

Produkte
Products



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<i>Test Report No.:</i>			
Auftraggeber: <i>Client:</i>		Shanghai HuaTuo Satellite Navigation Technology Ltd. Floor 2, Buliding 35, NO 680 guiping road ,shanghai, 200233, China	
Gegenstand der Prüfung: <i>Test item:</i>		Geodetic GNSS Receiver	
Bezeichnung: <i>Identification:</i>	X900	Serien-Nr.: <i>Serial No.:</i>	n.a.
Wareneingangs-Nr.: <i>Receipt No.:</i>	163093989	Eingangsdatum: <i>Date of receipt:</i>	2012-06-05
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of test item at delivery:</i>		Test samples received are sufficient for testing and not damaged.	
Prüfört: <i>Testing location:</i>		Shenzhen Accurate Technology Co., Ltd. F1, Bldg. A, Changyuan New Meterial Port, Keyuan Rd., Science & Industry Park Nanshan District, Shenzhen 518057, P.R. China FCC Registration No.: 752051	
Prüfgrundlage: <i>Test specification:</i>		FCC CFR47 Part 15: Subpart B Section 15.107 FCC CFR47 Part 15: Subpart B Section 15.109 FCC CFR47 Part 15: Subpart C Section 15.247 FCC CFR47 Part 15: Subpart C Section 15.207 FCC CFR47 Part 15: Subpart C Section 15.209	
Prüfergebnis: <i>Test Result:</i>		Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n). The test item passed the test specification(s).	
Prüflaboratorium: <i>Testing Laboratory:</i>		TÜV Rheinland (Shenzhen) Co., Ltd.	
geprüft/ tested by:		kontrolliert/ reviewed by:	
 2012-08-20 Sam Lin/ Project Manager		 2012-08-30 Winnie Hou/ Technical Certifier	
Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>
Sonstiges/ Other Aspects:			
Abkürzungen: P(ass) = entspricht Prüfgrundlage F(ail) = entspricht nicht Prüfgrundlage N/A = nicht anwendbar N/T = nicht getestet		Abbreviations: P(ass) = passed F(ail) = failed N/A = not applicable N/T = not tested	
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. This test report relates to the a. m. test item. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.			

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1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix 1: Test Result

2. Test Sites

2.1 Test Facilities

Shenzhen Accurate Technology Co., Ltd.

F1, Bldg. A, Changyuan New Material Port, Keyuan Rd., Science & Industry Park Nanshan District, Shenzhen 518057, P.R. China

FCC Registration No.: 752051

The tests at the test site have been conducted under the supervision of a TÜV engineer.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Kind of Equipment	Manufacturer	Type	S/N	Calibrated until
Spurious emission and Radiated emission				
Spectrum Analyzer	Agilent	E7405A	MY45115511	2013-01-07
Test Receiver	Rohde & Schwarz	ESCS30	100307	2013-01-07
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	2013-01-07
Loop Antenna	Schwarzbeck	FMZB1516	1516131	2013-01-07
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	2013-01-07
50 Coaxial Switch	Anritsu Corp	MP59B	6200506474	2013-01-07
Pre-Amplifier	Rohde & Schwarz	CBLU11835 40-01	3791	2013-01-07
Radio Test Suite				
Receiver	Rohde & Schwarz	ESPI	100396/003	2013-01-07
Conducted Emission				
Test Receiver	Rohde & Schwarz	ESCS30	100307	2013-01-07
Artificial Mains Network	Schwarzbeck	NLSK8126	8126431	2013-01-07

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements are $\pm 3\text{dB}$.

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix1 of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

Shenzhen Accurate Technology Co., Ltd. test facility located at F1, Bldg. A, Changyuan New Material Port, Keyuan Rd., Science & Industry Park Nanshan District, Shenzhen 518057, P.R. China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3. General Product Information

3.1 Product Function and Intended Use

The EUT is a Handheld GPS/GIS Data Collector with GSM module and Bluetooth technology. The EUT is working based on existing GSM/GPRS network and GPS satellites, and it employs Windows Mobile operation system. The GSM module operates on GSM band and DCS band.

The EUT employs one FCC approved "Single Modular" with FCC ID N7NWISMO228 already. As all conditions listed in the FCC Grant are fulfilled, hence no need to apply test for such modular.

For detailed test data of approved GSM module WISMO228, refer to test report FG980420 (issued by SPORTON International Inc.).

For details refer to the User Manual and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Rating of EUT

Kind of Equipment:	Handheld GPS/GIS Data Collector
Type Designation:	LT400
Operation Voltage	DC 3.7V (via lithium battery)
FCC ID:	BMU-B01001

Table 3: Technical Specification of Bluetooth

Technical Specification	Value
Operating Frequency band	2402 – 2480 MHz
Channel separation	1MHz
Extreme Temperature Range	-20°C to +55°C
Modulation	FHSS, GFSK, 8PSK, $\pi/4$ DQPSK
Antenna Type	Internal Antenna, Non-User Replaceable
Antenna Gain	2 dBi
RF Output Power	0.00293W (4.67dBm)

Table 4: Technical Specification of GPRS & GPS

mode		Work Frequency (MHz)	
		Transmitting frequency	Receiving frequency (MHz)
GSM	GSM900	880-915	925-96
	PCS1800	1710-1785	1805-1880
GPS		1575.42	

Table 5: Frequency hopping information

Technical Specification	Description
Hopping Range	Hereby we declare that the maximum frequency of this device is: 2402-2480MHz. This is according the Bluetooth Core Specification V2.1+EDR for devices which will be operated in the USA. This was checked during the Bluetooth Qualification tests (Test Case: TRM/CA/04-E).
Hopping Sequence	Example of a 79 hopping sequence in data mode: 33,04,21,44,23,42,53,46,55,48,40,59,72,29,76,31,08,73,07,75,09,45,60,39,58,13,47,11,77,52,35,50,65,54,67,56,69,62,71,64, 7,25,27,66,57,70,74,61,78,63,10,41,05,43,15,44,64,68,02,70,06,01,51,03,55,05,03,66,53,49,36,47,
Receiver input bandwidth	The input bandwidth of the receiver is 1MHz. In every connection one Bluetooth device is the master and the other one is the slave. The master determines the hopping sequence. The slave follows this sequence. Both devices shift between RX and TX time slot according to the clock of the master. Additionally the type of connection is set up at the beginning of the connection. The master adapts its hopping frequency and its TX/RX timing according to the packet type of the connection. Also the slave of the connection will use these settings. Repeating of a packer has no influence on the hopping sequence. The hopping sequence generated by the master of the connection will be followed in any case. That means a repeated packet will not be send on the same frequency, it is send on the next frequency of the hopping sequence.

3.3 Independent Operation Modes

The basic operation modes are:

- A. Bluetooth transmitting
 - 1. Low channel (2402MHz)
 - 2. Middle channel (2441MHz)
 - 3. High channel (2480MHz)
- B. Bluetooth standby
- C. Bluetooth Receiving
- D. GPS receiving
- E. Charging
- F. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.5 Submitted Documents

- | | |
|-------------------------|----------------------|
| - Bill of Material | - Circuit Diagram |
| - PCB Layout | - Instruction Manual |
| - Photo Document | - Rating Label |
| - Technical Description | |

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its maximum power level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.4: 2003.

4.3 Special Accessories and Auxiliary Equipment

The device was tested with following accessories

Description	Specification
AC/DC Adapter	Input: AC100~240V 50-60Hz 0.2A Output: DC5V 1.0A

Note: the adapter is only for testing, not marketed with EUT.

4.4 Countermeasures to achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Constructional Data Form or the Technical Construction File. No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test

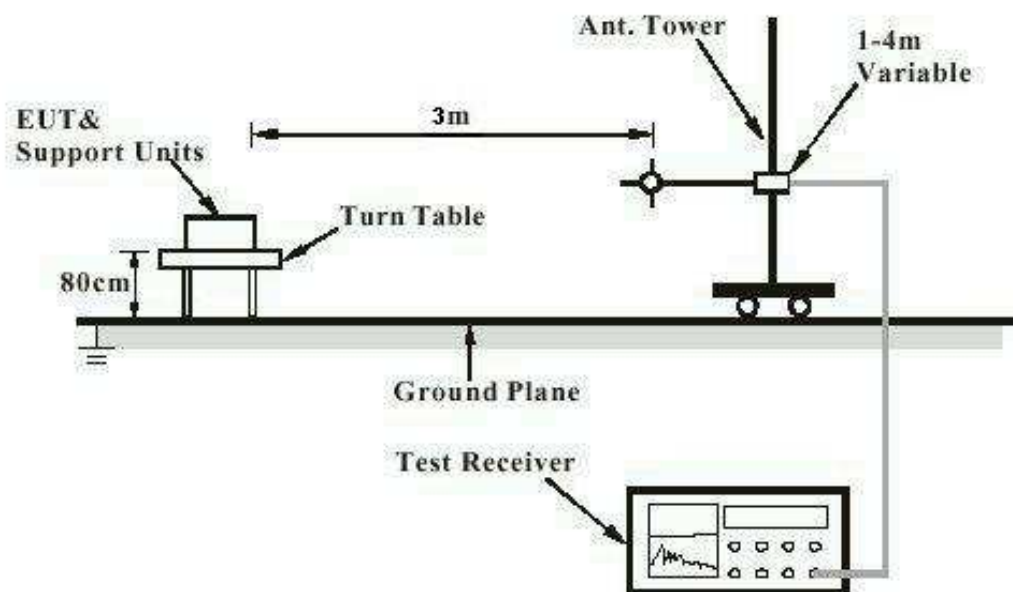


Diagram of Measurement Equipment Configuration for Mains Conduction Measurement

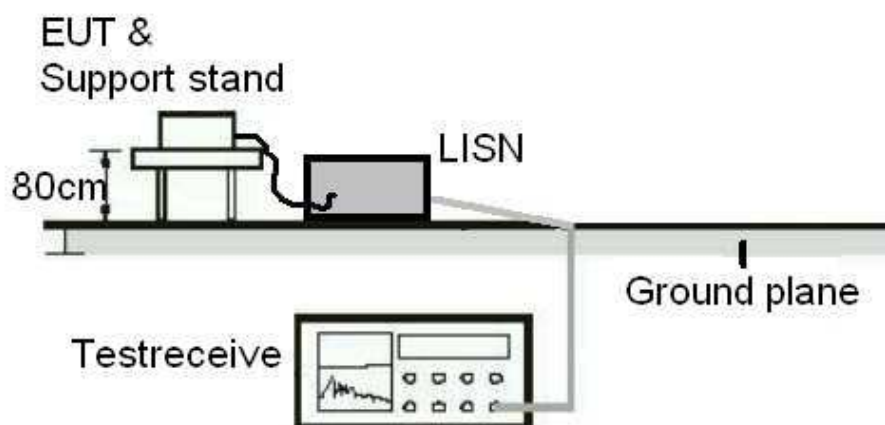
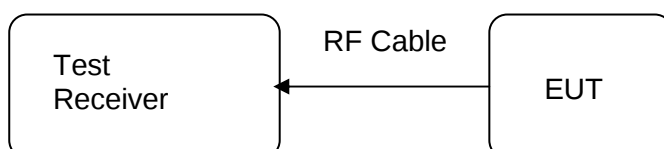


Diagram of Measurement Equipment Configuration for Conducted Transmitter Measurement



5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:**Passed**

Test date	:	2012-07-28
Test standard	:	FCC Part 15.247(b)(4) and Part 15.203
Limit	:	the use of antennas with directional gains that do not exceed 6 dBi

According to the manufacturer declared, the EUT has an internal antenna, the directional gain of antenna is 2dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT photo for details.

5.1.2 Peak Output Power

RESULT:
Passed

Test date : 2012-07-28
 Test standard : FCC Part 15.247(b)(1)
 Basic standard : ANSI C63.4: 2003
 Limit : 125mW
 Kind of test site : Shielded room

Test setup

Test Channel : Low/ Middle/ High
 Operation Mode : A
 Ambient temperature : 22°C
 Relative humidity : 52%
 Atmospheric pressure : 101 kPa

Table 6: Test result of Peak Output Power, GFSK modulation

Channel	Channel Frequency (MHz)	Peak Output Power		Limit
		(dBm)	(W)	(W)
Low Channel	2402	2.20	0.00166	0.125
Middle Channel	2441	2.54	0.00179	0.125
High Channel	2480	1.91	0.00155	0.125

Remark: RBW is 1MHz

Table 7: Test result of Peak Output Power, 8DPSK modulation

Channel	Channel Frequency (MHz)	Peak Output Power		Limit
		(dBm)	(W)	(W)
Low Channel	2402	4.67	0.00293	0.125
Middle Channel	2441	4.40	0.00275	0.125
High Channel	2480	3.88	0.00244	0.125

Remark: RBW is 3MHz

5.1.3 20dB Bandwidth

RESULT:**Passed**

Date of testing : 2012-07-28
Test standard : FCC Part 15.247(a)(1)
Basic standard : ANSI C63.4: 2003
Kind of test site : Shielded room

Test setup

Test Channel : Low/ Middle/ High
Operation Mode : A
Ambient temperature : 22°C
Relative humidity : 52%
Atmospheric pressure : 101 kPa

Table 8: Test result of 20dB Bandwidth, GFSK modulation

Channel	Channel Frequency (MHz)	20dB Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	960	/	Pass
Mid Channel	2441	966	/	Pass
High Channel	2480	960	/	Pass

Table 9: Test result of 20dB Bandwidth, 8DPSK modulation

Channel	Channel Frequency (MHz)	20dB Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	1290	/	Pass
Mid Channel	2441	1302	/	Pass
High Channel	2480	1302	/	Pass

5.1.4 Conducted spurious emissions measured in 100kHz Bandwidth

RESULT:**Passed**

Date of testing	:	2012-07-28
Test standard	:	FCC part 15.247(d)
Basic standard	:	ANSI C63.4: 2003
Limit	:	20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power); In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a)
Kind of test site	:	Shield room

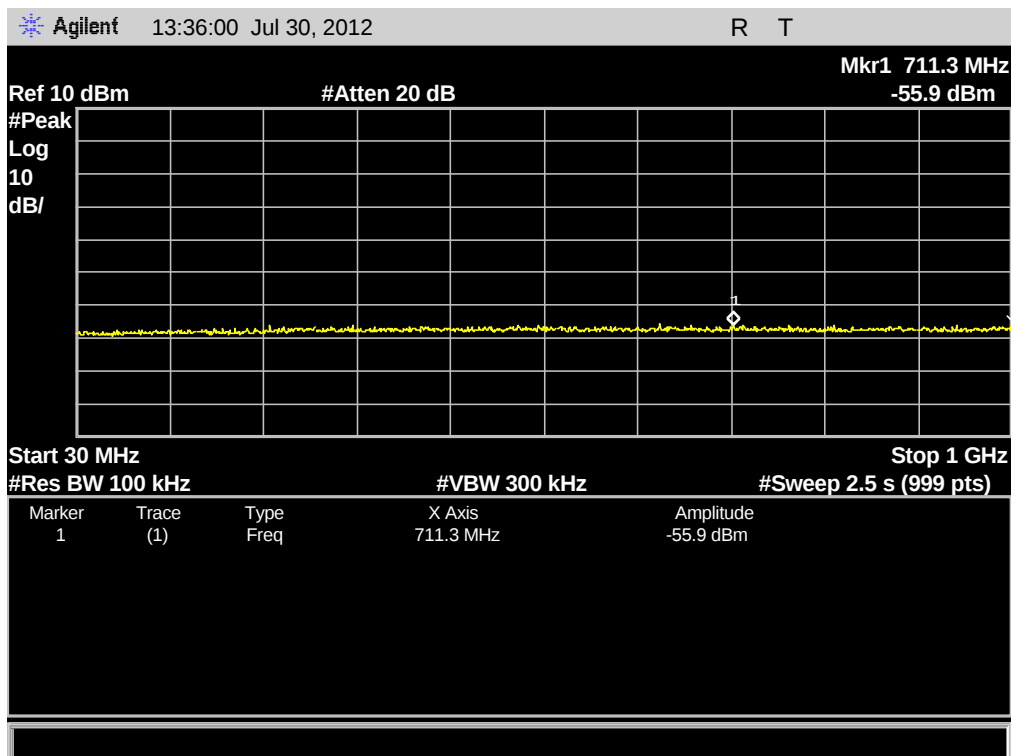
Test setup

Test Channel	:	Low/ High
Operation mode	:	A
Ambient temperature	:	22°C
Relative humidity	:	52%
Atmospheric pressure	:	101 kPa

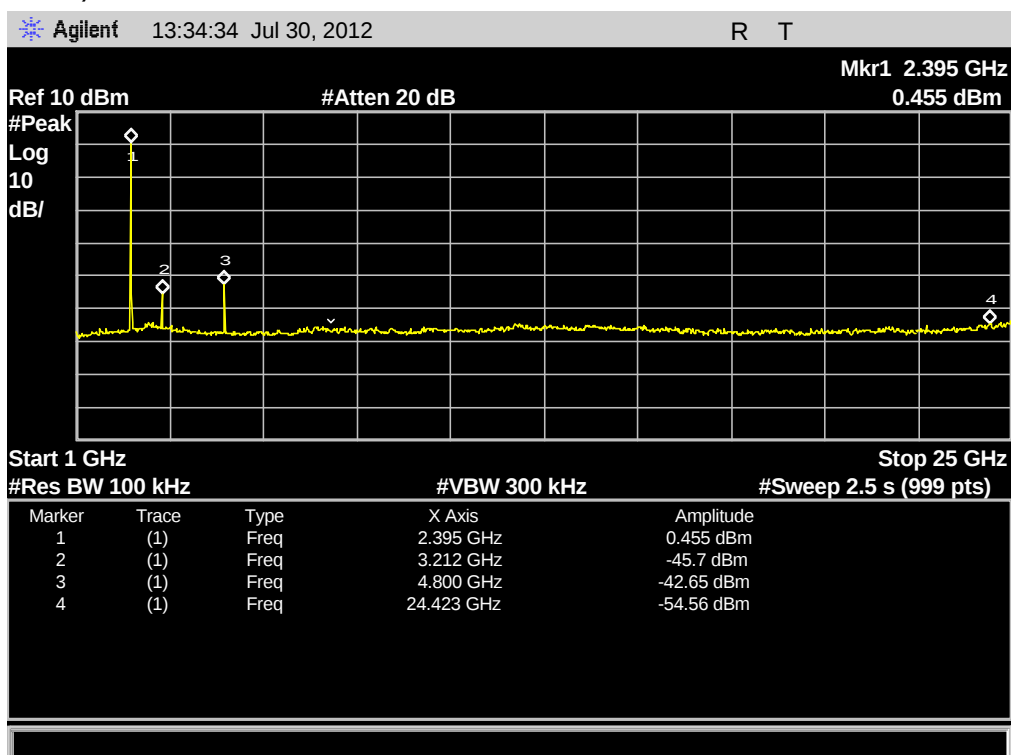
All emissions are more than 20dB below fundamental, details refer to following test plot, and compliance is achieved as well.

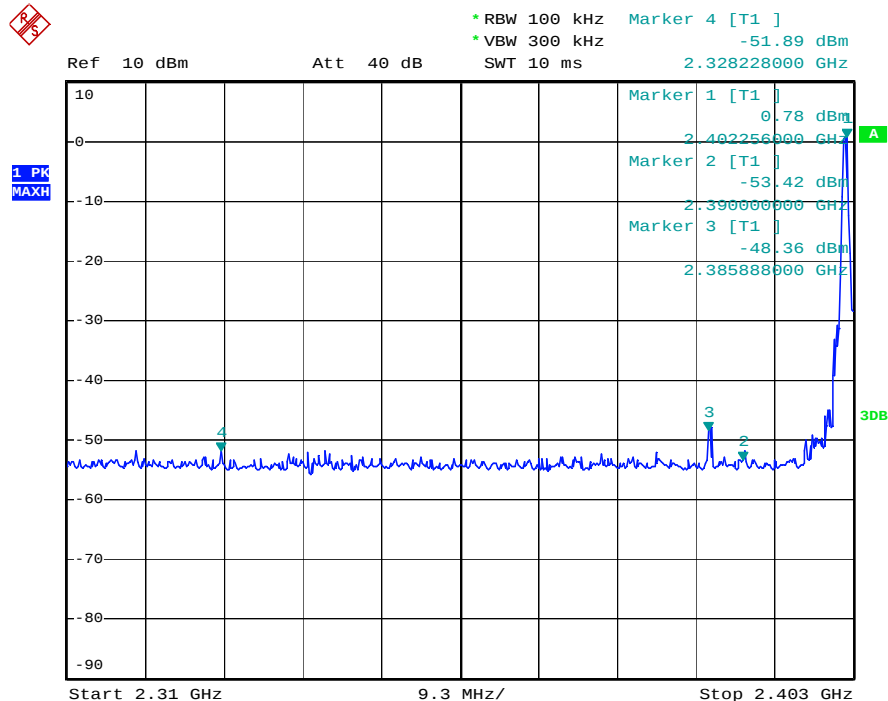
Test Plot of 100kHz Bandwidth of Frequency Band Edge, GFSK modulation

Low Channel, below 1GHz

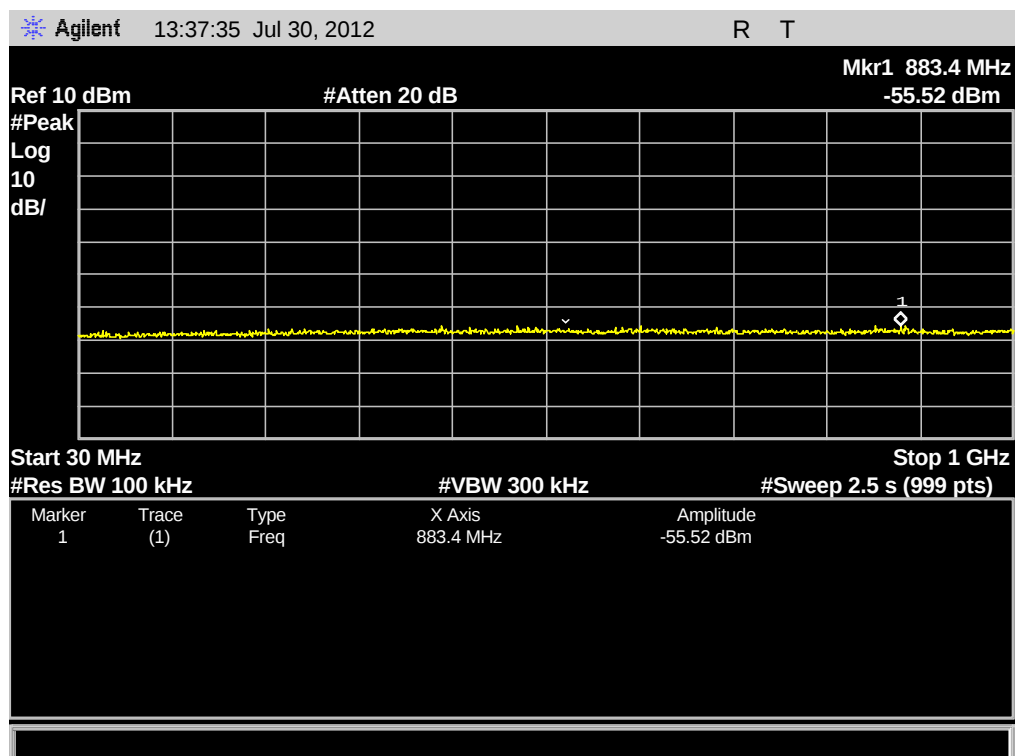


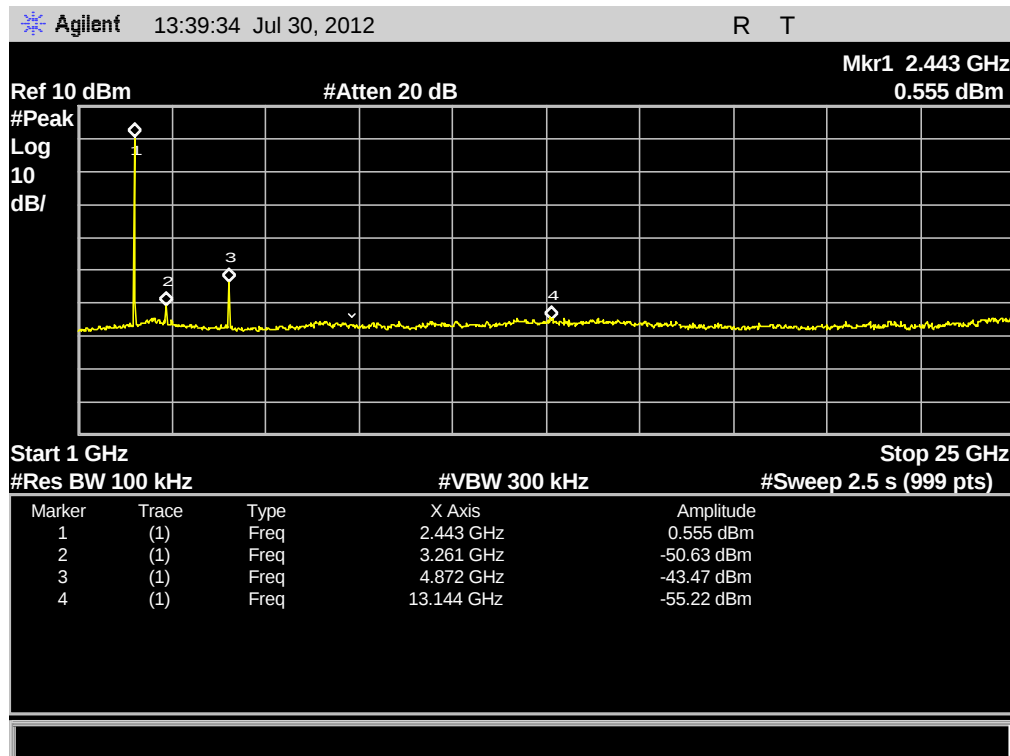
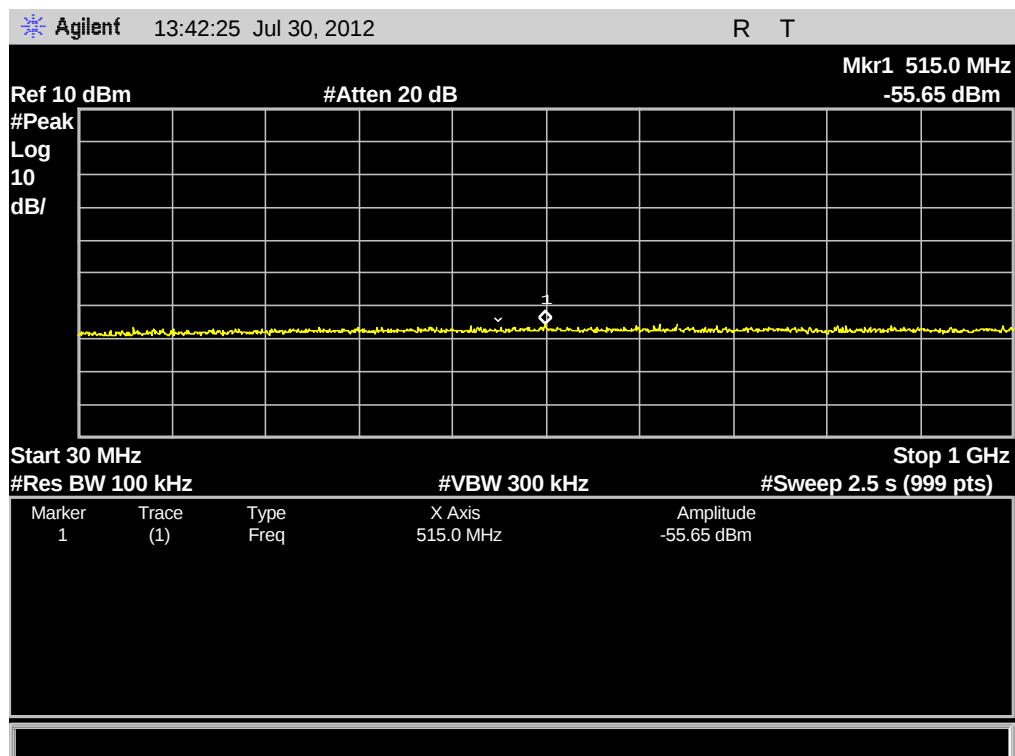
Low Channel, above 1GHz

