MOST TECHNOLOGY SERVICE CO., LTD.
Tel:(86) 755-86170306 Fax:(86) 755-86170310
Http:// www. szmost.com Email: szmost@szmost.com

Test Report

Product Name: POWER INVERTER

FCC ID: VFT-YINHE001 AND IC: 7220A-YINHE001
MODEL NO.:PI100UF 100W CARD INVERTER WITH USB and FM Transmitter

Applicant:

SHANGHAI HONGQIAO YINHE ELECTRONICS FACTORY

**No. 16, Lane 1620, Hu Song Road, Song Jiang District
Shanghai 201600, P.R. China**

Date Received: 7/04/2007

Date Tested: 6/27/2007

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APPLICANT: SHANGHAI HONGQIAO YINHE ELECTRONICS FACTORY

FCC ID: VFT-YINHE001 AND IC: 7220A-YINHE001

TEST REPORT CONTAINING:

EXHIBIT INCLUDED:

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EMC Equipment List

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
EMI Test Receiver	ROHDE&SCHWARZ	ESCI	100492	Apr 06,2007	1 Year
LISN	ROHDE&SCHWARZ	ENV216	100093	Apr 06,2007	1Year
EMI Test Receiver	ROHDE&SCHWARZ	ESCI	101202	Apr 06,2007	1 Year
50Ω Coaxial Switch	ANRITSU CORP	MP59B	6200283933	Apr 06,2007	1 Year
Spectrum Analyzer	ANRITSU	MS2651B	6200238316	Apr 06,2007	1 Year
Horn Antenna	ROHDE&SCHWARZ	HF906	1000031	Apr 06,2007	1 Year
Bilog Antenna	Sunol	JB3	A121206	Apr 06,2007	1 Year
50Ω Coaxial Switch	ANRITSU CORP	MP59B	6200283933	Apr 06,2007	1 Year
Cable	Resenberger	N/A	NO.1	Apr 06,2007	1 Year
Cable	SCHWARZBECK	N/A	NO.2	Apr 06,2007	1 Year
Cable	SCHWARZBECK	N/A	NO.3	Apr 06,2007	1 Year
Single Phase Power Line Filter	Kikusui	LIN40MA-PCR-L	LM002352	Apr 06,2007	1Year
AC Power Source	Kikusui	AC40MA	LM003232	Apr 06,2007	1Year
Test analyzer	Kikusui	KHA1000	LM003720	Apr 06,2007	1Year
ESD Tester	Kikusui	KES4021	LM003537	Apr 08,2007	1 Year
Signal Generator	IFR	2032	203002/100	Apr 08,2007	1 Year
Amplifier	A&R	150W1000	301584	NCR	NCR
Dual Directional Coupler	A&R	DC6080	301508	Apr 06,2007	1 Year
Power Head	A&R	PH2000	301193	Apr 06,2007	1 Year
Power Meter	A&R	PM2002	302799	Apr 06,2007	1 Year
Field Monitor	A&R	FM5004	300329	Apr 06,2007	1 Year
Field Probe	A&R	FP5000	300221	Apr 06,2007	1 Year
EMCPRO System	EM Test	UCS-500-M4	V0648102026	Apr 06,2007	1 Year
EMCPRO System	EM Test	UCS-500-M4	V0648102026	Apr 06,2007	1 Year

Remark:

Test Firm Name: Most Technology Service Co., Ltd.
Test Firm Address:
No. 5, 2nd Langshan Road, North District, Hi-tech Industrial Park,Nanshan, Shenzhen, Guangdong, China
FCC Registered Test Site Number: 490827
IC Registered Test Site Number: 7103A

TEST PROCEDURE

GENERAL: This report shall NOT be reproduced except in full without the written approval of Most Technology Service Co., Ltd. The EUT was transmitting a test signal during the testing.

POWER LINE CONDUCTED INTERFERENCE: The test procedure used was ANSI Standard C63.4-2003 using a 50uH LISN. Both Lines were observed. The bandwidth of the receiver was 10kHz with an appropriate sweep speed. The ambient temperature of the EUT was 25℃ with a humidity of 58%.

