

Prüfbericht-Nr.: <i>Test Report No.:</i>	17041027 001	Auftrags-Nr.: <i>Order No.:</i>	164015578	Seite 1 von 52 Page 1 of 52
Kunden-Referenz-Nr.: <i>Client Reference No.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	03.06.2014	
Auftraggeber: <i>Client:</i>	AAMP OF FLORIDA, DBA AAMP OF AMERICA 13190 56th court, Suite #401, Clearwater, Florida, USA, 33760			
Prüfgegenstand: <i>Test item:</i>	Jamkast USB			
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	ISFM30			
Auftrags-Inhalt: <i>Order content:</i>	FCC Certification			
Prüfgrundlage: <i>Test specification:</i>	CFR Title 47 FCC Part 15: Subpart C Section 15.239			
Wareneingangsdatum: <i>Date of receipt:</i>	03.06.2014			
Prüfmuster-Nr.: <i>Test sample No.:</i>	A000068373-001			
Prüfzeitraum: <i>Testing period:</i>	30.06.2014-02.07.2014			
Ort der Prüfung: <i>Place of testing:</i>	Accurate Technology Co.,Ltd.			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von / tested by: <i>Tom Wang</i>		kontrolliert von / reviewed by: <i>Sam Lin</i>		
05.07.2014	Tom Wang / Assistant Project Manager	05.07.2014	Sam Lin / Technical Certifier	
Datum <i>Date</i>	Name / Stellung <i>Name / Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>	Name / Stellung <i>Name / Position</i>
				Unterschrift <i>Signature</i>
Sonstiges / Other:		FCC ID: XBD-FM30		
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>		
* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) 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. <i>This test report only relates to the a. m. test sample. 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 test mark.</i>				

TEST SUMMARY

- 1.1 COMPLEMENTARY MATERIALS**
- 2.1 TEST FACILITIES**
- 2.2 LIST OF TEST AND MEASUREMENT INSTRUMENTS**
- 2.3 TRACEABILITY**
- 2.4 CALIBRATION**
- 2.5 MEASUREMENT UNCERTAINTY**
- 2.6 LOCATION OF ORIGINAL DATA**
- 2.7 STATUS OF FACILITY USED FOR TESTING**
- 3.1 PRODUCT FUNCTION AND INTENDED USE**
- 3.2 RATINGS AND SYSTEM DETAILS**
- 3.3 INDEPENDENT OPERATION MODES**
- 3.4 NOISE GENERATING AND NOISE SUPPRESSING PARTS**
- 3.5 SUBMITTED DOCUMENTS**
- 4.1 PRINCIPLE OF CONFIGURATION SELECTION**
- 4.2 TEST OPERATION AND TEST SOFTWARE**
- 4.3 SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT**
- 4.4 COUNTERMEASURES TO ACHIEVE ERM COMPLIANCE**
- 4.5 TEST SETUP DIAGRAM**
- 5.1 -26dB BANDWIDTH**
RESULT: Pass
- 5.2 IN-BAND EMISSION**
RESULT: Pass
- 5.3 OUT-OF-BAND EMISSION**
RESULT: Pass
- 6.1 RADIO FREQUENCY EXPOSURE COMPLIANCE**
RESULT: Pass

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1. General Remarks

1.1 Complementary Materials

None.

2. Test Sites

2.1 Test Facilities

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.

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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
Radiated Emission				
Spectrum Analyzer	Agilent	E7405A	MY45115511	2015-01-11
Test Receiver	Rohde & Schwarz	ESCS30	100307	2015-01-11
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	2015-01-15
50 Coaxial Switch	Anritsu Corp	MP59B	6200506474	2015-01-15
Pre-Amplifier	Rohde & Schwarz	CBLU11835 40-01	3791	2015-01-11
Radio Spectrum Test				
Spectrum Analyzer	Rohde & Schwarz	ESPI3	100396/003	2015-01-11
Temp. & Humid. Chamber	Gongwen	HSD-500	0109	2015-01-11

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 included in 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

The 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 FM radio transmitter used in vehicle for broadcasting audio data and charging for portable device.

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Technical Specification of EUT

Technical Specification	Value
Product Name	Jamkast USB
Model Name	ISFM30
Number of Channel	4
Operation Frequency	106.7MHz, 106.9MHz, 107.1MHz, 107.3MHz
Operating Voltage	DC 12V (via car battery)
Modulation type	FM
Antenna gain	0.27dBi
Measured Maximum EIRP	-50.29dBm

3.3 Independent Operation Modes

The basic operation modes are:

- A. Transmitting
 - 1. Low channel
 - 2. Middle Channel
 - 3. High Channel
- B. Charging for portable device
- C. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.5 Submitted Documents

- Circuit Diagram
- Rating Label
- Schematic
- Block Diagram
- Instruction Manual
- Specification
- BOM
- PCB layout

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation 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.

4.3 Special Accessories and Auxiliary Equipment

The EUT was tested with the following equipment

Table 3 Auxiliary Equipment

Description	Manufacturer	Model No.	S/N
Mobile telephone	HTC	HTC Z510d	HC22MM701532
Mobile telephone	SAMSUNG	GT-N7100	--

4.4 Countermeasures to Achieve ERM Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF). No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test