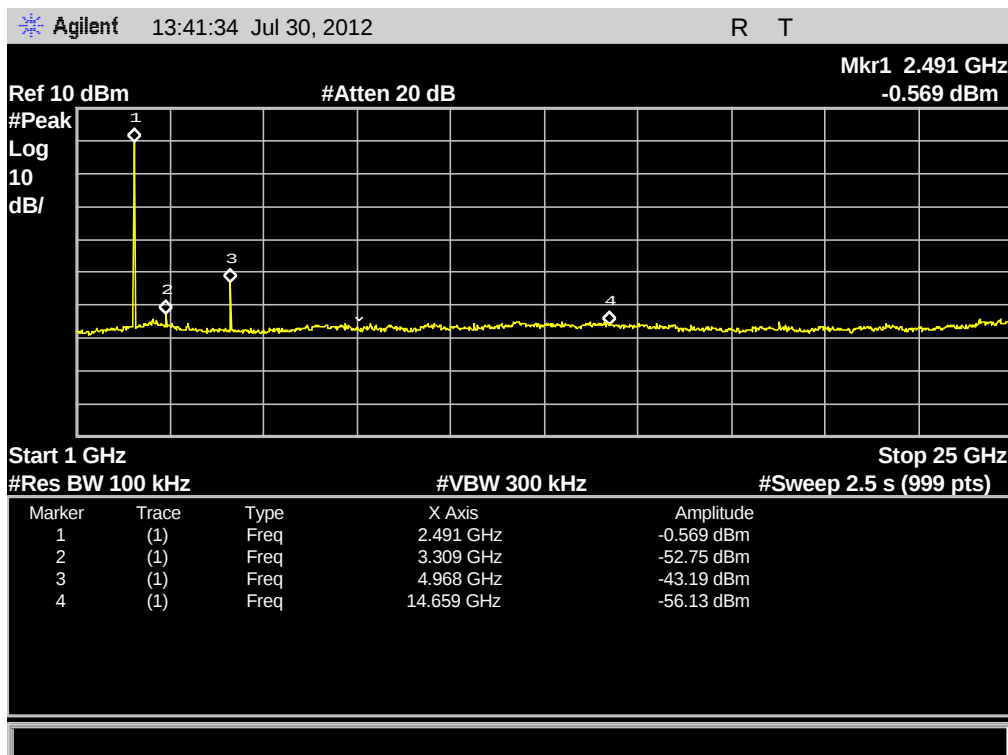
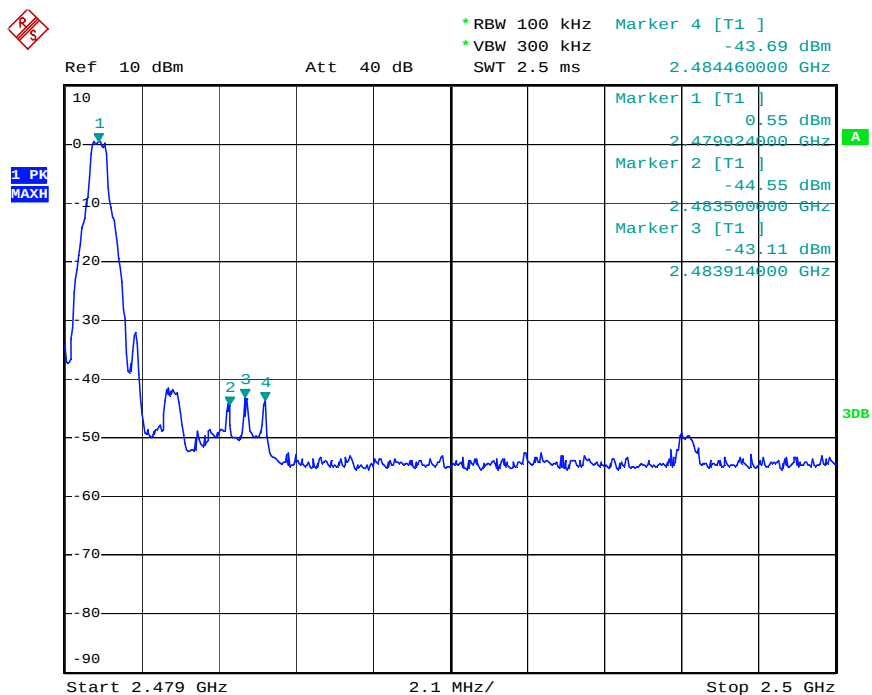


Low Channel, Band Edge


Date: 28.JUL.2012 18:39:10

Middle Channel, below 1GHz


Middle Channel, above 1GHz

High Channel, below 1GHz


High Channel, above 1GHz

High Channel, Band Edge


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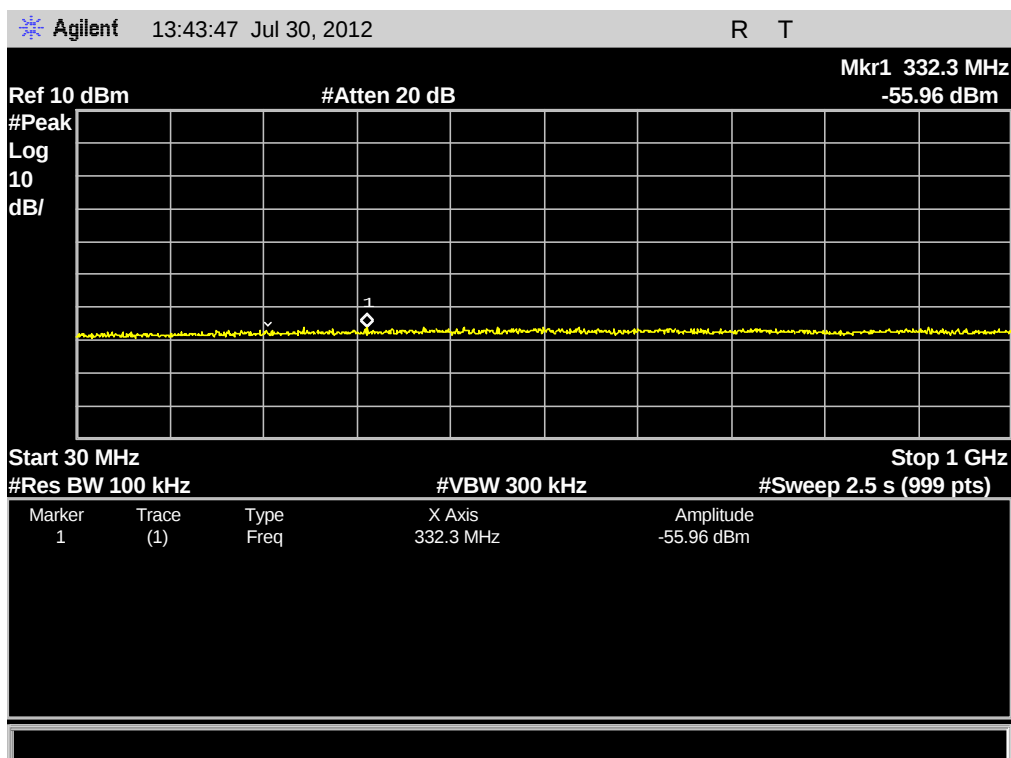
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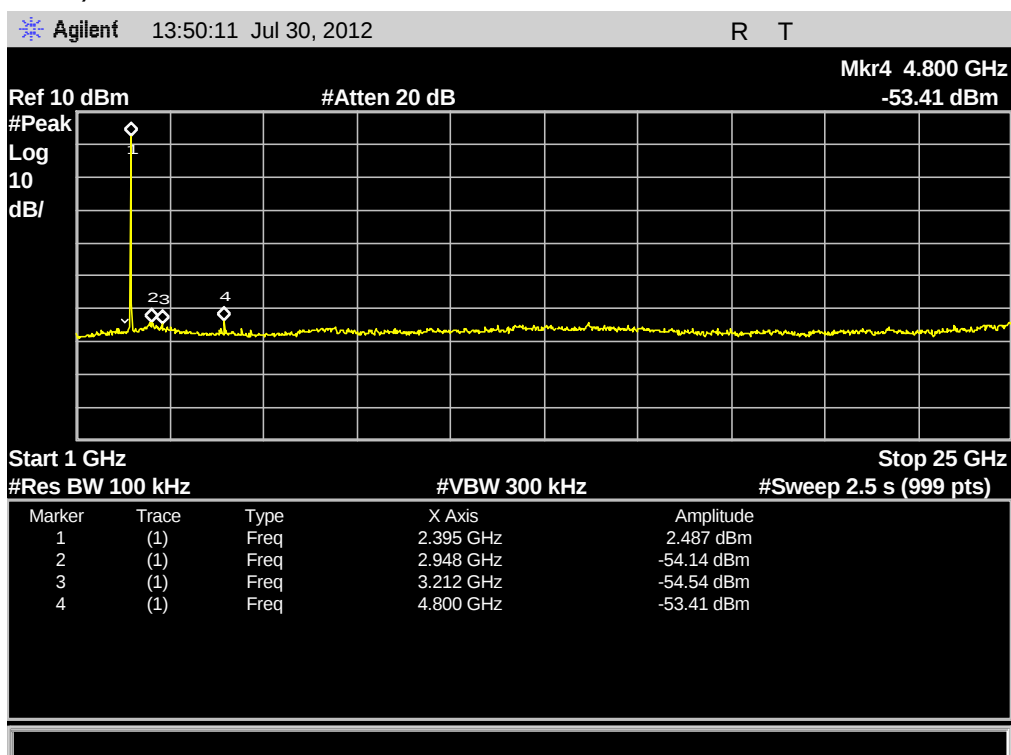
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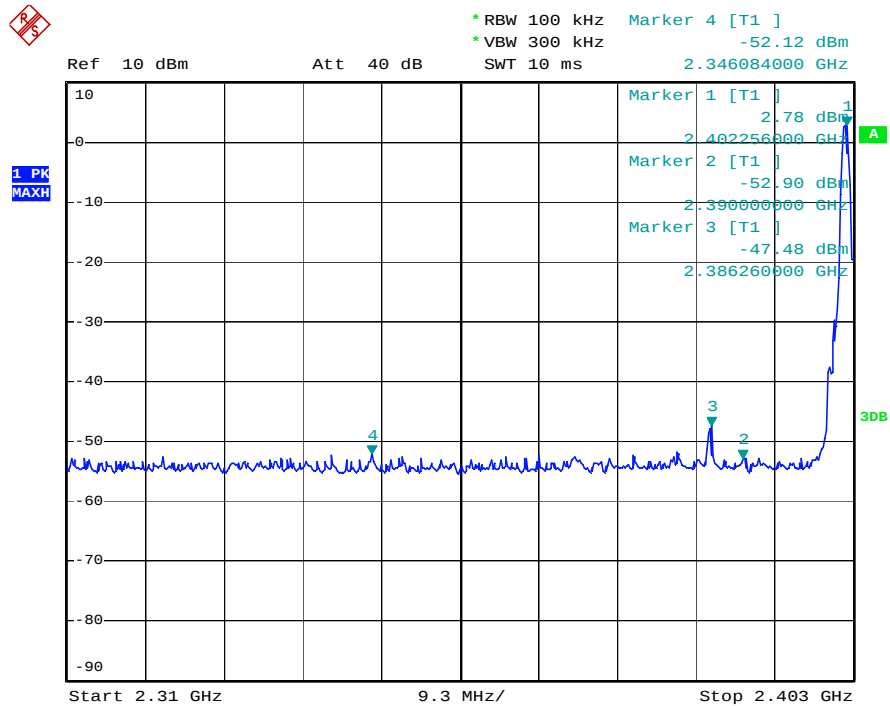
Test Plot of 100kHz Bandwidth of Frequency Band Edge, 8DPSK modulation

Low Channel, below 1GHz

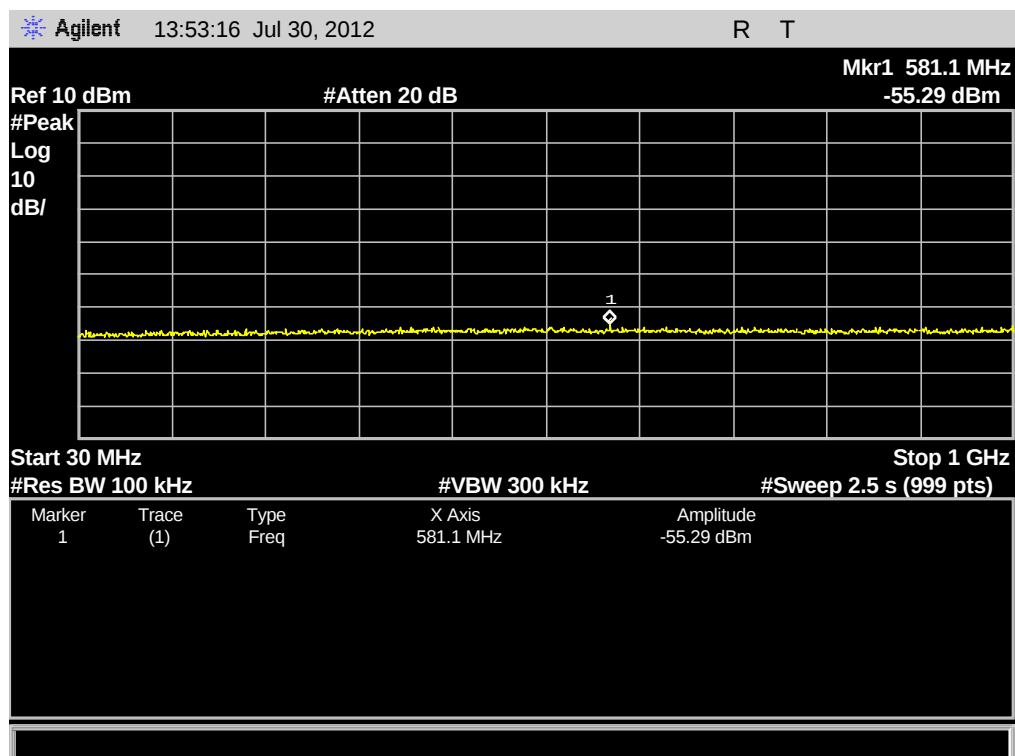


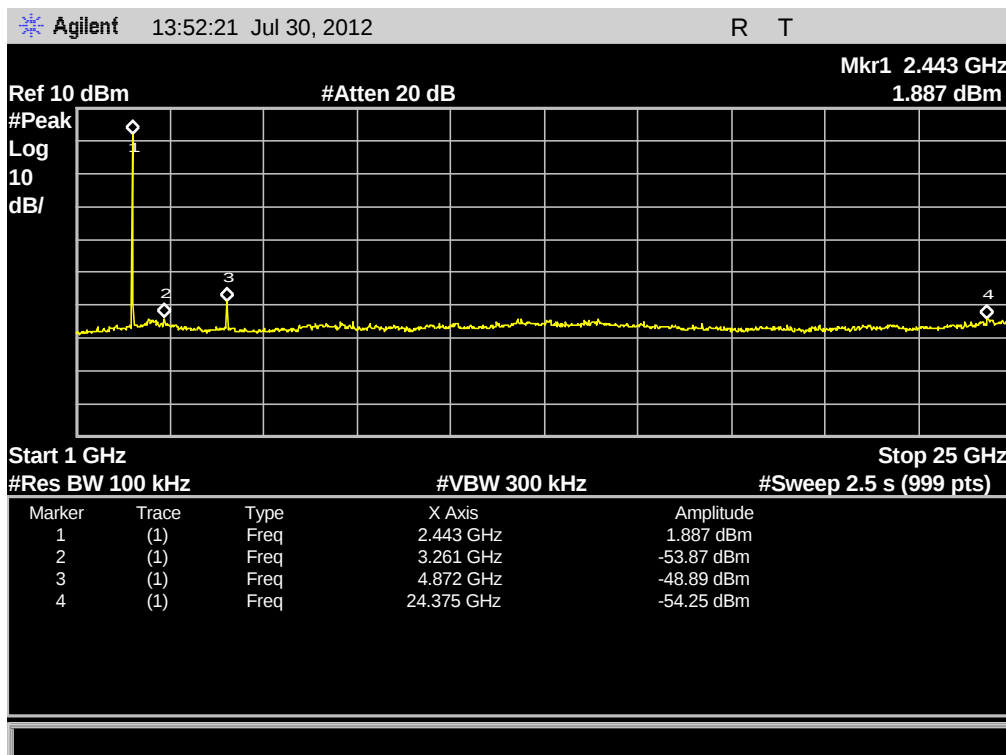
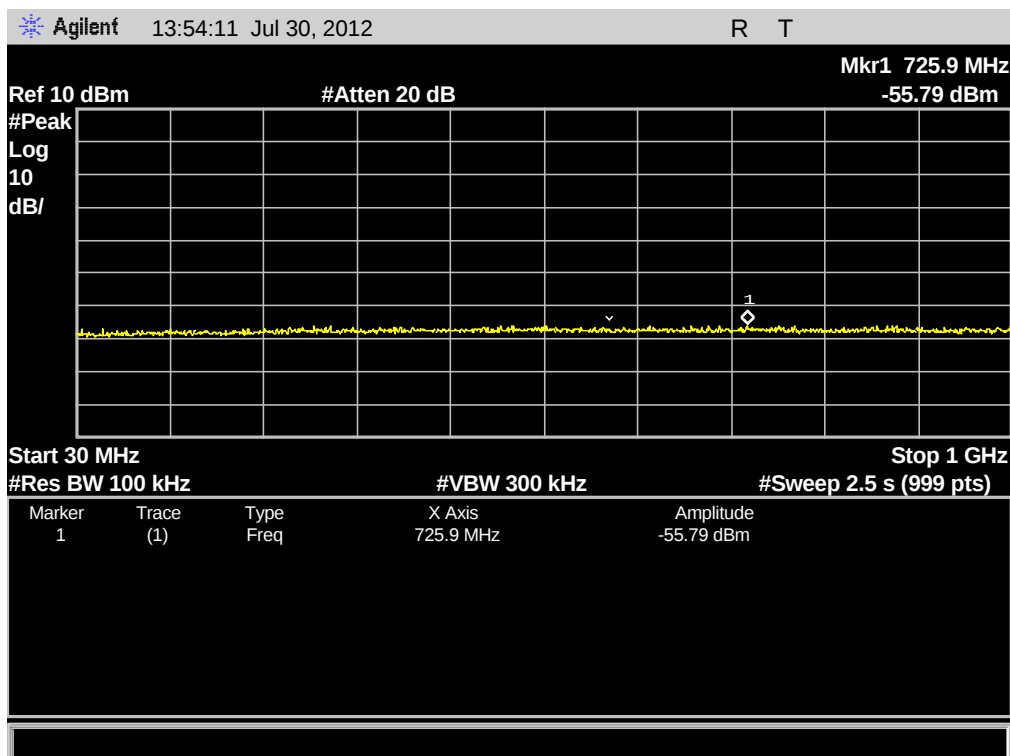
Low Channel, above 1GHz



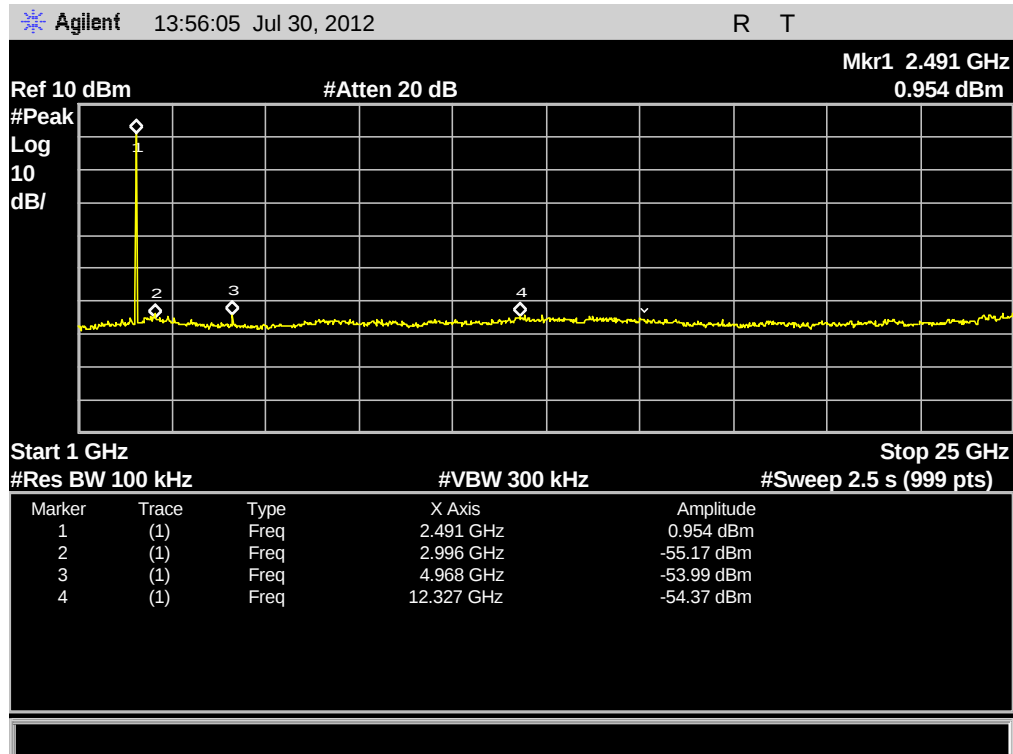
Low Channel, Band Edge


Date: 28.JUL.2012 18:35:18

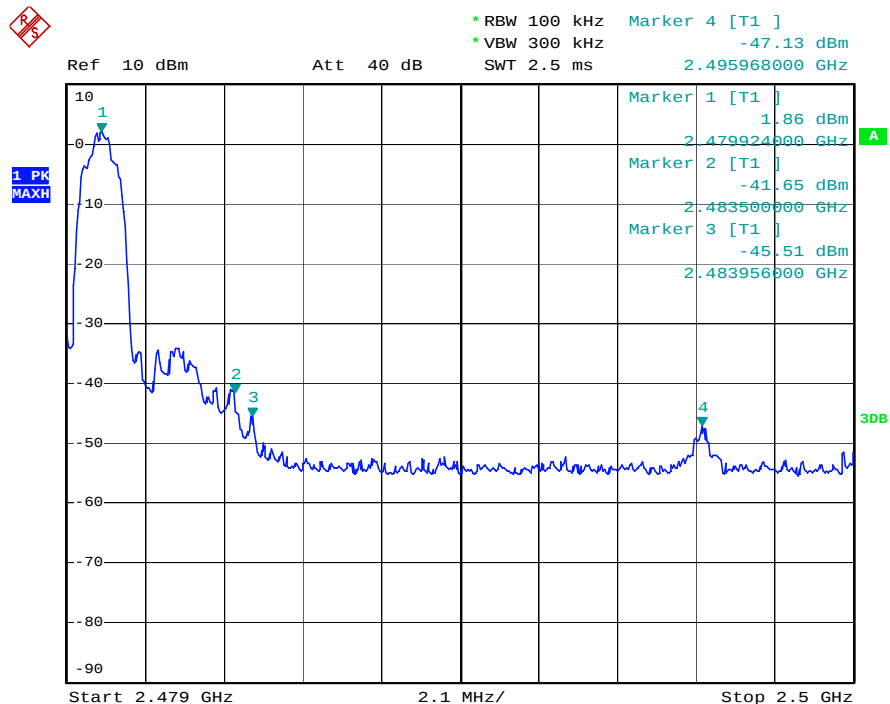
Middle Channel, below 1GHz


Middle Channel, above 1GHz

High Channel, below 1GHz


High Channel, above 1GHz



High Channel, Band Edge



5.1.5 Spurious Emission

RESULT:**Passed**

Date of testing	:	2012-07-25
Test standard	:	FCC part 15.247(d) FCC Part 15.205
Basic standard	:	ANSI C63.4: 2003
Limits	:	Refer to 15.209(a) of FCC part 15.247(d)
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Test Channel	:	Low/ Middle/ High
Operation mode	:	A, C
Ambient temperature	:	24°C
Relative humidity	:	48%
Atmospheric pressure	:	101 kPa

Remark:

During the pretest the EUT was rotated through three orthogonal axes to determine the attitude that maximizes the emissions. After that the EUT was manually handled to find the orientation that has the maximum emission, which is the orientation shown in the test setup photos.

Testing was carried out within frequency range 9kHz to the tenth harmonics.

For details refer to Appendix 1.

5.1.6 Frequency Separation

RESULT:**Passed**

Date of testing : 2012-07-28
Test standard : FCC part 15.247(a)(1)
Basic standard : ANSI C63.4: 2003
Limit : $\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth, whichever is greater

Test setup

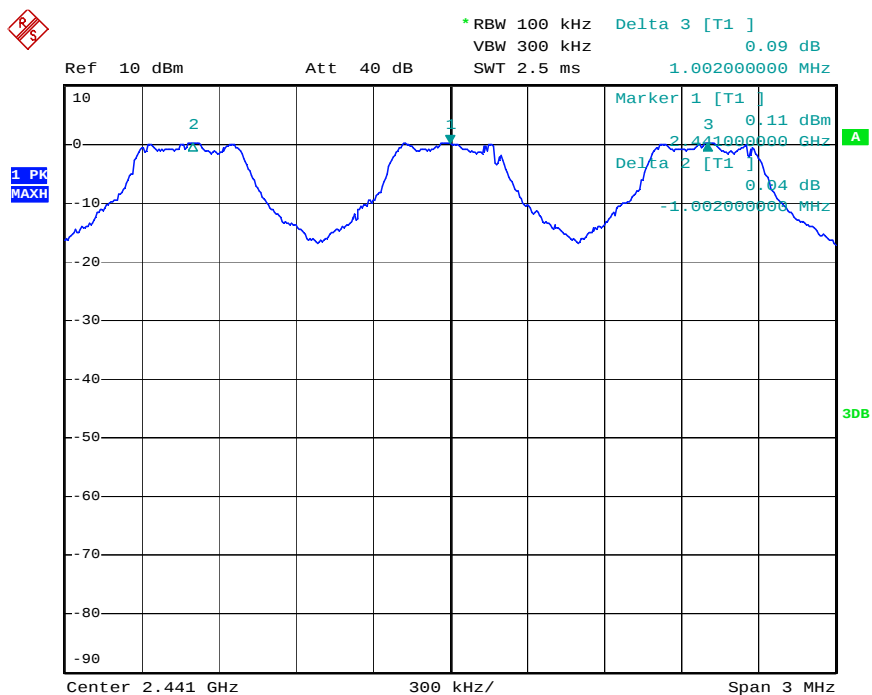
Test Channel : Low/ Middle/ High
Operation Mode : A
Ambient temperature : 22°C
Relative humidity : 52%
Atmospheric pressure : 101 kPa

Table 10: Test result of Frequency Separation

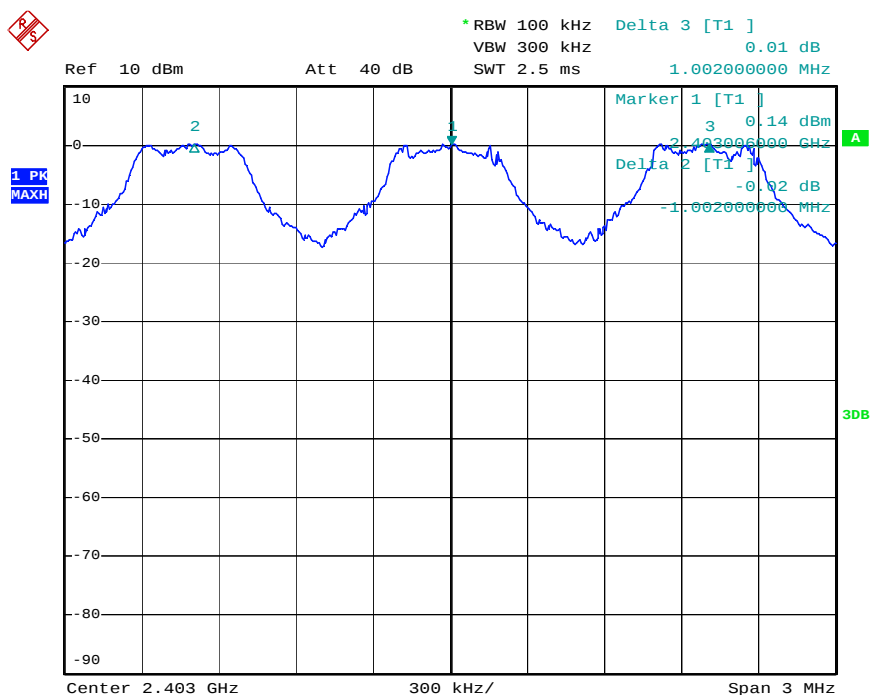
Channel	Channel Frequency (MHz)	Measured Channel Separation (MHz)	Limit (kHz)	Result
Low Channel	2402	1	$\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth	Pass
Adjacency Channel	2403			
Mid Channel	2441	1	$\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth	Pass
Adjacency Channel	2442			
High Channel	2480	1	$\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth	Pass
Adjacency Channel	2479			