RADIATION INTERFERENCE: The test procedure used was ANSI Standard C63.4-2003 using a ANRITSU spectrum analyzer with a pre-selector. The analyzer was calibrated in dB above a micro volt at the output of the antenna. The resolution bandwidth was 100 kHz and the video bandwidth was 300 kHz up to 1 GHz and 1 MHz with a video BW of 3 MHz above 1 GHz. The ambient temperature of the EUT was 25℃with a humidity of 58%.

FORMULA OF CONVERSION FACTORS: The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dBuV) to the antenna correction factor supplied by the antenna manufacturer. The antenna correction factors are stated in terms of dB. The gain of the Pre-selector was accounted for in the Spectrum Analyzer Meter Reading.

Example:
Freq (MHz) METER READING + ACF = FS
33 20 dBuV + 10.36 dB = 30.36 dBuV/m @ 3m

ANSI STANDARD C63.4-2003 10.1.7 MEASUREMENT PROCEDURES: The EUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m. The EUT was placed in the center of the table (1.5m side). The table used for radiated measurements is capable of continuous rotation.

When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes.

The situation was similar for the conducted measurement except that the table did not rotate. The EUT was setup as described in ANSI Standard C63.4-2003 10.1.7 with the EUT 40 cm from the vertical ground wall.

APPLICANT: SHANGHAI HONGQIAO YINHE ELECTRONICS FACTORY

FCC ID: VFT-YINHE001 AND IC: 7220A-YINHE001

NAME OF TEST: RADIATION INTERFERENCE

RULES PART NUMBER: 15.239, 15.209, RSS-210 Issue 7 June 2007 Section A2.8

REQUIREMENTS:

FIELD STRENGTH of Fundamental: S15.209

88-108 MHZ
47.96 dBuV/m @3m

30 -88 MHz 40 dBuV/m @3M
88 - 216 MHz 43.5
216 - 960 MHz 46
ABOVE 960 MHz 54dBuV/m

EMISSIONS RADIATED OUTSIDE OF THE SPECIFIED FREQUENCY BANDS, EXCEPT FOR HARMONICS, SHALL BE ATTENUATED BY AT LEAST 50 dB BELOW THE LEVEL OF THE FUNDAMENTAL OR TO THE GENERAL RADIATED EMISSION LIMITS IN 15.209, WHICHEVER IS THE LESSER ATTENUATION.

Fundamental Radiation Interference Data:
Band 88.1-89.1MHz

Frequency (MHz)	Antenna Polarization	Emission Level (dBuV/m)	FCC 15 Subpart C Limit (dBuV/m)
88.1MHz			
88.100	Horizontal	41.70	47.96
88.100	Vertical	40.20	47.96

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APPLICANT: SHANGHAI HONGQIAO YINHE ELECTRONICS FACTORY

FCC ID: VFT-YINHE001 AND IC: 7220A-YINHE001

NAME OF TEST: RADIATION INTERFERENCE

RULES PART NUMBER: 15.239, 15.209, RSS-210 Issue 7 June 2007 Section A2.8

REQUIREMENTS:

FIELD STRENGTH of Fundamental: S15.209

88-108 MHZ

47.96 dBuV/m @3m

30 -88 MHz 40 dBuV/m @3M
88 - 216 MHz 43.5
216 - 960 MHz 46
ABOVE 960 MHz 54dBuV/m

EMISSIONS RADIATED OUTSIDE OF THE SPECIFIED FREQUENCY BANDS, EXCEPT FOR HARMONICS, SHALL BE ATTENUATED BY AT LEAST 50 dB BELOW THE LEVEL OF THE FUNDAMENTAL OR TO THE GENERAL RADIATED EMISSION LIMITS IN 15.209, WHICHEVER IS THE LESSER ATTENUATION.

