Report On

FCC Part 15 B and Industry Canada Testing of the
Modelabs Manufacture
TH01M Mobile Handset

COMMERCIAL-IN-CONFIDENCE

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IC ID: IC 7712A TH01-M

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Modelabs Maufacture
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June 2008

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DATED 26 June 2008

ENGINEERING STATEMENT

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported testing was carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47: Part 15 B. The sample tested was found to comply with the requirements defined in the applied rules.

Test Engineers;

A Hubbard P Harrison A Guy

Product Service

CONTENTS

SECTION 1

REPORT SUMMARY

FCC Part 15 B and Industry Canada Testing of the
Modelabs Manufacture
TH01M Mobile Handset

1.1 INTRODUCTION

The information contained in this report is intended to show verification of the Modelabs Manufacture TH01M Mobile Handset to the requirements of FCC CFR 47 Part 15B: 2006 and Industry Canada RSS-Gen: 2005.

Objective	To perform Electromagnetic Compatibility (EMC) Qualification Approval Testing to determine the Equipment Under Test's (EUT's) compliance with the Test Specification, for the series of tests carried out.
Manufacturer	Modelabs Manufacture
Part Number(s)	091358009804000
IMEI Number(s)	004401750000677
Software Version	0259000505020000
Hardware Version	PIR
Number of Samples Tested	1
Test Specification/Issue/Date	FCC CFR 47 Part 15B: 2006 and Industry Canada RSS-Gen: 2005
Incoming Release Date	Declaration of Build Status 02 June 2008
Disposal Reference Number Date	Held Pending Disposal Not Applicable Not applicable
Start of Test	27 May 2008
Finish of Test	12 June 2008
Name of Engineer(s)	A Guy P Harrison A Hubbard

1.2 BRIEF SUMMARY OF RESULTS

A brief summary of results for each configuration, in accordance with FCC CFR 47 Part 15B: 2006 and Industry Canada RSS-Gen: 2005, is shown below.

Configuration 1 - Mobile Handset							
Section	Spec Clause		Test Description	Mode	Mod State	Result	Base Standard
	FCC	Industry Canada					
2.1	15.109	6.0	Radiated Emissions (Enclosure Port)	2.4 GHz Idle	0	Pass	FCC CFR 47 Part 15: 2006
				850 MHz Idle	0	Pass	
				1900 MHz Idle	0	Pass	
	15.107	7.2.2	Conducted Emissions (AC Power Port)	2.4 GHz Idle		N/A	FCC CFR 47 Part 15: 2006
				850 MHz Idle		N/A	
				1900 MHz Idle		N/A	

Configuration 2 - Mobile Handset & AC Adaptor							
Section	Spec Clause		Test Description	Mode	Mod State	Result	Base Standard
	FCC	Industry Canada					
	15.109	6.0	Radiated Emissions (Enclosure Port)	2.4 GHz Idle		N/A	FCC CFR 47 Part 15: 2006
				850 MHz Idle		N/A	
				1900 MHz Idle		N/A	
2.2	15.107	7.2.2	Conducted Emissions (AC Power Port)	2.4 GHz Idle	0	Pass	FCC CFR 47 Part 15: 2006
				850 MHz Idle	0	Pass	
				1900 MHz Idle	0	Pass	

N/A – Not Applicable

Product Service

1.3 DECLARATION OF BUILD STATUS

MAIN EUT			
MANUFACTURING DESCRIPTION	Cellular mobile phone manufacturer		
MANUFACTURER	Modelabs Manufacture		
TYPE	Cellular mobile phone		
PART NUMBER	091358009804000		
SERIAL NUMBER			
HARDWARE VERSION	PIR		
SOFTWARE VERSION	0259000505020000		
TRANSMITTER OPERATING RANGE	Part22(824.2-848.8 Mhz) Part24(1850.2-1909.8 Mhz)		
RECEIVER OPERATING RANGE	Part22(869.2-893.8 Mhz) Part24(1930.2-1989.8 Mhz)		
COUNTRY OF ORIGIN	France		
INTERMEDIATE FREQUENCIES	Direct conversion		
ITU DESIGNATION OF EMISSION	300KGXW		
HIGHEST INTERNALLY GENERATED FREQUENCY			
OUTPUT POWER (W or dBm)	32 dBm		
FCC ID	WCKTH01M		
INDUSTRY CANADA ID	IC 7712A TH01-M		
TECHNICAL DESCRIPTION (a brief description of the intended use and operation)	This product is the cellular mobile phone in 850/900/1800/1900 bands		
BATTERY/POWER SUPPLY			
MANUFACTURING DESCRIPTION	Batterie's Manufacturer		
MANUFACTURER	Xwoda		
TYPE	Lithium Ion		
PART NUMBER	TH01M-BAT		
VOLTAGE	3.7 V		
COUNTRY OF ORIGIN	China		
MODULES (if applicable)			
MANUFACTURING DESCRIPTION			
MANUFACTURER			
TYPE			
POWER			
FCC ID			
COUNTRY OF ORIGIN			
INDUSTRY CANADA ID			
EMISSION DESIGNATOR			
DHSS/FHSS/COMBINED OR OTHER			
ANCILLARIES (if applicable)			
MANUFACTURING DESCRIPTION			
MANUFACTURER			
TYPE			
PART NUMBER			
SERIAL NUMBER			
COUNTRY OF ORIGIN			

Signature

Date 2 June 2008

Declaration of Build Status Serial Number

1.4 PRODUCT INFORMATION

1.4.1 Technical Description

The Equipment Under Test (EUT) was a Modelabs Manufacture TH01M Mobile Handset as shown in the photograph below. A full technical description can be found in the Manufacturers documentation.

Equipment Under Test

1.4.2 Test Configuration

Configuration 1: Mobile Handset

The EUT was configured in accordance with FCC CFR 47 Part 15B: 2006 and Industry Canada RSS-Gen: 2005.

Configuration 2: Mobile Handset & AC Adaptor

The EUT was configured in accordance with FCC CFR 47 Part 15B: 2006 and Industry Canada RSS-Gen: 2005.

1.4.3 Modes of Operation

Modes of operation of each EUT during testing were as follows:

Mode 1 - 2.4GHz Idle

Mode 2 - 850 MHz Idle

Mode 3 - 1900 MHz Idle

Information on the specific test modes utilised are detailed in the test procedure for each individual test.

1.5 TEST CONDITIONS

For all tests the EUT was set up in accordance with the relevant test standard and to represent typical operating conditions. Tests were applied with the EUT situated in a shielded enclosure, test laboratories or an open test area as appropriate.

The EUT was powered from either 230V AC via an AC Adapter or internal battery as appropriate.

FCC Accreditation
90987 Octagon House, Fareham Test Laboratory

Industry Canada Accreditation
2932B-1 Octagon House, Fareham Test Laboratory

1.6 DEVIATIONS FROM THE STANDARD

No deviations from the applicable test standards or test plan were made during testing.

1.7 MODIFICATION RECORD

No modifications were made to the EUT during testing.

SECTION 2

TEST DETAILS

FCC Part 15 B and Industry Canada Testing of the
Modelabs Manufacture
TH01M Mobile Handset

2.1 RADIATED EMISSIONS (ENCLOSURE PORT)AV

2.1.1 Specification Reference

FCC CFR 47 Part 15B: 2006, Clause 15.109
Industry Canada RSS-Gen: 2005, Clause 6.0

2.1.2 Equipment Under Test

TH01M Mobile Handset, IMEI 004401750000677

2.1.3 Date of Test and Modification State

29 May and 12 June 2008 - Modification State 0

2.1.4 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.1.5 Test Method and Operating Modes

The test was applied in accordance with the test method requirements of FCC CFR 47 Part 15B: 2006 and Industry Canada RSS-Gen: 2005.