Test Plot of Frequency Separation

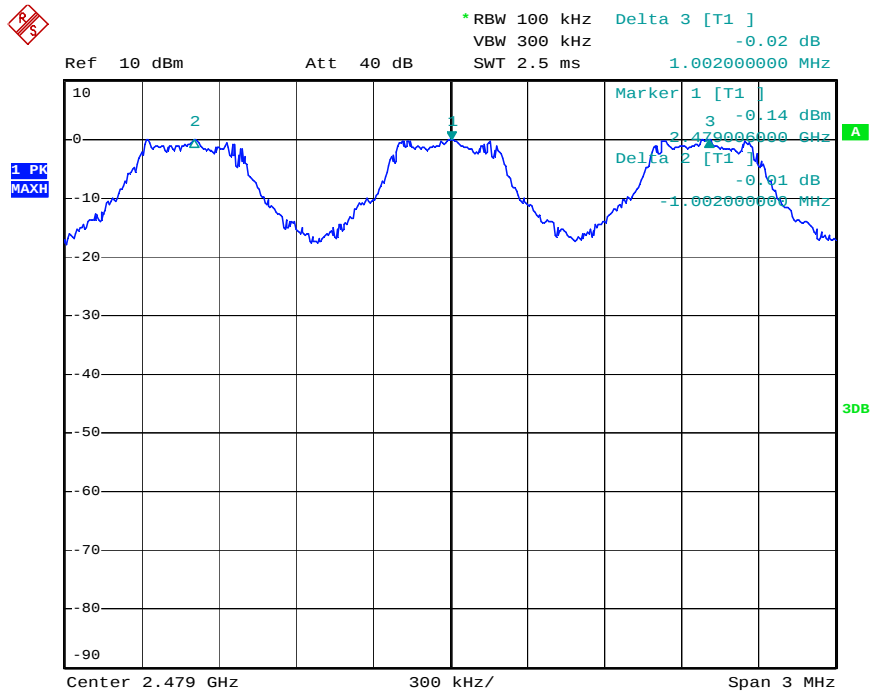
Low Channel



Middle Channel



High Channel



5.1.7 Number of hopping frequency

RESULT:**Passed**

Date of testing : 2012-07-28
Test standard : FCC part 15.247(a)(1)(iii)
Basic standard : ANSI C63.4: 2003
Limits : ≥ 15 non-overlapping channels
Kind of test site : Shield room

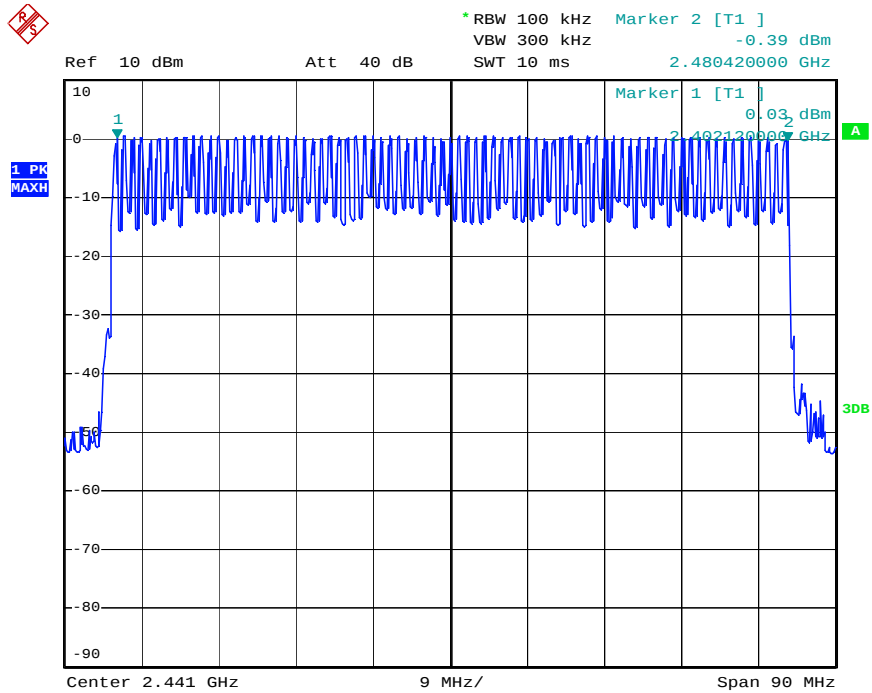
Test setup

Test Channel : Low/ Middle/ High
Operation Mode : A
Ambient temperature : 22°C
Relative humidity : 52%
Atmospheric pressure : 101 kPa

Table 11: Test result of Number of hopping frequency

Frequency Range	Measured Quantity of Hopping Channel	Limit	Result
<u>2400</u> to <u>2483.5</u> MHz	79	≥ 15	Pass

Test Plot of Number of hopping frequencies



5.1.8 Time of Occupancy

RESULT:
Passed

Date of testing : 2012-07-28
 Test standard : FCC part 15.247(a)(1)(iii)
 Basic standard : ANSI C63.4: 2003
 Limits : 0.4s
 Kind of test site : Shield room

Test setup

Test Channel : Low/ Middle/ High
 Operation Mode : A
 Ambient temperature : 22°C
 Relative humidity : 52%
 Atmospheric pressure : 101 kPa

Table 12: Test result of Time of Occupancy, GFSK modulation

Channel	Data Mode	Pulse width (ms)	Measured Dwell time (s)	Limit (s)	Result
Low Channel	DH1	0.54	0.173	0.4	Pass
	DH3	1.82	0.291	0.4	Pass
	DH5	3.09	0.330	0.4	Pass
Mid Channel	DH1	0.54	0.173	0.4	Pass
	DH3	1.84	0.294	0.4	Pass
	DH5	3.09	0.330	0.4	Pass
High Channel	DH1	0.54	0.173	0.4	Pass
	DH3	1.82	0.291	0.4	Pass
	DH5	3.09	0.330	0.4	Pass

Table 13: Test result of Time of Occupancy, 8DPSK modulation

Channel	Data Mode	Pulse width (ms)	Measured Dwell time (s)	Limit (s)	Result
Low Channel	DH1	0.56	0.179	0.4	Pass
	DH3	1.72	0.275	0.4	Pass
	DH5	3.09	0.329	0.4	Pass
Mid Channel	DH1	0.56	0.179	0.4	Pass
	DH3	1.72	0.275	0.4	Pass
	DH5	3.09	0.329	0.4	Pass
High Channel	DH1	0.55	0.176	0.4	Pass
	DH3	1.72	0.275	0.4	Pass
	DH5	3.09	0.329	0.4	Pass

Note:

$$\text{Dwell time} = \text{Pulse width} \times (\text{Hopping rate} / \text{Number of channels}) \times \text{Period}$$
$$\text{Period} = 0.4 \text{ (seconds/ channel)} \times 79 \text{ (channel)} = 31.6 \text{ seconds}$$

5.1.9 Conducted emissions

RESULT:**Passed**

Date of testing	:	2012-07-24
Test standard	:	FCC Part 15.107(a), FCC Part 15.207(a)
Basic standard	:	ANSI C63.4: 2003
Frequency range	:	0.15 – 30MHz
Limits	:	FCC Part 15.107(a)
Kind of test site	:	Shield room

Test setup

Input Voltage	:	AC120V 60Hz
Operation Mode	:	A,B,C,D,E
Earthing	:	Not connected
Ambient temperature	:	22°C
Relative humidity	:	55%
Atmospheric pressure	:	101 kPa

For details refer to Appendix 1.

Testing was performed in all modes, the worst-case was recorded in this test report.

5.1.10 Radiated emissions

RESULT:**Passed**

Date of testing	:	2012-07-25 to 2012-07-30
Test standard	:	FCC Part 15.109
Basic standard	:	ANSI C63.4: 2003
Test frequency	:	30 - 6000MHz
Limits	:	FCC Part 15.109(a)
Kind of test site	:	3m Semi-Anechoic Chamber

Test Setup

Input Voltage	:	AC120V 60Hz
Operation Mode	:	D,E
Earthing	:	Not connected
Ambient temperature	:	24°C
Relative humidity	:	48%
Atmospheric pressure	:	101 kPa

For details refer to Appendix 1.

The Radiated Emissions testing was performed in the X and Z axis mode. The X Axis mode is the worst-case recorded in this test report.

6. Safety Human exposure

6.1 Radio Frequency Exposure Compliance

6.1.1 Electromagnetic Fields

RESULT:**Passed**

Test standard : FCC KDB Publication 447498

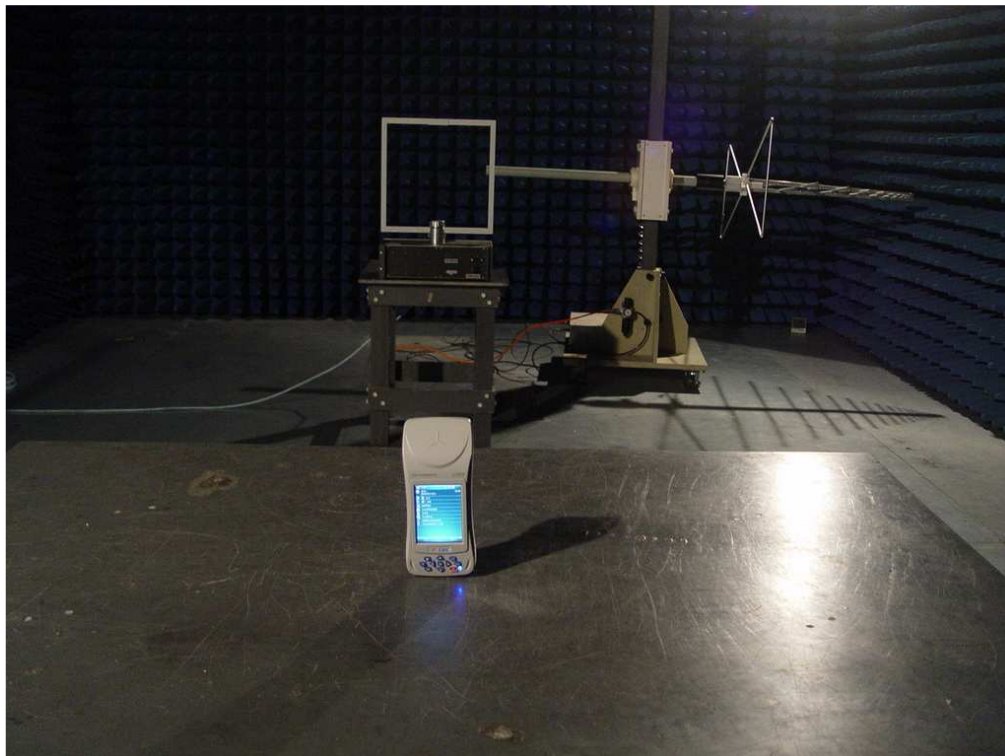
Since maximum peak output power of the transmitter is $<60/f(\text{GHz})\text{mW}$, i.e.
 $2.93\text{mW} < 25(=60/2.4)\text{mW}$, hence the EUT is excluded from SAR evaluation according to
FCC KDB publication 447498 D01: Mobile Portable RF Exposure.

7. Photographs of the Test Set-Up

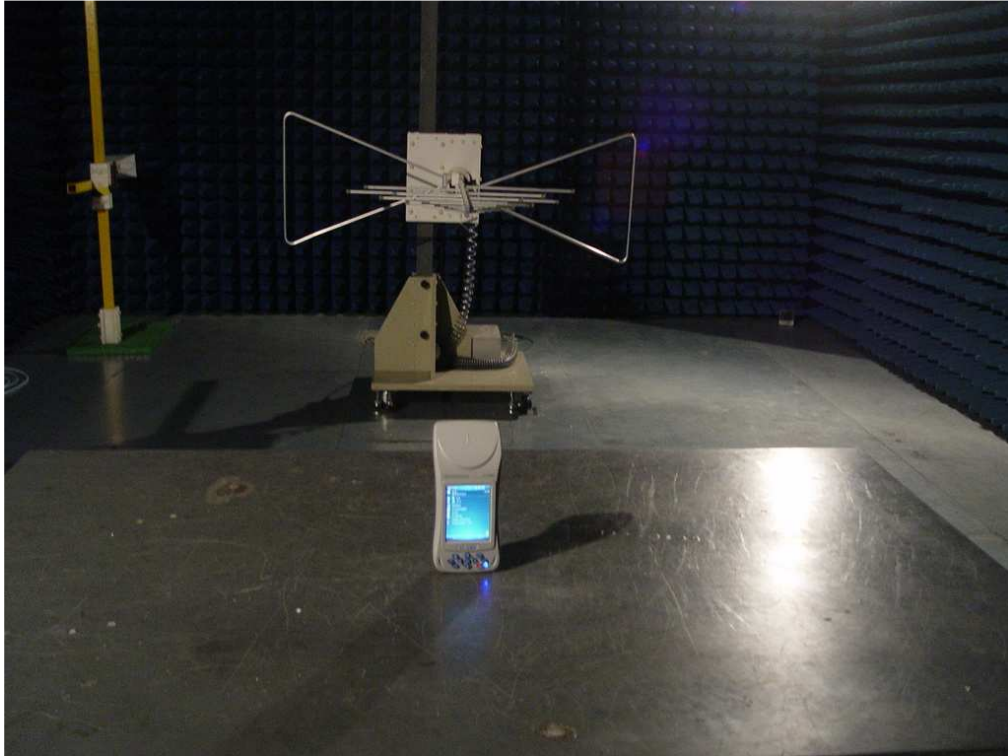
Photograph 1: Set-up for Coducted Emissions



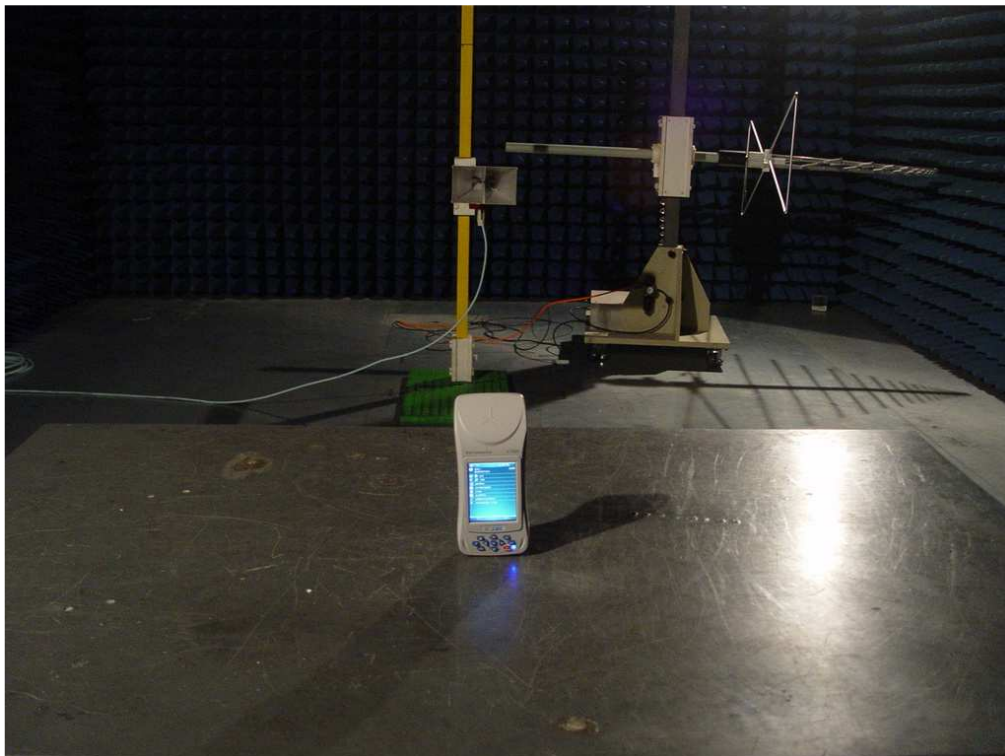
Photograph 2: Set-up for Radiated Emissions, below 30MHz



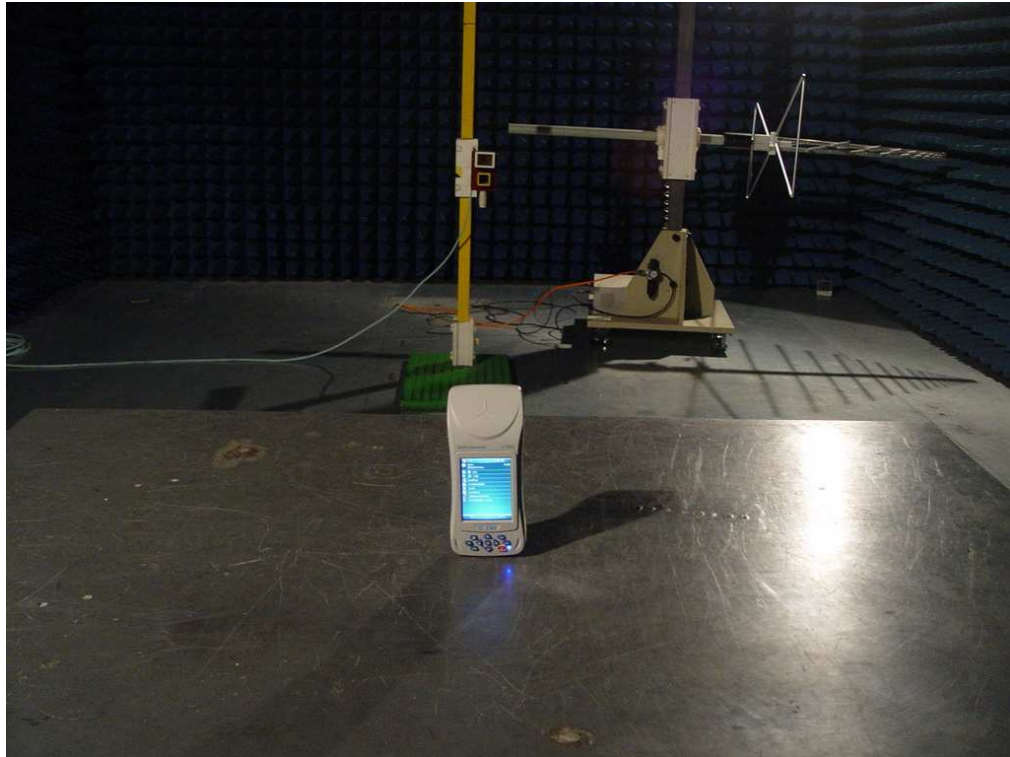
Photograph 3: Set-up for Radiated Emissions (30MHz-1GHz)



Photograph 4: Set-up for Radiated Emissions (1GHz-18GHz)



Photograph 5: Set-up for Radiated Emissions (18GHz-26GHz)



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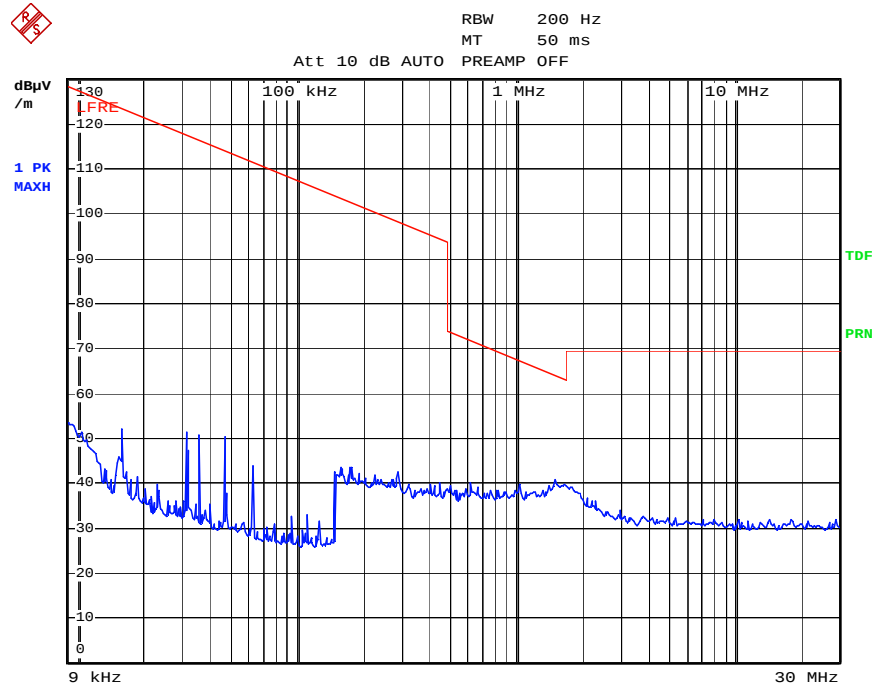
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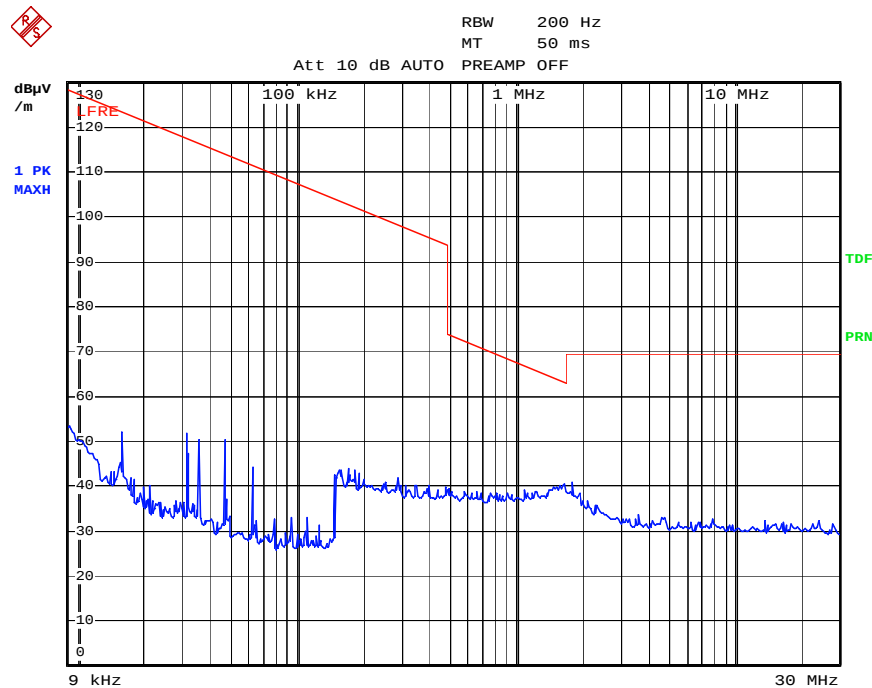
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Figure 1: Test figure of spurious emissions, mode A.1, Horizontal polarity (9kHz – 30MHz), GFSK Modulation



Date: 27.JUL.2012 22:24:14

Figure 2: Test figure of spurious emissions, mode A.1, Vertical polarity (9kHz – 30MHz), GFSK Modulation



Date: 27.JUL.2012 22:26:09

Figure 3: Test figure of spurious emissions, mode A.1, Horizontal polarity (30MHz – 1GHz), GFSK Modulation



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Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9841

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: TX 2402MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Horizontal

Power Source: DC 3.7V

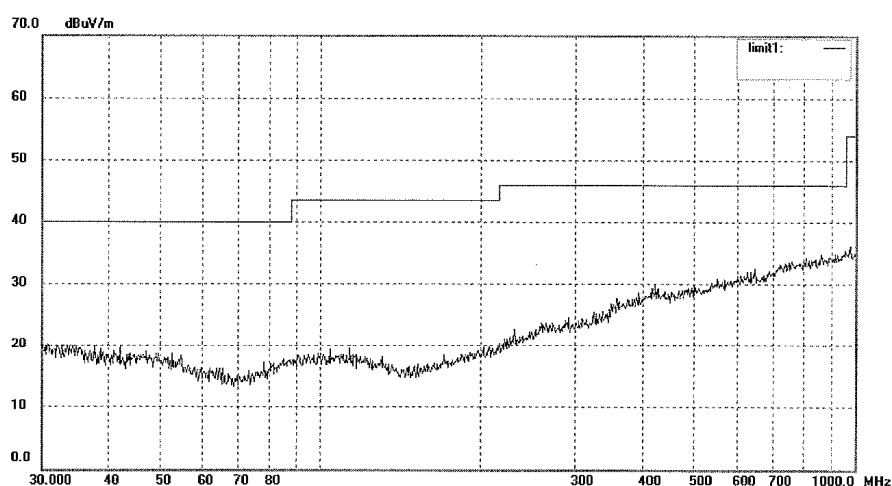
Date: 2012/07/25

Time: 5:41:14

Engineer Signature: PEI

Distance: 3m

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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Figure 4: Test figure of spurious emissions, mode A.1, Vertical polarity (30MHz – 1GHz), GFSK Modulation



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Job No.: pei #9842	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 5:48:24
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: BDR

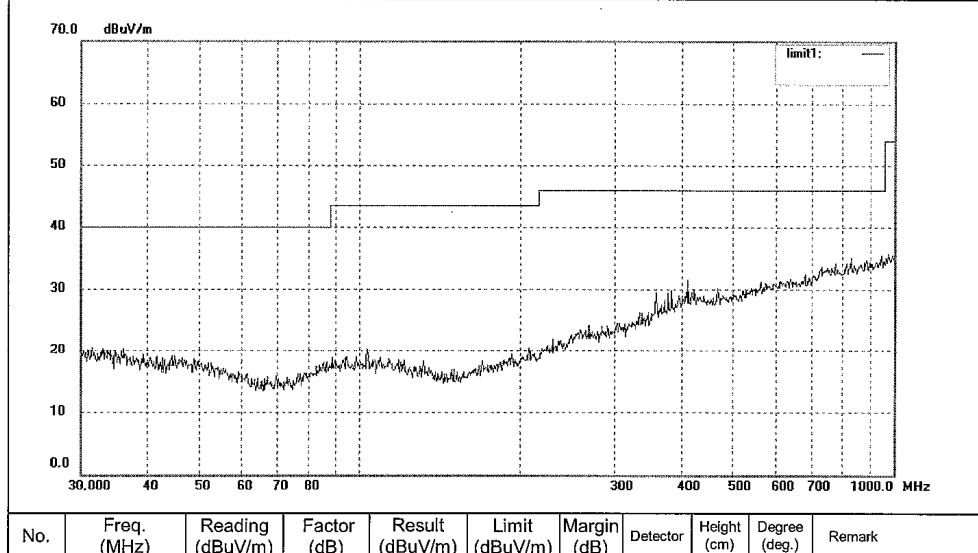


Figure 5: Test figure of spurious emissions, mode A.1, Horizontal polarity (1GHz –18GHz), GFSK Modulation



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Fax:+86-0755-26503396

Job No.: pei #9854

Standard: FCC Class B 3M Radiated

Test Item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: TX 2402MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Horizontal

Power Source: DC 3.7V

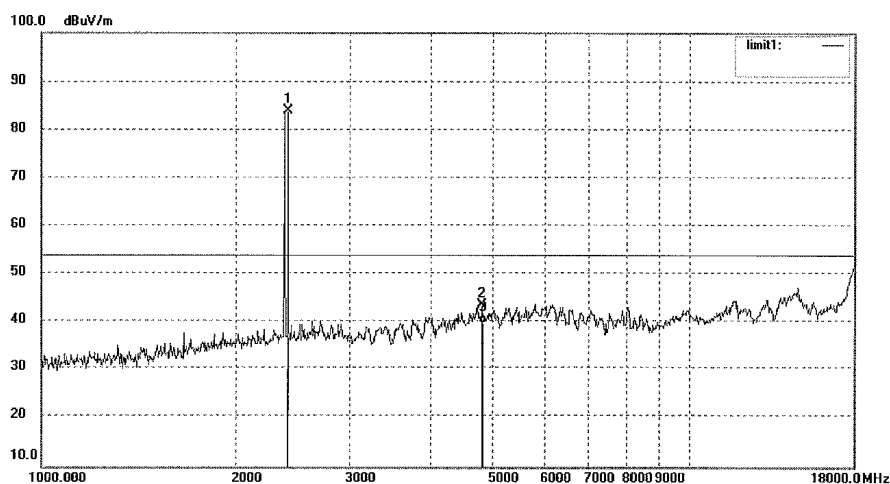
Date: 2012/07/25

Time: 7:24:11

Engineer Signature: PEI

Distance: 3m

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.015	91.45	-7.45	84.00	/	/	peak			
2	4804.025	43.87	-0.30	43.57	74.00	-30.43	peak			
3	4804.025	40.02	-0.30	39.72	54.00	-14.28	AVG			

Figure 6: Test figure of spurious emissions, mode A.1, Vertical polarity (1GHz – 18GHz), GFSK Modulation



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Job No.: pei #9853

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: TX 2402MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Vertical

Power Source: DC 3.7V

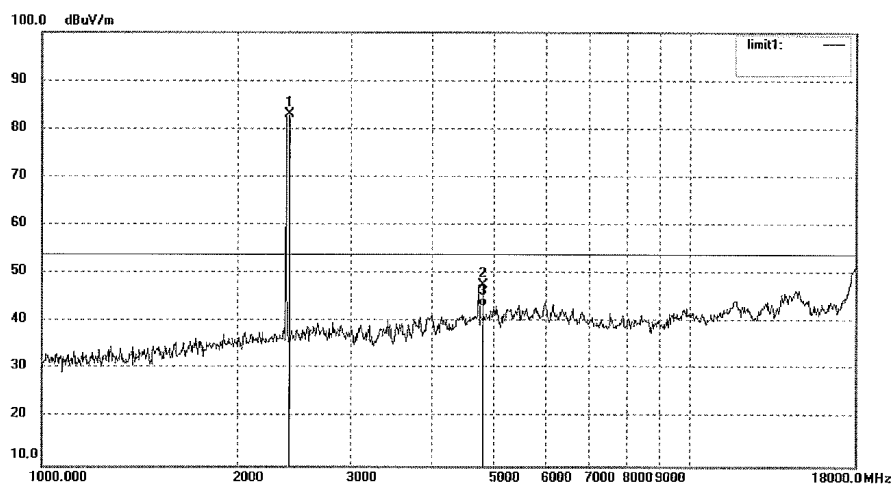
Date: 2012/07/25

Time: 7:13:57

Engineer Signature: PEI

Distance: 3m

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.015	90.38	-7.45	82.93	/	/	peak			
2	4804.042	47.88	-0.30	47.58	74.00	-26.42	peak			
3	4804.042	43.54	-0.30	43.24	54.00	-10.76	AVG			

Figure 7: Test figure of spurious emissions, mode A.1, Horizontal polarity (18GHz –25GHz), GFSK Modulation



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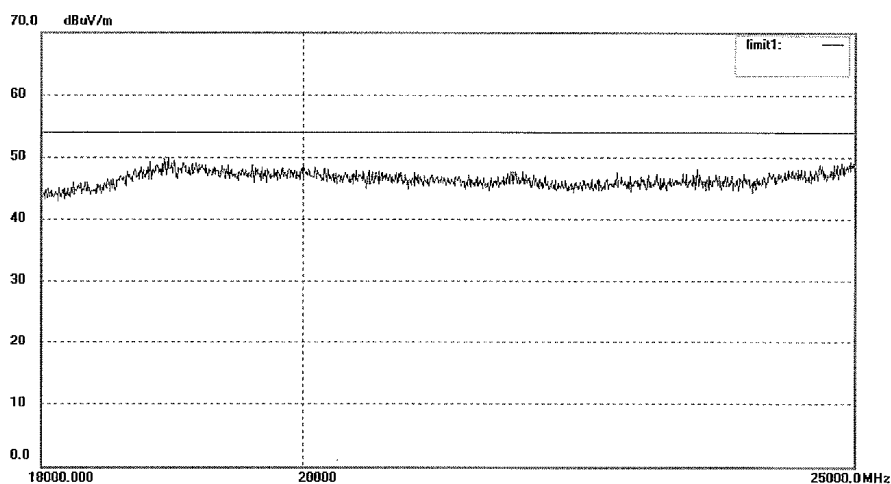
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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: pei #9889	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 12:47:38
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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Figure 8: Test figure of spurious emissions, mode A.1, Vertical polarity (18GHz – 25GHz), GFSK Modulation



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Job No.: pei #9890

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: GPS receiver

Mode: TX 2402MHz

Model: LT400

Manufacturer: Huatuo Satelite Navigation Technology Ltd.

