Lab Code: 200707-0

FCC PART 15 CLASS B

MEASUREMENT AND TEST REPORT

For

ITALCOM GROUP

1728 Coral Way, Coral Gables, Miami, Florida, United States

FCC ID: YPVITALCOMWAYX2

Report Type:	Product Type:
Original Report	Mobile Phone

Test Engineer:	Leon Chen
Report Number:	RSZ111124003-00
Report Date:	2012-01-16
Reviewed By:	Merry Zhao EMC Engineer
Test Laboratory:	Bay Area Compliance Laboratories Corp. (Shenzhen) 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China Tel: +86-755-33320018 Fax: +86-755-33320008 www.baclcorp.com.cn

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *ITALCOM GROUP*'s product, model number: *WAYx2 (FCC ID: YPVITALCOMWAYX2)* (the "EUT") in this report is a *Mobile Phone*, which was measured approximately: 10.0 cm (L) x 5.6 cm (W) x 1.4 cm (H), rated input voltage: DC 3.7 V battery or DC 5.0V from USB port. The highest operating frequency is 26MHz.

Adapter Information:
Model: WAYX2
Input: 100~240 AC 50/60Hz 0.15A
Output: 5.0V 500mA

** All measurement and test data in this report was gathered from production sample serial number: 1111062 (Assigned by BACL, Shenzhen). The EUT was received on 2011-11-24.*

Objective

This report is prepared on behalf of *ITALCOM GROUP* in accordance with Part 2, Subpart J, Part 15-Subparts A and B of the Federal Communication Commissions rules.

The objective of the manufacturer is to determine the compliance of EUT with FCC Part 15 Class B.

Related Submittal(s)/Grant(s)

FCC Part 15.247 DSS, 22H&24E PCE submissions with FCC ID: YPVITALCOMWAYX2

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp.(Shenzhen) to collect test data is located on the 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China.

Test site at Bay Area Compliance Laboratories Corp. (Shenzhen) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on December 06, 2010. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2009.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 382179. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Bay Area Compliance Laboratories Corp. (Shenzhen) is an ISO/IEC 17025 accredited laboratory, and is accredited by National Voluntary Laboratory Accredited Program (Lab Code 200707-0).

The current scope of accreditations can be found at http://ts.nist.gov/Standards/scopes/2007070.htm

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in a typical mode which is provided by manufacturer.

EUT Exercise Software

Exercise software: Winthraw, which was provided by BACL.

Equipment Modifications

No modification was made to the unit tested.