The test was performed with the EUT in the following configurations and modes of operation:

Configuration 1 - Mode 1
- Mode 2
- Mode 3

2.1.6 Environmental Conditions

	29 May 2008	12 June 2008
Ambient Temperature	17°C	19°C
Relative Humidity	53%	46%
Atmospheric Pressure	1008mbar	1017mbar

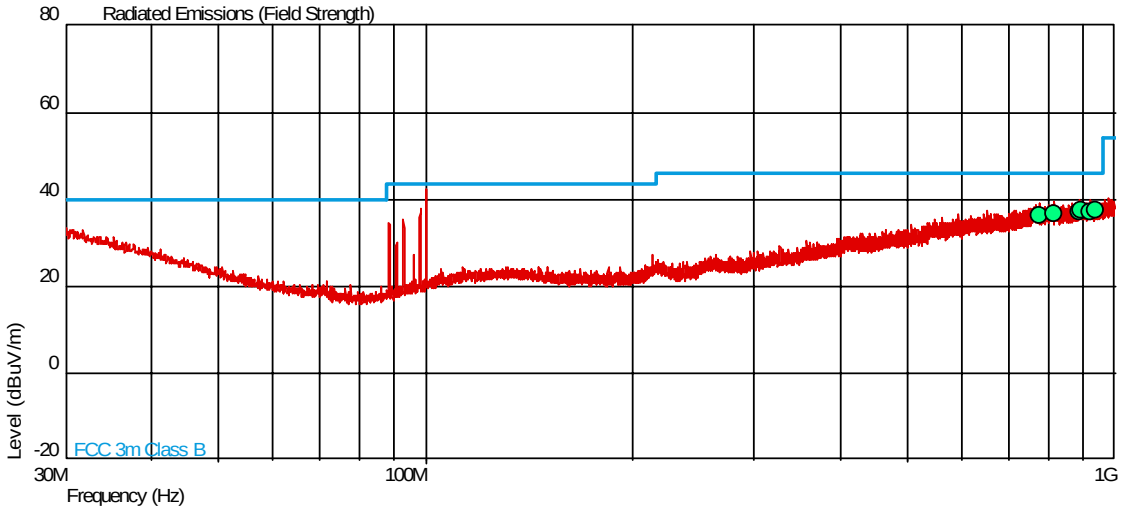
2.1.7 Test Results

For the period of test the EUT met the requirements of FCC CFR 47 Part 15B: 2006 and Industry Canada RSS-Gen: 2005 for Radiated Emissions (Enclosure Port).

The test results are shown below.

Configuration 1 - Mode 1

30MHz to 1GHz



The emissions over the frequncy range 85MHz to 100MHz were identified as ambeint emissions.

Frequency (MHz)	QP Level		QP Limit		QP Margin		Angle (Deg)	Height (m)	Polarity
	(dBuV/m)	(uV/m)	(dBuV/m)	(uV/m)	(dBuV/m)	(uV/m)			
777.723	36.3	65.3	46.0	200.0	-9.7	134.7	245	1.00	Horizontal
818.379	36.6	67.6	46.0	200.0	-9.4	132.4	351	1.00	Horizontal
886.732	37.2	72.4	46.0	200.0	-8.8	127.6	97	1.00	Vertical
895.648	37.3	73.3	46.0	200.0	-8.7	126.7	247	4.00	Horizontal
920.629	37.3	73.3	46.0	200.0	-8.7	126.7	91	1.00	Horizontal
940.477	37.3	73.3	46.0	200.0	-8.7	126.7	326	1.85	Vertical

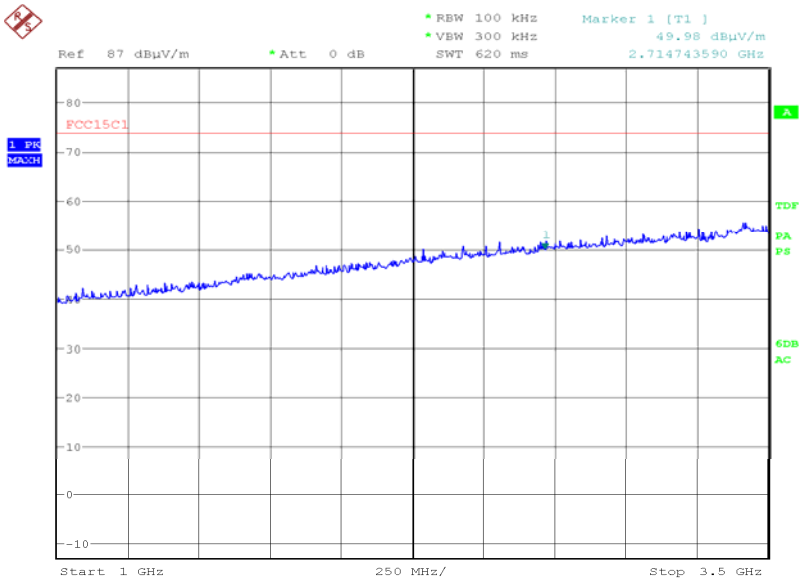
1GHz to 13GHz

No emissions were detected above the receiver noise floor.

Configuration 1 - Mode 1

1GHz to 3.5GHz

Vertical Polarity



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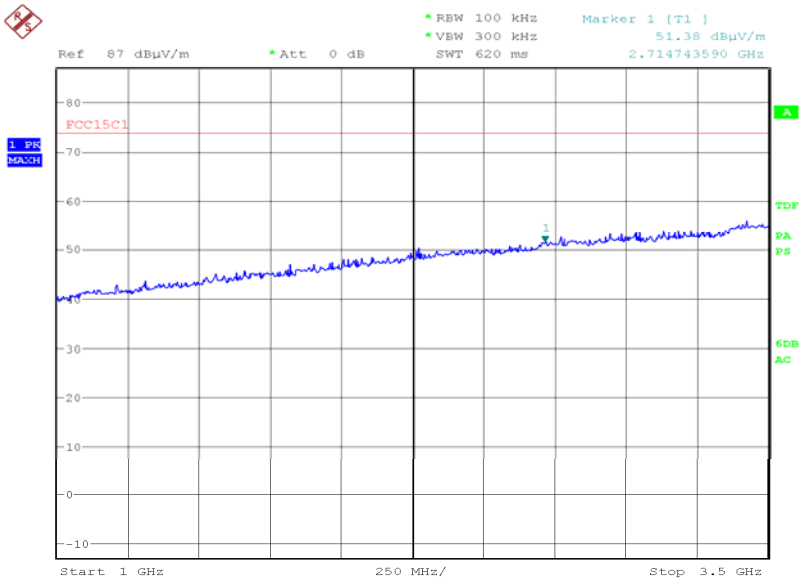

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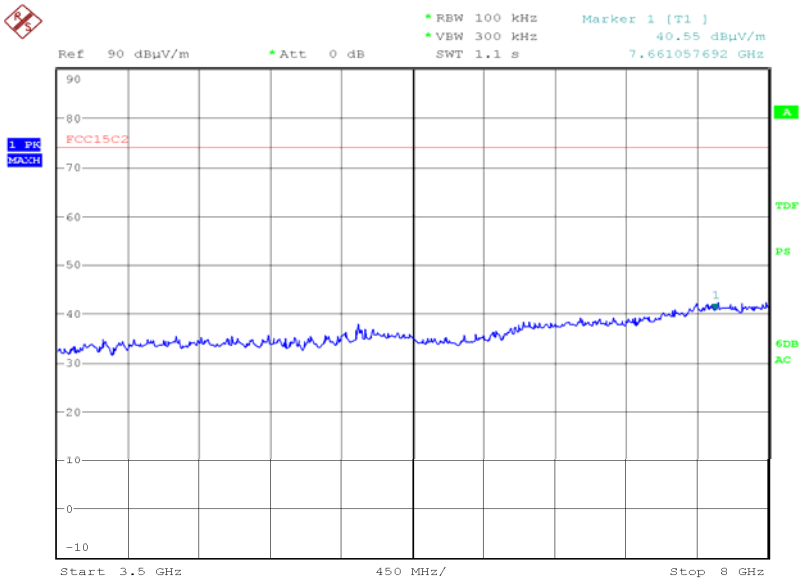
3.5GHz to 8GHz