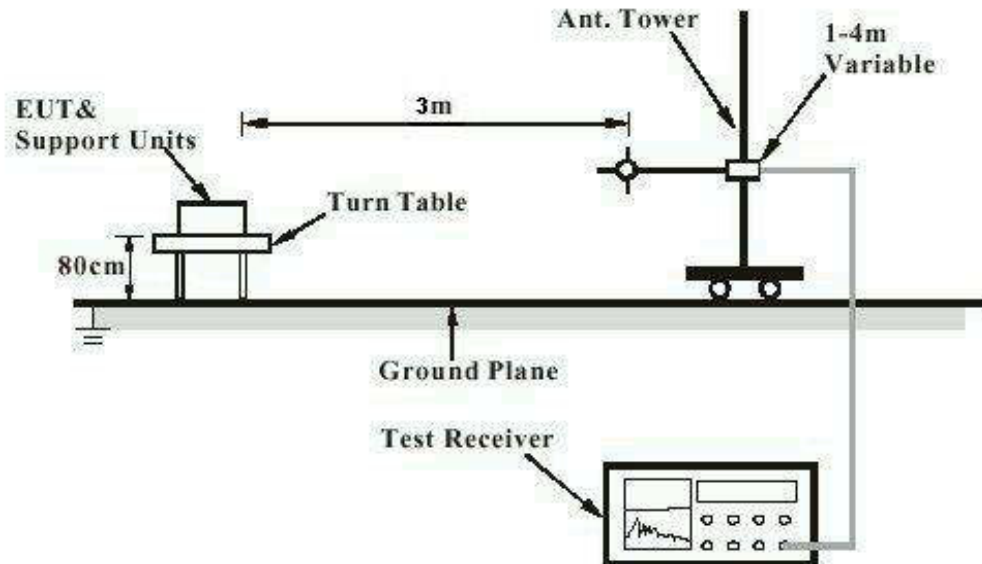
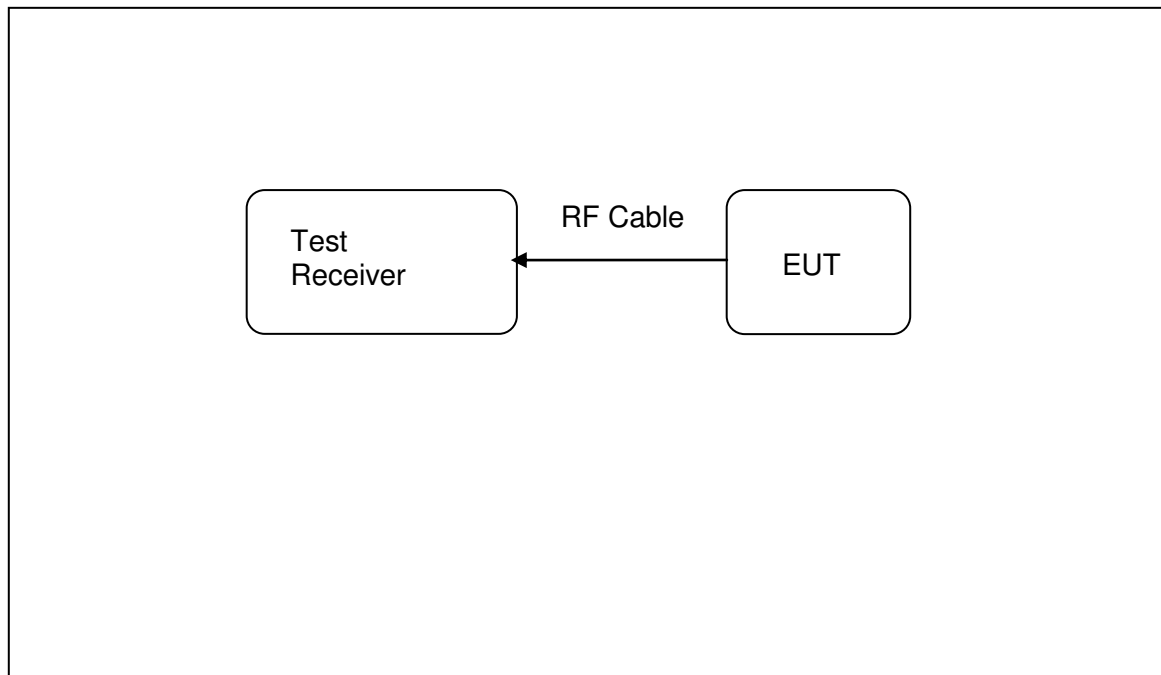


Diagram of Measurement Equipment Configuration for Radio Spectrum Measurement



5. Test Results

5.1 -26dB Bandwidth

RESULT:

Pass

Date of testing : 2014-06-30
Test standard : FCC Part 15.239(a)
Basic standard : ANSI C63.4: 2009
Limit : 200KHz contains in the 88-108 MHz
Kind of test site : Shielded Room

Test setup

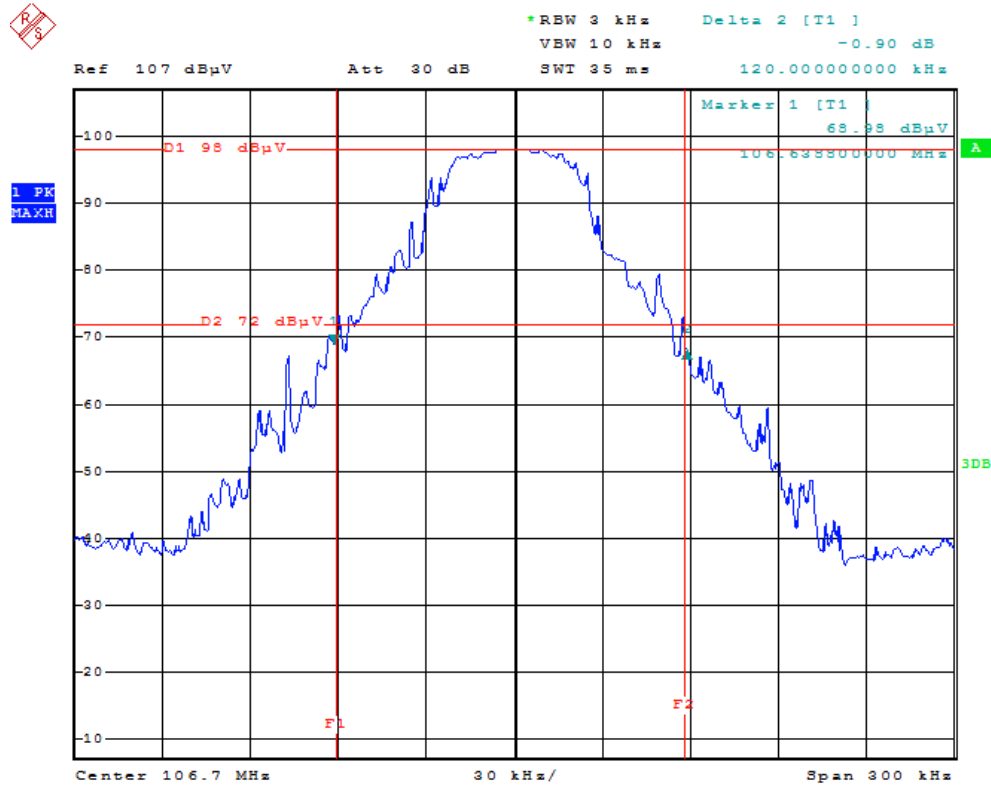
Input Voltage : DC 12V
Operation mode : A