Polarization: Vertical

Power Source: DC 3.7V

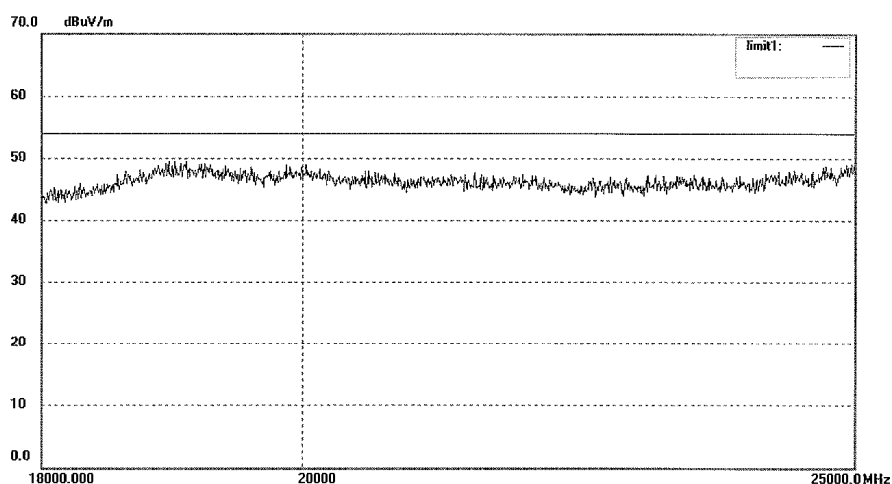
Date: 2012/07/25

Time: 12:55:11

Engineer Signature: PEI

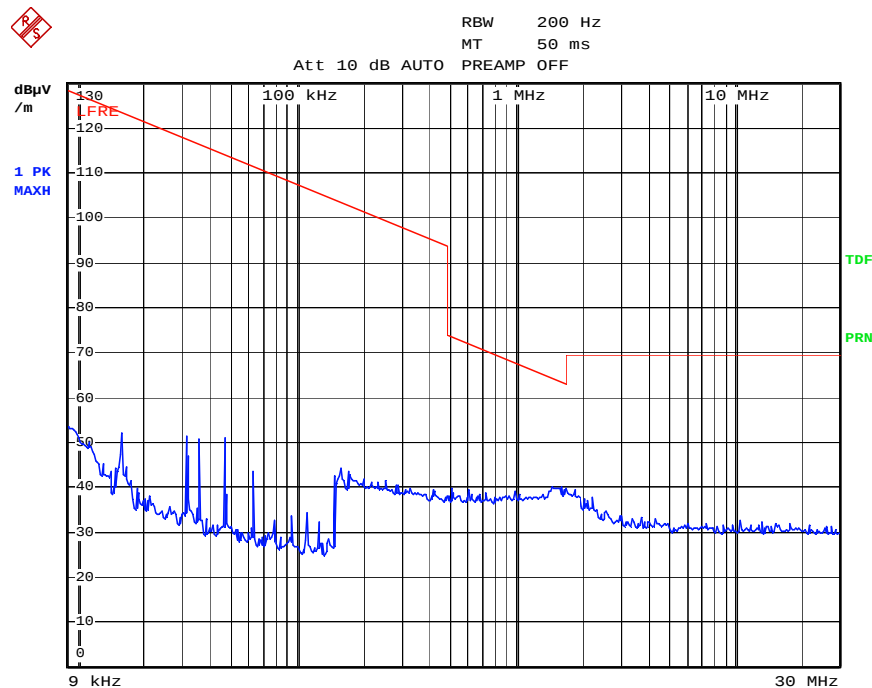
Distance: 3m

Note: BDR



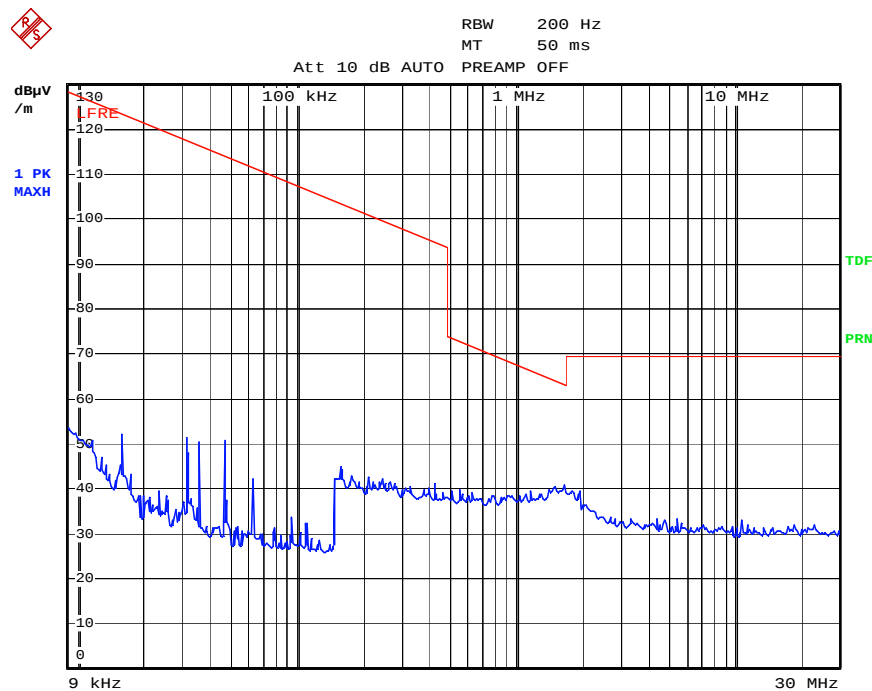
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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Figure 9: Test figure of spurious emissions, mode A.2, Horizontal polarity (9kHz – 30MHz), GFSK Modulation



Date: 27. JUL. 2012 22:30:15

Figure 10: Test figure of spurious emissions, mode A.2, Vertical polarity (9kHz – 30MHz), GFSK Modulation



Date: 27. JUL. 2012 22:54:46

Figure 11: Test figure of spurious emissions, mode A.2, Horizontal polarity (30MHz – 1GHz), GFSK Modulation



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Job No.: pei #9843

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: TX 2441MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Horizontal

Power Source: DC 3.7V

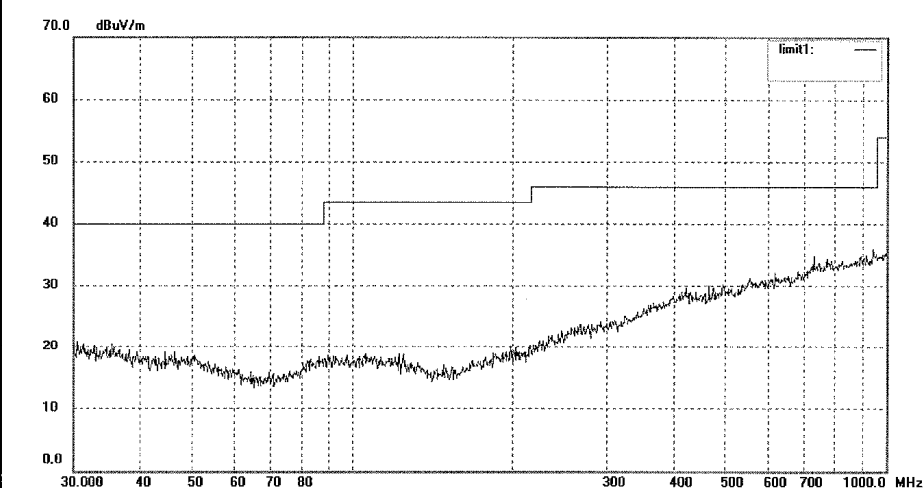
Date: 2012/07/25

Time: 5:55:59

Engineer Signature: PEI

Distance: 3m

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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Figure 12: Test figure of spurious emissions, mode A.2, Vertical polarity (30MHz – 1GHz), GFSK Modulation



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Site: 966 chamber

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Fax:+86-0755-26503396

Job No.: pei #9844	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 6:03:22
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2441MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: BDR

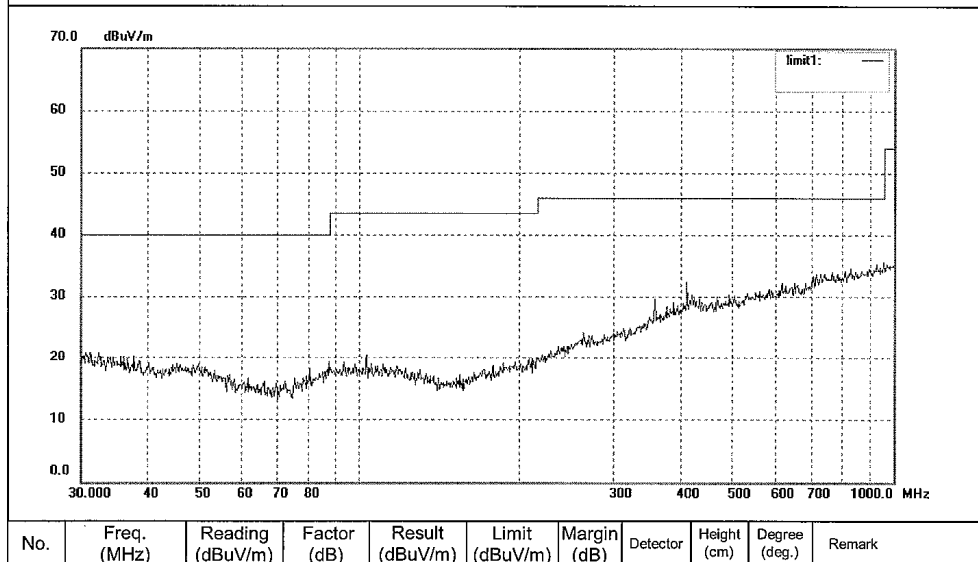


Figure 13: Test figure of spurious emissions, mode A.2, Horizontal polarity (1GHz – 18GHz), GFSK Modulation



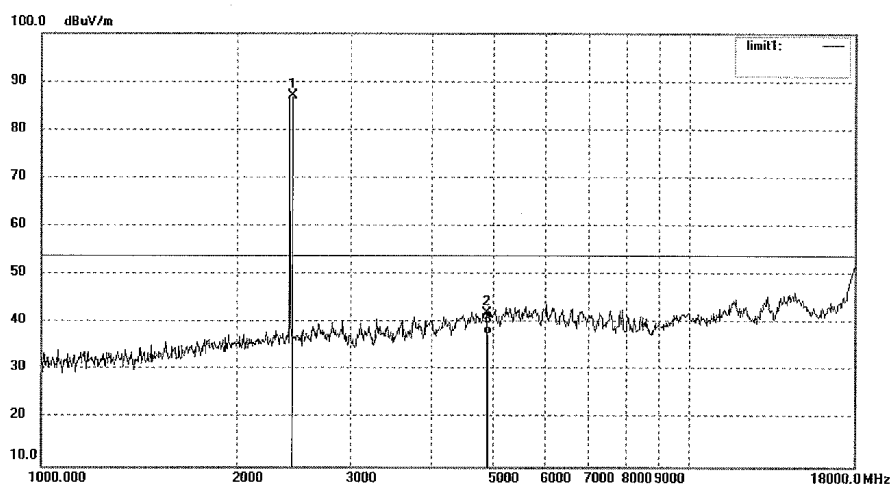
ACCURATE TECHNOLOGY CO., LTD.

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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: pei #9858	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 8:05:31
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2441MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.021	94.44	-7.35	87.09	/	/	peak			
2	4882.044	42.02	0.14	42.16	74.00	-31.84	peak			
3	4882.044	37.52	0.14	37.66	54.00	-16.34	AVG			

Figure 14: Test figure of spurious emissions, mode A.2, Vertical polarity (1GHz – 18GHz), GFSK Modulation



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Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9857

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: TX 2441MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Vertical

Power Source: DC 3.7V

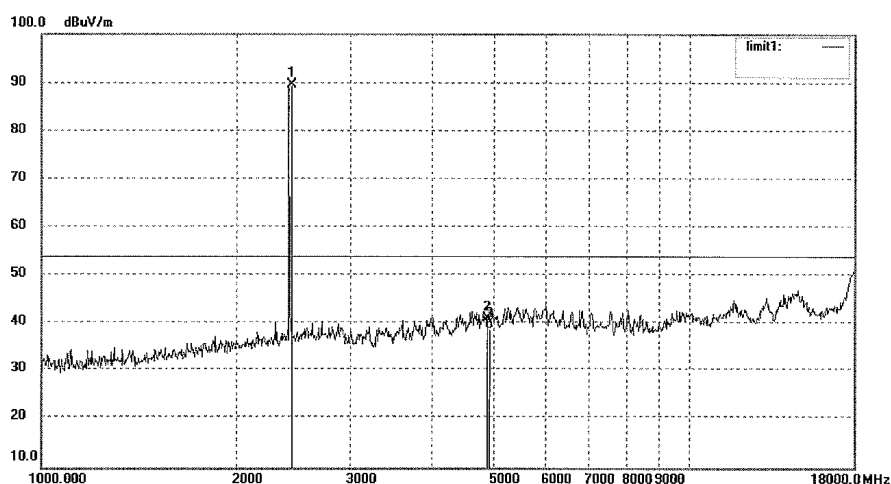
Date: 2012/07/25

Time: 7:52:23

Engineer Signature: PEI

Distance: 3m

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.021	96.98	-7.35	89.63	/	/	peak			
2	4882.043	40.92	0.14	41.06	74.00	-32.94	peak			
3	4882.043	38.76	0.14	38.90	54.00	-15.10	AVG			

Figure 15: Test figure of spurious emissions, mode A.2, Horizontal polarity (18GHz – 25GHz), GFSK Modulation



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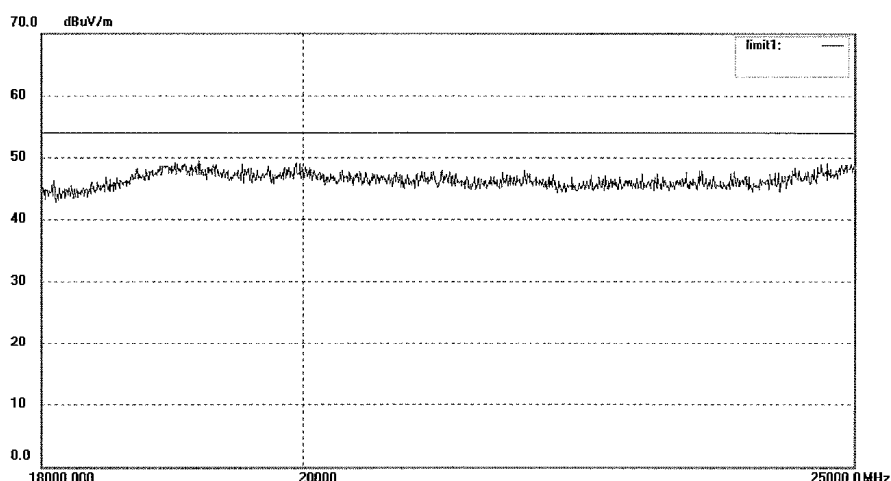
Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9892	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test Item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 13:17:59
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2441MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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Figure 16: Test figure of spurious emissions, mode A.2, Vertical polarity (18GHz – 25GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

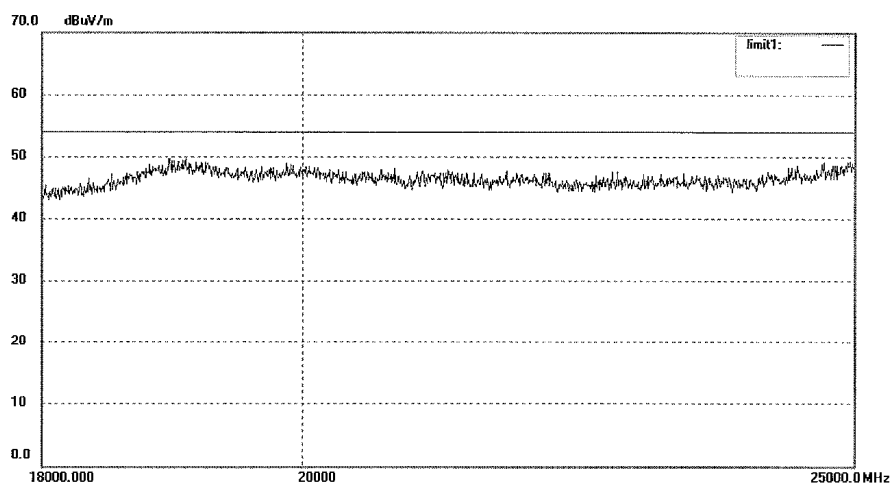
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

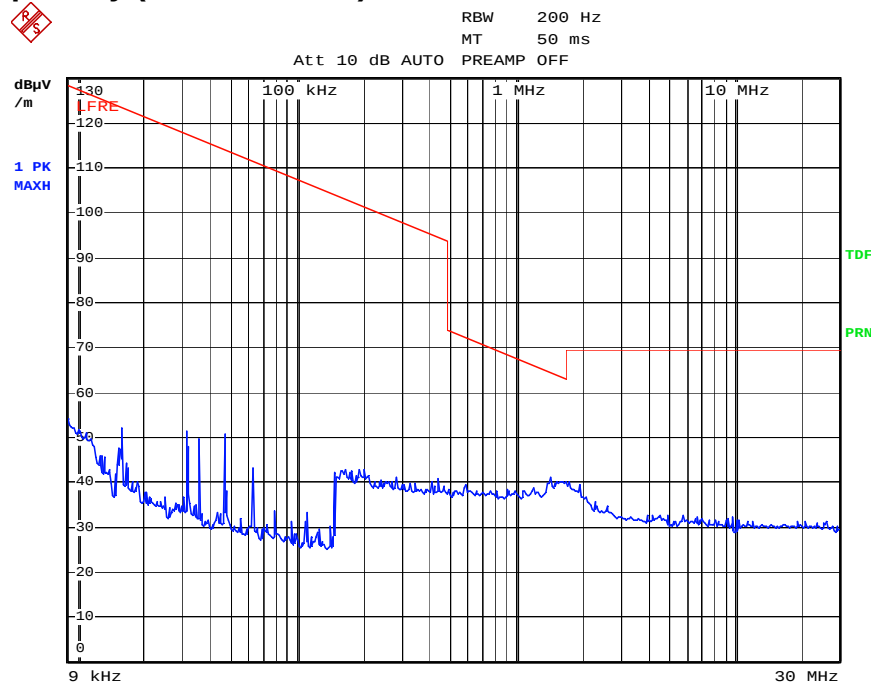
Job No.: pei #9891	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test Item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 13:08:24
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2441MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satelite Navigation Technology Ltd.	

Note: BDR



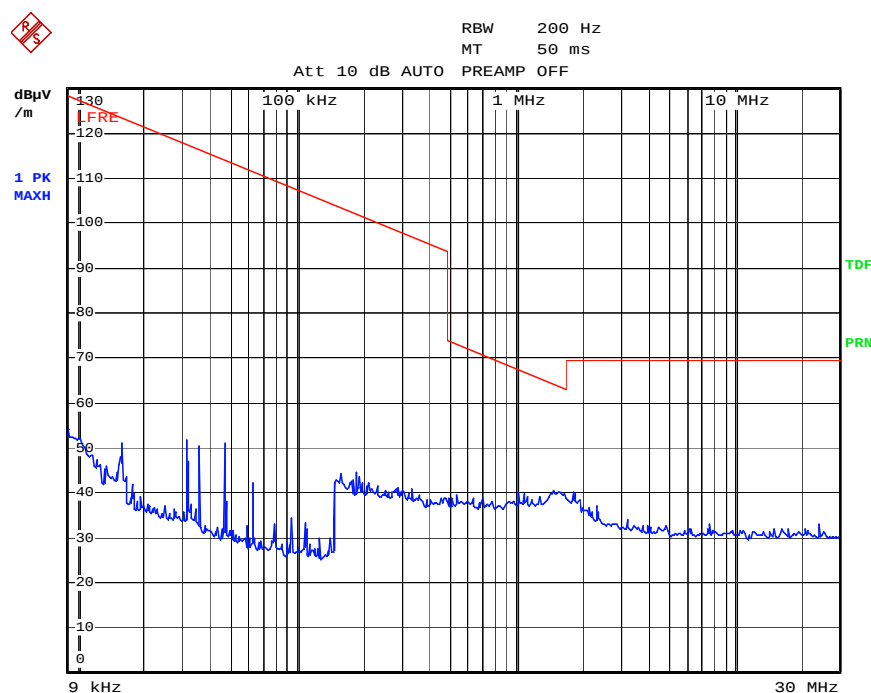
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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Figure 17: Test figure of spurious emissions, mode A.3, Horizontal polarity (9kHz – 30MHz), GFSK Modulation



Date: 27. JUL. 2012 22:59:51

Figure 18: Test figure of spurious emissions, mode A.3, Vertical polarity (9kHz – 30MHz), GFSK Modulation



Date: 27. JUL. 2012 23:01:52

Figure 19: Test figure of spurious emissions, mode A.3, Horizontal polarity (30MHz – 1GHz), GFSK Modulation



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Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9846

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: TX 2480MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Horizontal

Power Source: DC 3.7V

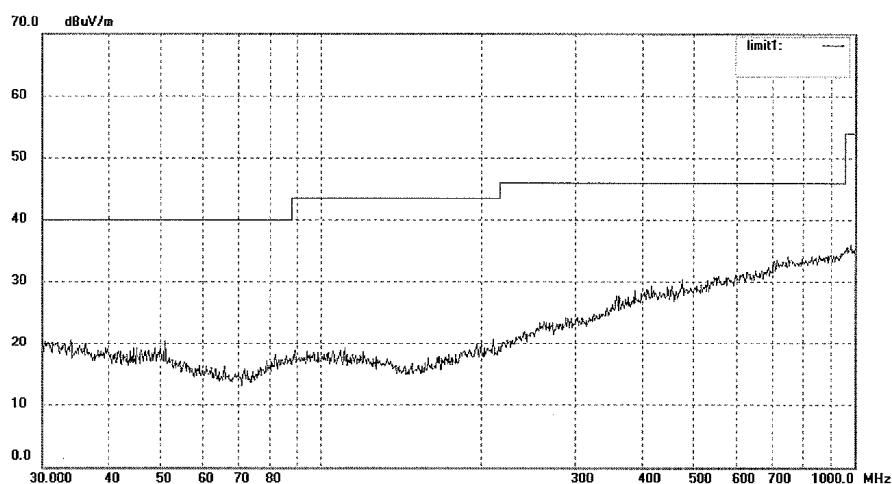
Date: 2012/07/25

Time: 6:17:27

Engineer Signature: PEI

Distance: 3m

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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Figure 20: Test figure of spurious emissions, mode A.3, Vertical polarity (30MHz – 1GHz), GFSK Modulation



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Site: 966 chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: pei #9845

Standard: FCC Class B 3M Radiated

Test Item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: TX 2480MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Vertical

Power Source: DC 3.7V

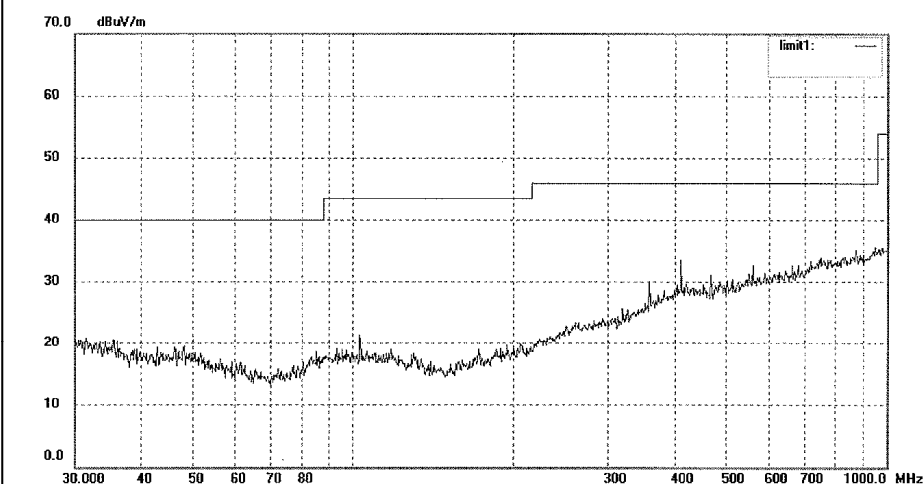
Date: 2012/07/25

Time: 6:10:18

Engineer Signature: PEI

Distance: 3m

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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Figure 21: Test figure of spurious emissions, mode A.3, Horizontal polarity (1GHz –18GHz), GFSK Modulation



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Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9859	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 8:17:14
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	
Note: BDR	

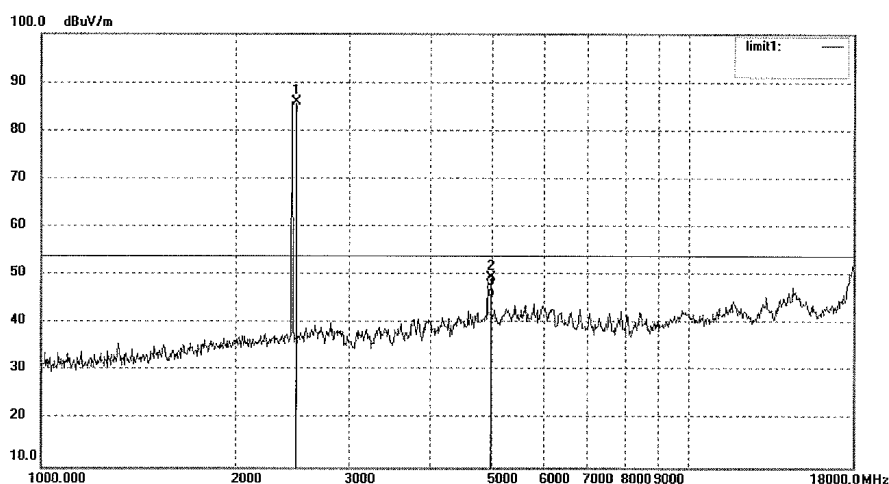


Figure 22: Test figure of spurious emissions, mode A.3, Vertical polarity (1GHz – 18GHz), GFSK Modulation



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Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9860

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: TX 2480MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Vertical