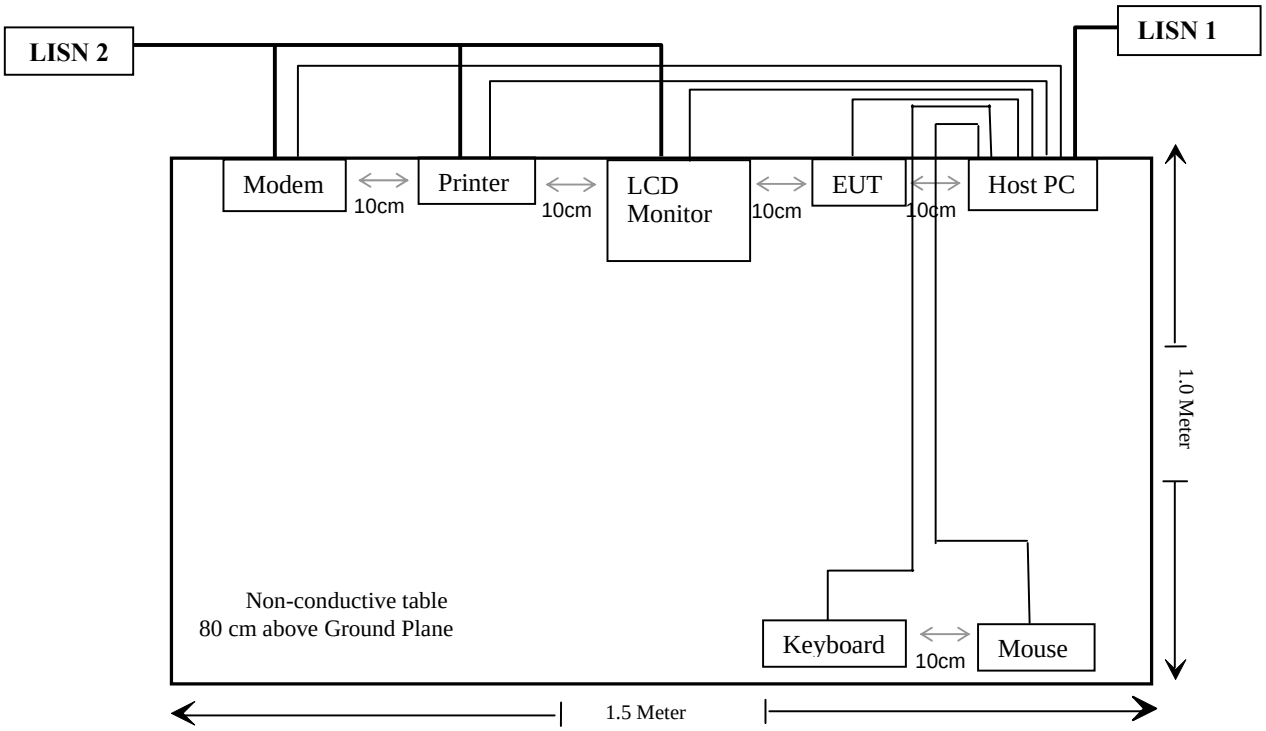
Local Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
DELL	Host PC	DELL 170L	N/A
DELL	Keyboard	L100	CNORH656658907BL 04TY
DELL	Mouse	MOC5UO	G1B0096D
SAMSUNG	LCD	225MS	CR22HV2P401073M
HP	Printer	C3941A	JPTVOB2337
SAST	Modem	AEM-2100	0293

External I/O Cable

Cable Description	Length (m)	From	To
Shielded Detachable Keyboard Cable	1.5	Keyboard	Host PC
Shielded Detachable Mouse Cable	1.5	Mouse	Host PC
Shielded Detachable Printer Cable	1.2	Printer	Host PC
Shielded Detachable Serial Cable	1.2	Modem	Host PC
Shielded Detachable VGA Cable	1.5	Host PC	LCD Monitor
Unshielded Detachable USB Cable	1.0	EUT	Host PC

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Results
§15.107	AC Line Conducted Emissions	Compliance
§15.109	Radiated Emissions	Compliance

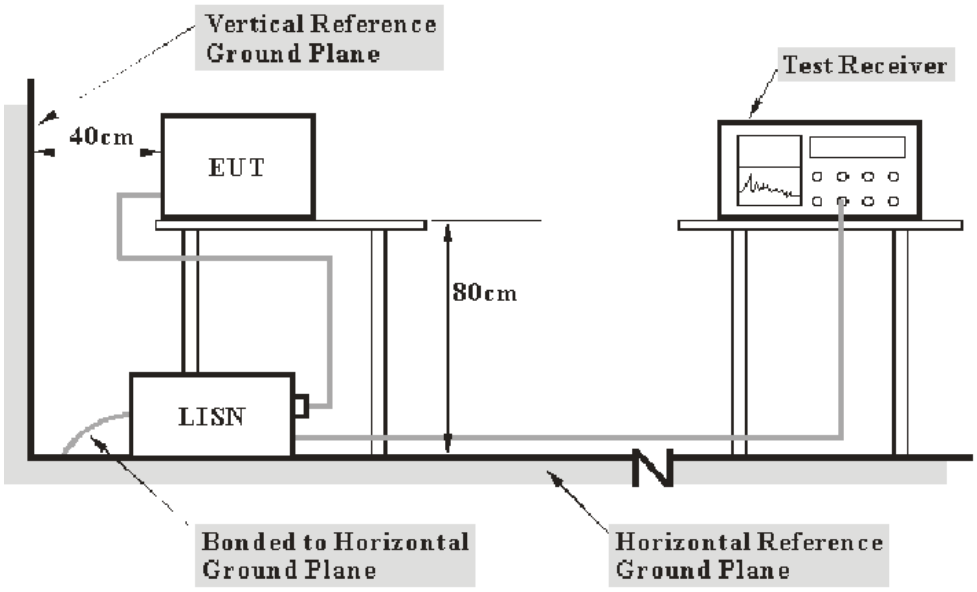
FCC §15.107 – AC LINE CONDUCTED EMISSIONS