Vertical Polarity



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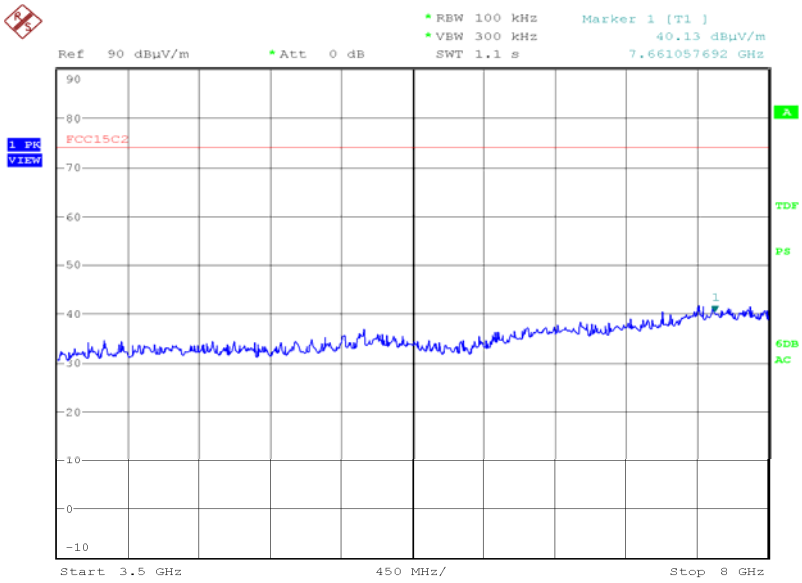
Horizontal Polarity



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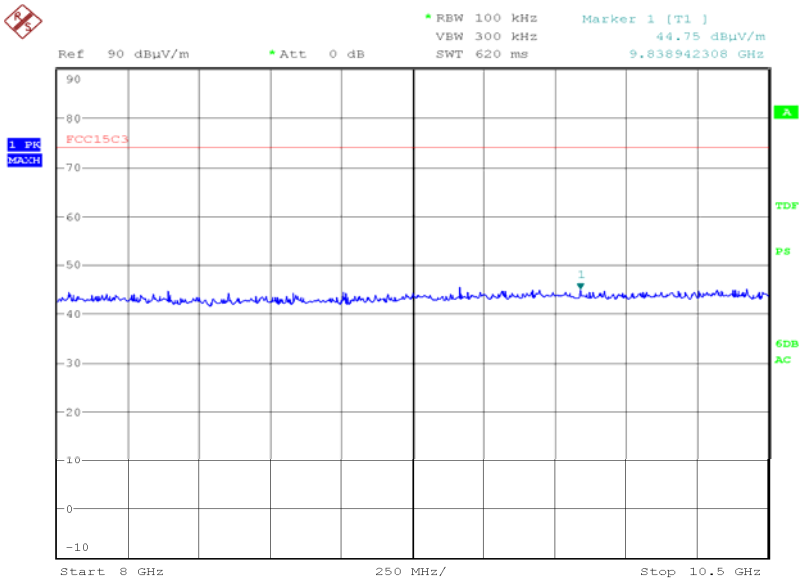
8GHz to 10.5GHz

Vertical Polarity



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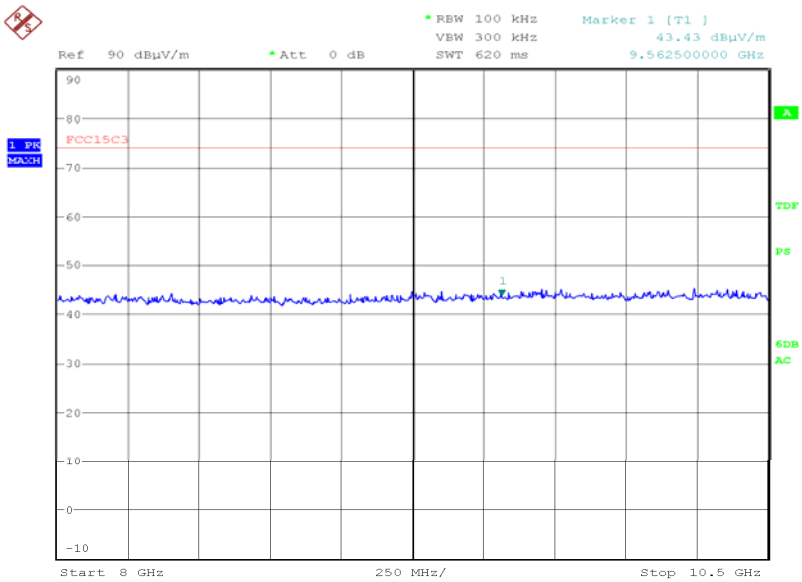

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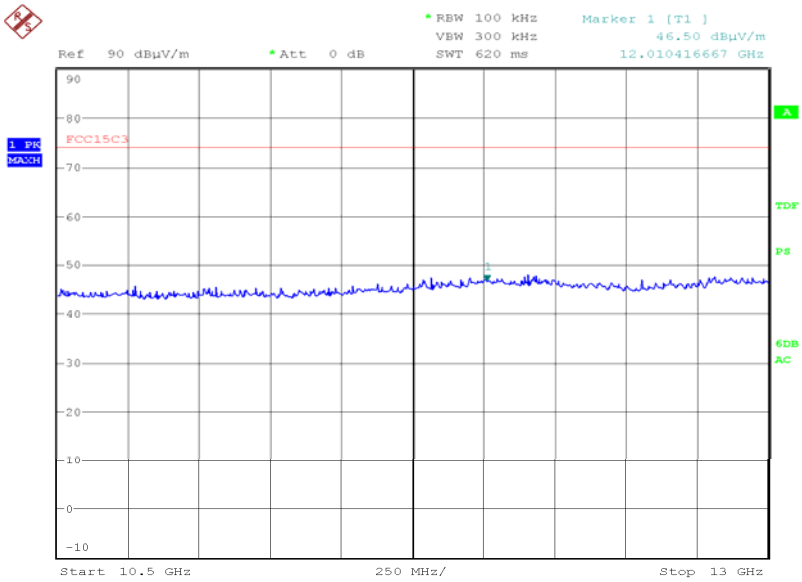
10.5GHz to 13GHz

Vertical Polarity



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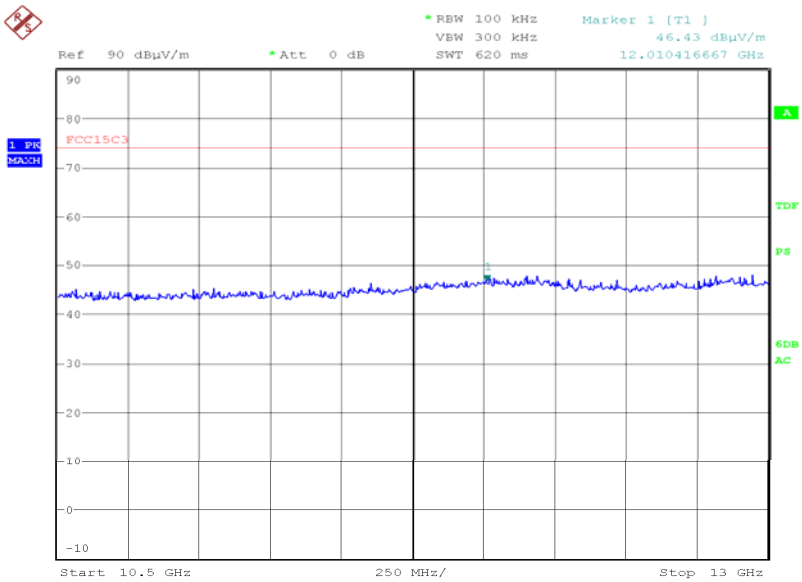
Horizontal Polarity