Power Source: DC 3.7V

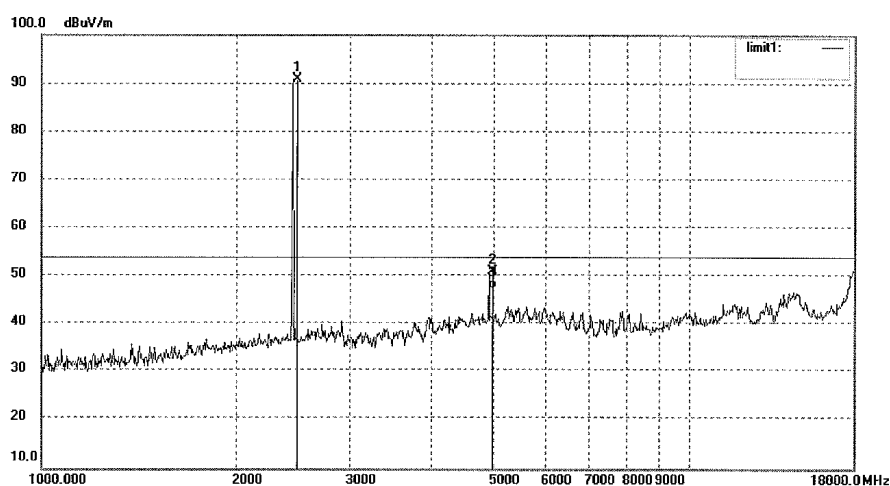
Date: 2012/07/25

Time: 8:30:02

Engineer Signature: PEI

Distance: 3m

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.044	98.35	-7.37	90.98	/	/	peak			
2	4960.091	50.48	0.52	51.00	74.00	-23.00	peak			
3	4960.091	47.02	0.52	47.54	54.00	-6.46	AVG			

Figure 23: Test figure of spurious emissions, mode A.3, Horizontal polarity (18GHz –25GHz), GFSK Modulation

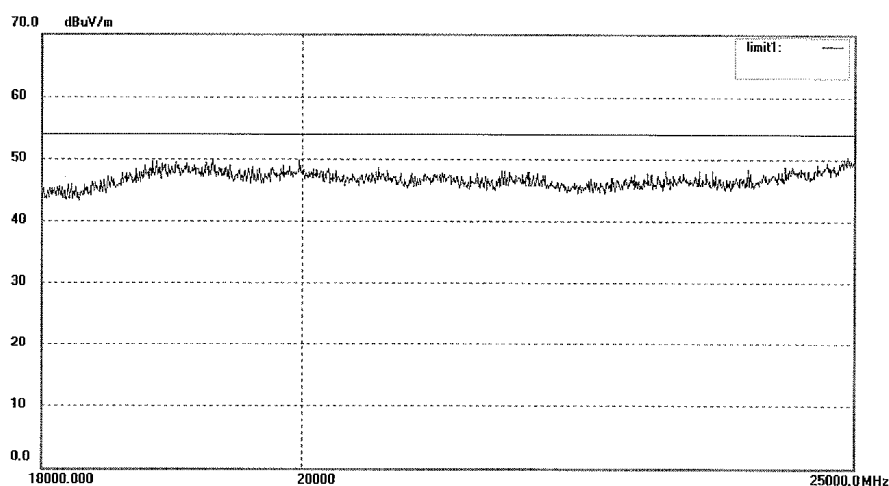


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Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: pei #9894	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 25 C / 51 %	Time: 13:35:32
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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**Figure 24: Test figure of spurious emissions, mode A.3, Vertical polarity
(18GHz – 25GHz), GFSK Modulation**

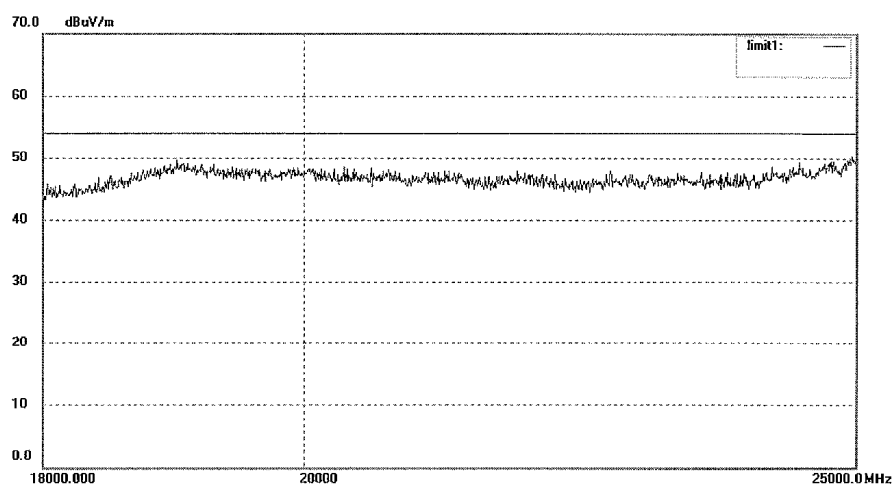


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F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

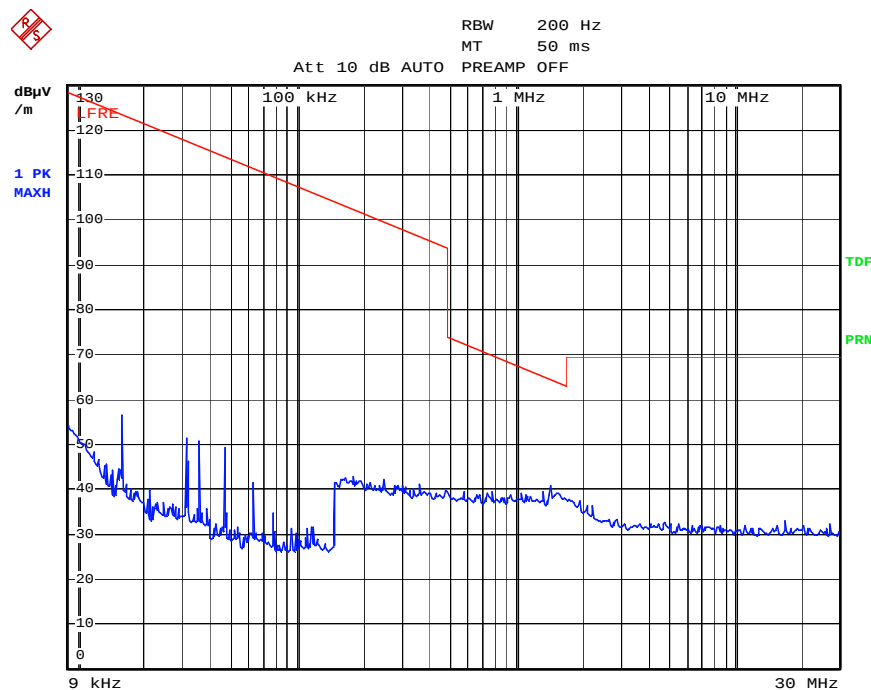
Job No.: pei #9893	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 25 C / 51 %	Time: 13:26:03
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: BDR



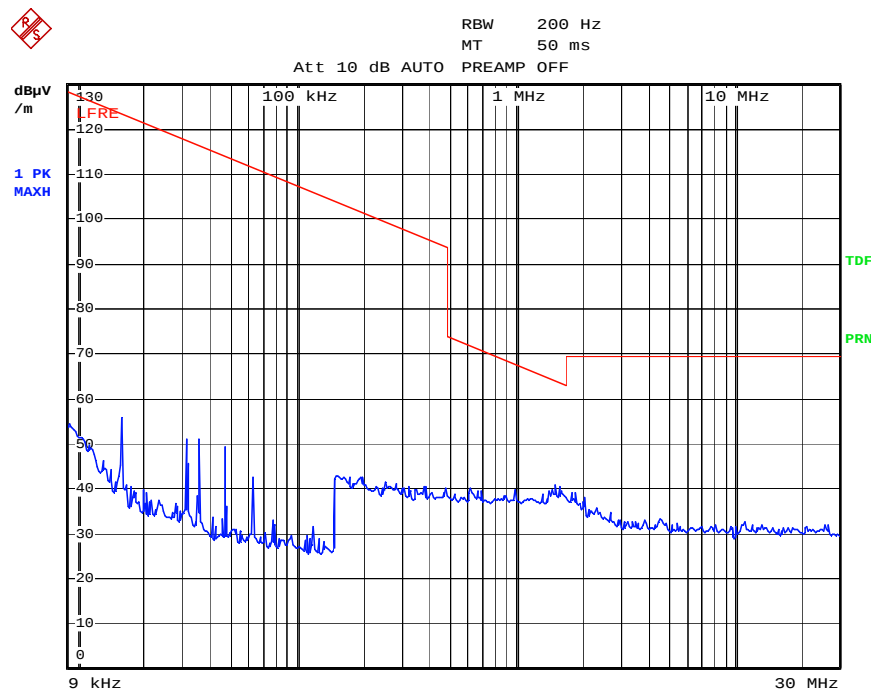
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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Figure 25: Test figure of spurious emissions, mode A.1, Horizontal polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 29. JUL. 2012 21:43:00

Figure 26: Test figure of spurious emissions, mode A.1, Vertical polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 29. JUL. 2012 21:45:29

Figure 27: Test figure of spurious emissions, mode A.1, Horizontal polarity (30MHz – 1GHz), 8DPSK Modulation

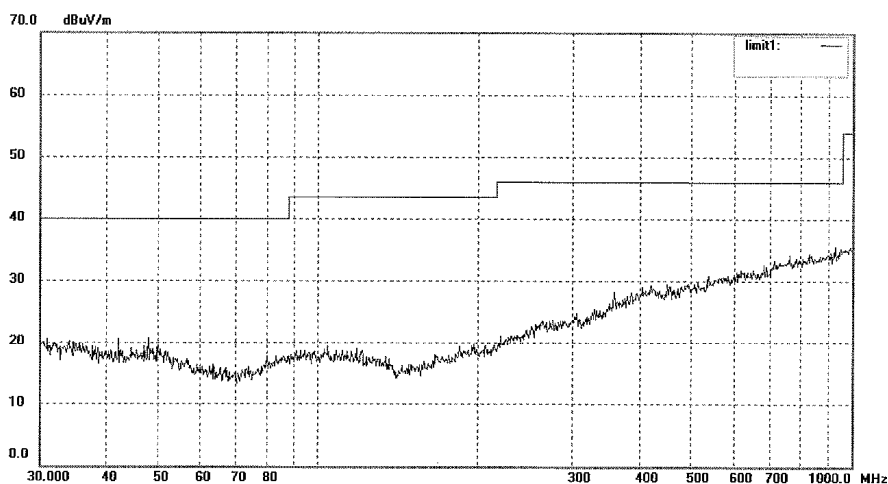


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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: pei #9847	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 6:24:33
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	
Note: EDR	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
-----	----------------	---------------------	----------------	--------------------	-------------------	----------------	----------	----------------	------------------	--------

Figure 28: Test figure of spurious emissions, mode A.1, Vertical polarity (30MHz – 1GHz), 8DPSK Modulation



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Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9848

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: TX 2402MHz

Model: LT400

Manufacturer: Huatuo Satelite Navigation Technology Ltd.

Polarization: Vertical

Power Source: DC 3.7V

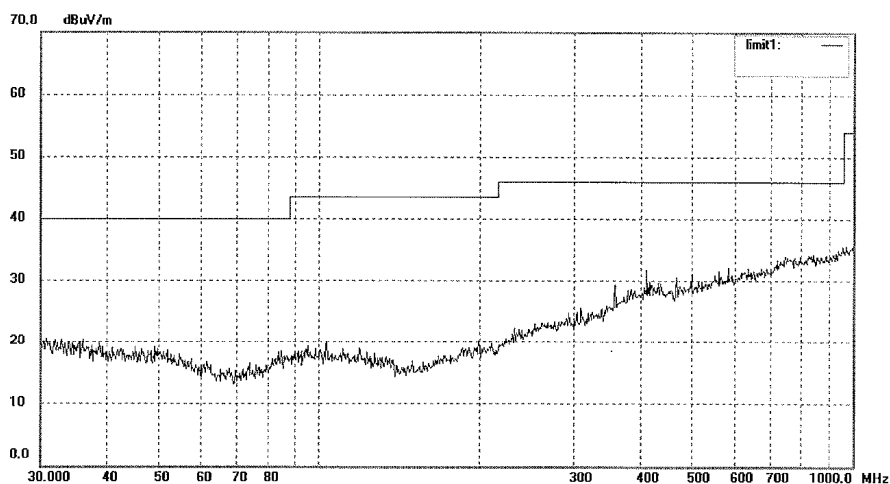
Date: 2012/07/25

Time: 6:31:39

Engineer Signature: PEI

Distance: 3m

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
-----	----------------	---------------------	----------------	--------------------	-------------------	----------------	----------	----------------	------------------	--------

Figure 29: Test figure of spurious emissions, mode A.1, Horizontal polarity (1GHz –18GHz), 8DPSK Modulation

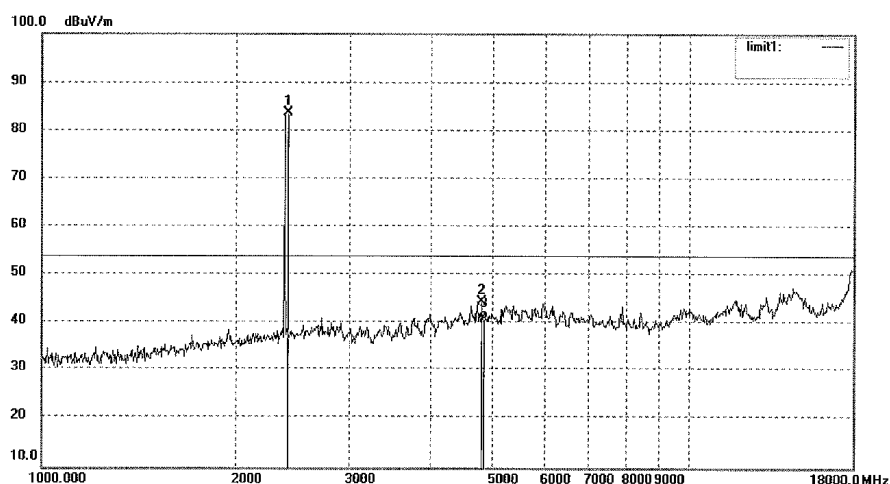


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F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: pei #9872	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 10:37:48
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	
Note: EDR	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.030	91.03	-7.45	83.58	/	/	peak			
2	4804.055	44.73	-0.30	44.43	74.00	-29.57	peak			
3	4804.055	41.20	-0.30	40.90	54.00	-13.10	AVG			

Figure 30: Test figure of spurious emissions, mode A.1, Vertical polarity (1GHz – 18GHz), 8DPSK Modulation



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Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9871

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: TX 2402MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Vertical

Power Source: DC 3.7V

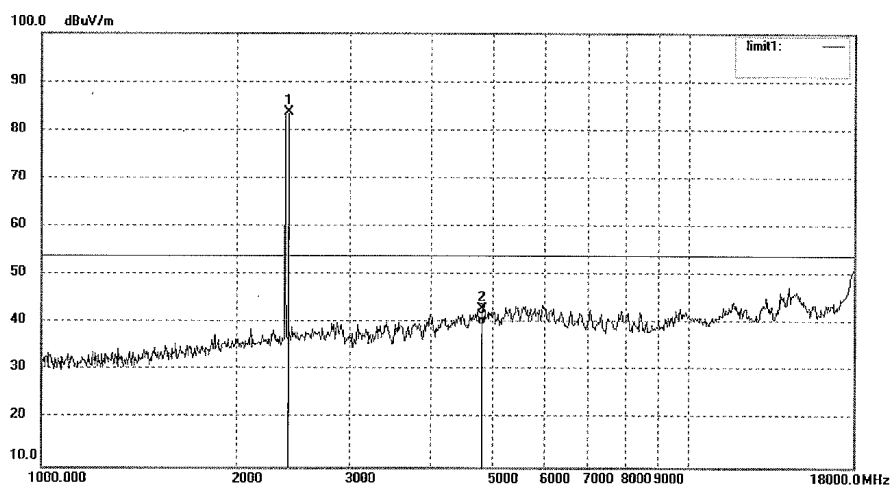
Date: 2012/07/25

Time: 10:25:11

Engineer Signature: PEI

Distance: 3m

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.019	91.18	-7.45	83.73	/	/	peak			
2	4804.057	43.32	-0.30	43.02	74.00	-30.98	peak			
3	4804.057	39.97	-0.30	39.67	54.00	-14.33	AVG			

Figure 31: Test figure of spurious emissions, mode A.1, Horizontal polarity (18GHz –25GHz), 8DPSK Modulation



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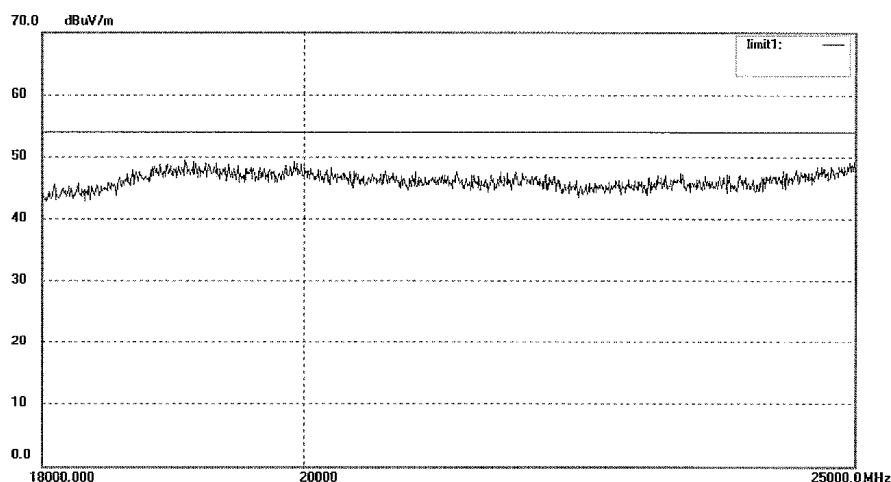
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: pei #9881	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:54:50
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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**Figure 32: Test figure of spurious emissions, mode A.1, Vertical polarity
(18GHz – 25GHz), 8DPSK Modulation**



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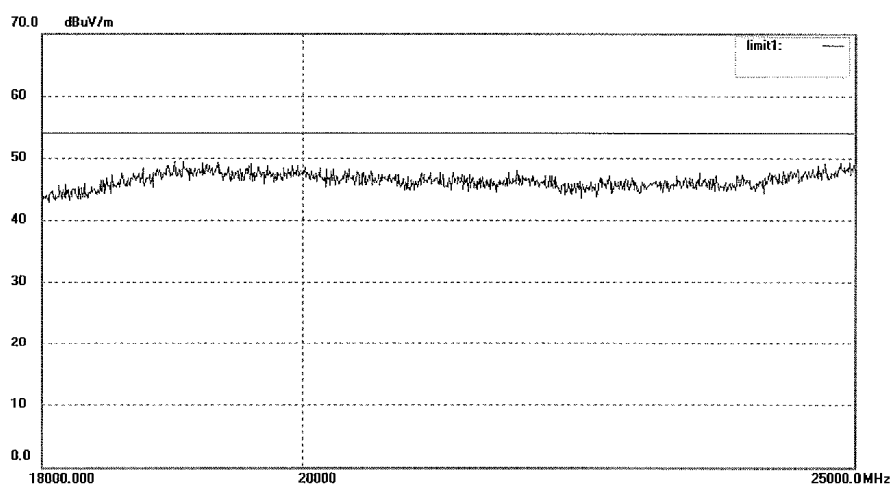
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

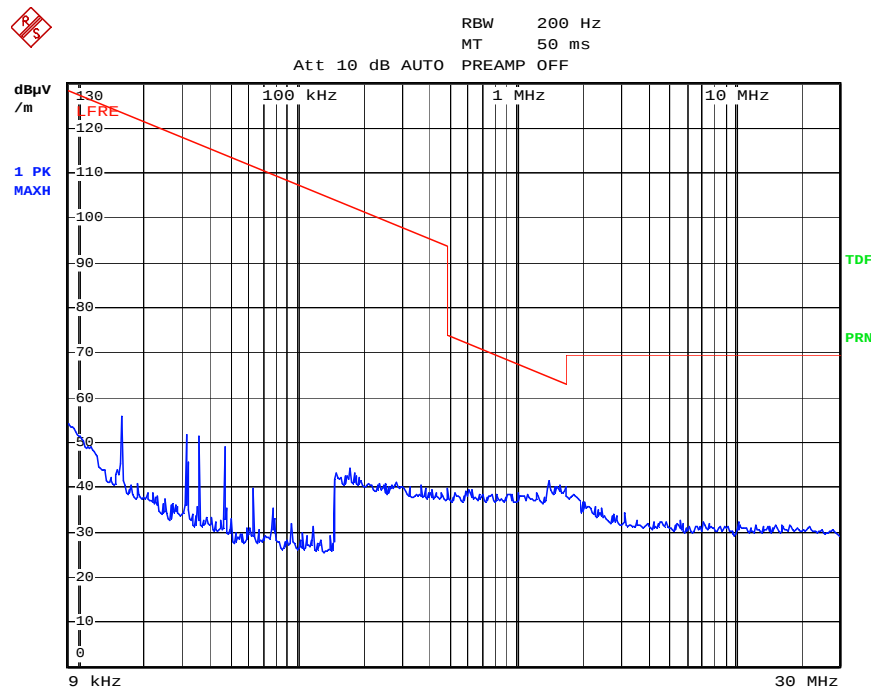
Job No.: pei #9882	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 12:03:26
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: EDR



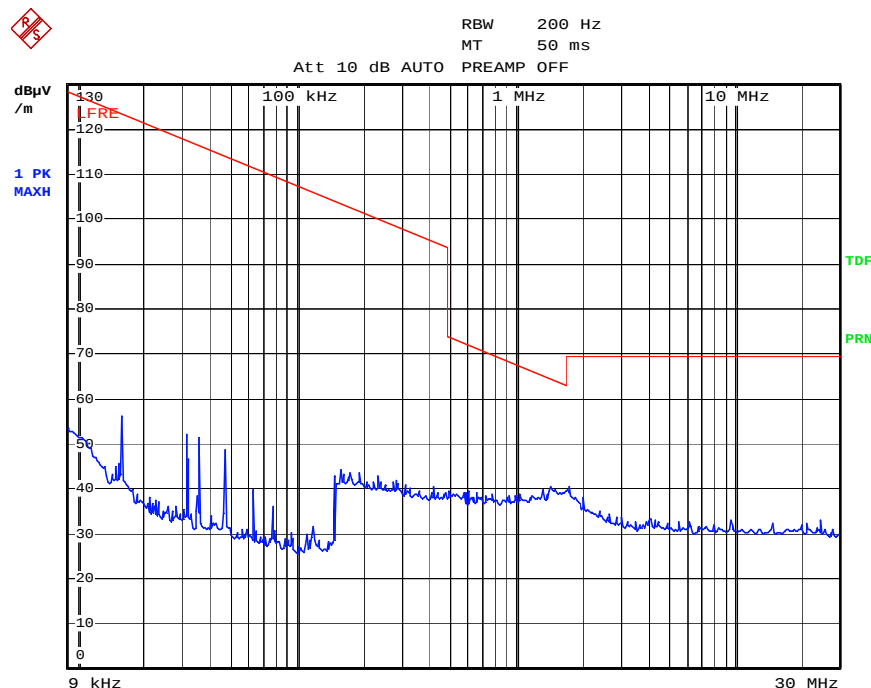
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
-----	----------------	---------------------	----------------	--------------------	-------------------	----------------	----------	----------------	------------------	--------

Figure 33: Test figure of spurious emissions, mode A.2, Horizontal polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 29.JUL.2012 21:49:39

Figure 34: Test figure of spurious emissions, mode A.2, Vertical polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 29.JUL.2012 21:51:37

Figure 35: Test figure of spurious emissions, mode A.2, Horizontal polarity (30MHz – 1GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

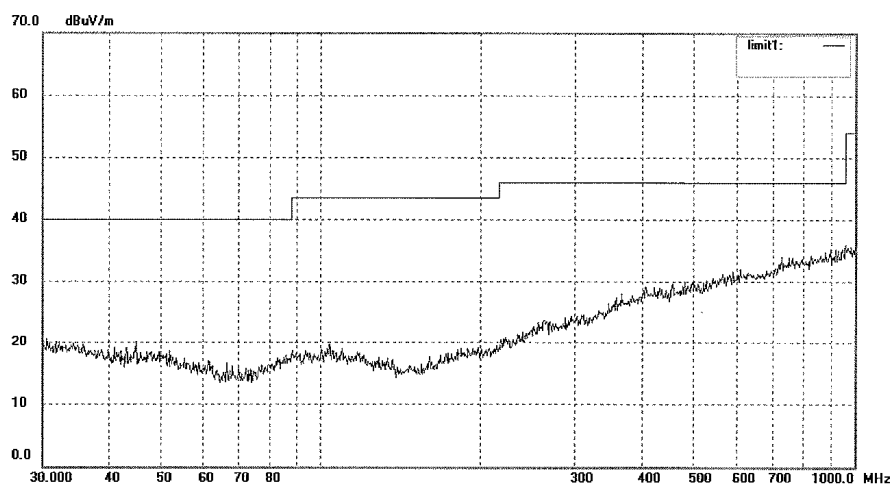
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: pei #9850	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 6:47:40
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2441MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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Figure 36: Test figure of spurious emissions, mode A.2, Vertical polarity (30MHz – 1GMHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9849

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: TX 2441MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Vertical

Power Source: DC 3.7V

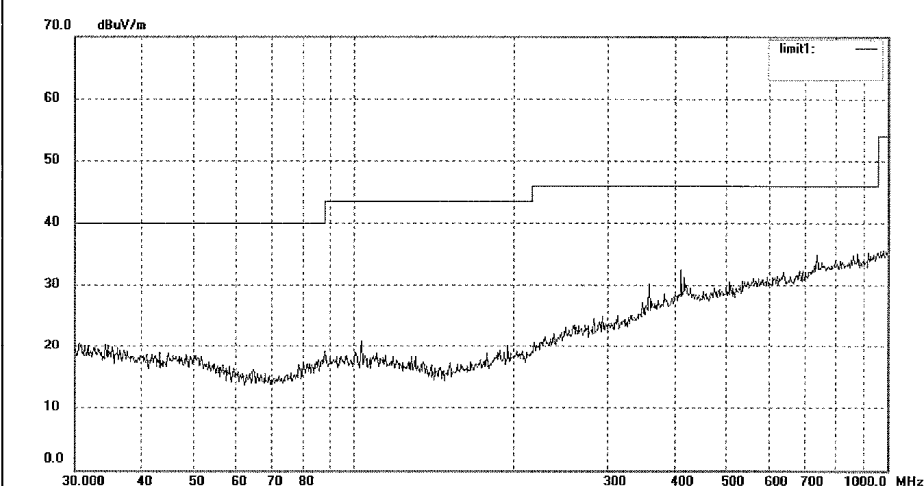
Date: 2012/07/25

Time: 6:39:36

Engineer Signature: PEI

Distance: 3m

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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Figure 37: Test figure of spurious emissions, mode A.2, Horizontal polarity (1GHz – 18GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

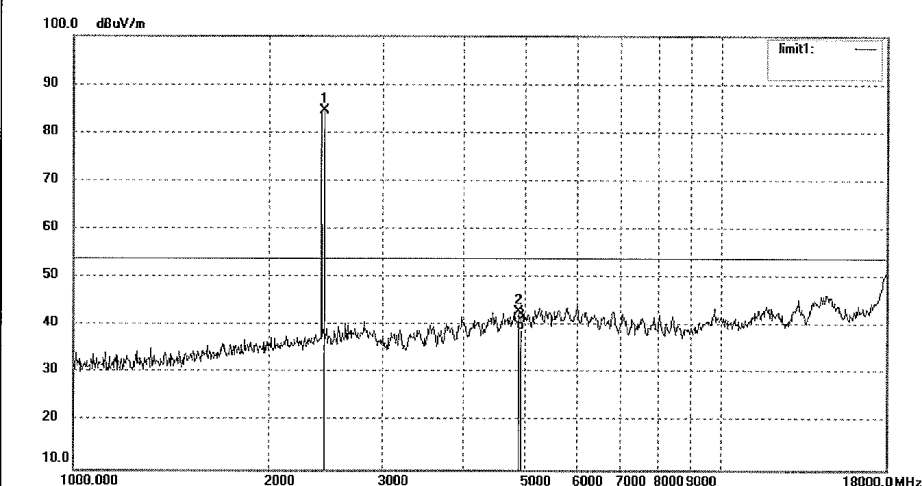
Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9876	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 11:04:46
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2441MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.076	91.84	-7.35	84.49	/	/	peak			
2	4882.132	42.83	0.14	42.97	74.00	-31.03	peak			
3	4882.132	38.89	0.14	39.03	54.00	-14.97	AVG			

Figure 38: Test figure of spurious emissions, mode A.2, Vertical polarity (1GHz – 18GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9875

