +0.7	+0.0 +0.1	+6.5 +0.1	+0.0 +0.1	+0.0 +0.4	20.6	40.0 MID CH	-19.4	Vert
51	359.993M	34.8	-26.8 +1.6	+0.0 +0.2	+15.0 +0.2	+0.0 +0.2	+0.0 +0.9	25.9	46.0 HIGH CH	-20.1	Horiz
52	760.018M	28.1	-27.7 +2.4	+0.0 +0.2	+21.4 +0.2	+0.0 +0.2	+0.0 +1.3	25.9	46.0 HIGH CH	-20.1	Vert
53	800.030M	27.6	-27.7 +2.4	+0.0 +0.2	+21.9 +0.2	+0.0 +0.2	+0.0 +1.3	25.9	46.0 LOW CH	-20.1	Vert
54	760.013M	28.0	-27.7 +2.4	+0.0 +0.2	+21.4 +0.2	+0.0 +0.2	+0.0 +1.3	25.8	46.0 MID CH	-20.2	Vert
55	352.000M	34.5	-26.7 +1.6	+0.0 +0.2	+14.8 +0.2	+0.0 +0.2	+0.0 +0.9	25.5	46.0 HIGH CH	-20.5	Vert
56	480.000M	31.9	-27.6 +1.9	+0.0 +0.2	+17.8 +0.2	+0.0 +0.2	+0.0 +1.0	25.4	46.0 MID CH	-20.6	Vert
57	672.018M	28.8	-27.9 +2.2	+0.0 +0.2	+20.4 +0.3	+0.0 +0.3	+0.0 +1.2	25.2	46.0 HIGH CH	-20.8	Vert
58	512.012M	30.9	-27.7 +1.9	+0.0 +0.2	+18.4 +0.2	+0.0 +0.2	+0.0 +1.0	24.9	46.0 HIGH CH	-21.1	Vert
59	479.998M	31.4	-27.6 +1.9	+0.0 +0.2	+17.8 +0.2	+0.0 +0.2	+0.0 +1.0	24.9	46.0 MID CH	-21.1	Horiz
60	416.000M	33.0	-27.4 +1.7	+0.0 +0.2	+16.3 +0.2	+0.0 +0.2	+0.0 +0.9	24.9	46.0 MID CH	-21.1	Vert
61	608.030M	29.5	-28.0 +2.1	+0.0 +0.2	+19.8 +0.2	+0.0 +0.2	+0.0 +1.1	24.9	46.0 LOW CH	-21.1	Vert
62	448.016M	32.0	-27.5 +1.8	+0.0 +0.2	+17.1 +0.2	+0.0 +0.2	+0.0 +1.0	24.8	46.0 LOW CH	-21.2	Vert
63	479.993M	31.2	-27.6 +1.9	+0.0 +0.2	+17.8 +0.2	+0.0 +0.2	+0.0 +1.0	24.7	46.0 HIGH CH	-21.3	Horiz
64	399.993M	33.0	-27.3 +1.7	+0.0 +0.2	+15.9 +0.2	+0.0 +0.2	+0.0 +0.9	24.6	46.0 HIGH CH	-21.4	Horiz
65	576.016M	29.5	-28.0 +2.1	+0.0 +0.2	+19.4 +0.2	+0.0 +0.2	+0.0 +1.1	24.5	46.0 HIGH CH	-21.5	Vert
66	360.000M	33.3	-26.8 +1.6	+0.0 +0.2	+15.0 +0.2	+0.0 +0.2	+0.0 +0.9	24.4	46.0 HIGH CH	-21.6	Vert
67	448.000M	31.3	-27.5 +1.8	+0.0 +0.2	+17.1 +0.2	+0.0 +0.2	+0.0 +1.0	24.1	46.0 HIGH CH	-21.9	Vert
68	640.030M	28.2	-27.9 +2.2	+0.0 +0.2	+20.1 +0.2	+0.0 +0.2	+0.0 +1.1	24.1	46.0 LOW CH	-21.9	Vert