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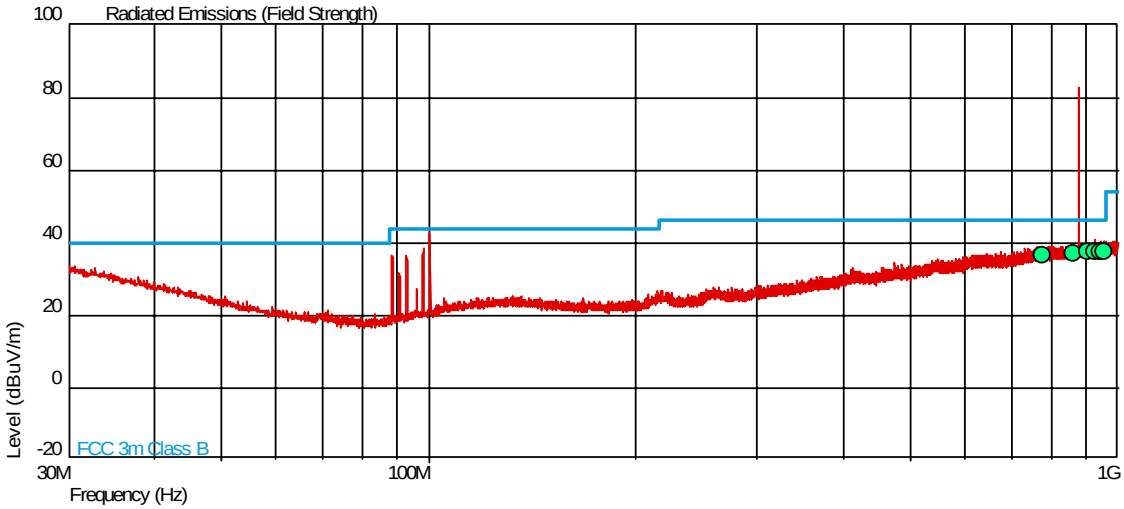
Note. Bandwidth reduced from Specification level to improve noise floor to limit margin.

Configuration 1 - Mode 2

30MHz to 1GHz



The emissions over the frequncy range 85MHz to 100MHz were identified as ambeint emissions.

Frequency (MHz)	QP Level		QP Limit		QP Margin		Angle (Deg)	Height (m)	Polarity
	(dBuV/m)	(uV/m)	(dBuV/m)	(uV/m)	(dBuV/m)	(uV/m)			
778.327	36.3	65.3	46.0	200.0	-9.7	134.7	169	1.00	Vertical
864.186	36.9	70.0	46.0	200.0	-9.1	130.0	97	1.00	Horizontal
904.081	37.3	73.3	46.0	200.0	-8.7	126.7	95	1.00	Horizontal
927.287	37.3	73.3	46.0	200.0	-8.7	126.7	73	3.62	Horizontal
943.212	37.4	74.1	46.0	200.0	-8.6	125.9	55	1.00	Horizontal
954.215	37.5	80.0	46.0	200.0	-8.5	120.0	98	1.00	Vertical

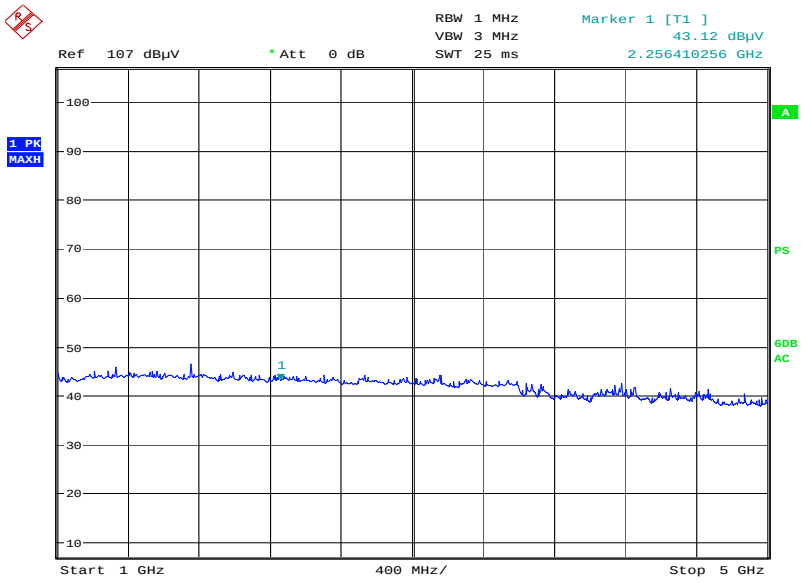
1GHz to 5GHz

No emissions were detected above the receiver noise floor.

Configuration 1 - Mode 2

1GHz to 5GHz

Vertical Polarity



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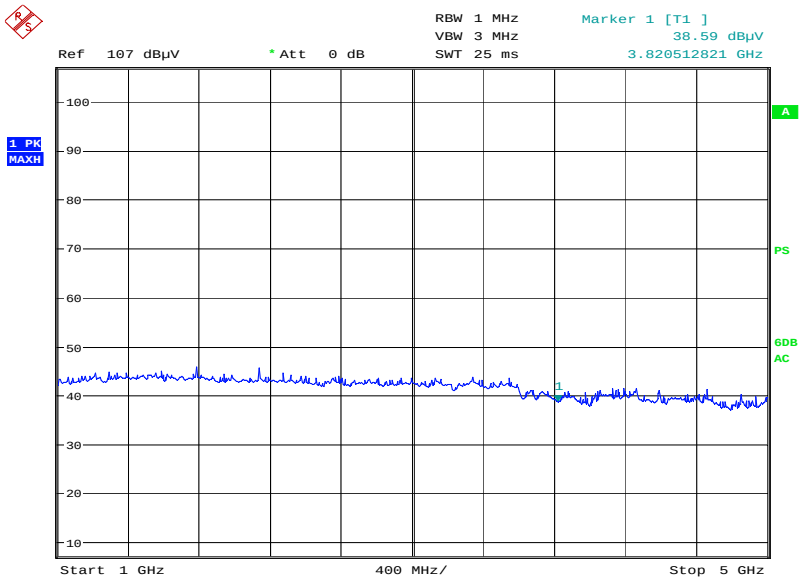
Horizontal Polarity



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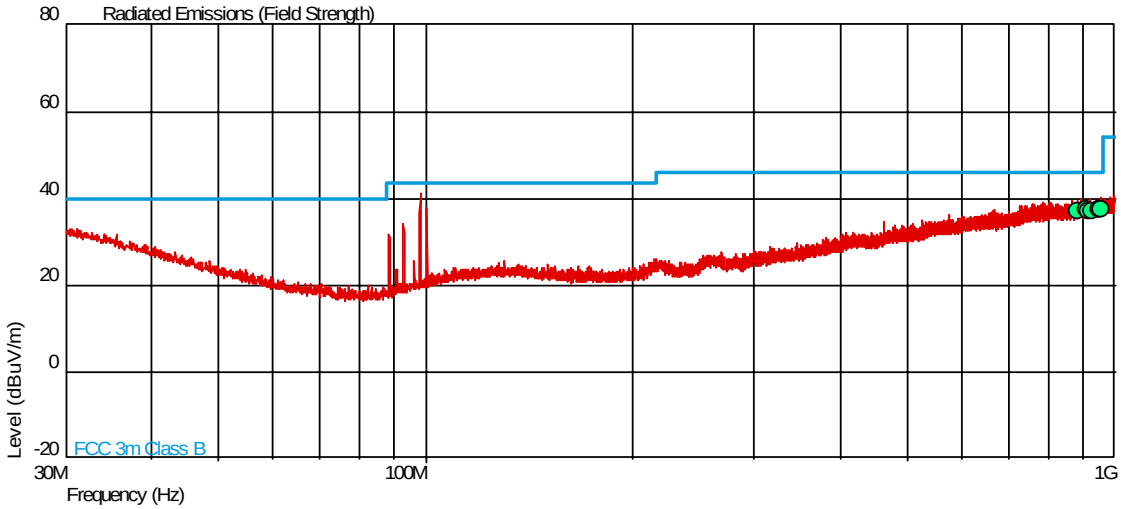
Configuration 1 - Mode 3

30MHz to 1GHz



The emissions over the frequncy range 85MHz to 100MHz were identified as ambeint emissions.