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, and LISN.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement at Bay Area Compliance Laboratories Corp. (Shenzhen) is ±2.4 dB.(k=2, 95% level of confidence)

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.4-2009 measurement procedure. The specification used was with the FCC Part 15.107 Class B limits.

The spacing between the peripherals was 10 cm.

The host PC was connected to a 120 VAC/60 Hz power source.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	***IF B/W***
150 kHz – 30 MHz	9 kHz

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCS30	830245/006	2011-03-03	2012-03-02
Rohde & Schwarz	L.I.S.N.	ESH2-Z5	892107/021	2011-03-09	2012-03-08
Com-Power	L.I.S.N.	LI-200	12005	N/A	N/A
Com-Power	L.I.S.N.	LI-200	12208	N/A	N/A

*** Statement of Traceability:** Bay Area Compliance Laboratory Corp. attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

During the conducted emission test, the host PC was connected to the outlet of the first LISN, and the other relevant equipments were connected to the outlet of the second LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.107, with the worst margin reading of:

9.07 dB at **1.035 MHz** in the **Neutral** conducted mode

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	48 %
ATM Pressure:	100.0 kPa

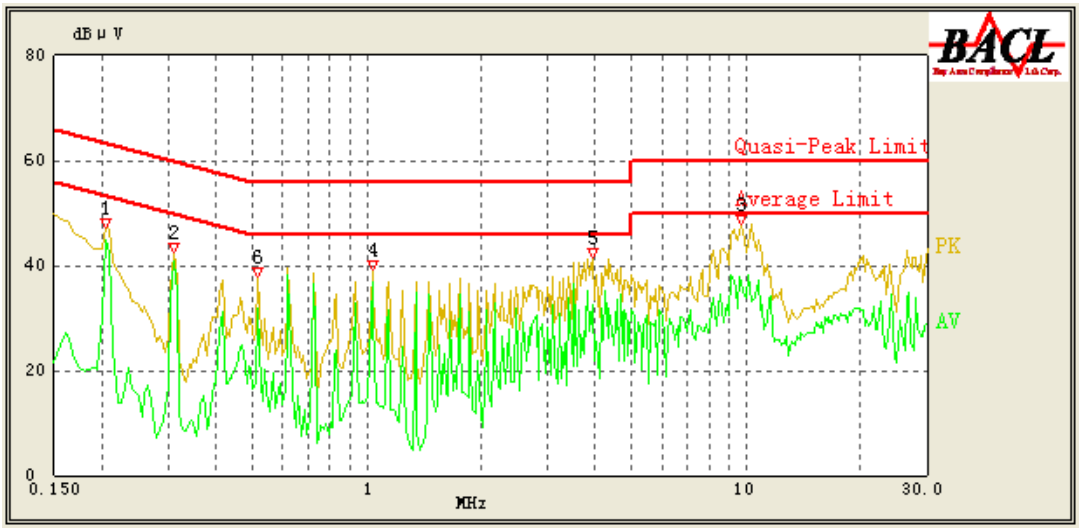
The testing was performed by Leon Chen on 2011-12-12.