Table 4 Test results of bandwidth

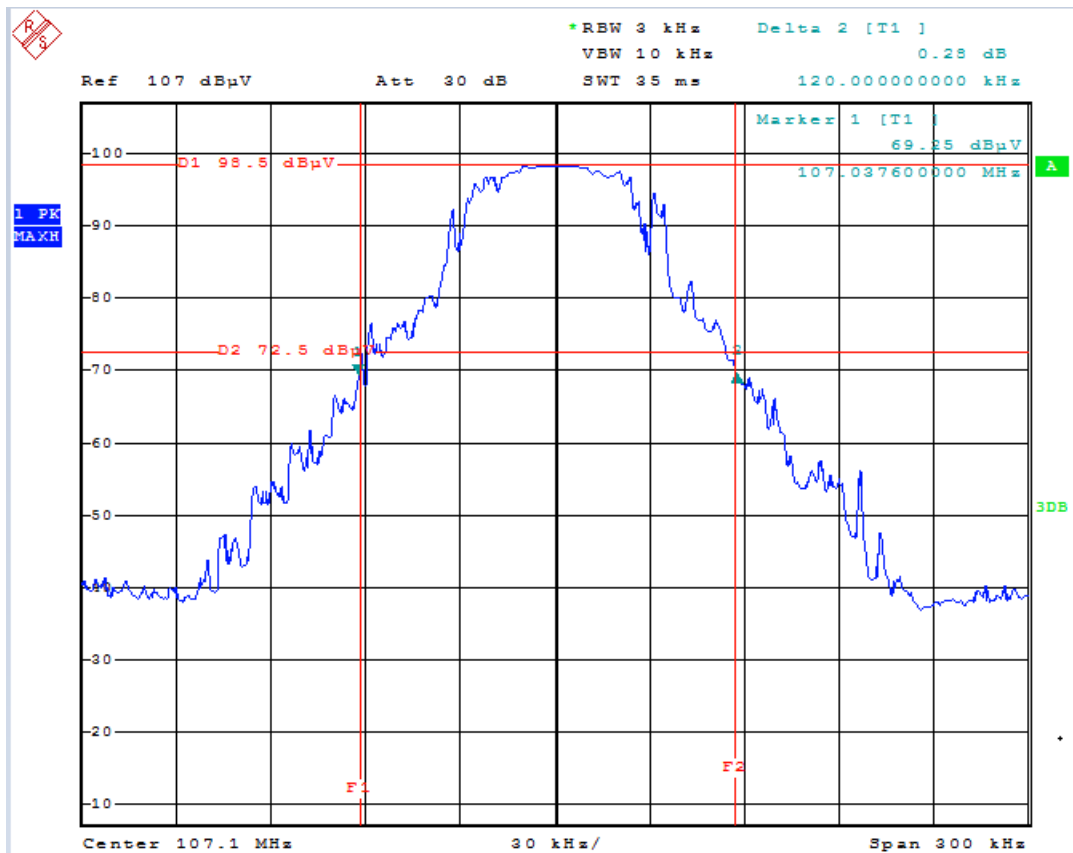
Frequency	Measured bandwidth	Limit
Low	106.63KHz	≤200KHz and fall into 88-108 MHz
Middle	107.04KHz	
High	125.40 KHz	

For details refer to the test plots.

Test plots of bandwidth



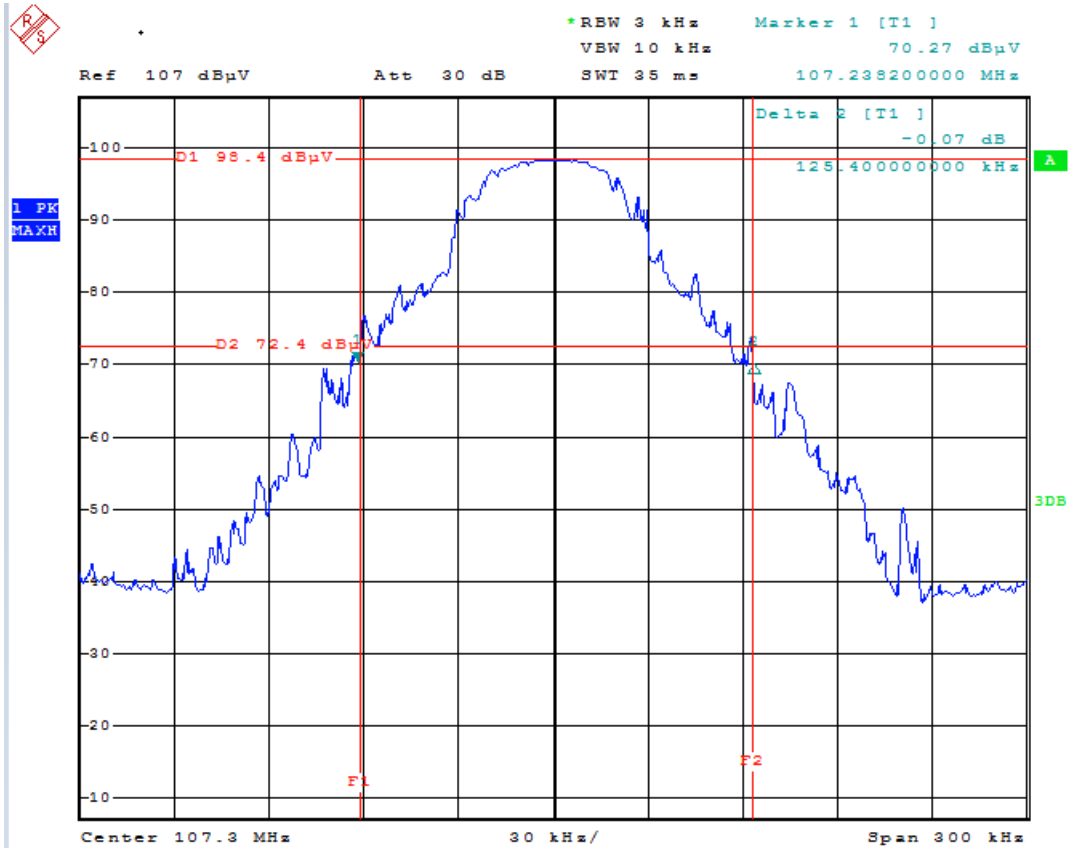
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Date: 30.JUN.2014 15:10:41

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Date: 30.JUN.2014 15:14:50

5.2 In-band Emission

RESULT:

Pass

Date of testing : 2014-06-30
Test standard : FCC Part 15.239(b)
Basic standard : ANSI C63.4: 2009
Limit : The field strength of any emissions within the permitted 200 kHz band shall not exceed 250 microvolts/meter at 3 meters. The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in §15.35 for limiting peak emissions apply.
Kind of test site : 3m Semi-Anechoic Chamber

Test setup

Input Voltage : DC 12V
Operation mode : A +B

Table 5 Test results of In-band Emission

Frequency	Maximum peak field strength (dBuV/m)	Detector	Polarization	Limit(dBuV/m)
Low	44.20	AV	Horizontal	48
	44.94	PK	Horizontal	68
Middle	44.23	AV	Horizontal	48
	44.89	PK	Horizontal	68
High	44.07	AV	Horizontal	48
	44.83	PK	Horizontal	68

For details refer to the following test plots.