69	288.028M	34.5	-26.4 +1.4	+0.0 +0.2	+13.2 +0.2	+0.0 +0.8	+0.0 +0.6	23.9	46.0 HIGH CH	-22.1	Horiz
70	192.004M	36.6	-26.7 +1.2	+0.0 +0.1	+9.1 +0.1	+0.0 +0.6	+0.0 +0.8	21.0	43.5 HIGH CH	-22.5	Horiz
71	288.000M	34.0	-26.4 +1.4	+0.0 +0.2	+13.2 +0.2	+0.0 +0.8	+0.0 +0.6	23.4	46.0 HIGH CH	-22.6	Vert
72	287.996M	33.9	-26.4 +1.4	+0.0 +0.2	+13.2 +0.2	+0.0 +0.8	+0.0 +0.6	23.3	46.0 MID CH	-22.7	Vert
73	256.000M	34.6	-26.4 +1.3	+0.0 +0.2	+12.6 +0.2	+0.0 +0.7	+0.0 +0.6	23.2	46.0 HIGH CH	-22.8	Vert
74	192.028M	35.2	-26.7 +1.2	+0.0 +0.1	+9.1 +0.1	+0.0 +0.6	+0.0 +0.6	19.6	43.5 LOW CH	-23.9	Horiz
75	224.014M	35.2	-26.5 +1.3	+0.0 +0.1	+10.8 +0.1	+0.0 +0.7	+0.0 +0.7	21.7	46.0 LOW CH	-24.3	Vert
76	351.998M	30.4	-26.7 +1.6	+0.0 +0.2	+14.8 +0.2	+0.0 +0.9	+0.0 +0.9	21.4	46.0 MID CH	-24.6	Horiz
77	384.016M	29.9	-27.1 +1.7	+0.0 +0.2	+15.5 +0.2	+0.0 +0.9	+0.0 +0.9	21.3	46.0 LOW CH	-24.7	Vert
78	288.007M	31.7	-26.4 +1.4	+0.0 +0.2	+13.2 +0.2	+0.0 +0.8	+0.0 +0.8	21.1	46.0 MID CH	-24.9	Horiz
79	223.996M	34.5	-26.5 +1.3	+0.0 +0.1	+10.8 +0.1	+0.0 +0.7	+0.0 +0.7	21.0	46.0 MID CH	-25.0	Vert
80	263.998M	31.8	-26.4 +1.4	+0.0 +0.2	+12.8 +0.2	+0.0 +0.7	+0.0 +0.7	20.7	46.0 MID CH	-25.3	Horiz
81	224.000M	34.1	-26.5 +1.3	+0.0 +0.1	+10.8 +0.1	+0.0 +0.7	+0.0 +0.7	20.6	46.0 HIGH CH	-25.4	Vert
82	528.003M	26.4	-27.8 +2.0	+0.0 +0.2	+18.6 +0.2	+0.0 +0.9	+0.0 +1.0	20.6	46.0 LOW CH	-25.4	Vert
83	320.000M	30.3	-26.5 +1.5	+0.0 +0.2	+14.0 +0.2	+0.0 +0.8	+0.0 +0.8	20.5	46.0 HIGH CH	-25.5	Vert
84	288.016M	30.9	-26.4 +1.4	+0.0 +0.2	+13.2 +0.2	+0.0 +0.8	+0.0 +0.8	20.3	46.0 LOW CH	-25.7	Vert
85	208.014M	32.3	-26.6 +1.2	+0.0 +0.1	+9.7 +0.1	+0.0 +0.6	+0.0 +0.6	17.4	43.5 LOW CH	-26.1	Vert
86	416.000M	27.5	-27.4 +1.7	+0.0 +0.2	+16.3 +0.2	+0.0 +0.9	+0.0 +0.9	19.4	46.0 HIGH CH	-26.6	Vert
87	288.028M	30.0	-26.4 +1.4	+0.0 +0.2	+13.2 +0.2	+0.0 +0.8	+0.0 +0.8	19.4	46.0 LOW CH	-26.6	Horiz
88	304.028M	28.7	-26.4 +1.4	+0.0 +0.2	+13.5 +0.2	+0.0 +0.8	+0.0 +0.8	18.4	46.0 HIGH CH	-27.6	Horiz
89	303.996M	28.7	-26.4 +1.4	+0.0 +0.2	+13.5 +0.2	+0.0 +0.8	+0.0 +0.8	18.4	46.0 MID CH	-27.6	Vert
90	311.996M	28.2	-26.5 +1.5	+0.0 +0.2	+13.7 +0.2	+0.0 +0.8	+0.0 +0.8	18.1	46.0 MID CH	-27.9	Vert
91	264.004M	29.1	-26.4 +1.4	+0.0 +0.2	+12.8 +0.2	+0.0 +0.7	+0.0 +0.7	18.0	46.0 HIGH CH	-28.0	Horiz
92	191.998M	31.1	-26.7 +1.2	+0.0 +0.1	+9.1 +0.1	+0.0 +0.6	+0.0 +0.6	15.5	43.5 MID CH	-28.0	Horiz

93	200.014M	31.0	-26.7	+0.0	+9.1	+0.0	+0.0	15.4	43.5	-28.1	Vert
			+1.2	+0.1	+0.1	+0.6				LOW CH	
94	207.996M	29.8	-26.6	+0.0	+9.7	+0.0	+0.0	14.9	43.5	-28.6	Vert
			+1.2	+0.1	+0.1	+0.6				MID CH	
95	272.014M	27.3	-26.4	+0.0	+12.9	+0.0	+0.0	16.4	46.0	-29.6	Vert
			+1.4	+0.2	+0.2	+0.8				LOW CH	

FCC PART 15.247(d) BAND EDGE

Test Conditions

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 209 966-5240

Customer: **INNCON International**
 Specification: **15.247(d) Bandedge Compliance**
 Work Order #: **88333**
 Test Type: **Maximized Emissions**
 Equipment: **INNCOM TXR**
 Manufacturer: INNCOM International
 Model: 02-9994
 S/N: None
 Tested By: Mike Wilkinson

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8593EM SA	3624A00159	03/23/2007	03/23/2009	02111
EMCO 3115 Horn Antenna	9307-4085	03/17/2007	03/17/2009	00656
HP 8449B Preamp	3008A00301	12/13/2006	12/13/2008	2010
3M SITE CABLE 20GHZ	NA	03/06/2008	03/06/2010	SITED3M1
Cable 2' 40 GHz Astrolab	NA	01/15/2008	01/15/2010	AN03008
Cable 2' 40 GHz Astrolab	NA	01/15/2008	01/15/2010	AN03011
Andrews Hardline (25')	CKC 1012	04/23/2007	04/23/2009	P01012

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
INNCOM TXR*	INNCOM International	02-9994	None
Break Out Board	INNCOM International	02-9995	None