Test Mode: Downloading

AC 120V/60 Hz, Line

Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/ QP/Ave.)
0.310	40.19	1.10	51.43	11.24	Ave.
0.515	34.00	1.10	46.00	12.00	Ave.
0.205	40.20	1.10	54.43	14.23	Ave.
2.170	29.46	1.10	46.00	16.54	Ave.
9.715	33.20	1.10	50.00	16.80	Ave.
9.715	40.41	1.10	60.00	19.59	QP
0.515	35.05	1.10	56.00	20.95	QP
0.310	39.94	1.10	61.43	21.49	QP
0.205	41.63	1.10	64.43	22.80	QP
2.170	33.17	1.10	56.00	22.83	QP
6.715	19.95	1.10	50.00	30.05	Ave.
6.695	21.87	1.10	60.00	38.13	QP

AC 120V/60 Hz, Neutral



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/ QP/Ave.)
1.035	36.93	1.10	46.00	9.07	Ave.
0.205	44.80	1.10	54.43	9.63	Ave.
0.310	40.92	1.10	51.43	10.51	Ave.
9.605	37.94	1.10	50.00	12.06	Ave.
3.935	32.50	1.10	46.00	13.50	Ave.
0.515	31.81	1.10	46.00	14.19	Ave.
0.205	45.92	1.10	64.43	18.51	QP
3.935	37.41	1.10	56.00	18.59	QP
1.035	36.97	1.10	56.00	19.03	QP
0.310	40.86	1.10	61.43	20.57	QP
0.515	34.41	1.10	56.00	21.59	QP
9.715	32.81	1.10	60.00	27.19	QP

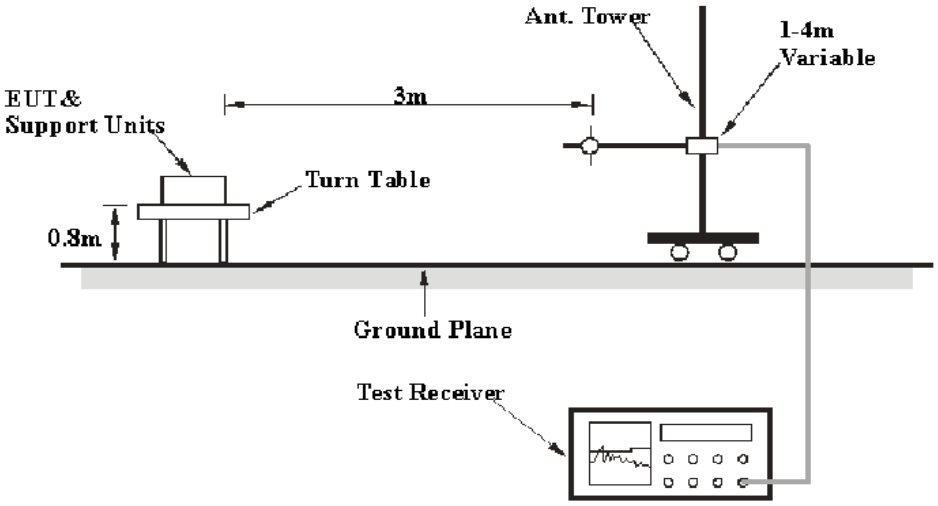
FCC §15.109 - RADIATED EMISSIONS

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of a radiation emissions measurement at Bay Area Compliance Laboratories Corp. (Shenzhen) is ±4.0 dB. (k=2, 95% level of confidence)

EUT Setup



The radiated emission tests were performed in the 3 meters test site, using the setup accordance with the ANSI C63.4-2009. The specification used was the FCC Part 15.109 Class B limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

The host PC was connected to a 120 VAC/60 Hz power source.

EMI Test Receiver Setup

The system was investigated from 30 MHz to 1000 MHz.

During the radiated emission test, the EMI test receiver was set with the following configurations:

Frequency	*RB/W*	*VB/W*	*IF B/W*	*Detection*
30 MHz-1 GHz	100 kHz	300 kHz	120 kHz	Quasi-peak

Test Procedure

During the radiated emissions test, the host PC and the relevant equipemnts were connected to AC floor outlet.