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: TX 2441MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Vertical

Power Source: DC 3.7V

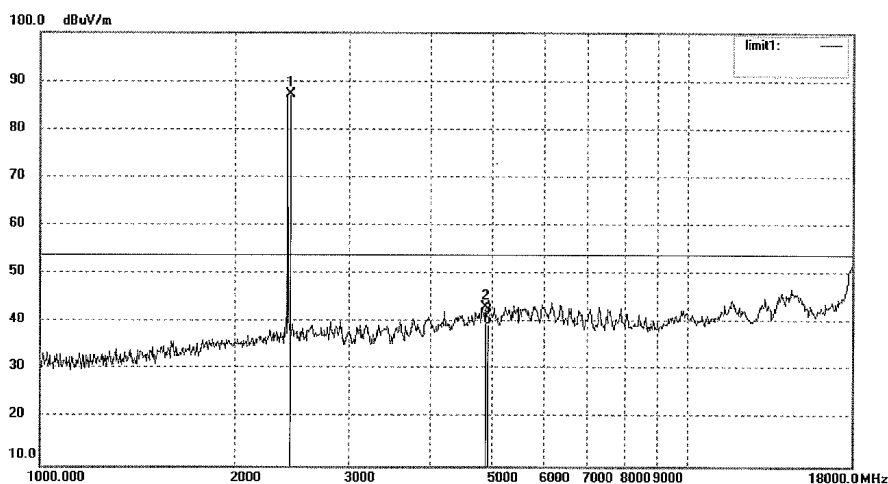
Date: 2012/07/25

Time: 10:53:31

Engineer Signature: PEI

Distance: 3m

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.055	94.71	-7.35	87.36	/	/	peak			
2	4882.324	42.97	0.14	43.11	74.00	-30.89	peak			
3	4882.324	39.38	0.14	39.52	54.00	-14.48	AVG			

Figure 39: Test figure of spurious emissions, mode A.2, Horizontal polarity (18GHz – 25GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

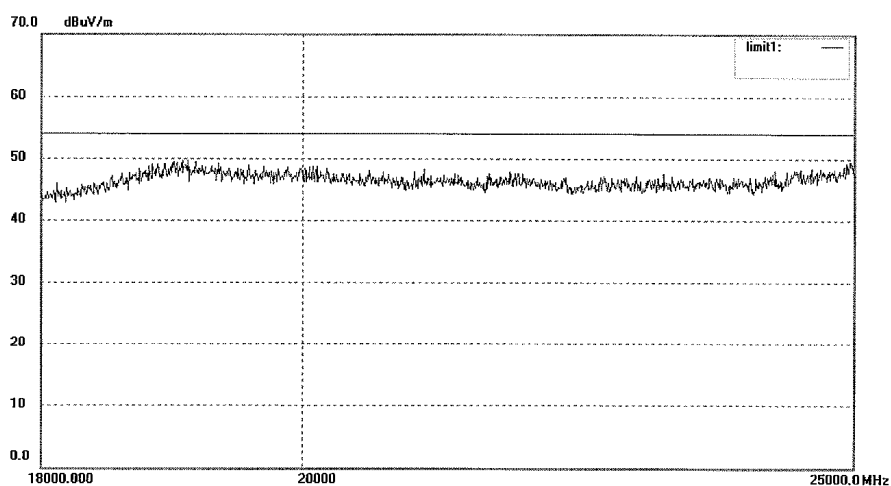
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: pei #9884	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 12:21:14
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2441MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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**Figure 40: Test figure of spurious emissions, mode A.2, Vertical polarity
(18GHz – 25GHz), 8DPSK Modulation**



ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

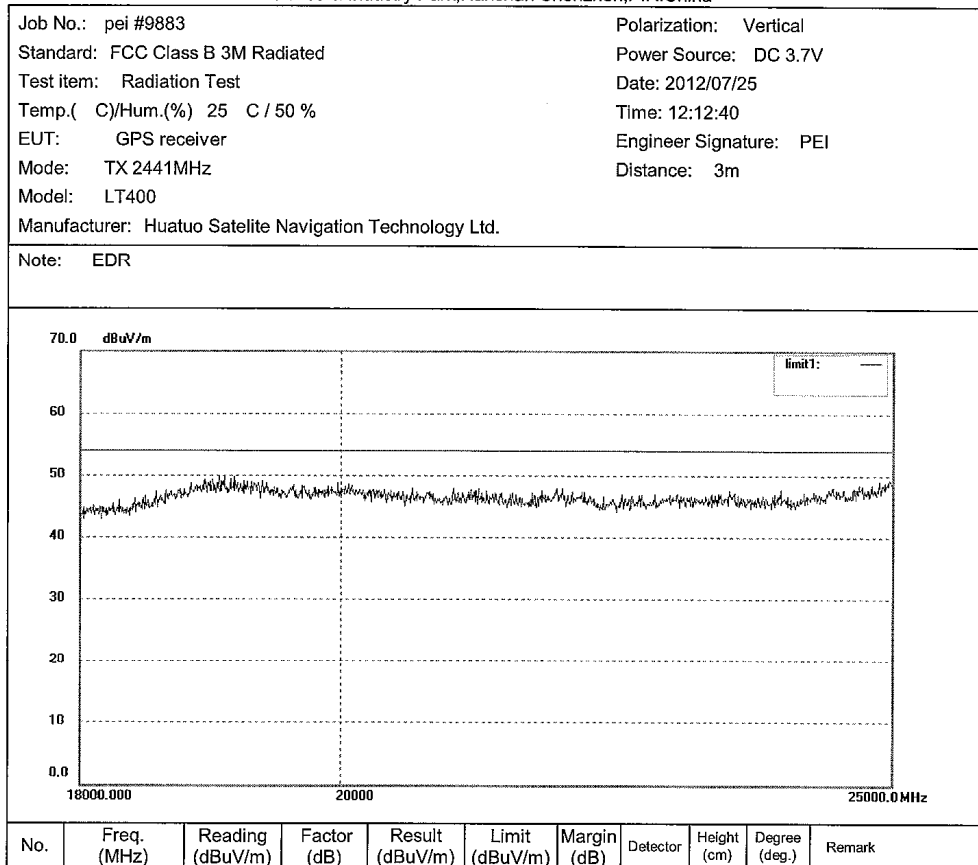
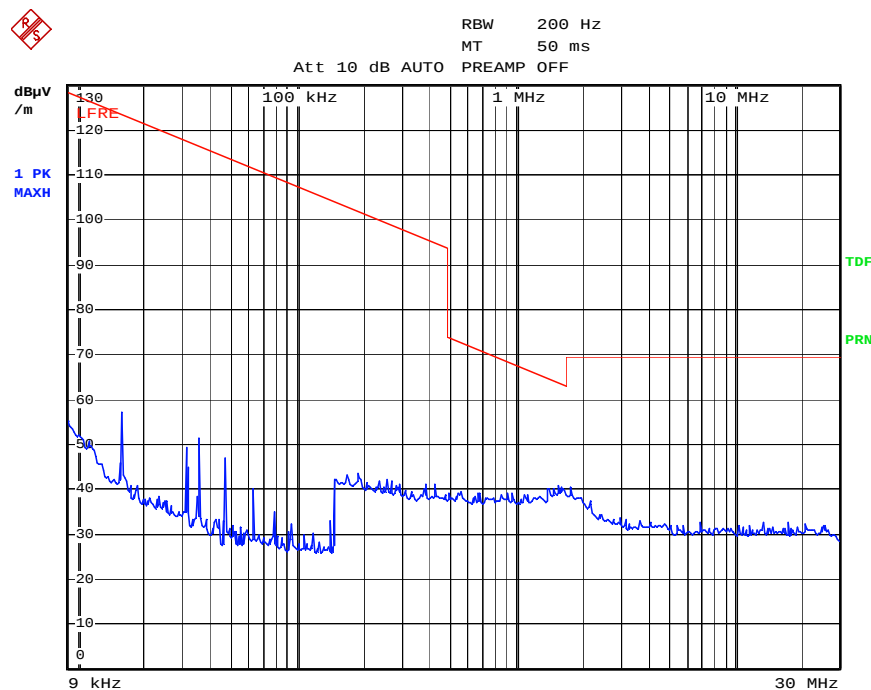
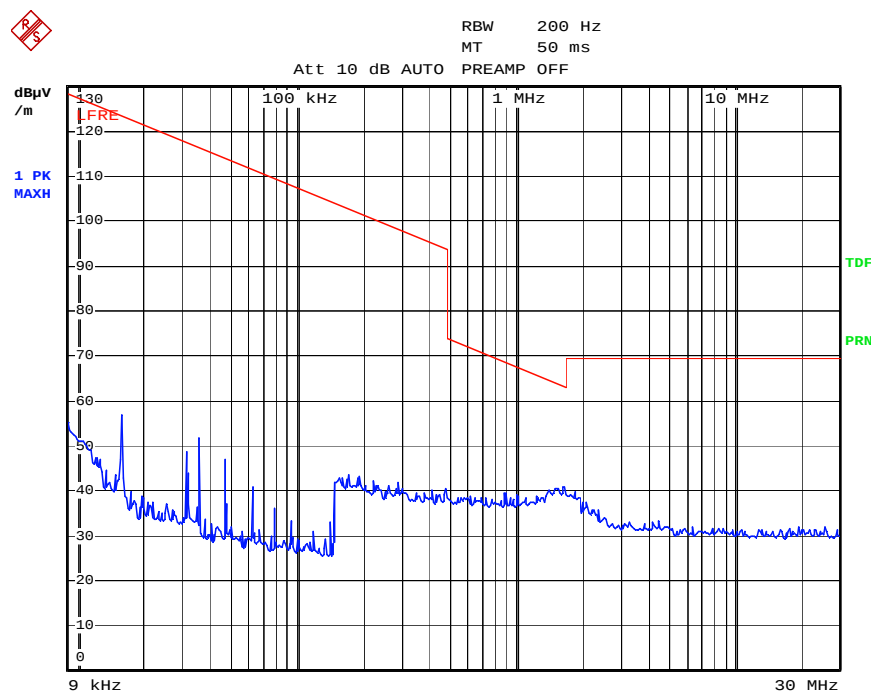


Figure 41: Test figure of spurious emissions, mode A.3, Horizontal polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 29. JUL. 2012 21:55:49

Figure 42: Test figure of spurious emissions, mode A.3, Vertical polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 29. JUL. 2012 21:57:49

Figure 43: Test figure of spurious emissions, mode A.3, Horizontal polarity (30MHz – 1GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

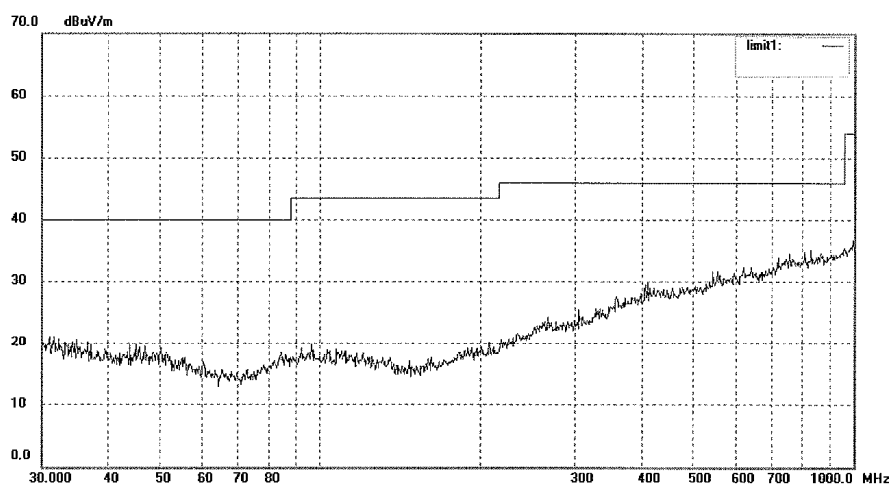
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9851	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 6:53:38
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	
Note: EDR	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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Figure 44: Test figure of spurious emissions, mode A.3, Vertical polarity (30MHz – 1GHz), 8DPSK Modulation



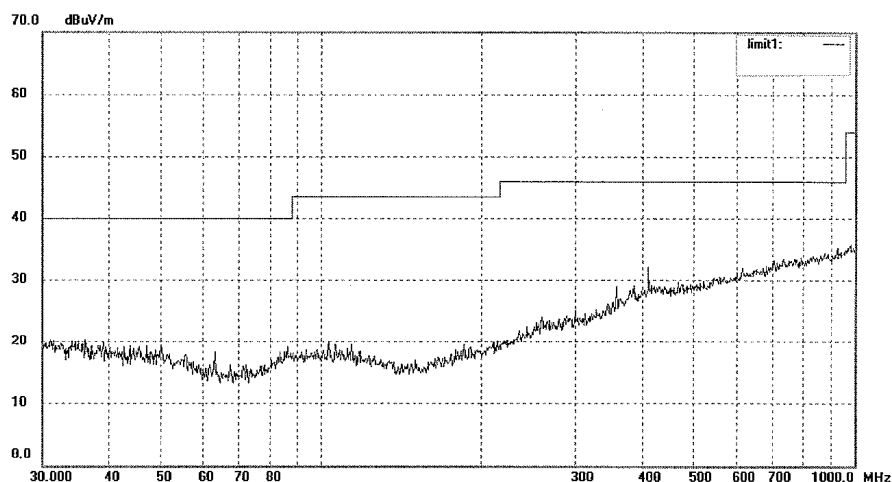
ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: pei #9852	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 7:01:42
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	
Note: EDR	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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Figure 45: Test figure of spurious emissions, mode A.3, Horizontal polarity (1GHz –18GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

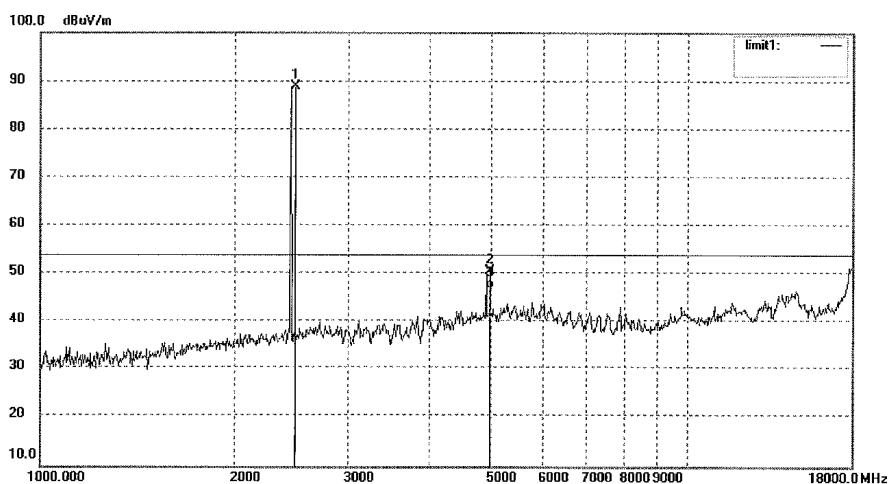
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9877	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 11:15:08
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	
Note: EDR	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.034	96.15	-7.37	88.78	/	/	peak			
2	4960.080	50.09	0.52	50.61	74.00	-23.39	peak			
3	4960.080	46.57	0.52	47.09	54.00	-6.91	AVG			

Figure 46: Test figure of spurious emissions, mode A.3, Vertical polarity (1GHz – 18GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9878

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: TX 2480MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Vertical

Power Source: DC 3.7V

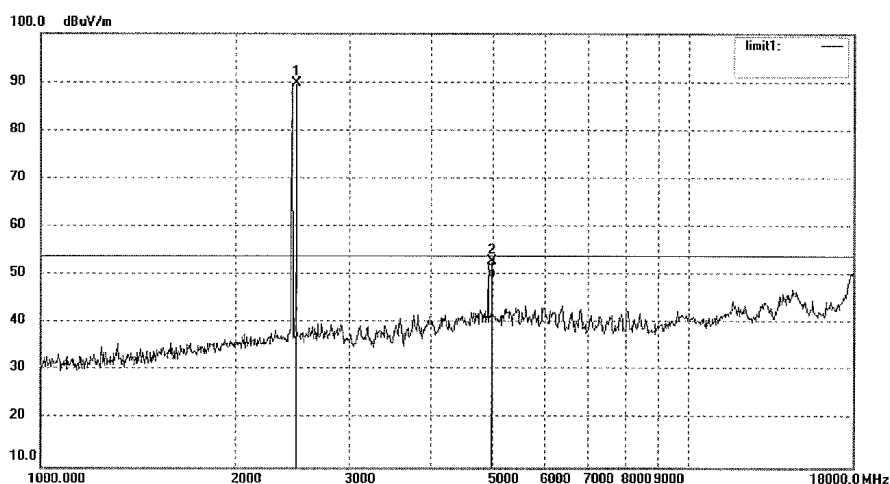
Date: 2012/07/25

Time: 11:27:11

Engineer Signature: PEI

Distance: 3m

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.035	97.05	-7.37	89.68	/	/	peak			
2	4960.085	52.38	0.52	52.90	74.00	-31.10	peak			
3	4960.085	48.88	0.52	49.40	54.00	-4.60	AVG			

Figure 47: Test figure of spurious emissions, mode A.3, Horizontal polarity (18GHz –25GHz), 8DPSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax: +86-0755-26503396

Job No.: pei #9885

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 50 %

EUT: GPS receiver

Mode: TX 2480MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Horizontal

Power Source: DC 3.7V

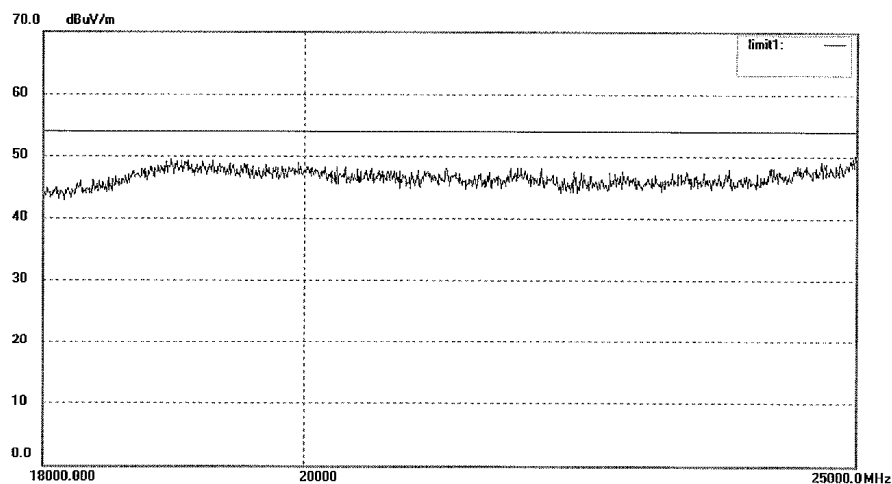
Date: 2012/07/25

Time: 12:32:25

Engineer Signature: PEI

Distance: 3m

Note:	EDR
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No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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**Figure 48: Test figure of spurious emissions, mode A.3, Vertical polarity
(18GHz – 25GHz), 8DPSK Modulation**



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

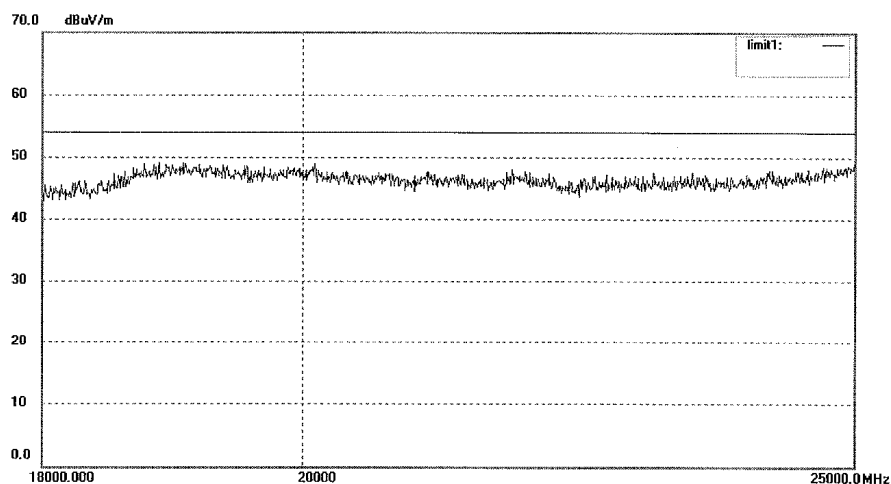
Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

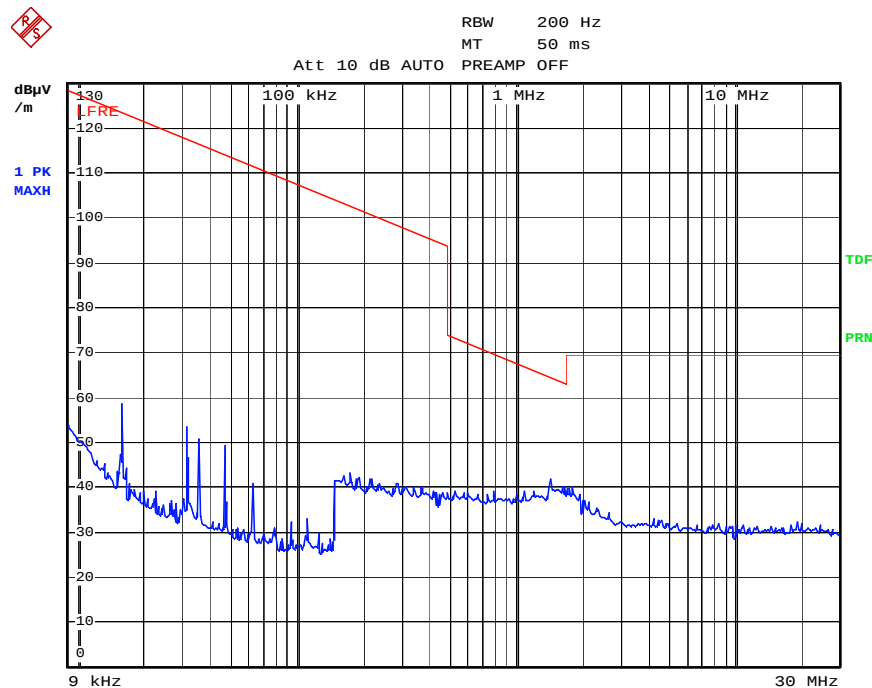
Job No.: pei #9888	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test Item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 12:39:21
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: EDR



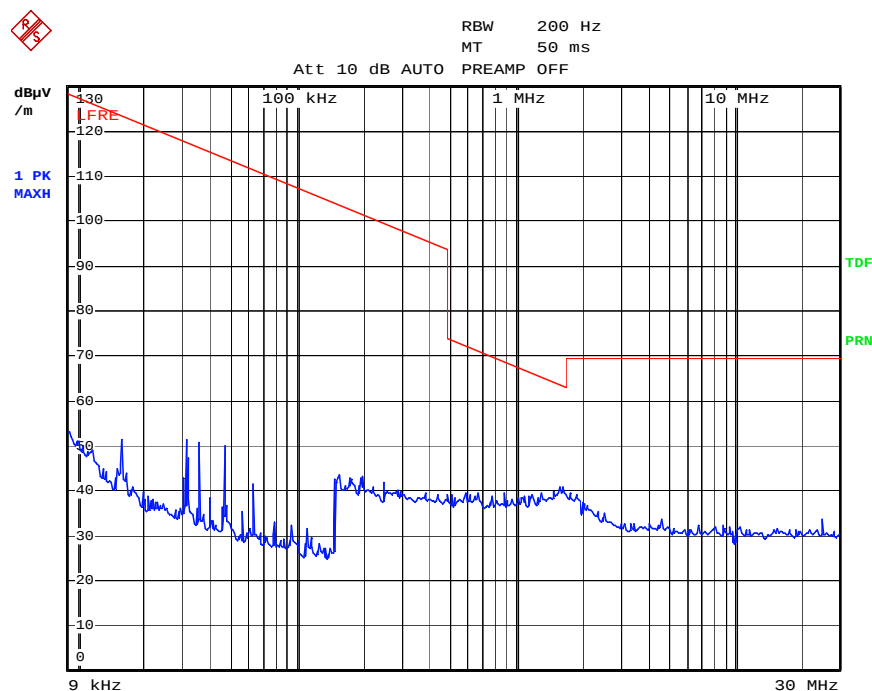
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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Figure 49: Test figure of spurious emissions, mode C, Horizontal polarity (9kHz – 30MHz), GFSK Modulation



Date: 27.JUL.2012 22:10:06

Figure 50: Test figure of spurious emissions, mode C, Vertical polarity (9kHz – 30MHz), GFSK Modulation



Date: 27.JUL.2012 22:13:07

Figure 51: Test figure of spurious emissions, mode C, Horizontal polarity (30MHz – 1GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9870

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: RX 2402MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Horizontal

Power Source: DC 3.7V

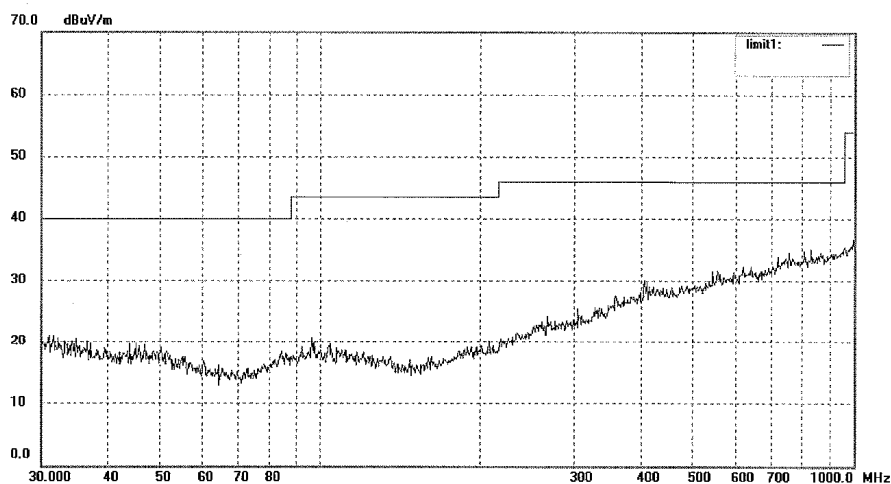
Date: 2012/07/25

Time: 10:08:38

Engineer Signature: PEI

Distance: 3m

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
-----	----------------	---------------------	----------------	--------------------	-------------------	----------------	----------	----------------	------------------	--------

Figure 52: Test figure of spurious emissions, mode C, Vertical polarity (30MHz – 1GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9869

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: RX 2402MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Vertical

Power Source: DC 3.7V

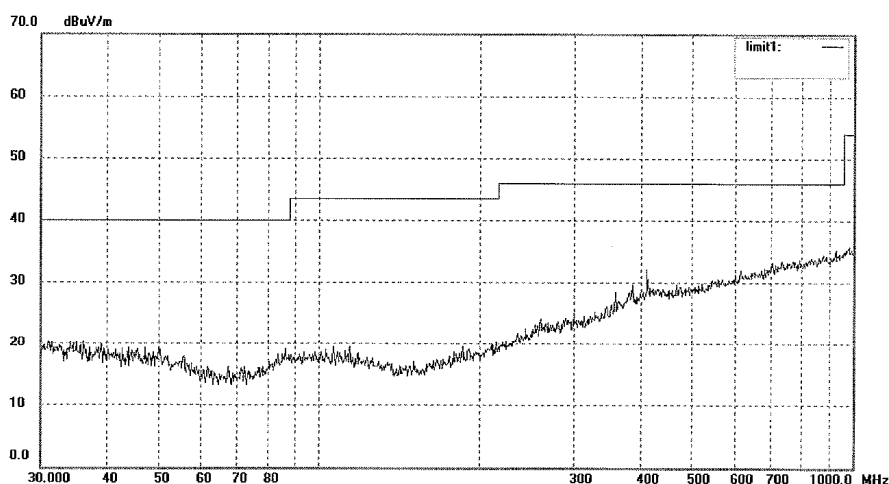
Date: 2012/07/25

Time: 10:00:42

Engineer Signature: PEI

Distance: 3m

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
-----	----------------	---------------------	----------------	--------------------	-------------------	----------------	----------	----------------	------------------	--------

Figure 53: Test figure of spurious emissions, mode C, Horizontal polarity (1GHz –18GHz), GFSK Modulation



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9863

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: RX 2402MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Horizontal