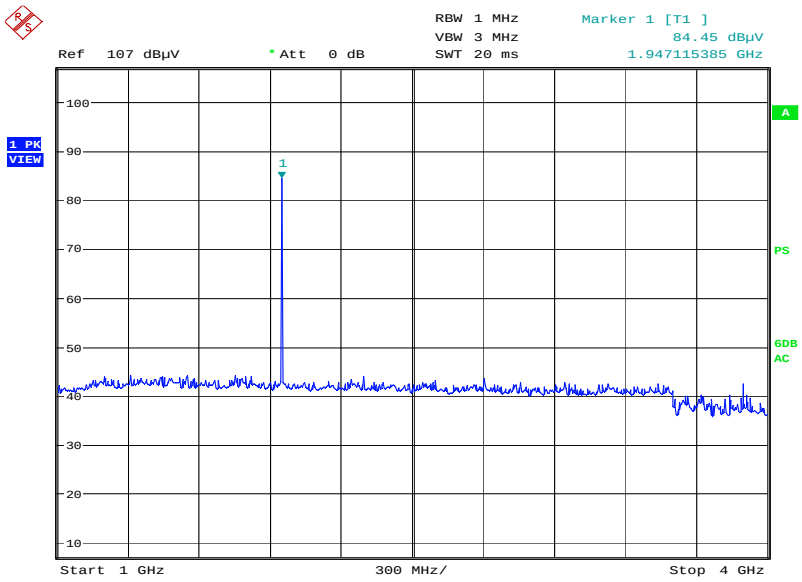
Frequency (MHz)	QP Level		QP Limit		QP Margin		Angle (Deg)	Height (m)	Polarity
	(dBuV/m)	(uV/m)	(dBuV/m)	(uV/m)	(dBuV/m)	(uV/m)			
884.641	37.1	71.6	46.0	200.0	-8.9	128.4	112	2.45	Horizontal
912.549	37.4	74.1	46.0	200.0	-8.6	125.9	134	1.00	Horizontal
918.736	37.3	73.3	46.0	200.0	-8.7	126.7	313	1.00	Vertical
924.434	37.3	73.3	46.0	200.0	-8.7	126.7	254	1.00	Vertical
947.687	37.4	74.1	46.0	200.0	-8.6	125.9	279	1.00	Vertical
955.712	37.6	75.9	46.0	200.0	-8.4	124.1	8	1.00	Vertical

1GHz to 10GHz

No emissions were detected above the receiver noise floor with the exception of the transmit frequency.

1GHz to 4GHz

Vertical Polarity



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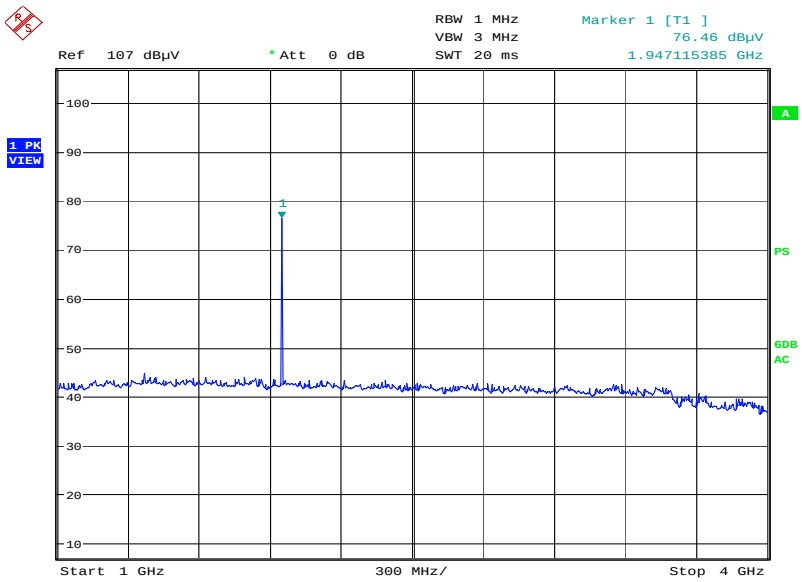
Horizontal Polarity



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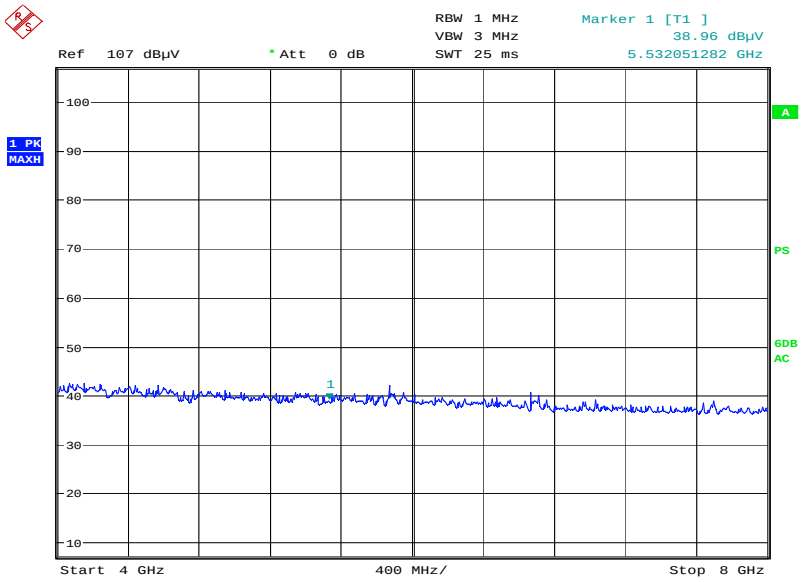
4GHz to 8GHz

Vertical Polarity



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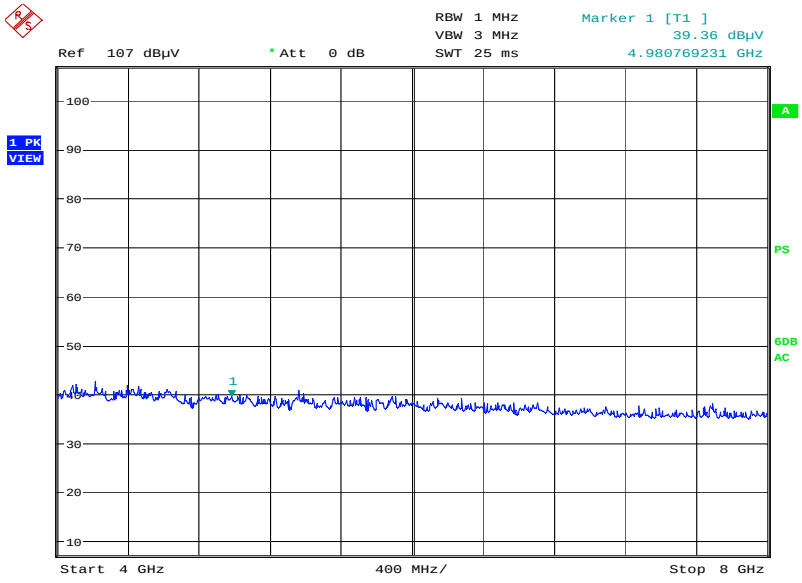