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

The data was recorded in the Quasi-peak detection mode from 30 MHz to 1 GHz, when the peak was below the limit 2dB.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
HP	Amplifier	HP8447E	1937A01046	2011-08-02	2012-08-02
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2011-11-11	2012-11-10
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2011-07-05	2012-07-04

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp (Shenzhen). attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Loss and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Corrected Amplitude = Meter Reading + Antenna Loss + Cable Loss - Amplifier Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin = Limit – Corrected Amplitude

Test Results Summary

According to the data in the following table, the EUT complied with the FCC §15.109 Class B, with the worst margin reading of:

2.06 dB at **932.10 MHz** in the **Horizontal** polarization

Test Data

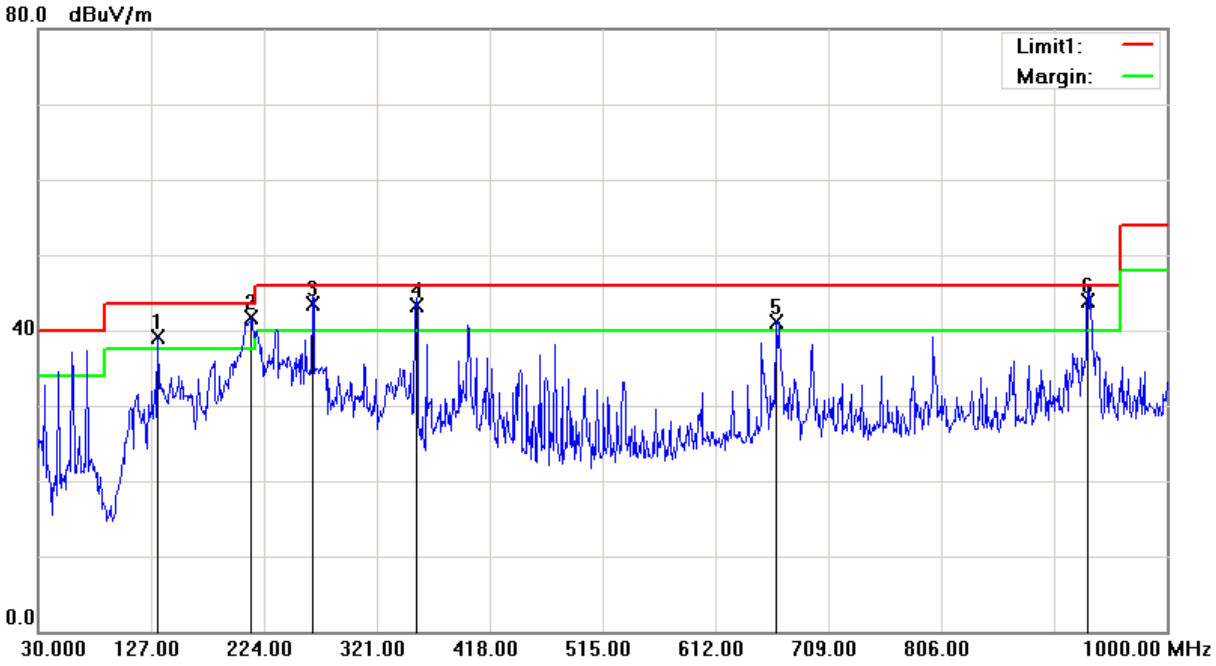
Environmental Conditions

Temperature:	25 °C
Relative Humidity:	48 %
ATM Pressure:	100.0 kPa

The testing was performed by Leon Chen on 2011-12-12.