Power Source: DC 3.7V

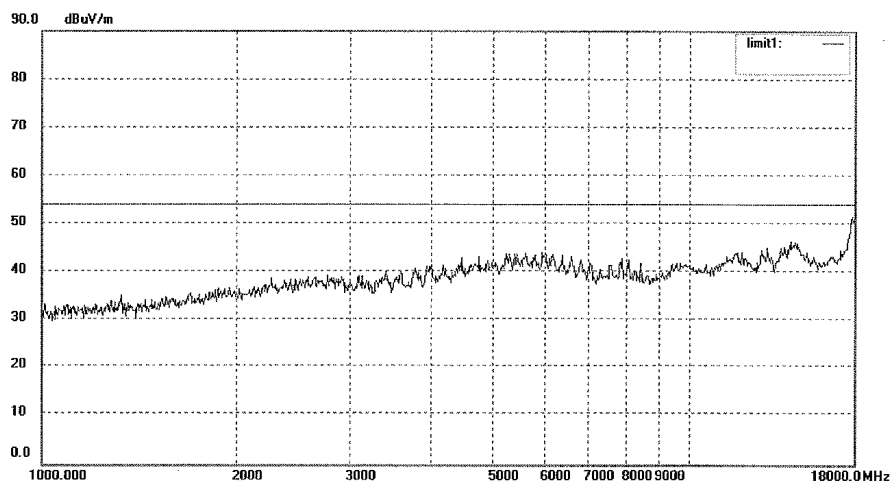
Date: 2012/07/25

Time: 9:06:19

Engineer Signature: PEI

Distance: 3m

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
-----	----------------	---------------------	----------------	--------------------	-------------------	----------------	----------	----------------	------------------	--------

**Figure 54: Test figure of spurious emissions, mode C, Vertical polarity
(1GHz – 18GHz), GFSK Modulation**



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9864

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: RX 2402MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Vertical

Power Source: DC 3.7V

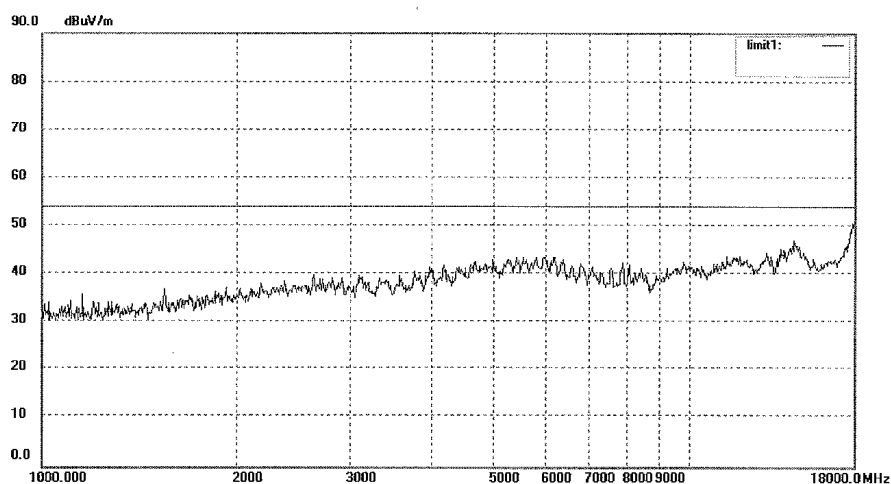
Date: 2012/07/25

Time: 9:15:16

Engineer Signature: PEI

Distance: 3m

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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**Figure 55: Test figure of spurious emissions, mode C, Horizontal polarity
(18GHz –25GHz), GFSK Modulation**



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

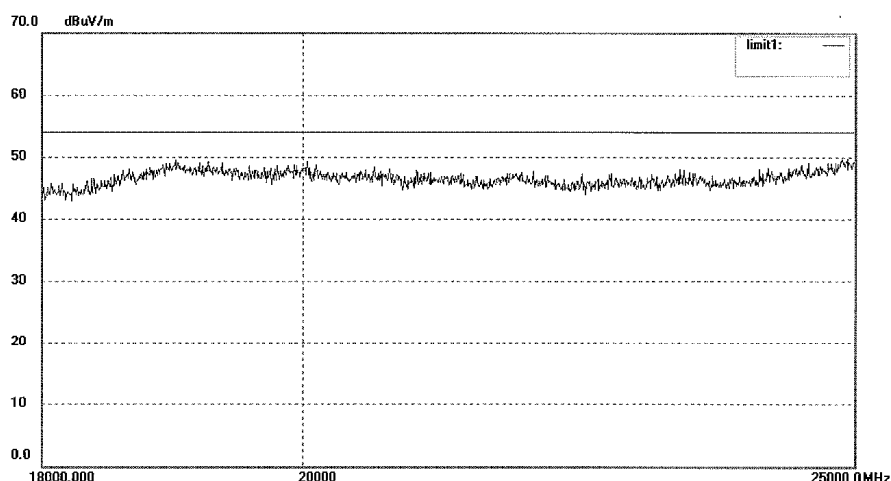
Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9898	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 25 C / 51 %	Time: 14:10:35
EUT: GPS receiver	Engineer Signature: PEI
Mode: RX 2402MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
-----	----------------	---------------------	----------------	--------------------	-------------------	----------------	----------	----------------	------------------	--------

**Figure 56: Test figure of spurious emissions, mode C, Vertical polarity
(18GHz – 25GHz), GFSK Modulation**



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

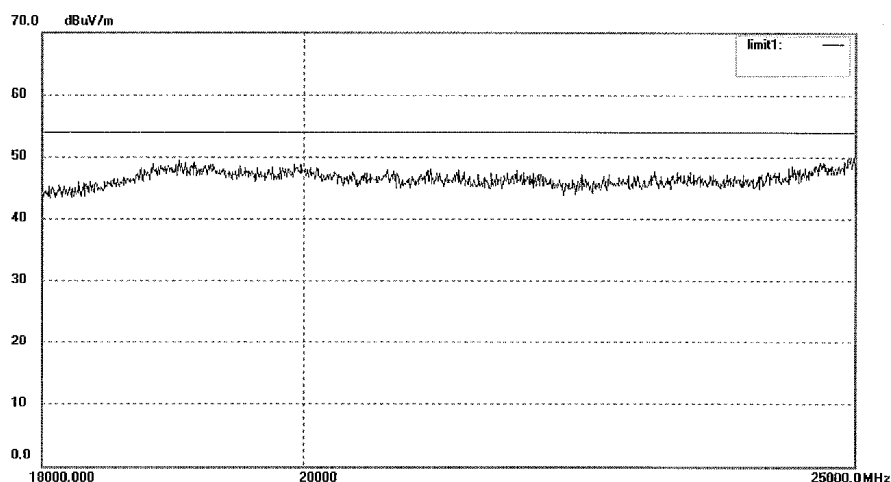
Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

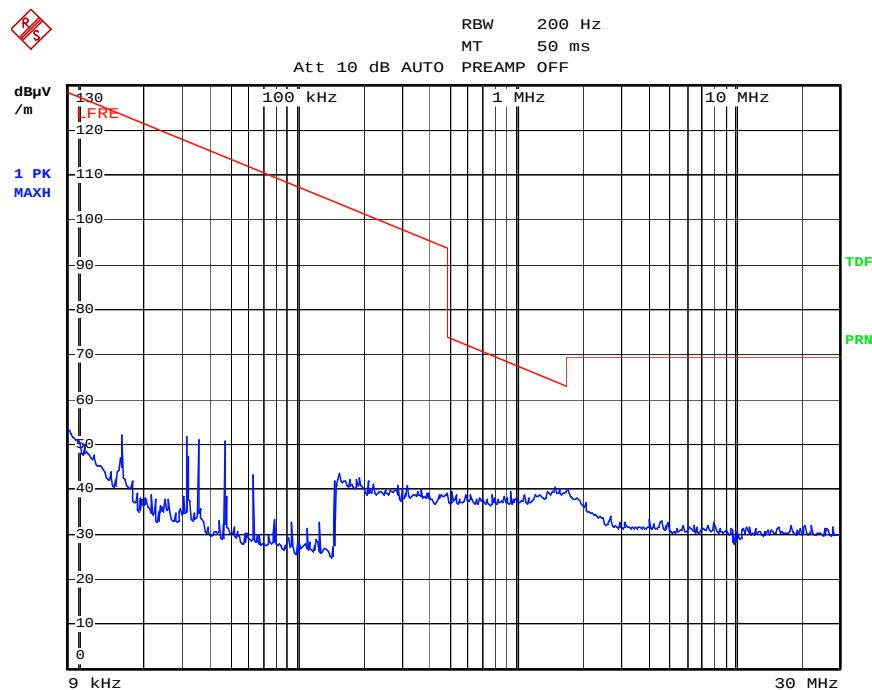
Job No.: pei #9897	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 25 C / 51 %	Time: 14:01:10
EUT: GPS receiver	Engineer Signature: PEI
Mode: RX 2402MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: BDR



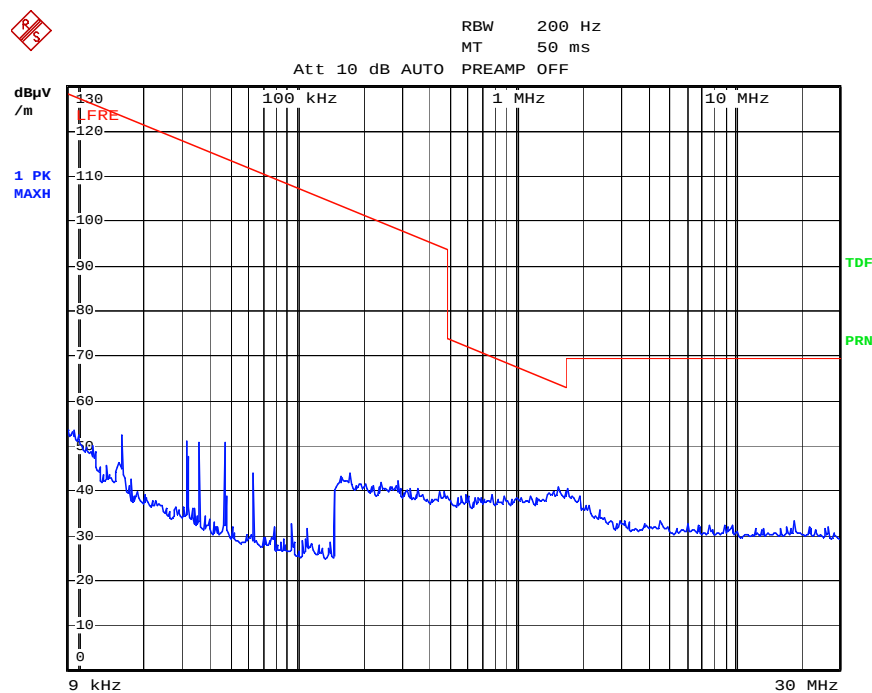
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
-----	----------------	---------------------	----------------	--------------------	-------------------	----------------	----------	----------------	------------------	--------

Figure 57: Test figure of spurious emissions, mode C, Horizontal polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 27. JUL. 2012 22:17:17

Figure 58: Test figure of spurious emissions, mode C, Vertical polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 27. JUL. 2012 22:20:16

Figure 59: Test figure of spurious emissions, mode C, Horizontal polarity (30MHz – 1GHz), 8DPSK Modulation



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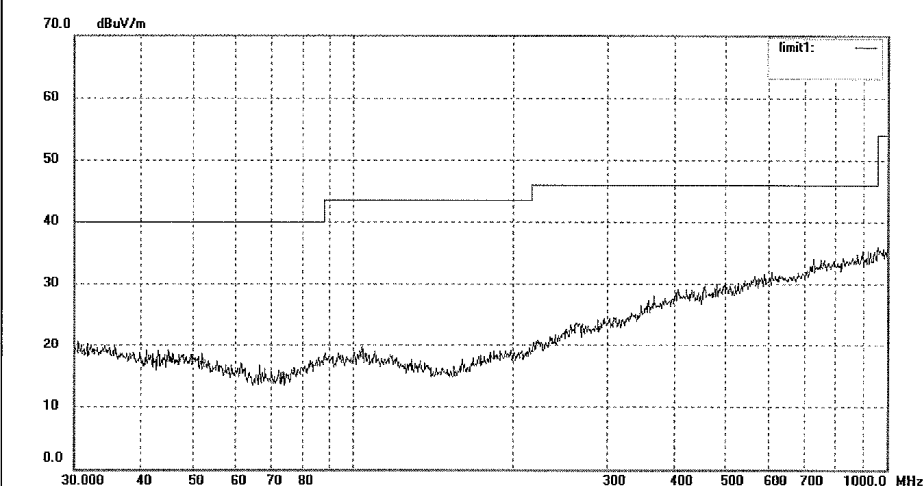
Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9868	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 9:51:40
EUT: GPS receiver	Engineer Signature: PEI
Mode: RX 2402MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
-----	----------------	---------------------	----------------	--------------------	-------------------	----------------	----------	----------------	------------------	--------

**Figure 60: Test figure of spurious emissions, mode C, Vertical polarity
(30MHz – 1GHz), 8DPSK Modulation**



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Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9867

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: RX 2402MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Vertical

Power Source: DC 3.7V

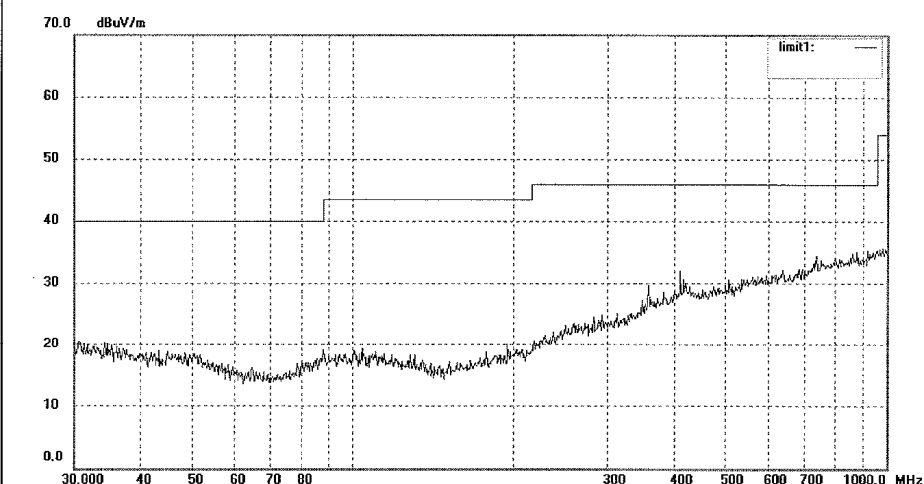
Date: 2012/07/25

Time: 9:42:36

Engineer Signature: PEI

Distance: 3m

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
-----	----------------	---------------------	----------------	--------------------	-------------------	----------------	----------	----------------	------------------	--------

Figure 61: Test figure of spurious emissions, mode C, Horizontal polarity (1GHz –18GHz), 8DPSK Modulation



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Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: pei #9866

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: RX 2402MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Horizontal

Power Source: DC 3.7V

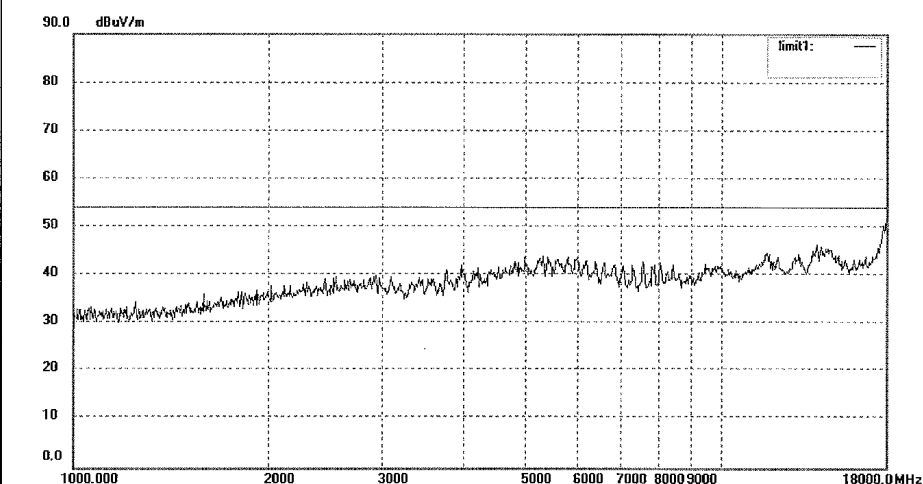
Date: 2012/07/25

Time: 9:33:41

Engineer Signature: PEI

Distance: 3m

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
-----	----------------	---------------------	----------------	--------------------	-------------------	----------------	----------	----------------	------------------	--------

**Figure 62: Test figure of spurious emissions, mode C, Vertical polarity
(1GHz – 18GHz), 8DPSK Modulation**



ACCURATE TECHNOLOGY CO., LTD.

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Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9865

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: RX 2402MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Vertical

Power Source: DC 3.7V

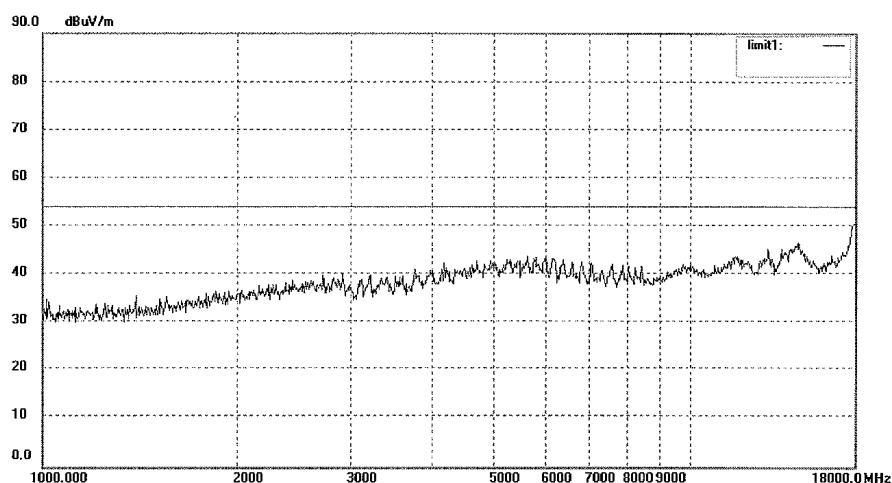
Date: 2012/07/25

Time: 9:23:09

Engineer Signature: PEI

Distance: 3m

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
-----	----------------	---------------------	----------------	--------------------	-------------------	----------------	----------	----------------	------------------	--------

**Figure 63: Test figure of spurious emissions, mode C, Horizontal polarity
(18GHz –25GHz), 8DPSK Modulation**



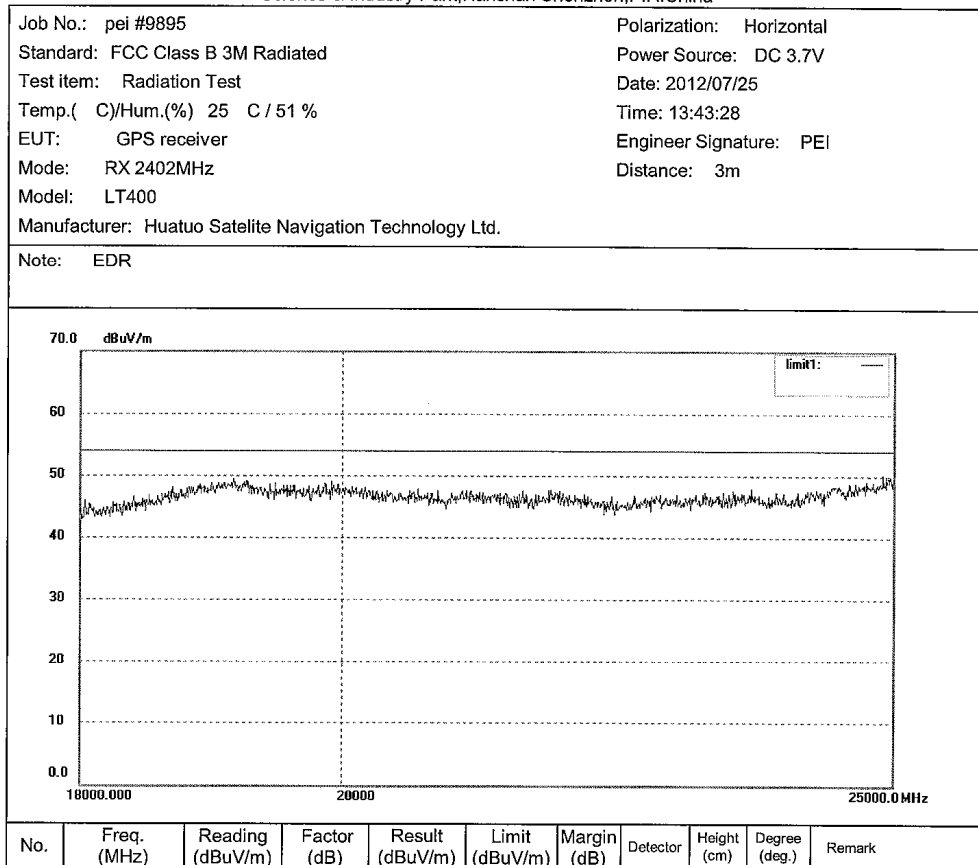
ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396



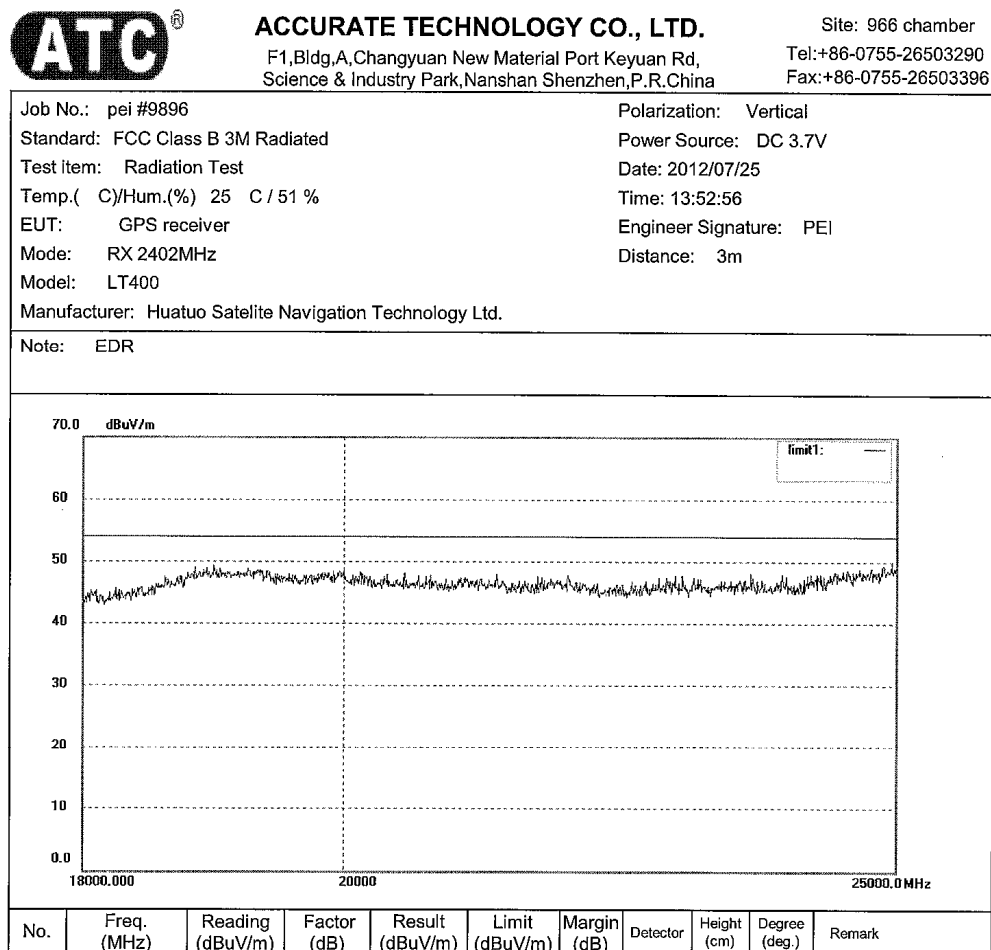


Figure 65: Test figure of Radiated emissions in restricted bands, Mode A.1, Horizontal, GFSK Modulation

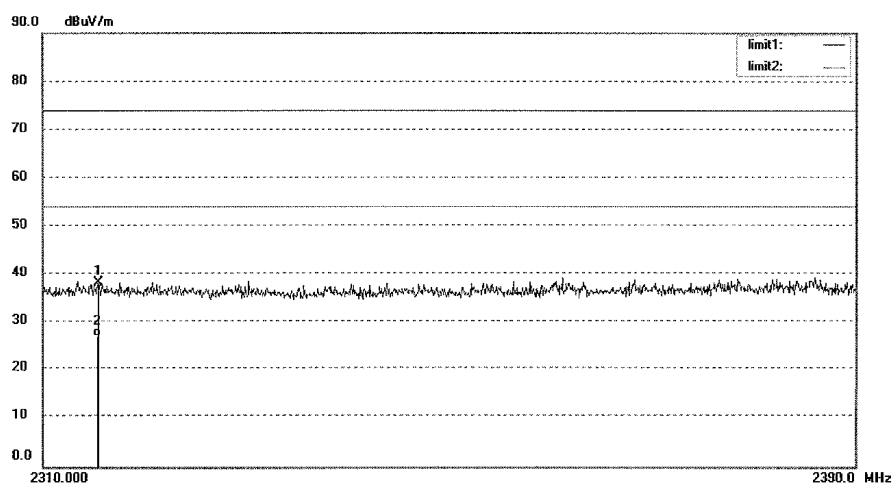


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Site: 966 chamber
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Fax:+86-0755-26503396

Job No.: pei #9855	Polarization: Horizontal
Standard: FCC Part 15 Band Edge (2.4G)	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 7:32:53
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2315.286	46.23	-7.81	38.42	74.00	-35.58	peak			
2	2315.286	34.91	-7.81	27.10	54.00	-26.90	AVG			

Figure 66: Test figure of Radiated emissions in restricted bands, Mode A.1, Vertical, GFSK Modulation



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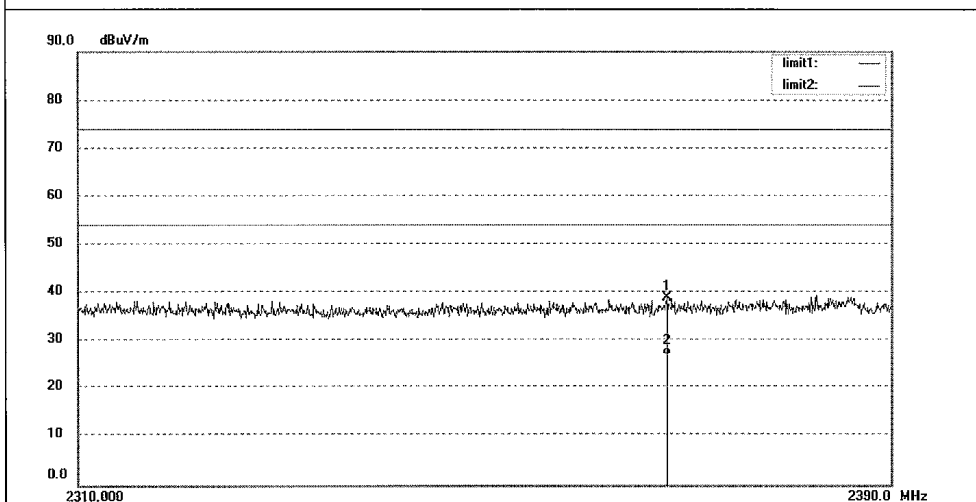
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: pei #9856	Polarization: Vertical
Standard: FCC Part 15 Band Edge (2.4G)	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 7:43:12
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2367.683	46.62	-7.67	38.95	74.00	-35.05	peak			
2	2367.683	34.62	-7.67	26.95	54.00	-27.05	AVG			

Figure 67: Test figure of Radiated emissions in restricted bands, Mode A.3, Horizontal, GFSK Modulation

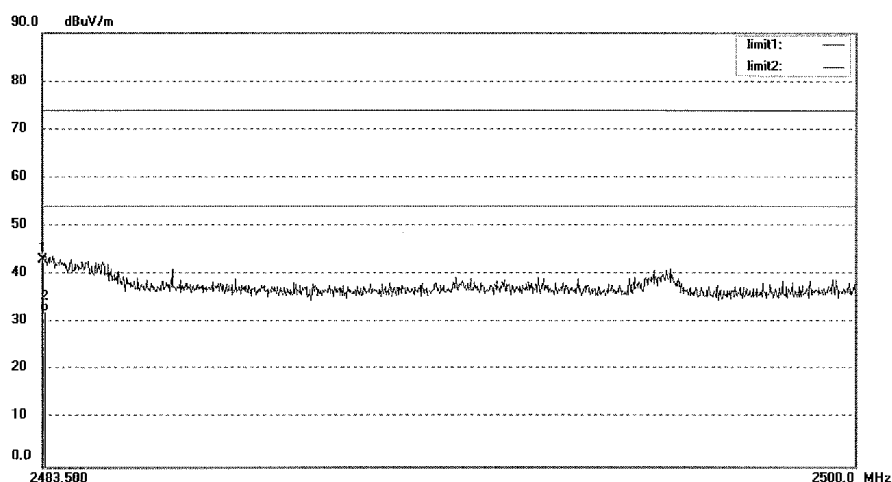


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Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: pei #9862	Polarization: Horizontal
Standard: FCC Part 15 Band Edge (2.4G)	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 8:55:32
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	50.35	-7.37	42.98	74.00	-31.02	peak			
2	2483.500	39.77	-7.37	32.40	54.00	-21.60	AVG			

Figure 68: Test figure of Radiated emissions in restricted bands, Mode A.3, Vertical, GFSK Modulation



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Fax:+86-0755-26503396

Job No.: pei #9861

Standard: FCC Part 15 Band Edge (2.4G)

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: TX 2480MHz

Model: LT400

Manufacturer: Huatuo Satelite Navigation Technology Ltd.