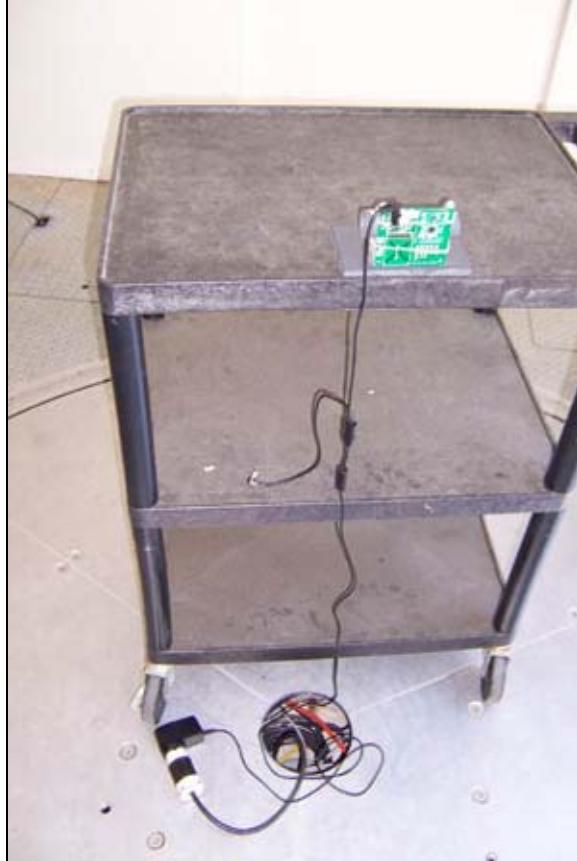
Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Amplus	0299-120133U	

Test Conditions / Notes:

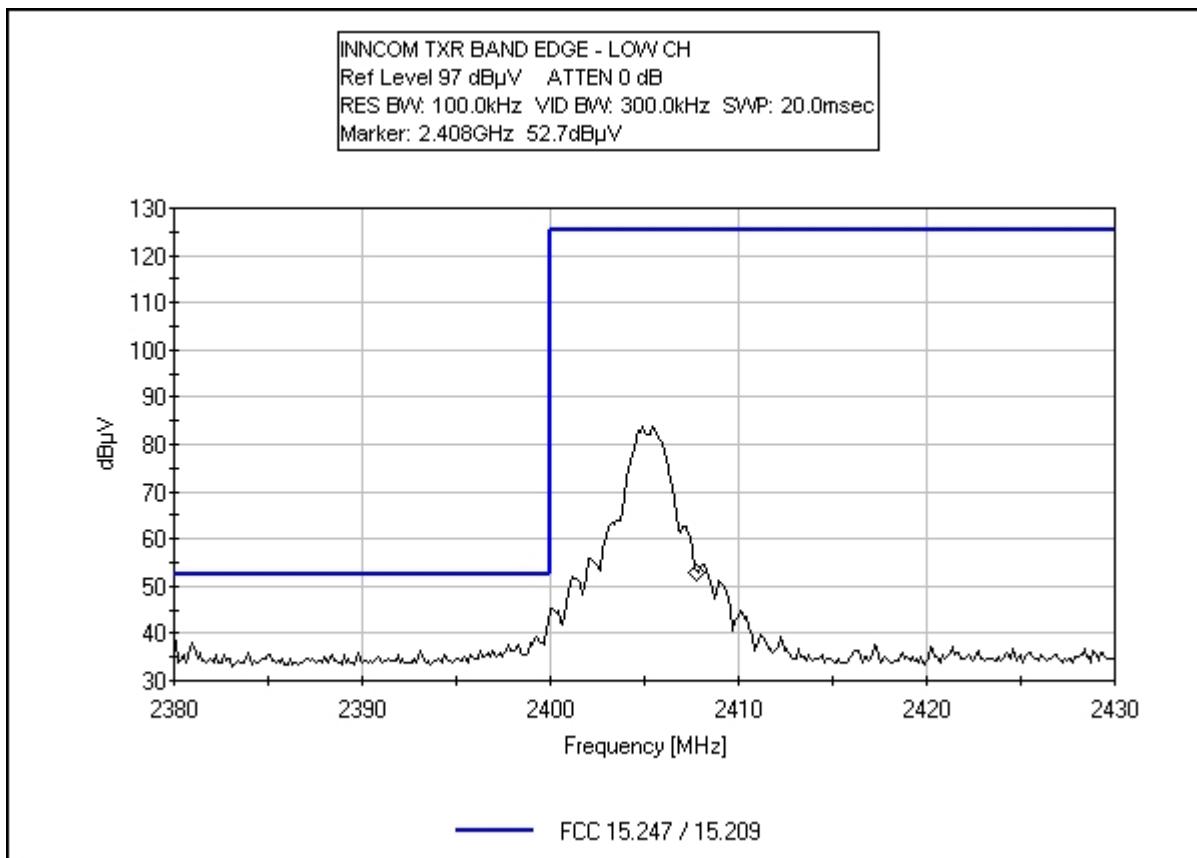
The TXR is installed directly on the Break-Out board and the Break-Out board is powered from the power supply. EUT is a Zigbee transceiver transmitting from 2405 MHz to 2480 MHz. EUT clocks are 32.768 kHz and 32 MHz. Highest frequency generated is 2500 MHz. Frequency range investigated: Carrier. The temperature was 23.3°C and the humidity was 43%. Bandedge Compliance measurements made as radiated field strength at 3 meters.