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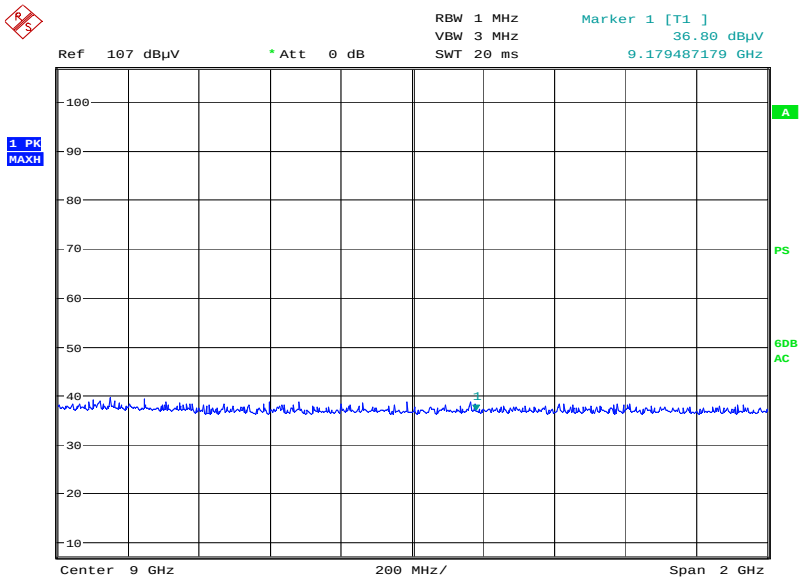
8GHz to 10GHz

Vertical Polarity



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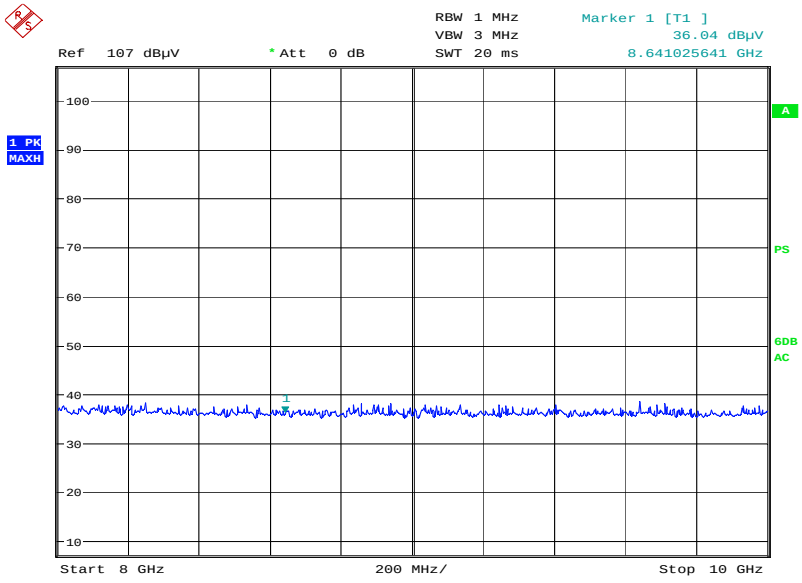
Horizontal Polarity



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2.2 CONDUCTED EMISSIONS (AC POWER PORT)

2.2.1 Specification Reference

FCC CFR 47 Part 15B: 2006, Clause 15.107
Industry Canada RSS-Gen: 2005, Clause 7.2.2

2.2.2 Equipment Under Test

TH01M Mobile Handset, IMEI 004401750000677

2.2.3 Date of Test and Modification State

27 May and 28 May 2008 - Modification State 0

2.2.4 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.2.5 Test Method and Operating Modes

The test was applied in accordance with the test method requirements of FCC CFR 47 Part 15B: 2006 and Industry Canada RSS-Gen: 2005.

The test was performed with the EUT in the following configurations and modes of operation:

Configuration 2 - Mode 1
- Mode 2
- Mode 3

2.2.6 Environmental Conditions

	27 May 2008	28 May 2008
Ambient Temperature	21.2°C	22.7°C
Relative Humidity	37%	41%
Atmospheric Pressure	1005mbar	995mbar

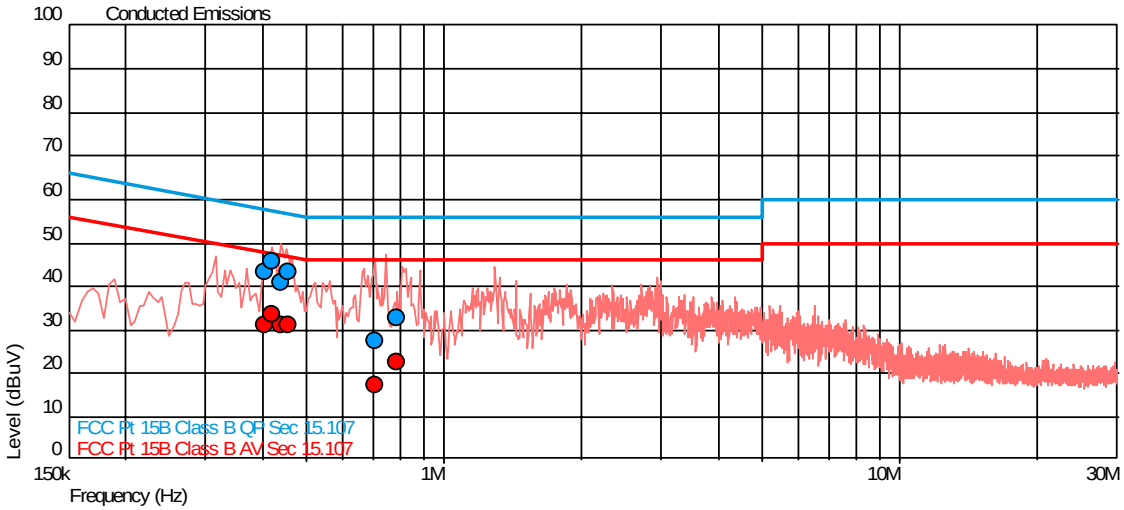
2.2.7 Test Results

For the period of test the EUT met the requirements of FCC CFR 47 Part 15B: 2006 and Industry Canada RSS-Gen: 2005 for Conducted Emissions (AC Power Port).

The test results are shown below.