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Test Plots of In-band Emission



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

Site: 2# Chamber

Tel: +86-0755-26503290

Fax: +86-0755-26503396

Job No.: PZ #808

Standard: FCC

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C /48 %

EUT:

Mode: TX 106.7MHz

Model: ISFM30

Manufacturer: AAMP

Polarization: Horizontal

Power Source: DC 12V

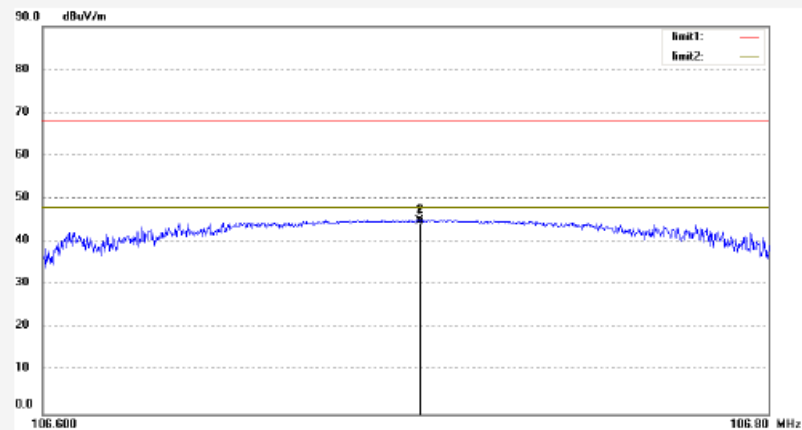
Date: 14/07/02/

Time:

Engineer Signature: PEI

Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (m)	Degree (deg)	Remark
1	106.7038	58.87	-13.93	44.94	68.00	-23.06	peak			
2	106.7038	58.13	-13.93	44.20	48.00	-3.80	AVG			

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Site: 2# Chamber

Tel:+86-0755-26503290
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Job No.: PZ #909

Standard: FCC

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C /48 %

EUT:

Mode: TX 106.7MHz

Model: ISFM30

Manufacturer: AAMP

Polarization: Vertical

Power Source: DC 12V

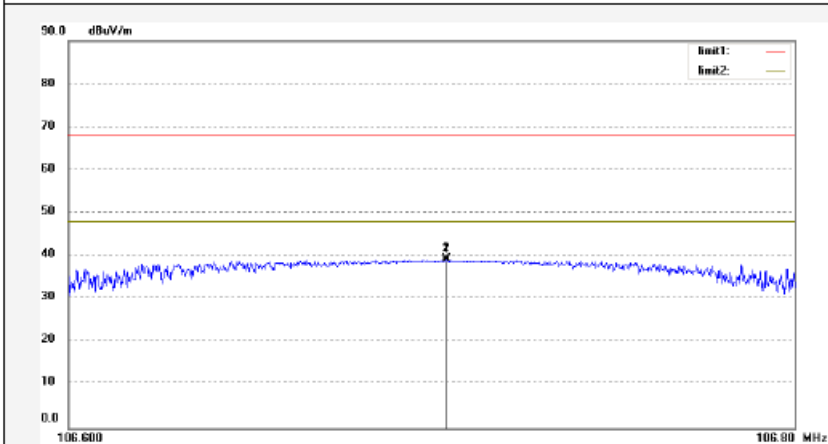
Date: 14/07/02/

Time:

Engineer Signature: PEI

Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (m)	Degree (deg)	Remark
1	106.7040	53.11	-13.93	39.18	68.00	-28.82	peak			
2	106.7040	52.45	-13.93	38.52	48.00	-9.48	AVG			

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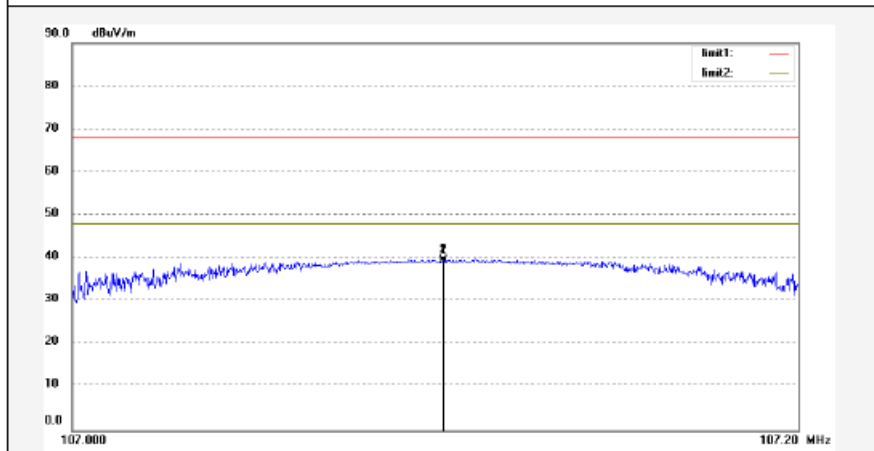


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Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: PZ #810	Polarization: Vertical
Standard: FCC	Power Source: DC 12V
Test item: Radiation Test	Date: 14/07/02/
Temp.(C)/Hum.(%) 23 C /48 %	Time:
EUT:	Engineer Signature: PEI
Mode: TX 107.1MHz	Distance:
Model: ISFM30	
Manufacturer: AAMP	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (m)	Degree (deg)	Remark
1	107.1022	53.46	-13.93	39.53	68.00	-28.47	peak			
2	107.1022	52.85	-13.93	38.92	48.00	-9.08	AVG			

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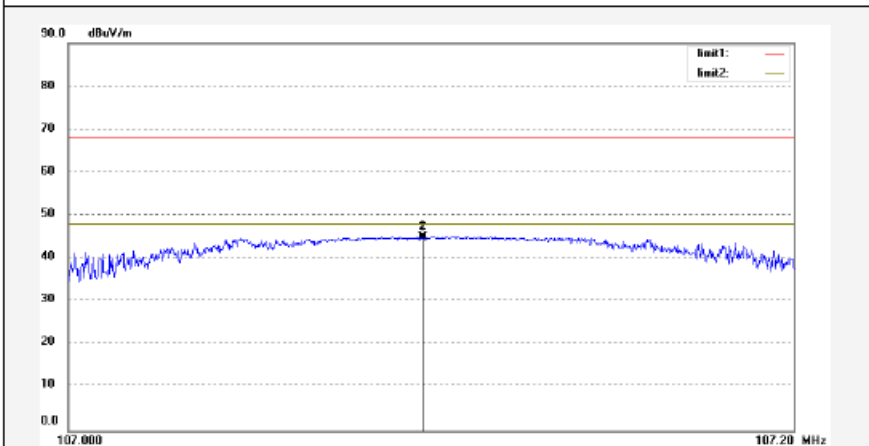


ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: PZ #811	Polarization: Horizontal
Standard: FCC	Power Source: DC 12V
Test item: Radiation Test	Date: 14/07/02/
Temp.(C)/Hum.(%) 23 C /48 %	Time:
EUT:	Engineer Signature: PEI
Mode: TX 107.1MHz	Distance:
Model: ISFM30	
Manufacturer: AAMP	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (m)	Degree (deg)	Remark
1	107.0977	58.82	-13.93	44.89	68.00	-23.11	peak			
2	107.0977	58.16	-13.93	44.23	48.00	-3.77	AVG			

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

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PZ #812

Standard: FCC

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C /48 %

EUT:

Mode: TX 107.3MHz

Model: ISFM30

Manufacturer: AAMP

Polarization: Horizontal

Power Source: DC 12V

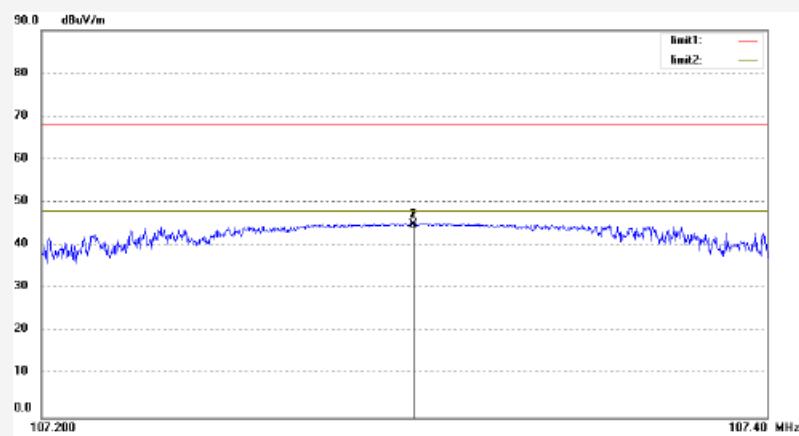
Date: 14/07/02/

Time:

Engineer Signature: PEI

Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (m)	Degree (deg)	Remark
1	107.3023	58.76	-13.93	44.83	68.00	-23.17	peak			
2	107.3023	58.00	-13.93	44.07	48.00	-3.93	AVG			

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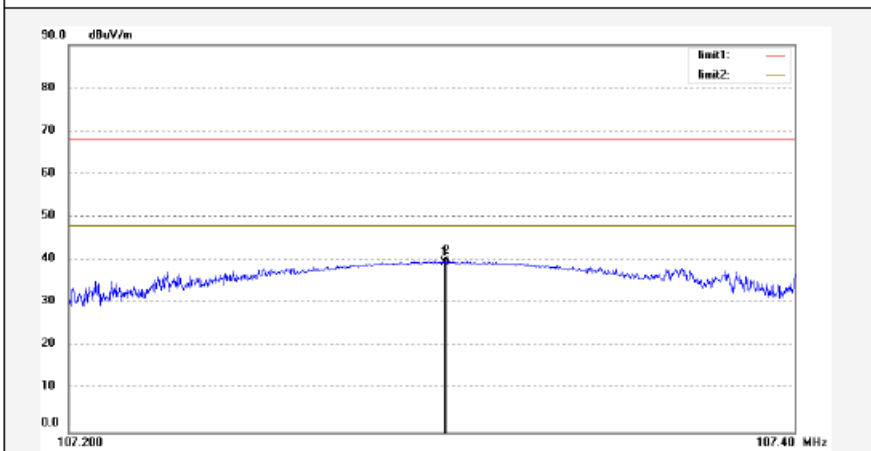


ACCURATE TECHNOLOGY CO., LTD.
F 1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: PZ #813	Polarization: Vertical
Standard: FCC	Power Source: DC 12V
Test item: Radiation Test	Date: 14/07/02/
Temp.(C)/Hum.(%) 23 C /48 %	Time:
EUT:	Engineer Signature: PEI
Mode: TX 107.3MHz	Distance:
Model: ISFM30	
Manufacturer: AAMP	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (m)	Degree (deg)	Remark
1	107.3036	53.37	-13.93	39.44	68.00	-28.56	peak			
2	107.3036	52.87	-13.93	38.94	48.00	-9.06	AVG			

5.3 Out-of-band Emission

RESULT:

Pass

Date of testing	:	2014-06-30
Test standard	:	FCC Part 15.239 (C)
Basic standard	:	ANSI C63.4: 2009
Limit	:	The field strength of any emissions radiated on any frequency outside of the specified 200 kHz band shall not exceed the general radiated emission limits in §15.209.
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Input Voltage	:	DC 12V
Operation mode	:	A +B

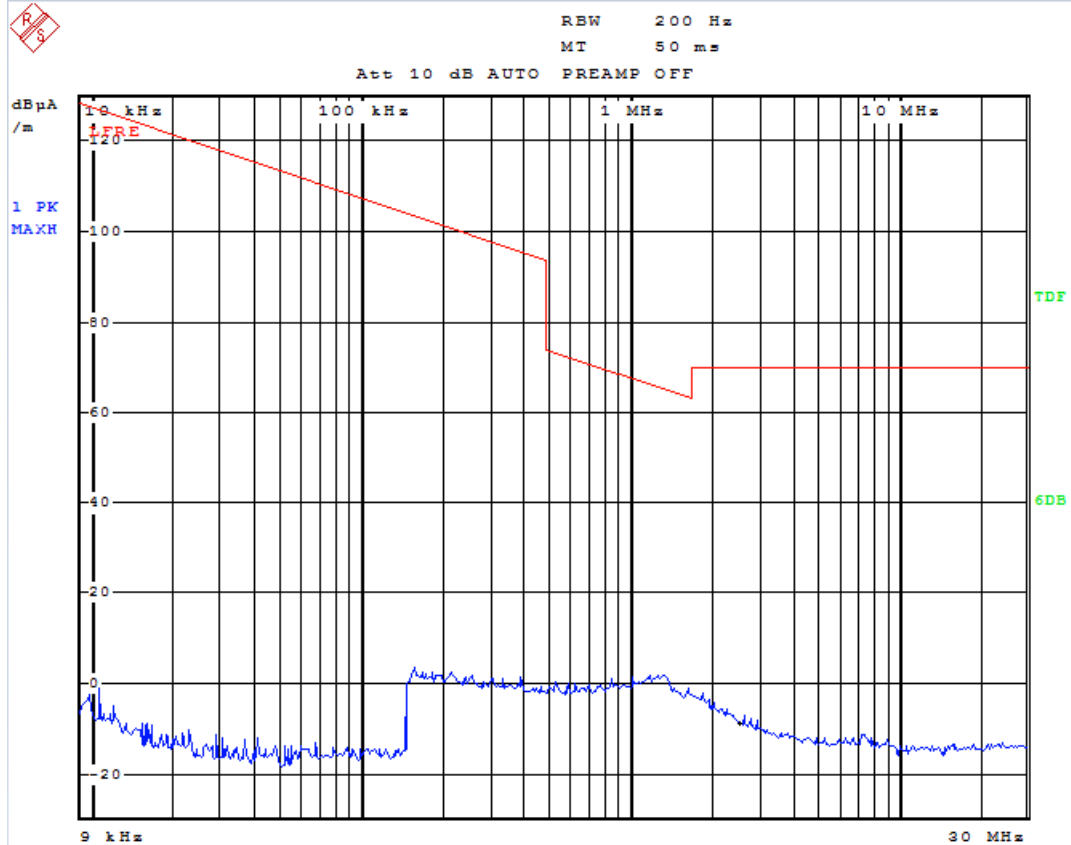
For details refer to the following test plots.