Test Setup Photos

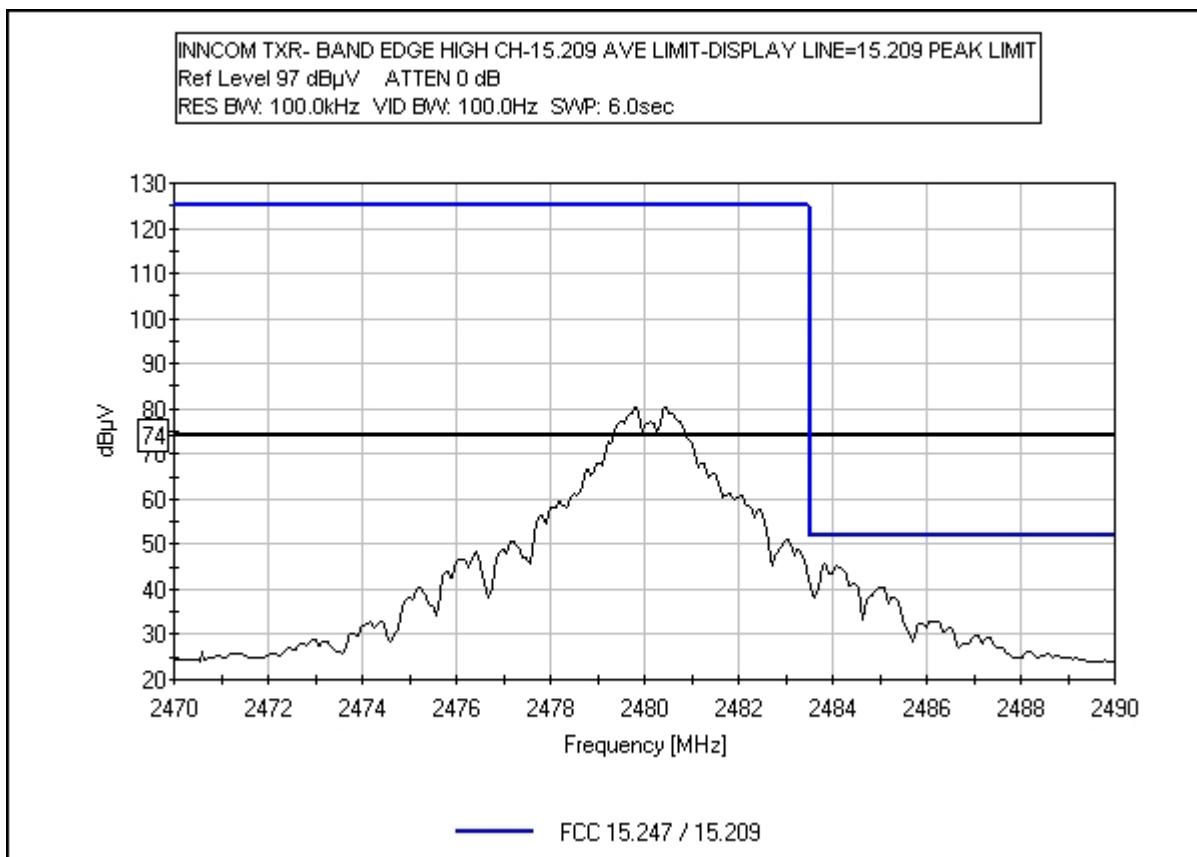


Test Plots

FCC 15.247(d) BAND EDGE LOW CHANNEL



FCC 15.247(d) BAND EDGE HIGH CHANNEL



FCC PART 15.247(e) PEAK POWER SPECTRAL DENSITY

Test Conditions

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 209 966-5240

Customer: **INNCON International**
 Specification: **15.247(e) SPECTRAL DENSITY**
 Work Order #: **88333**
 Test Type: **Maximized Emissions**
 Equipment: **INNCOM TXR**
 Manufacturer: INNCOM International
 Model: 02-9994
 S/N: None
 Tested By: Mike Wilkinson

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8593EM SA	3624A00159	03/23/2007	03/23/2009	02111
EMCO 3115 Horn Antenna	9307-4085	03/17/2007	03/17/2009	00656
HP 8449B Preamp	3008A00301	12/13/2006	12/13/2008	2010
3M SITE CABLE 20GHZ	NA	03/06/2008	03/06/2010	SITED3M1
Cable 2' 40 GHz Astrolab	NA	01/15/2008	01/15/2010	AN03008
Cable 2' 40 GHz Astrolab	NA	01/15/2008	01/15/2010	AN03011
Andrews Hardline (25')	CKC 1012	04/23/2007	04/23/2009	P01012

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
INNCOM TXR*	INNCOM International	02-9994	None
Break Out Board	INNCOM International	02-9995	None

Support Devices:

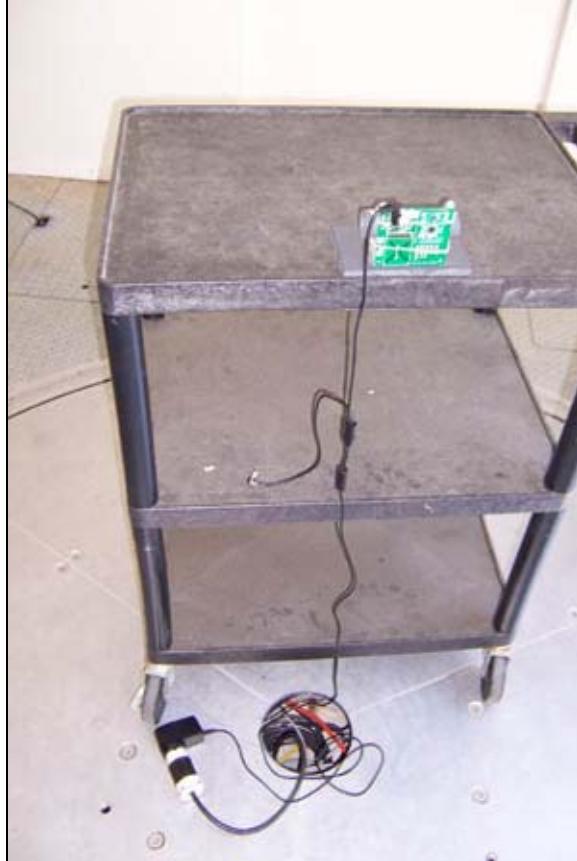
Function	Manufacturer	Model #	S/N
Power Supply	Amplus	0299-120133U	

Test Conditions / Notes:

The TXR is installed directly on the Break-Out board and the Break-Out board is powered from the power supply. EUT is a Zigbee transceiver transmitting from 2405 MHz to 2480 MHz EUT clocks are 32.768 kHz and 32 MHz Highest frequency generated is 2500 MHz. All measurements made in the worst case position of vertical which was based on preliminary investigation of 3 orthogonals. Frequency range investigated: Carrier. Measurements are field strength at 3 meters and corrected for measurement antenna, cables and preamp as follows: 1.5 dB for 2405 MHz. 1.7 dB for 2440 MHz. 2.0 dB for 2480 MHz. EUT antenna is 1 dBi. The temperature was 23.3° C and the humidity was 43%. RBW= 3 kHz VBW= 10 kHz.

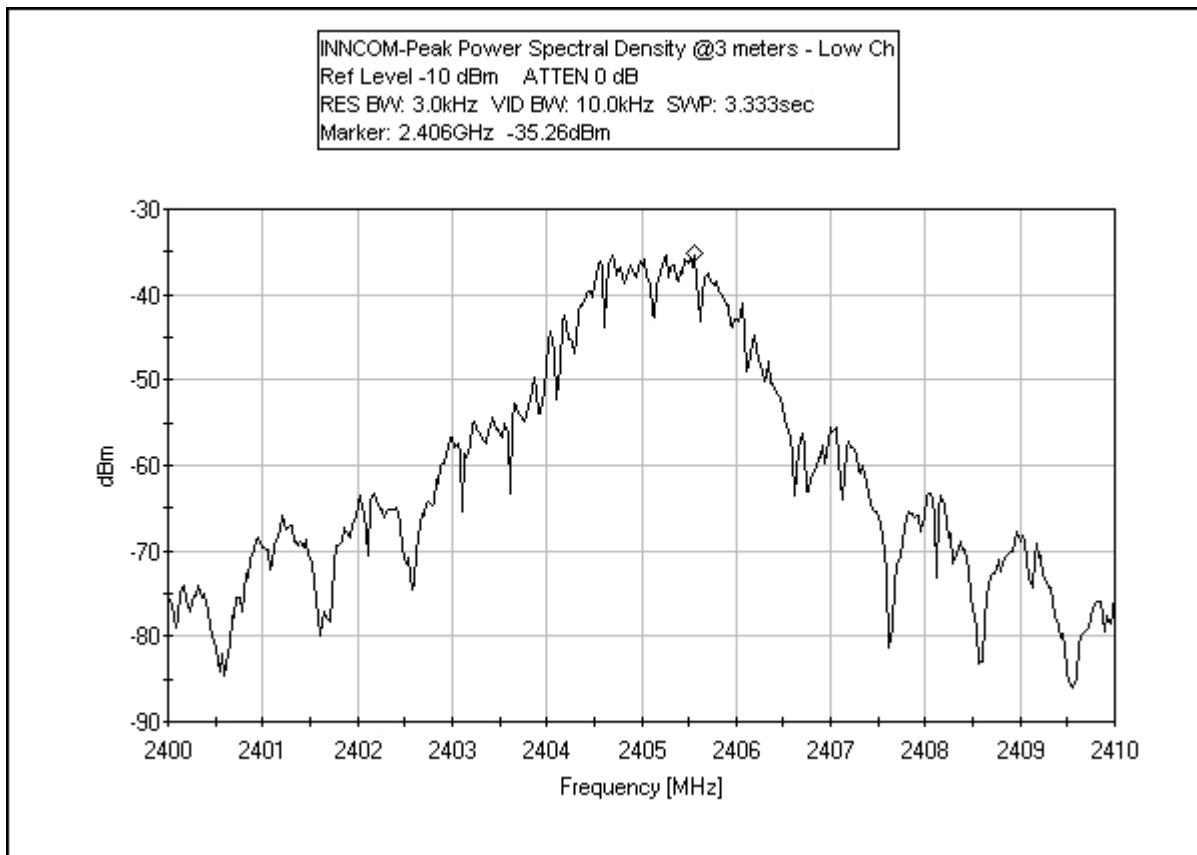
Frequency MHz	Gain of Antenna in dBi	Numeric Gain	F/S in dBuV/m	F/S in V/m	Test Distance in meters	Power in Watts	Power in dBm	15.247 Limit in dBm	PASS / FAIL
2405	1.00	1.26	93.2	0.0457	3.00	0.00049788	-3.0	8	PASS
2440	1.00	1.26	99.2	0.0912	3.00	0.00198208	3.0	8	PASS
2480	1.00	1.26	99.9	0.0989	3.00	0.00232874	3.7	8	PASS