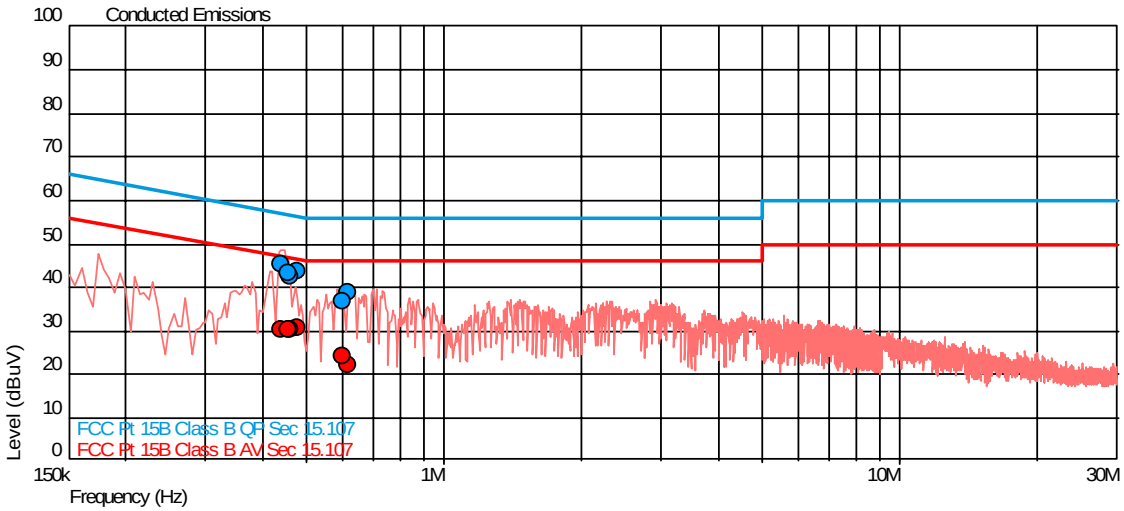
Configuration 2 - Mode 1

Live Line



Frequency (MHz)	QP Level (dBuV)	QP Limit (dBuV)	QP Margin (dBuV)	AV Level (dBuV)	AV Limit (dBuV)	AV Margin (dBuV)
0.406	43.4	57.7	-14.3	31.2	47.7	-16.6
0.418	45.8	57.5	-11.7	33.5	47.5	-14.0
0.439	40.8	57.1	-16.3	31.3	47.1	-15.8
0.454	43.3	56.8	-13.5	31.1	46.8	-15.7
0.706	27.3	56.0	-28.7	17.2	46.0	-28.8
0.788	32.9	56.0	-23.1	22.5	46.0	-23.5

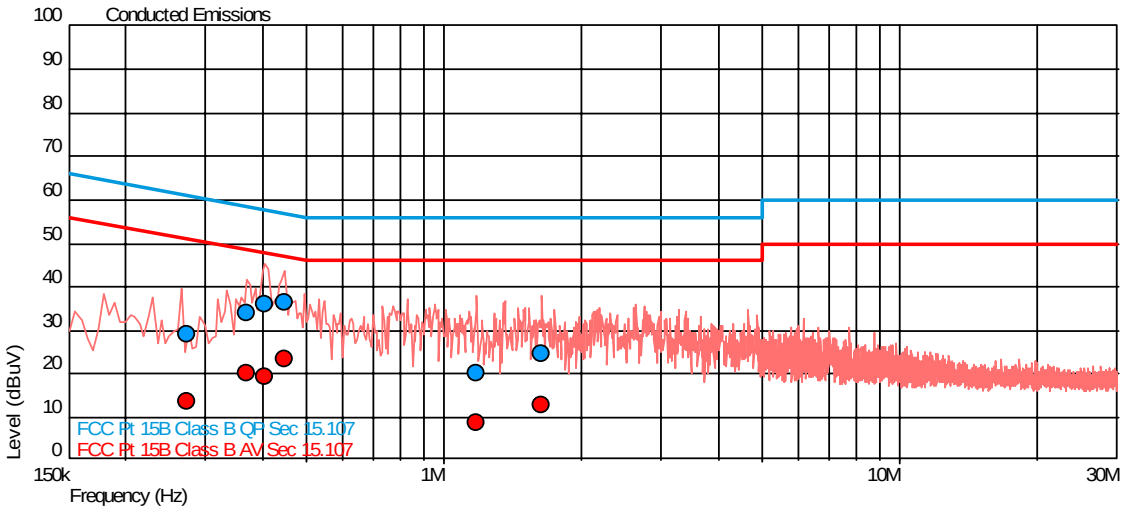
Neutral Line



Frequency (MHz)	QP Level (dBuV)	QP Limit (dBuV)	QP Margin (dBuV)	AV Level (dBuV)	AV Limit (dBuV)	AV Margin (dBuV)
0.439	45.3	57.1	-11.8	30.3	47.1	-16.7
0.455	43.1	56.8	-13.7	30.5	46.8	-16.3
0.458	42.6	56.7	-14.1	30.4	46.7	-16.4
0.476	43.6	56.4	-12.8	30.7	46.4	-15.7
0.600	36.9	56.0	-19.1	24.3	46.0	-21.7
0.613	38.8	56.0	-17.2	22.2	46.0	-23.8

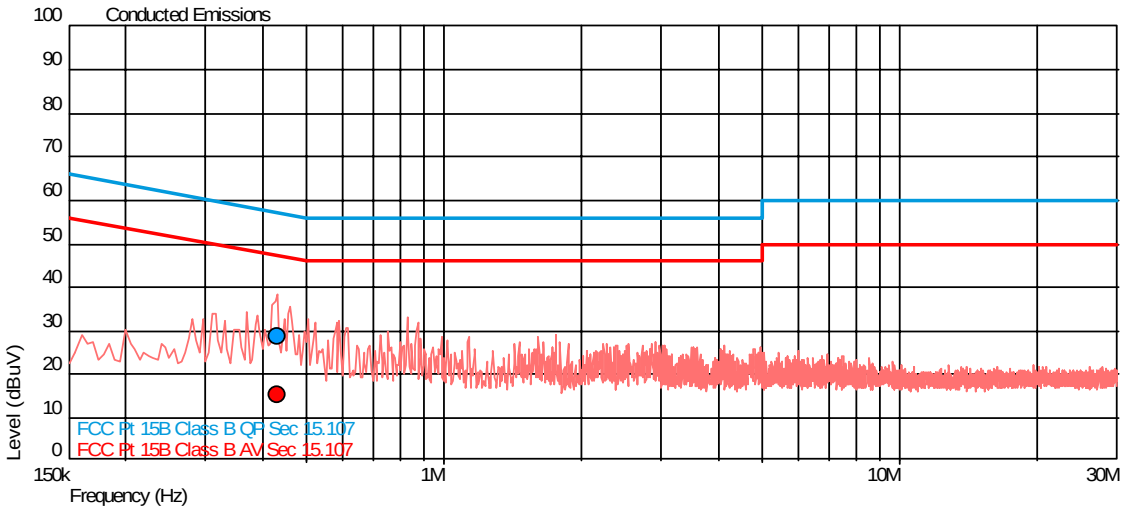
Configuration 2 - Mode 2

Live Line



Frequency (MHz)	QP Level (dBuV)	QP Limit (dBuV)	QP Margin (dBuV)	AV Level (dBuV)	AV Limit (dBuV)	AV Margin (dBuV)
0.273	28.9	61.0	-32.1	13.7	51.0	-37.3
0.369	33.8	58.5	-24.8	20.1	48.5	-28.5
0.405	36.2	57.7	-21.6	19.5	47.7	-28.3
0.445	36.6	57.0	-20.4	23.4	47.0	-23.6
1.181	20.1	56.0	-35.9	8.8	46.0	-37.2
1.640	24.6	56.0	-31.4	13.0	46.0	-33.0