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Test plots of out band emission

Test plot of out band emission, 9 kHz-30MHz
Channel 106.7MHz, X

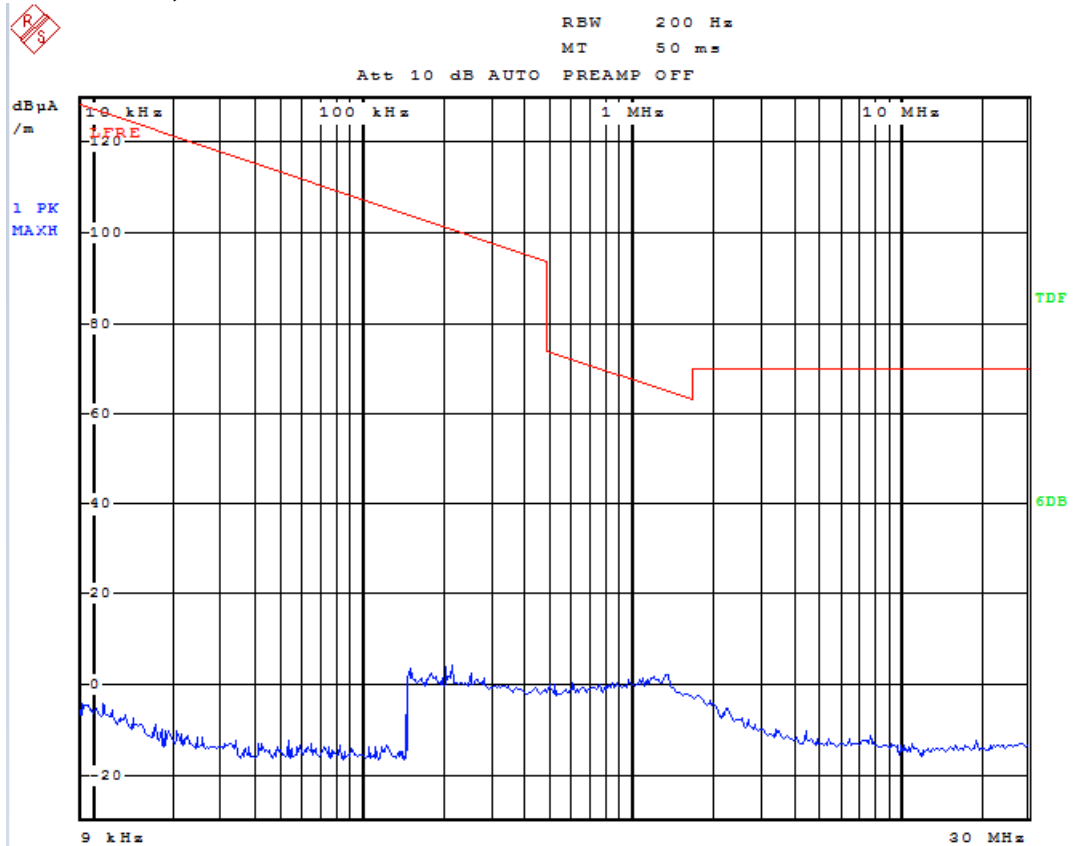


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Channel 106.7MHz, Y