Polarization: Vertical

Power Source: DC 3.7V

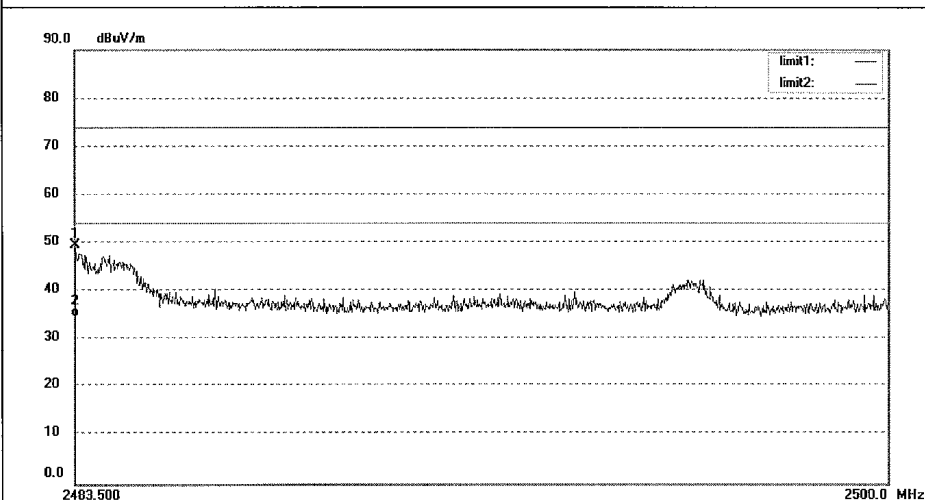
Date: 2012/07/25

Time: 8:45:51

Engineer Signature: PEI

Distance: 3m

Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	56.91	-7.37	49.54	74.00	-24.46	peak			
2	2483.500	42.17	-7.37	34.80	54.00	-19.20	AVG			

Figure 69: Test figure of Radiated emissions in restricted bands, Mode A.1, Horizontal, 8DPSK Modulation



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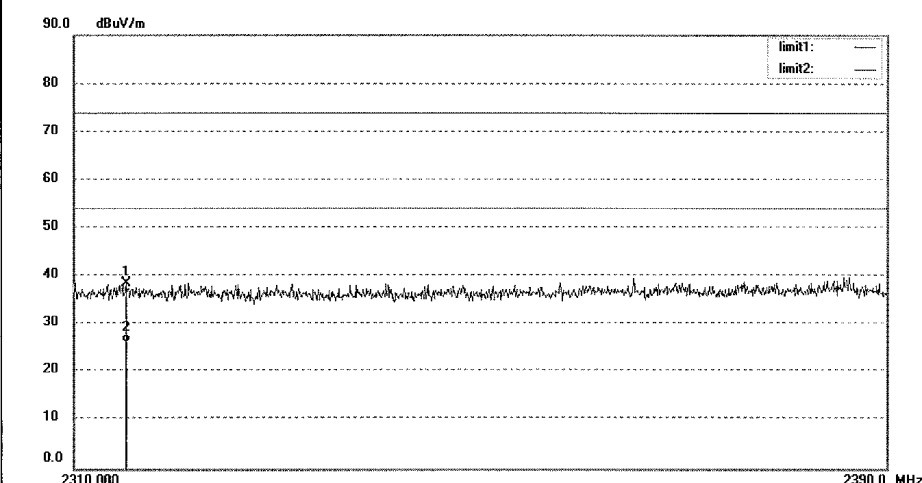
Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9873	Polarization: Horizontal
Standard: FCC Part 15 Band Edge (2.4G)	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 10:45:15
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2315.049	46.34	-7.81	38.53	74.00	-35.47	peak			
2	2315.049	34.05	-7.81	26.24	54.00	-27.76	AVG			

Figure 70: Test figure of Radiated emissions in restricted bands, Mode A.1, Vertical, 8DPSK Modulation

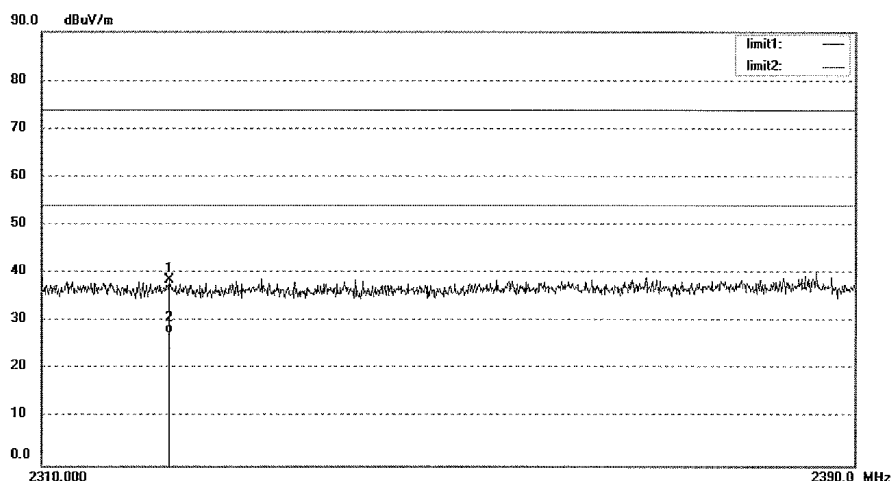


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Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: pei #9874	Polarization: Vertical
Standard: FCC Part 15 Band Edge (2.4G)	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 10:53:05
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2402MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2322.326	46.41	-7.81	38.60	74.00	-35.40	peak			
2	2322.326	35.41	-7.81	27.60	54.00	-26.40	AVG			

Figure 71: Test figure of Radiated emissions in restricted bands, Mode A.3, Horizontal, 8DPSK Modulation



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Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: pei #9880

Standard: FCC Part 15 Band Edge (2.4G)

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: TX 2480MHz

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Horizontal

Power Source: DC 3.7V

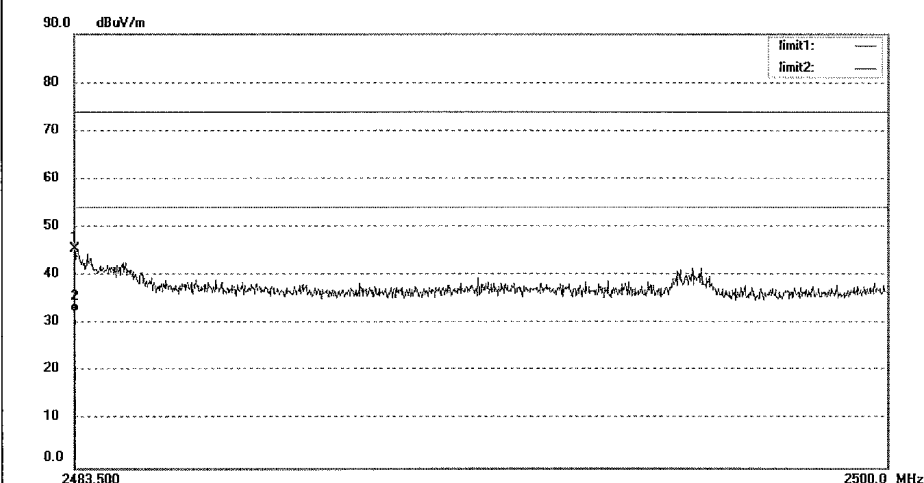
Date: 2012/07/25

Time: 11:46:38

Engineer Signature: PEI

Distance: 3m

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	52.91	-7.37	45.54	74.00	-28.46	peak			
2	2483.500	39.87	-7.37	32.50	54.00	-21.50	AVG			

Figure 72: Test figure of Radiated emissions in restricted bands, Mode A.3, Vertical, 8DPSK Modulation

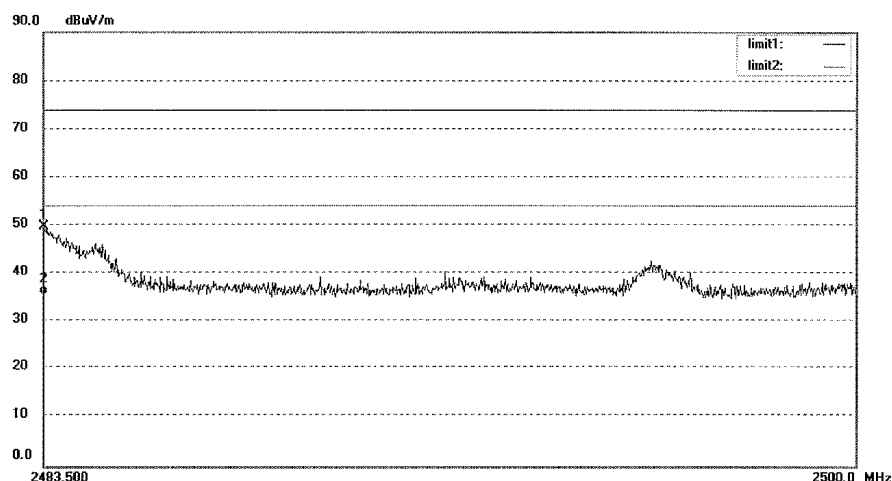


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Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: pei #9879	Polarization: Vertical
Standard: FCC Part 15 Band Edge (2.4G)	Power Source: DC 3.7V
Test item: Radiation Test	Date: 2012/07/25
Temp.(C)/Hum.(%) 24 C / 48 %	Time: 11:36:21
EUT: GPS receiver	Engineer Signature: PEI
Mode: TX 2480MHz	Distance: 3m
Model: LT400	
Manufacturer: Huatuo Satellite Navigation Technology Ltd.	

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	57.28	-7.37	49.91	74.00	-24.09	peak			
2	2483.500	42.97	-7.37	35.60	54.00	-18.40	AVG			

Figure 73: Test figure of conducted emissions, mode E, line live

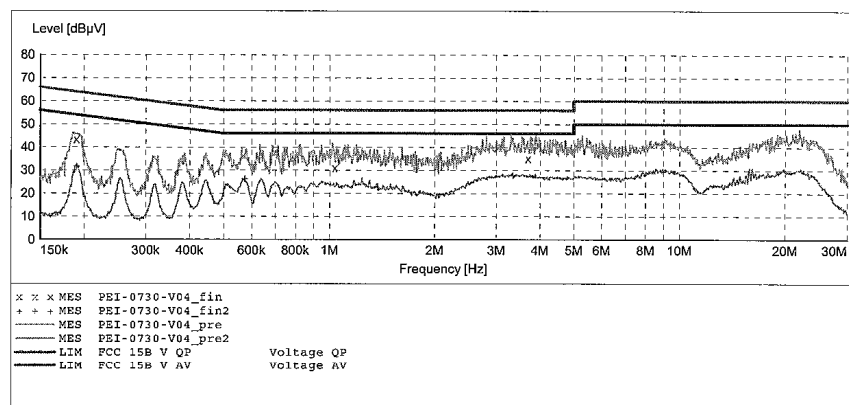
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: GPS receiver M/N:LT400
Manufacturer: Huatuo Satellite Navigation Technology Ltd.
Operating Condition: Charging
Test Site: 1#Shielding Room
Operator: PEI
Test Specification: L 120V/60Hz
Comment: Mains port
Start of Test: 7/24/2012 / 10:39:24PM

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB STD VTERM2 1.70
Start Stop Step Detector Meas. IF Transducer
Frequency Frequency Width Time Bandw.
150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008
Average



MEASUREMENT RESULT: "PEI-0730-V04_fin"

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.189837	43.50	11.2	64	20.5	QP	L1	GND
1.035639	31.00	11.8	56	25.0	QP	L1	GND
3.700519	35.10	11.5	56	20.9	QP	L1	GND

MEASUREMENT RESULT: "PEI-0730-V04_fin2"

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190596	31.50	11.2	54	22.5	AV	L1	GND
0.573613	26.10	12.0	46	19.9	AV	L1	GND
3.349036	27.70	11.5	46	18.3	AV	L1	GND

Figure 74: Test figure of conducted emissions, mode E, line neutral

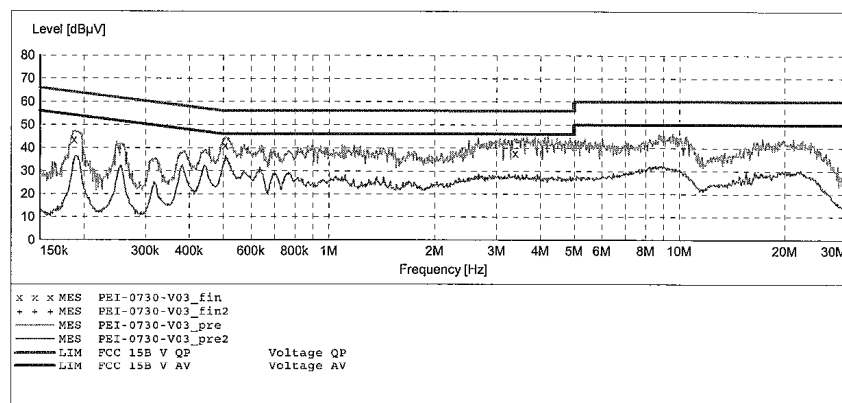
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: GPS receiver M/N:LT400
Manufacturer: Huatuo Satellite Navigation Technology Ltd.
Operating Condition: Charging
Test Site: 1#Shielding Room
Operator: PEI
Test Specification: N 120V/60Hz
Comment: Mains port
Start of Test: 7/24/2012 / 10:36:21PM

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB STD VTERM2 1.70
Start Stop Step Detector Meas. IF Transducer
Frequency Frequency Width Time Bandw.
150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008
Average



MEASUREMENT RESULT: "PEI-0730-V03_fin"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.187577	43.70	11.2	64	20.4	QP	N	GND
0.506843	41.10	12.0	56	14.9	QP	N	GND
3.389385	37.70	11.5	56	18.3	QP	N	GND

MEASUREMENT RESULT: "PEI-0730-V03_fin2"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.506843	35.20	12.0	46	10.8	AV	N	GND
0.636349	30.20	11.9	46	15.8	AV	N	GND
2.667462	27.40	11.6	46	18.6	AV	N	GND

**Figure 75: Test figure of Radiated emissions, mode D, Horizontal polarity
(30MHz – 1GHz)**



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Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9796

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: GPS receiving

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Horizontal

Power Source: DC 3.7V

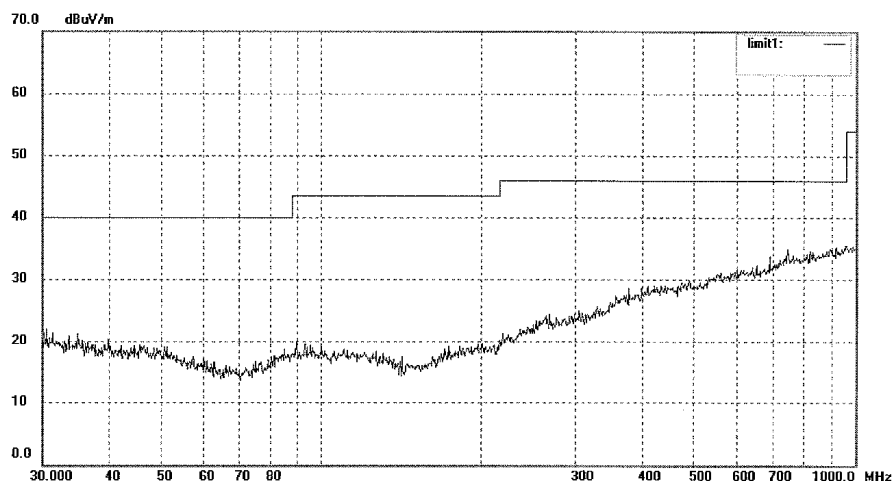
Date: 2012/07/25

Time: 21:09:53

Engineer Signature: PEI

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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**Figure 76: Test figure of Radiated emissions, mode D, Vertical polarity
(30MHz – 1GHz)**



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Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9795

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: GPS receiving

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Vertical

Power Source: DC 3.7V

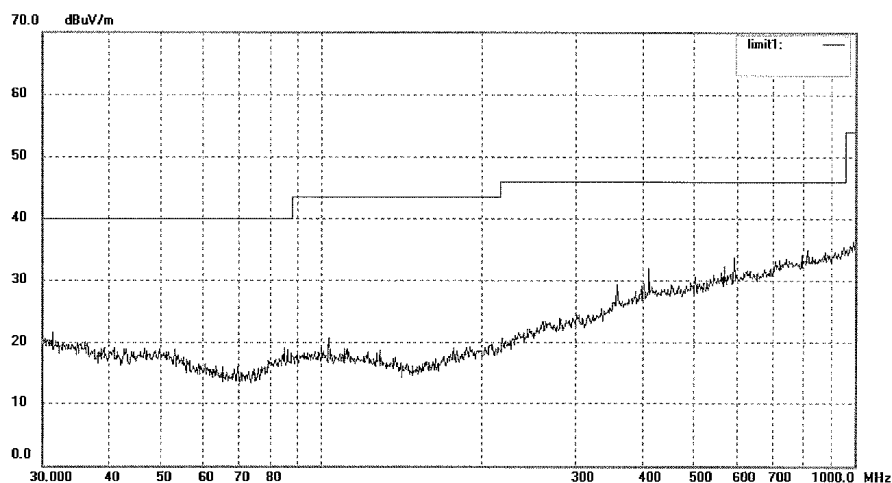
Date: 2012/07/25

Time: 21:01:44

Engineer Signature: PEI

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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Figure 77: Test figure of Radiated emissions, mode D, Horizontal polarity (1GHz –6GHz)



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9794

Standard: FCC PART 15B

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: GPS receiving

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Horizontal

Power Source: DC 3.7V

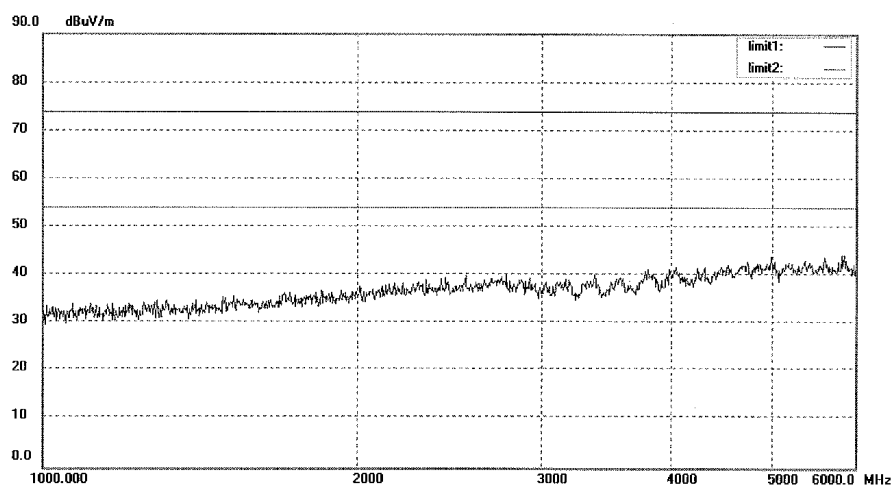
Date: 2012/07/25

Time: 20:53:42

Engineer Signature: PEI

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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**Figure 78: Test figure of Radiated emissions, mode D, Vertical polarity
(1GHz – 6GHz)**



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

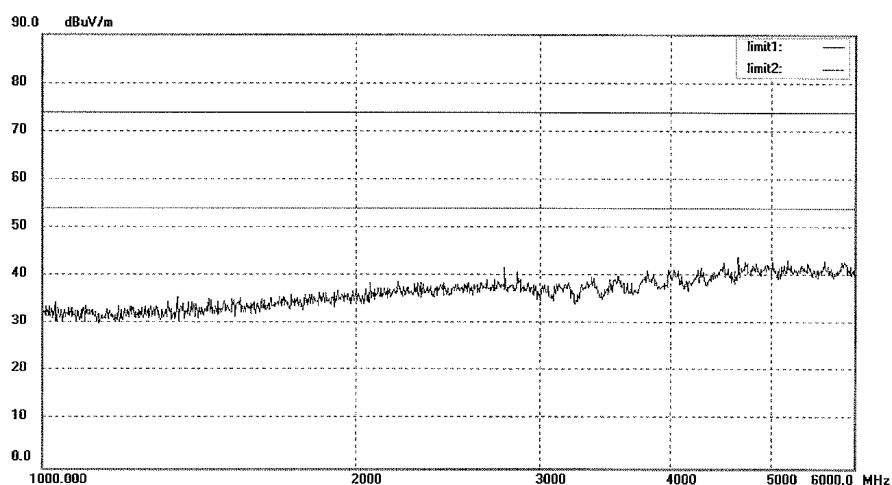
Fax:+86-0755-26503396

Job No.: pei #9793
Standard: FCC PART 15B
Test item: Radiation Test
Temp.(C)/Hum.(%) 24 C / 48 %
EUT: GPS receiver
Mode: GPS receiving
Model: LT400

Polarization: Vertical
Power Source: DC 3.7V
Date: 2012/07/25
Time: 20:46:41
Engineer Signature: PEI
Distance: 3m

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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**Figure 79: Test figure of Radiated emissions, mode E, Horizontal polarity
(30MHz – 1GHz)**



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9920

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: Charging

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Horizontal

Power Source: AC 120V/60Hz

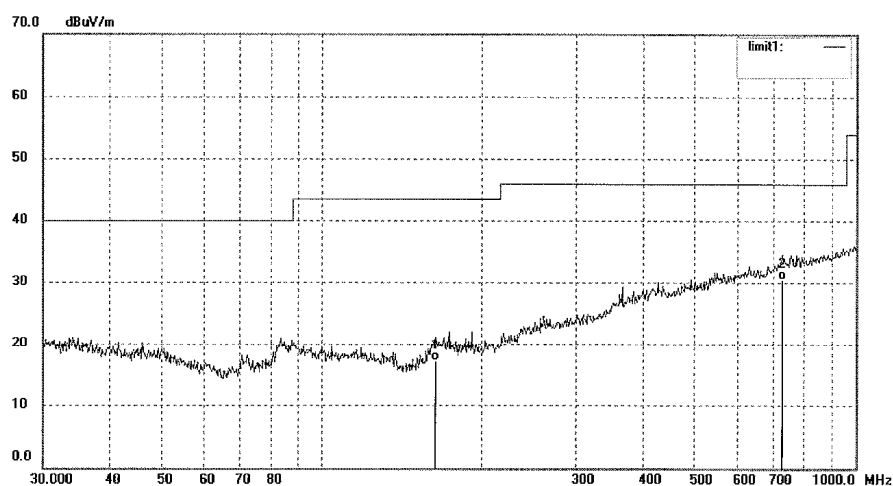
Date: 2012/07/30

Time: 7:50:44

Engineer Signature: PEI

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	163.7366	5.02	12.14	17.16	43.50	-26.34	QP			
2	728.8971	3.28	27.34	30.62	46.00	-15.38	QP			

**Figure 80: Test figure of Radiated emissions, mode E, Vertical polarity
(30MHz – 1GHz)**



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: pei #9921

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: Charging

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Vertical

Power Source: AC 120V/60Hz

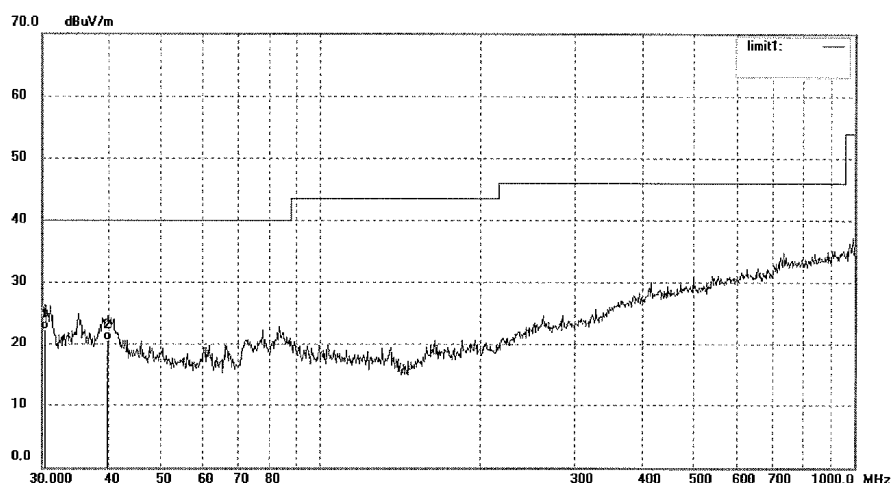
Date: 2012/07/30

Time: 8:00:22

Engineer Signature: PEI

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	30.3179	6.12	16.16	22.28	40.00	-17.72	QP			
2	39.8769	5.92	14.58	20.50	40.00	-19.50	QP			

Figure 81: Test figure of Radiated emissions, mode E, Horizontal polarity (1GHz –6GHz)



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel: +86-0755-26503290

Fax: +86-0755-26503396

Job No.: pei #9922

Standard: FCC PART 15B

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: Charging

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Horizontal

Power Source: AC 120V/60Hz

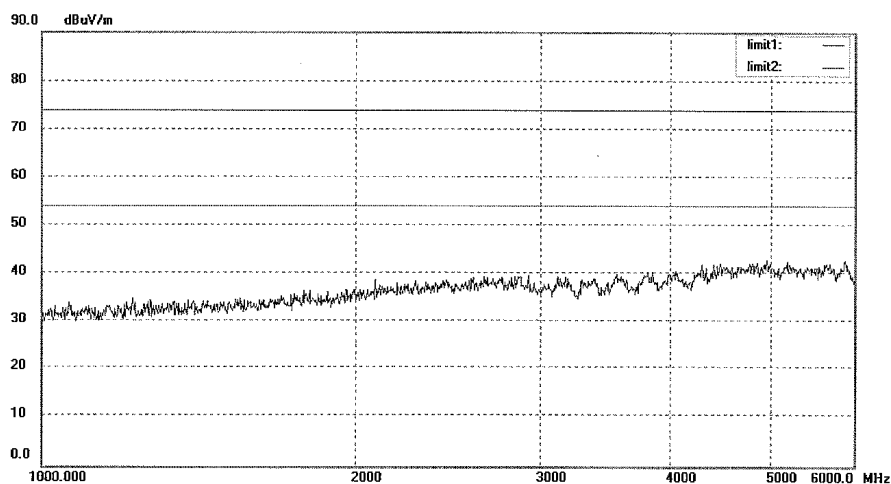
Date: 2012/07/30

Time: 8:12:21

Engineer Signature: PEI

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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**Figure 82: Test figure of Radiated emissions, mode E, Vertical polarity
(1GHz – 6GHz)**



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: pei #9923

Standard: FCC PART 15B

Test item: Radiation Test

Temp.(C)/Hum.(%) 24 C / 48 %

EUT: GPS receiver

Mode: Charging

Model: LT400

Manufacturer: Huatuo Satellite Navigation Technology Ltd.

Polarization: Vertical

Power Source: AC 120V/60Hz

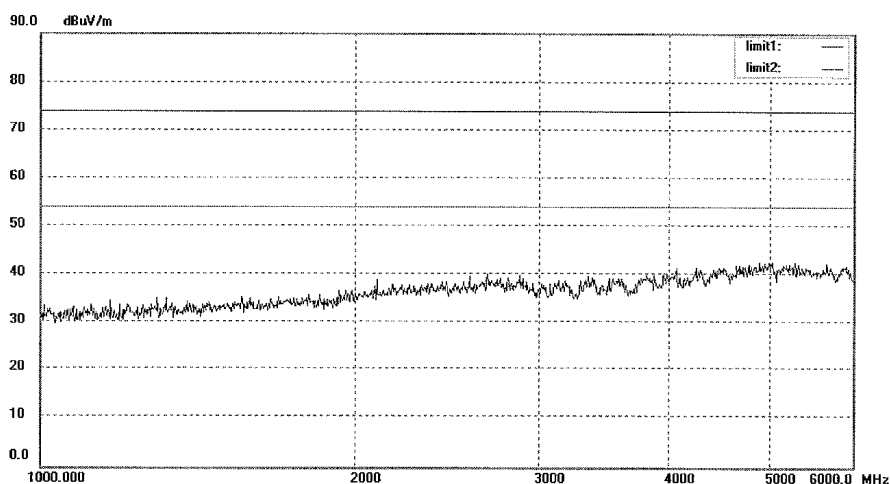
Date: 2012/07/30

Time: 8:21:06

Engineer Signature: PEI

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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