Test Setup Photos

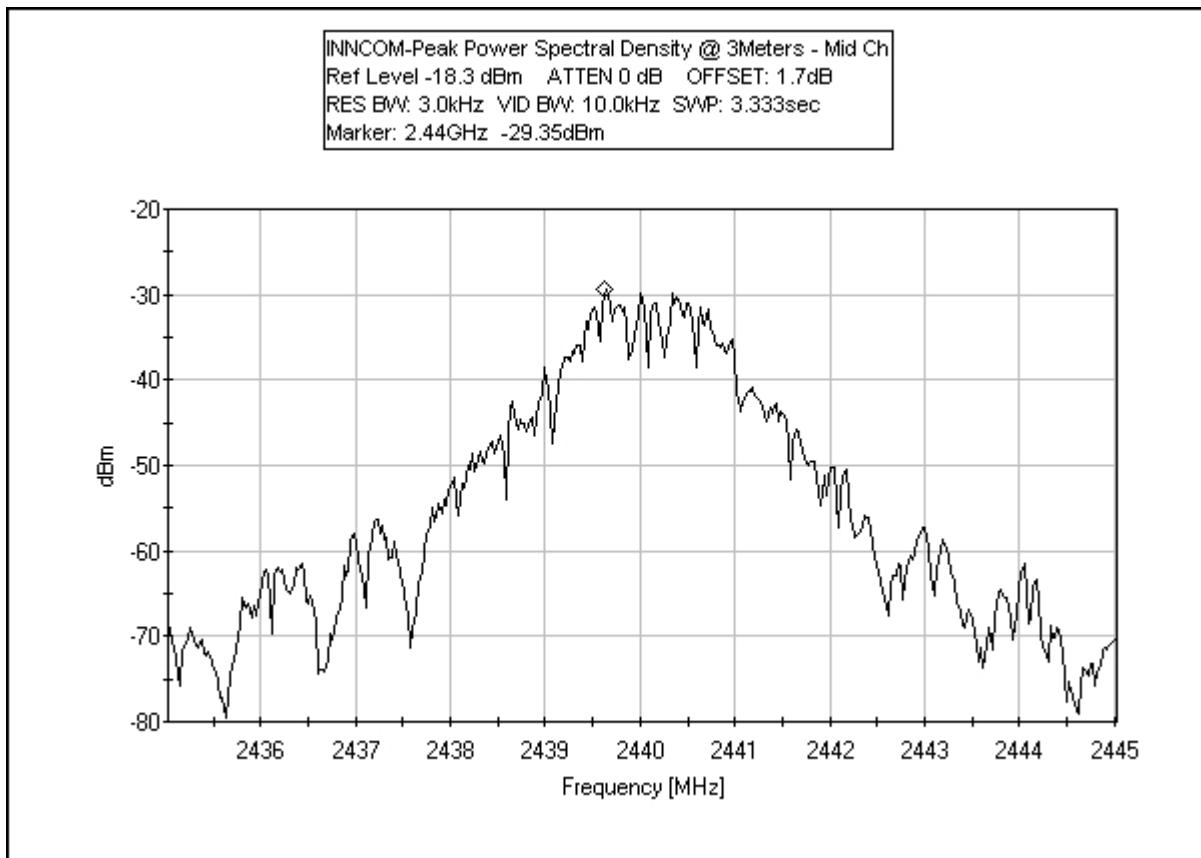


Test Plots

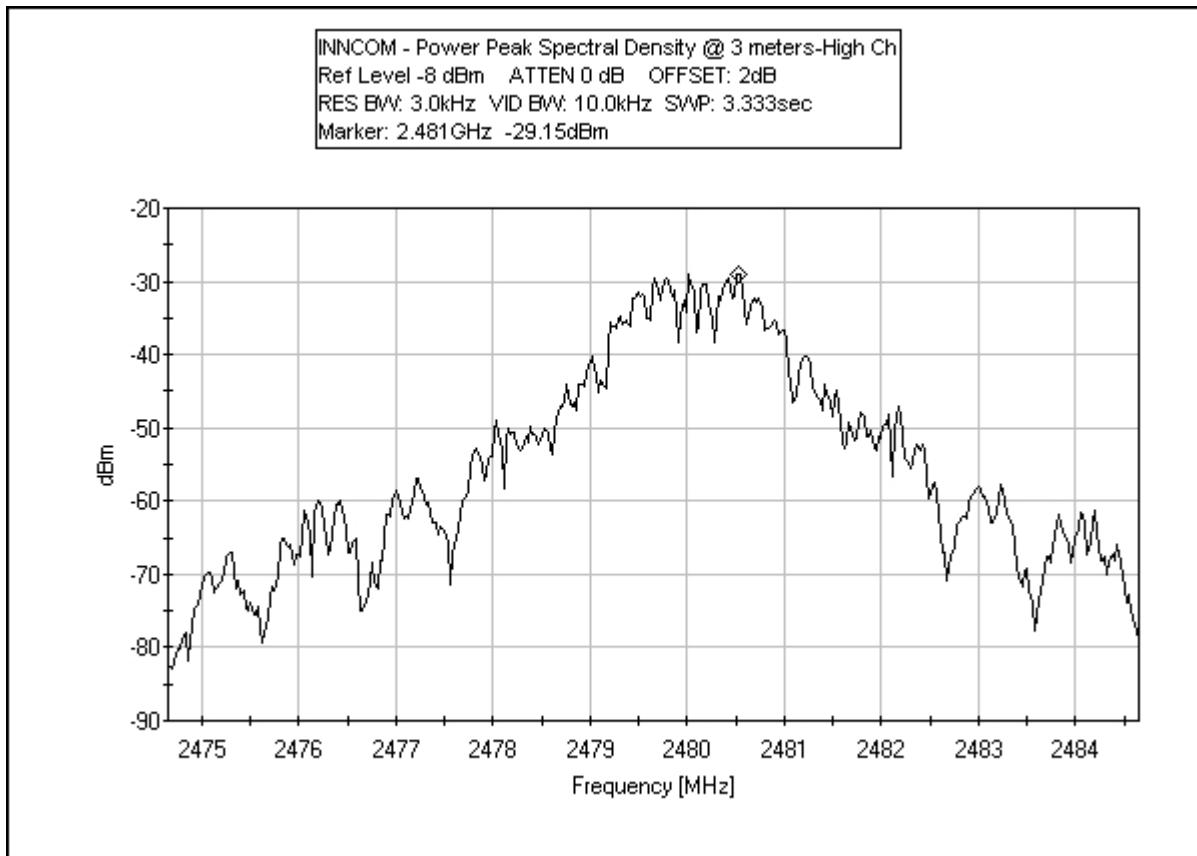
FCC 15.247(e) PEAK POWER SPECTRAL DENSITY LOW CHANNEL



FCC 15.247(e) PEAK POWER SPECTRAL DENSITY MID CHANNEL



FCC 15.247(e) PEAK POWER SPECTRAL DENSITY HIGH CHANNEL



RSS-210 99% BANDWIDTH

Test Conditions

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 209 966-5240

Customer: **INNCON International**
 Specification: **RSS 210 99% OBW**
 Work Order #: **88333** Date: **8/4/2008**
 Test Type: **Maximized Emissions**
 Equipment: **INNCOM TXR**
 Manufacturer: INNCOM International
 Model: 02-9994
 S/N: None
 Tested By: Mike Wilkinson

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8593EM SA	3624A00159	03/23/2007	03/23/2009	02111
EMCO 3115 Horn Antenna	9307-4085	03/17/2007	03/17/2009	00656
HP 8449B Preamp	3008A00301	12/13/2006	12/13/2008	2010
3M SITE CABLE 20GHz	NA	03/06/2008	03/06/2010	SITED3M1