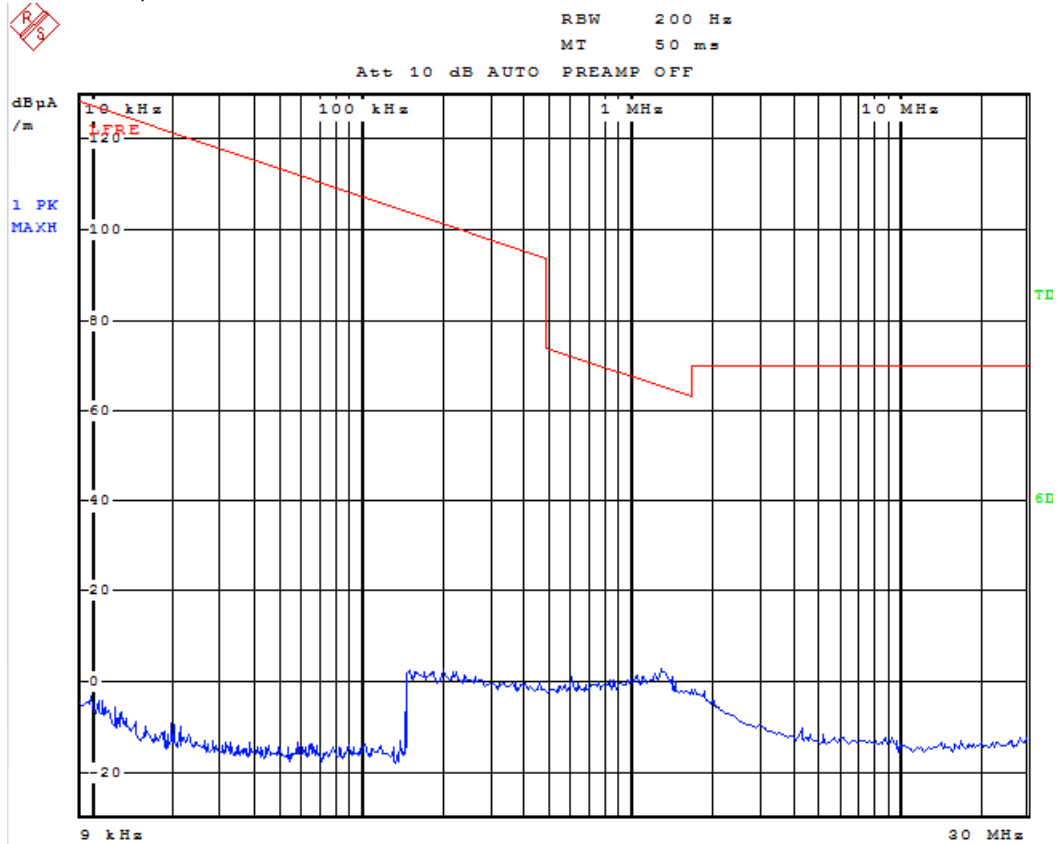


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Channel 106.7MHz, Z

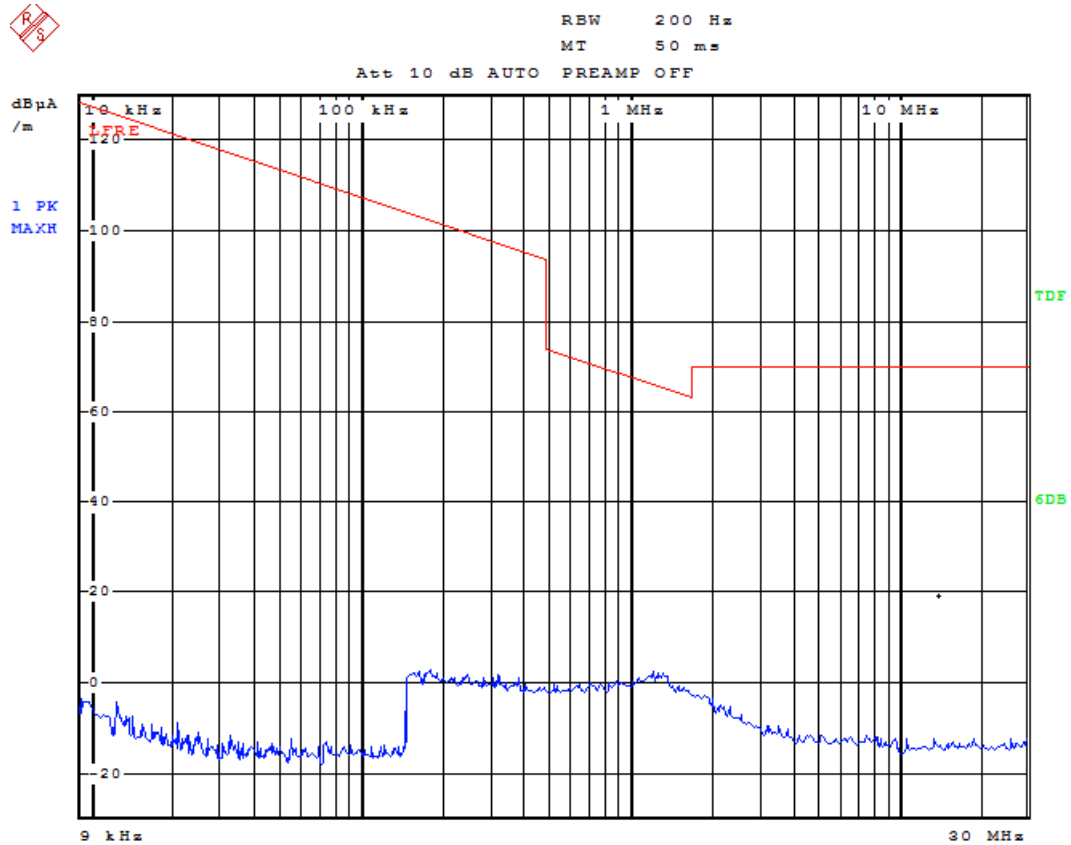


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Channel 107.1MHz, X

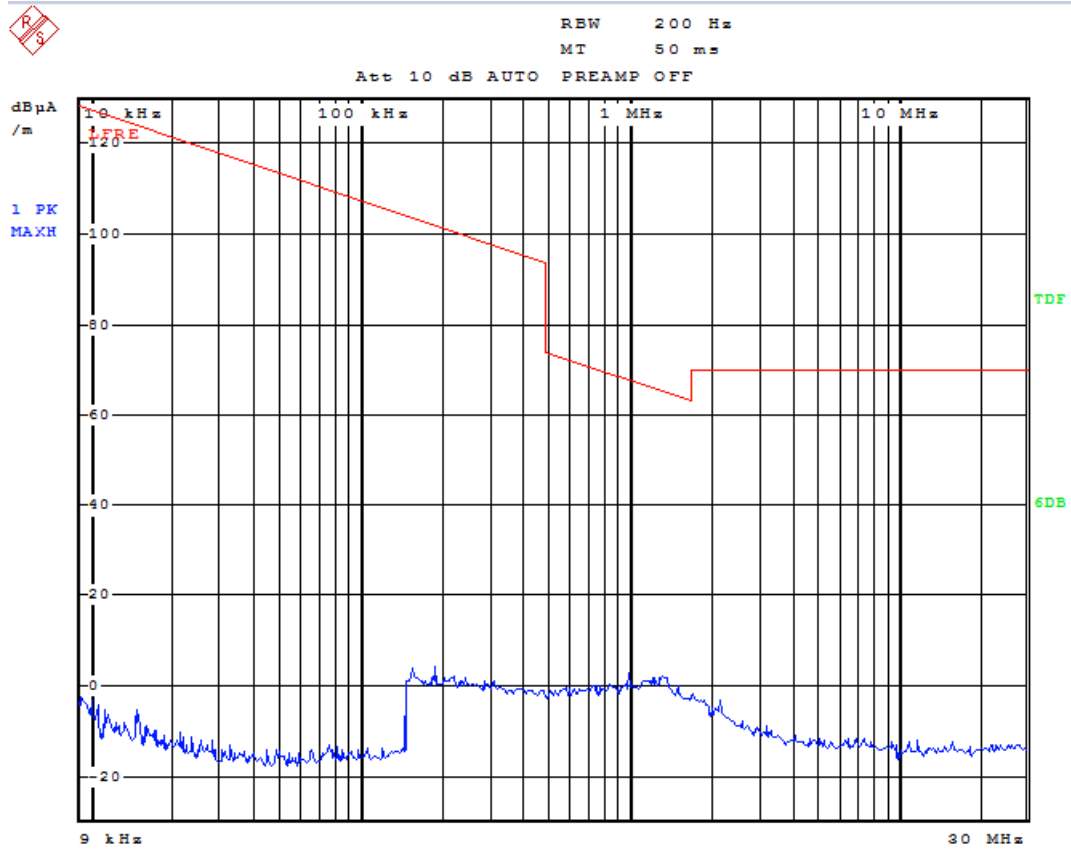