Fundamental Radiation Interference Data:
Band 106.7-107.9MHz

106.7MHz			
106.700	Horizontal	41.61	47.96
106.700	Vertical	40.65	47.96
107.9MHz			
107.900	Horizontal	41.81	47.96
107.900	Vertical	40.85	47.96

APPLICANT: SHANGHAI HONGQIAO YINHE ELECTRONICS FACTORY

FCC ID: VFT-YINHE001 AND IC: 7220A-YINHE001

NAME OF TEST: RADIATION INTERFERENCE

RULES PART NUMBER: 15.239, 15.209, RSS-210 Issue 7 June 2007 Section A2.8

REQUIREMENTS:

FIELD STRENGTH of Fundamental: S15.209

88-108 MHZ
47.96 dBuV/m @3m

30 -88 MHz 40 dBuV/m @3M
88 - 216 MHz 43.5
216 - 960 MHz 46
ABOVE 960 MHz 54 dBuV/m

EMISSIONS RADIATED OUTSIDE OF THE SPECIFIED FREQUENCY BANDS, EXCEPT FOR HARMONICS, SHALL BE ATTENUATED BY AT LEAST 50 dB BELOW THE LEVEL OF THE FUNDAMENTAL OR TO THE GENERAL RADIATED EMISSION LIMITS IN 15.209, WHICHEVER IS THE LESSER ATTENUATION.

Continued:

General Radiation Interference Data:

Frequency (MHz)	Antenna Polarization	Emission Level (dBuV/m)	FCC 15 Subpart C Limit (dBuV/m)
47.210	Horizontal	31.86	40.0
51.150	Horizontal	30.25	40.0
173.200	Horizontal	31.60	43.5
195.200	Horizontal	31.20	43.5
46.760	Vertical	30.35	40.0
52.010	Vertical	31.15	40.0
174.200	Vertical	30.95	43.5
196.500	Vertical	30.65	43.5

TEST PROCEDURE: ANSI Standard C63.4-2003 using a ANRITSU spectrum analyzer with a pre-selector and an appropriate antenna. The resolution bandwidth of spectrum analyzer was 100 kHz below 1 GHz and 1 MHz above 1 GHz. An appropriate sweep speed was used. When an emission was found, the table was rotated to produce the maximum signal strength. The antenna was placed in both the horizontal and vertical planes and the worse case emissions were reported. The spectrum was searched to at least the tenth (10) harmonic of the fundamental.