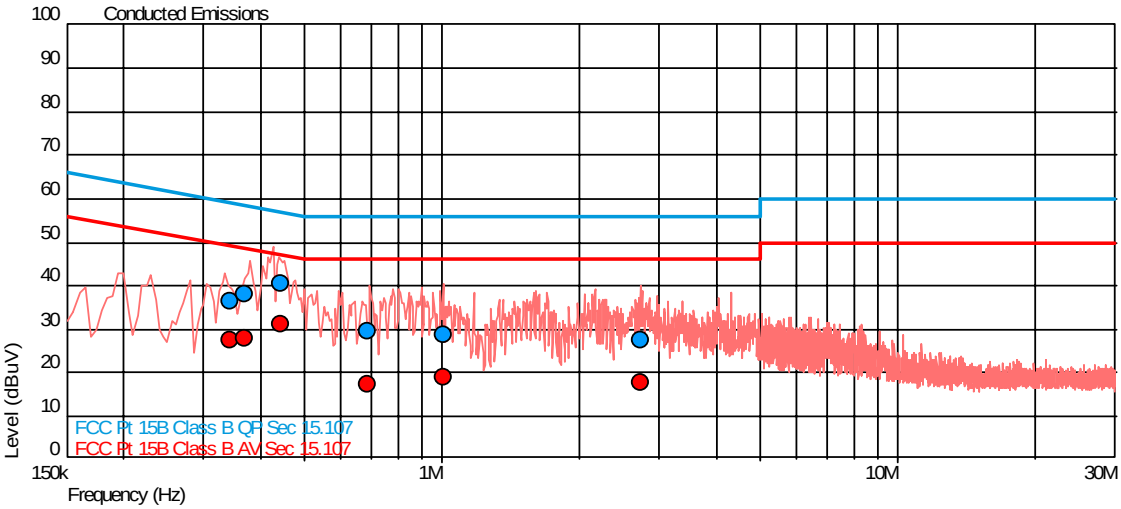
Neutral Line



Frequency (MHz)	QP Level (dBuV)	QP Limit (dBuV)	QP Margin (dBuV)	AV Level (dBuV)	AV Limit (dBuV)	AV Margin (dBuV)
0.432	28.7	57.2	-28.5	15.4	47.2	-31.8

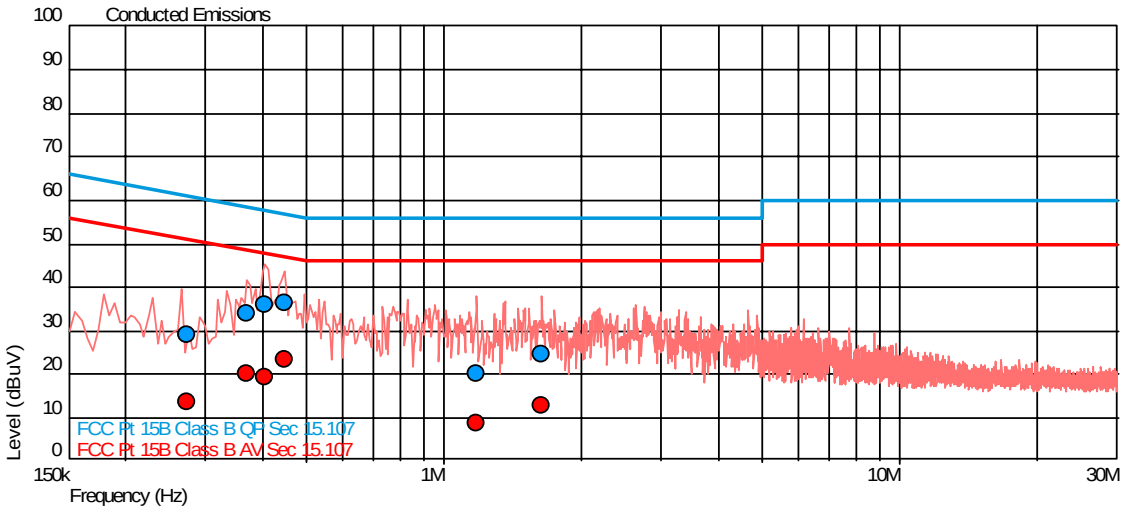
Configuration 2 - Mode 3

Live Line



Frequency (MHz)	QP Level (dBuV)	QP Limit (dBuV)	QP Margin (dBuV)	AV Level (dBuV)	AV Limit (dBuV)	AV Margin (dBuV)
0.344	36.3	59.1	-22.8	27.4	49.1	-21.7
0.370	38.2	58.5	-20.3	28.0	48.5	-20.5
0.444	40.5	57.0	-16.5	31.1	47.0	-15.9
0.688	29.4	56.0	-26.6	17.2	46.0	-28.8
1.004	28.8	56.0	-27.2	18.8	46.0	-27.2
2.715	27.3	56.0	-28.7	17.7	46.0	-28.3

Neutral Line



Frequency (MHz)	QP Level (dBuV)	QP Limit (dBuV)	QP Margin (dBuV)	AV Level (dBuV)	AV Limit (dBuV)	AV Margin (dBuV)
0.273	28.9	61.0	-32.1	13.7	51.0	-37.3
0.369	33.8	58.5	-24.8	20.1	48.5	-28.5
0.405	36.2	57.7	-21.6	19.5	47.7	-28.3
0.445	36.6	57.0	-20.4	23.4	47.0	-23.6
1.181	20.1	56.0	-35.9	8.8	46.0	-37.2
1.640	24.6	56.0	-31.4	13.0	46.0	-33.0

Product Service

SECTION 3

TEST EQUIPMENT USED

3.1 TEST EQUIPMENT USED

List of absolute measuring and other principal items of test equipment.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Due
Section 2.2 EMC - Conducted Emissions					
LISN (1 Phase)	Chase	MN 2050	336	12	18-Mar-2009
Test Receiver	Rohde & Schwarz	ESIB40	1006	12	14-May-2009
Transient Limiter	Hewlett Packard	11947A	1032	12	19-Jun-2008
Screened Room (2)	Rainford	Rainford	1542	-	TU
Radio Communications Test Set	Rohde & Schwarz	CMU 200	3035	12	5-Jun-2008
Compliance 3 Emissions	Schaffner	C3e Software V.4.00.00	3276	-	N/A - Software
Section 2.1 EMC - Radiated Emissions					
Radiocommunications Tester	Rohde & Schwarz	CMU 200	39	12	27-Oct-2008
Antenna (Double Ridge Guide, 1GHz-18GHz)	EMCO	3115	234	12	29-Jun-2008
Antenna (Double Ridge Guide, 1GHz-18GHz)	EMCO	3115	235	12	29-Jun-2008
Pre-Amplifier	Phase One	PS04-0085	1532	-	TU
Pre-Amplifier	Phase One	PS04-0086	1533	-	TU
Mast Controller	Inn-Co GmbH	CO 1000	1606	-	TU
Turntable/Mast Controller	EMCO	2090	1607	-	TU
Antenna (Bilog)	Chase	CBL6143	2904	24	28-Nov-2009
Signal Generator (10MHz to 40GHz)	Rohde & Schwarz	SMR40	3171	12	11-Jul-2008
EMI Test Receiver	Rohde & Schwarz	ESU40	3506	12	15-Mar-2009

TU – Traceability Unscheduled

3.2 MEASUREMENT UNCERTAINTY

For a 95% confidence level, the measurement uncertainties for defined systems are:-

Test Discipline	Frequency / Parameter	MU
Radiated Emissions, Bilog Antenna, AOATS	30MHz to 1GHz Amplitude	5.1dB*
Radiated Emissions, Horn Antenna, AOATS	1GHz to 40GHz Amplitude	6.3dB*
Conducted Emissions, LISN	150kHz to 30MHz Amplitude	3.2dB*
Conducted Emissions, ISN	150kHz to 30MHz Amplitude	2.1dB
Substitution Antenna, Radiated Field	30MHz to 18GHz Amplitude	2.6dB

Worst case error for both Time and Frequency measurement 12 parts in 10^6.

* In accordance with CISPR 16-4
† In accordance with UKAS Lab 34

SECTION 4

PHOTOGRAPHS

4.1 PHOTOGRAPHS OF EQUIPMENT UNDER TEST (EUT)

Front View of EUT

Rear View of EUT

Rear View of EUT with Battery removed

Product Service

SECTION 5

ACCREDITATION, DISCLAIMERS AND COPYRIGHT

5.1 ACCREDITATION, DISCLAIMERS AND COPYRIGHT

This report relates only to the actual item/items tested.

Our UKAS Accreditation does not cover opinions and interpretations and any expressed are outside the scope of our UKAS Accreditation.

Results of tests not covered by our UKAS Accreditation Schedule are marked NUA (Not UKAS Accredited).