Cable 2' 40 GHz Astrolab	NA	01/15/2008	01/15/2010	AN03008
Cable 2' 40 GHz Astrolab	NA	01/15/2008	01/15/2010	AN03011
Andrews Hardline (25')	CKC 1012	04/23/2007	04/23/2009	P01012

Equipment Under Test (= EUT):*

Function	Manufacturer	Model #	S/N
INNCOM TXR*	INNCOM International	02-9994	None
Break Out Board	INNCOM International	02-9995	None

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Amplus	0299-120133U	

Test Conditions / Notes:

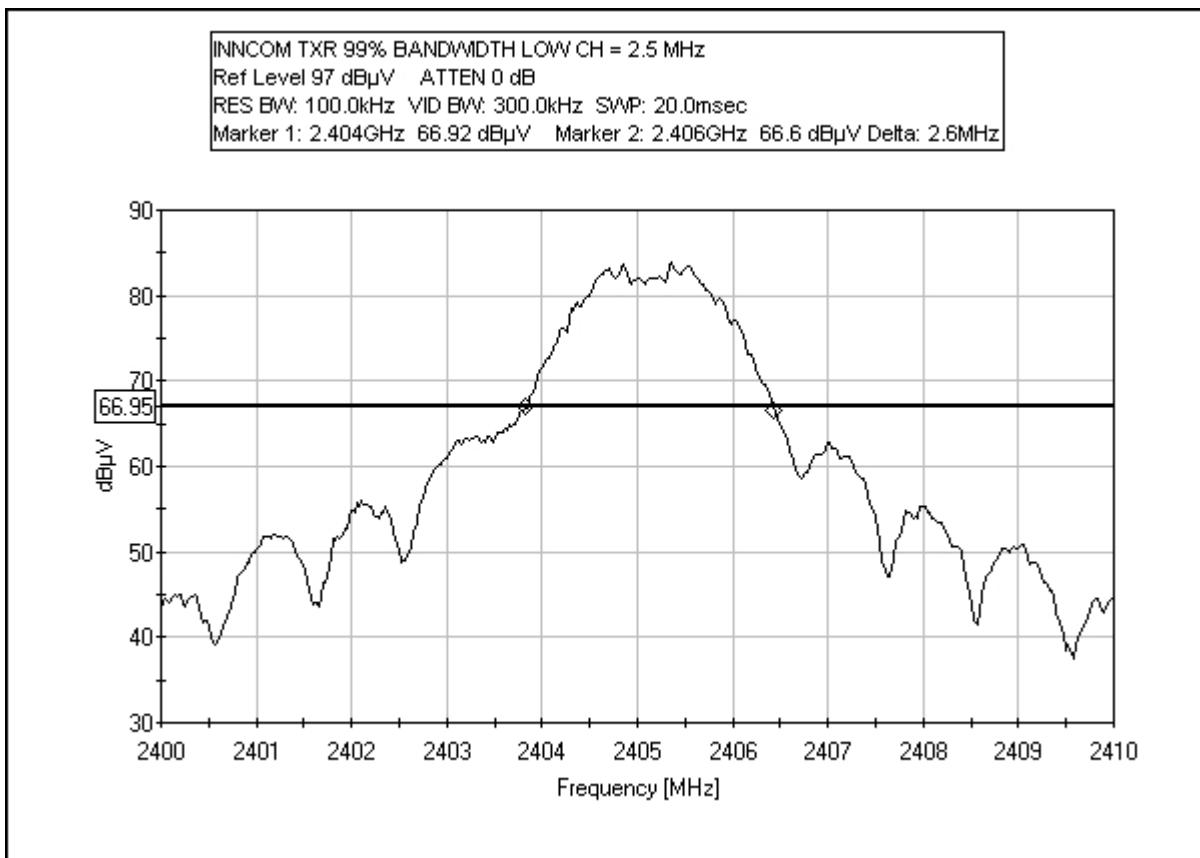
The TXR is installed directly on the Break-Out board and the Break-Out board is powered from the power supply. EUT is a Zigbee transceiver transmitting from 2405 MHz to 2480 MHz. EUT clocks are 32.768 kHz and 32 MHz. Highest frequency generated is 2500 MHz. Frequency range investigated: Carrier. The temperature was 23.3°C and the humidity was 43%. OBW measurements made as radiated field strength at 3 meters.