APPLICANT: SHANGHAI HONGQIAO YINHE ELECTRONICS FACTORY

FCC ID: VFT-YINHE001 AND IC: 7220A-YINHE001

NAME OF TEST: Occupied Bandwidth and Band Edge Compliance

RULES PART NUMBER: 15.239, RSS-210 Issue 7 June 2007 Section A2.8

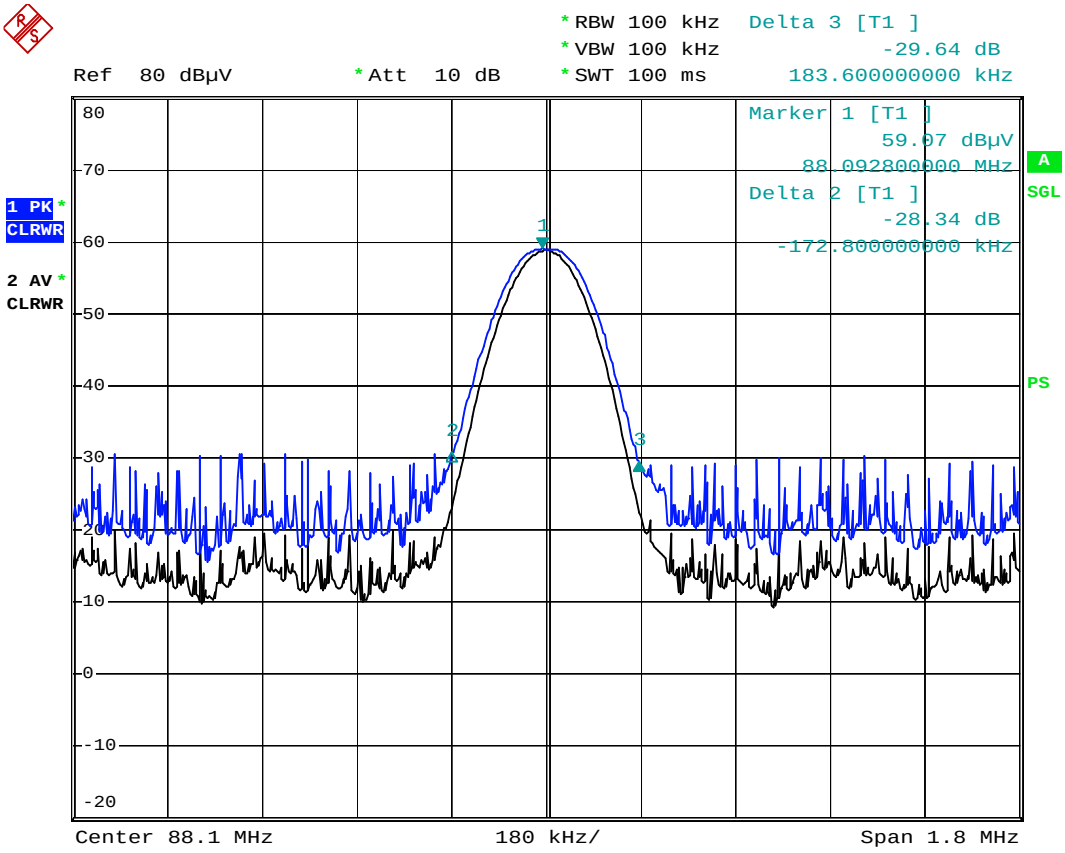
REQUIREMENTS: Emissions from the intentional radiator shall be confined within a band 200 kHz wide centered on the operating frequency. The 200 kHz band shall lie wholly within the frequency range of 88–108 MHz.

Band edge emissions plots are included on the following pages

METHOD OF MEASUREMENT: A small sample of the transmitter output was fed into the spectrum analyzer and the attached plot was printed. The vertical scale is set to 10 dB per division.

TEST RESULTS: The unit DOES meet the FCC requirements.

88.1MHz



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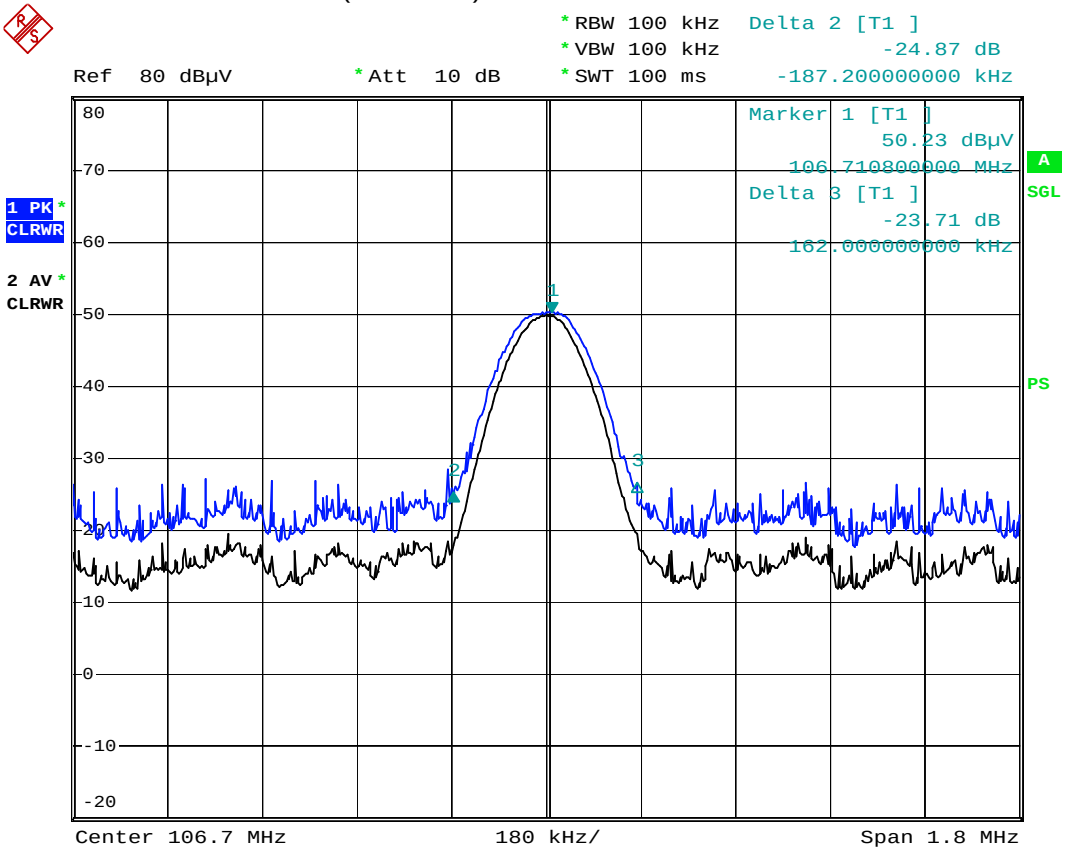
Band 106.7-107.9MHz: Low (106.7MHz)