Test Mode: Downloading

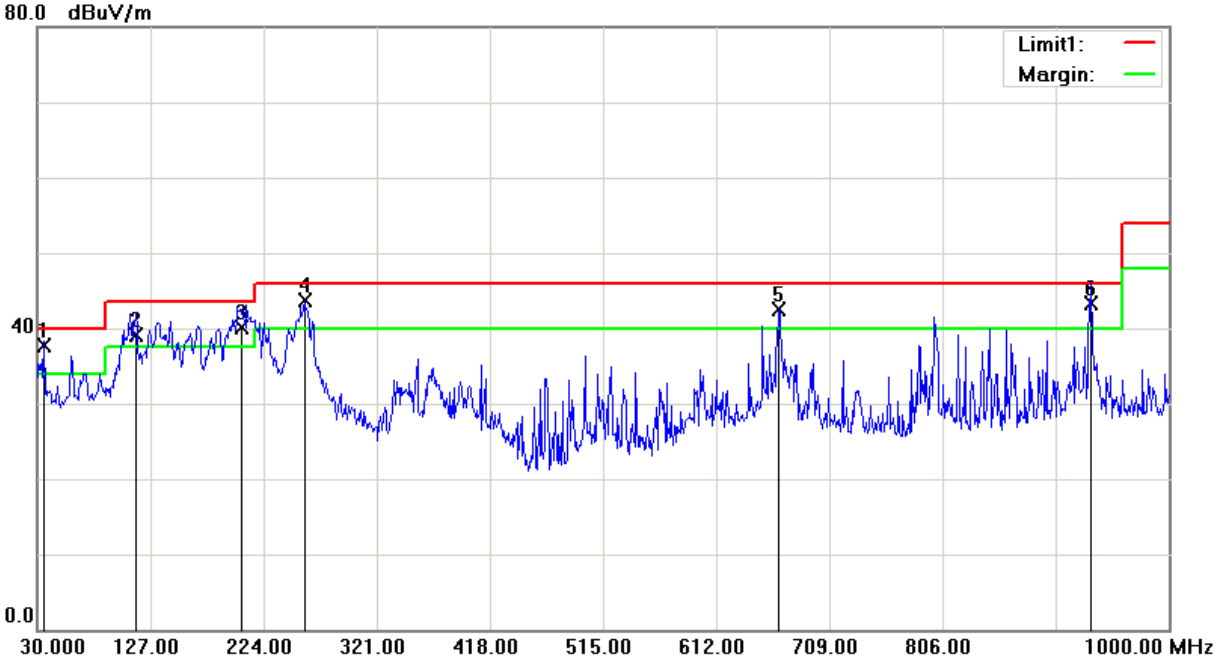
Horizontal:



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Detector (PK/QP)	Test Antenna		Turntable Position (degree)	Correction Factor (dB)	Limit (dBµV/m)	Margin (dB)
			Height (cm)	Polarity (H/V)				
932.10	43.94	PK	101	H	120	5.14	46.0	2.06*
265.71	43.53	PK	101	H	35	-5.62	46.0	2.47*
354.95	43.32	PK	101	H	320	-3.42	46.0	2.68*
213.33	39.64	QP	220	H	280	-7.94	43.5	3.86*
132.82	39.12	PK	205	H	300	-5.47	43.5	4.38
664.38	41.20	PK	110	H	338	1.93	46.0	4.80

* Within measurement uncertainty.

Vertical:



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Detector (PK/QP)	Test Antenna		Turntable Position (degree)	Correction Factor (dB)	Limit (dBµV/m)	Margin (dB)
			Height (cm)	Polarity (H/V)				
35.82	37.72	PK	101	V	358	-2.28	40.0	2.28*
258.92	43.66	PK	102	V	330	-6.47	46.0	2.34*
933.07	43.34	QP	210	V	260	5.14	46.0	2.66*
205.57	40.15	QP	105	V	28	-7.73	43.5	3.35*
665.35	42.48	PK	110	V	315	1.94	46.0	3.52*
114.39	39.02	QP	206	V	290	-6.08	43.5	4.48

* Within measurement uncertainty.

******* END OF REPORT *******