Test Setup Photos

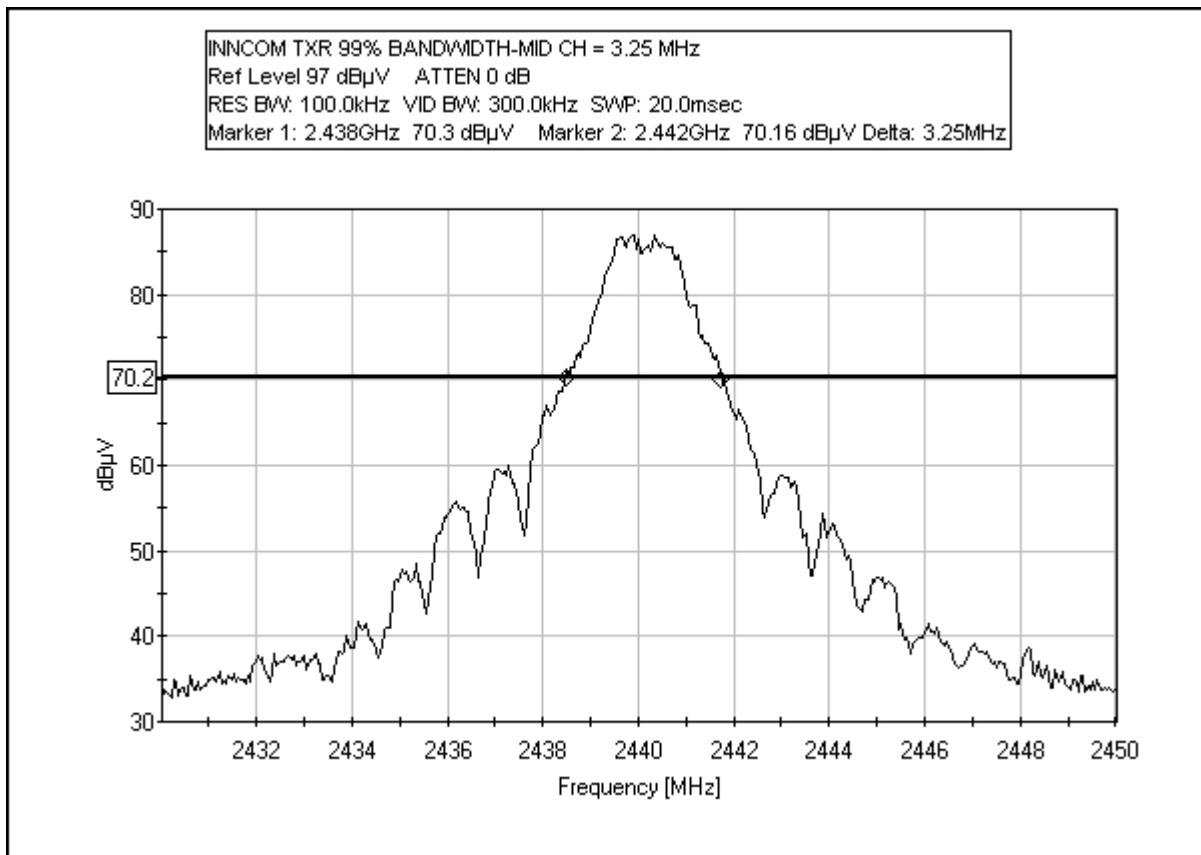


Test Plots

RSS-210 99% BANDWIDTH LOW CHANNEL



RSS-210 99% BANDWIDTH MID CHANNEL



RSS-210 99% BANDWIDTH HIGH CHANNEL