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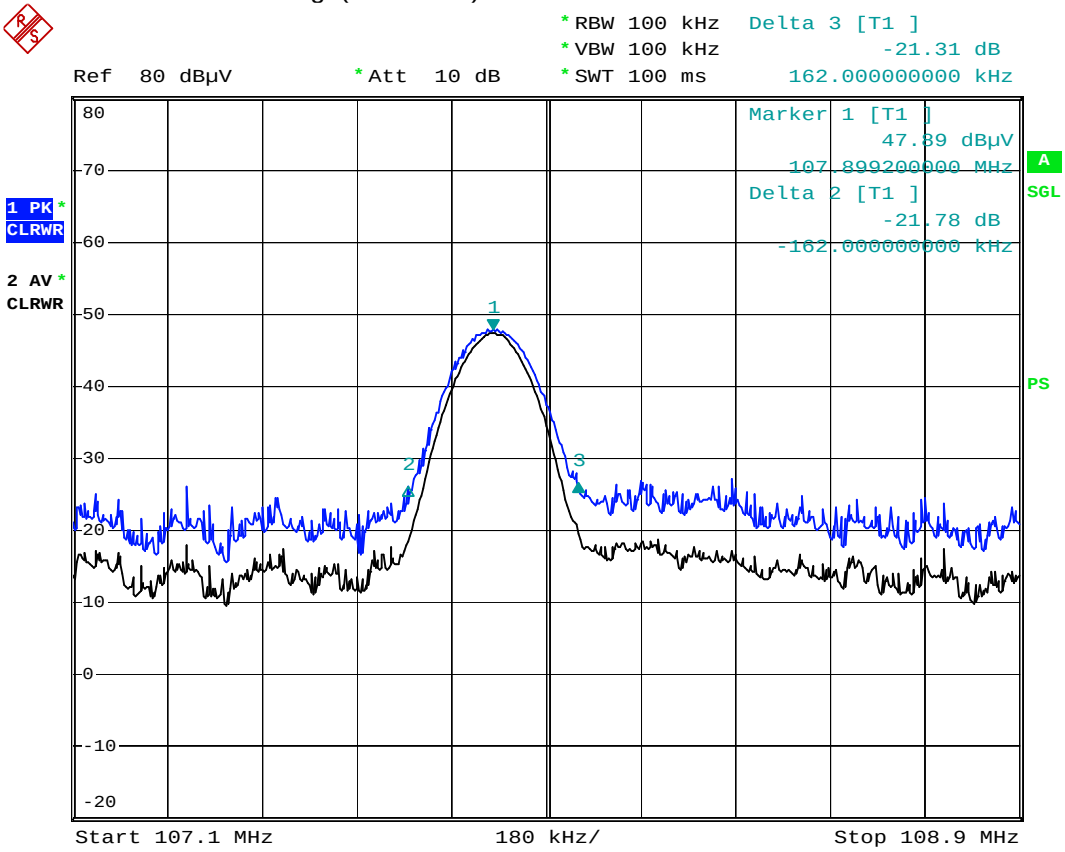
Band 106.7-107.9MHz: High(107.9MHz)



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