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Channel 107.1MHz, Y

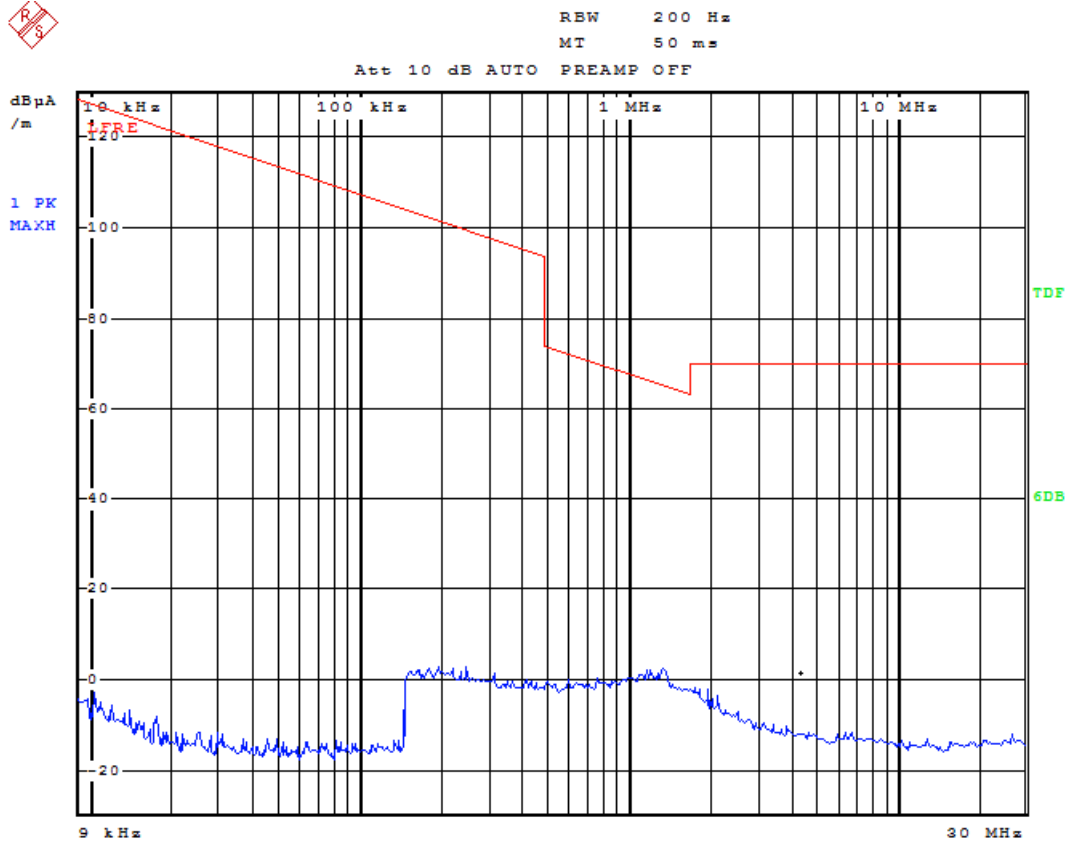


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Channel 107.1MHz, Z

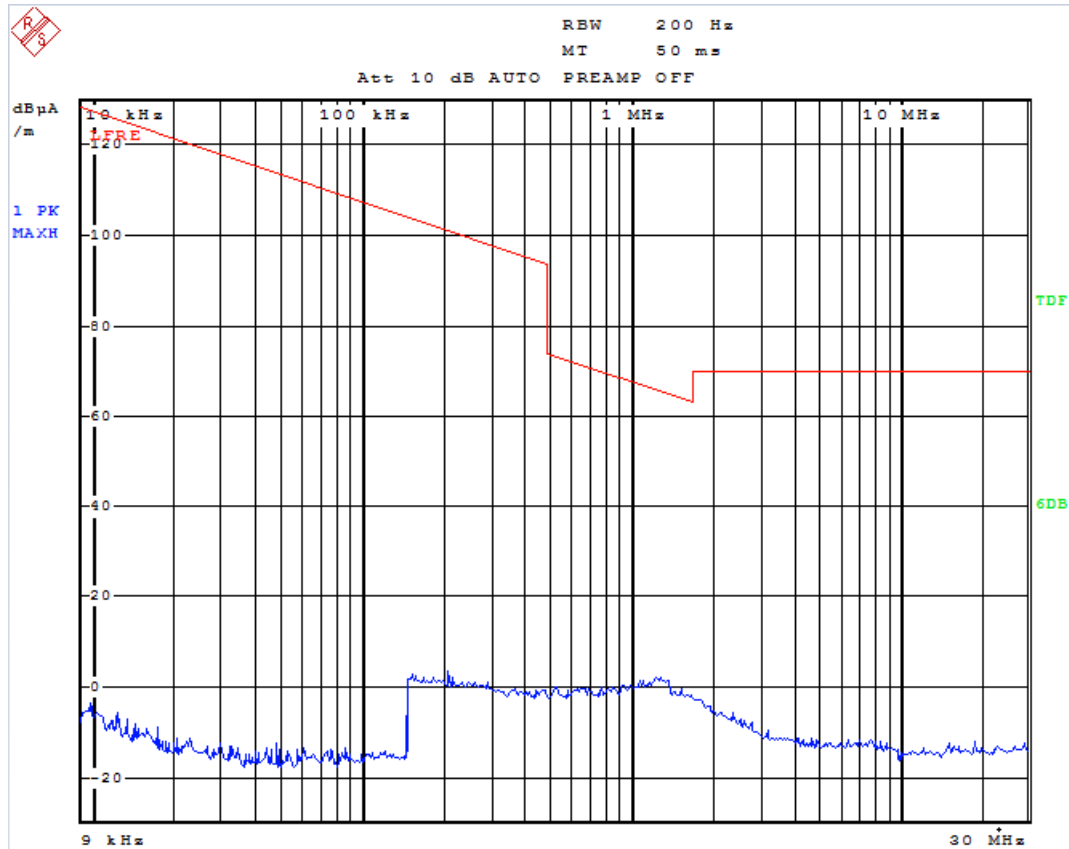


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Channel 107.3MHz, X

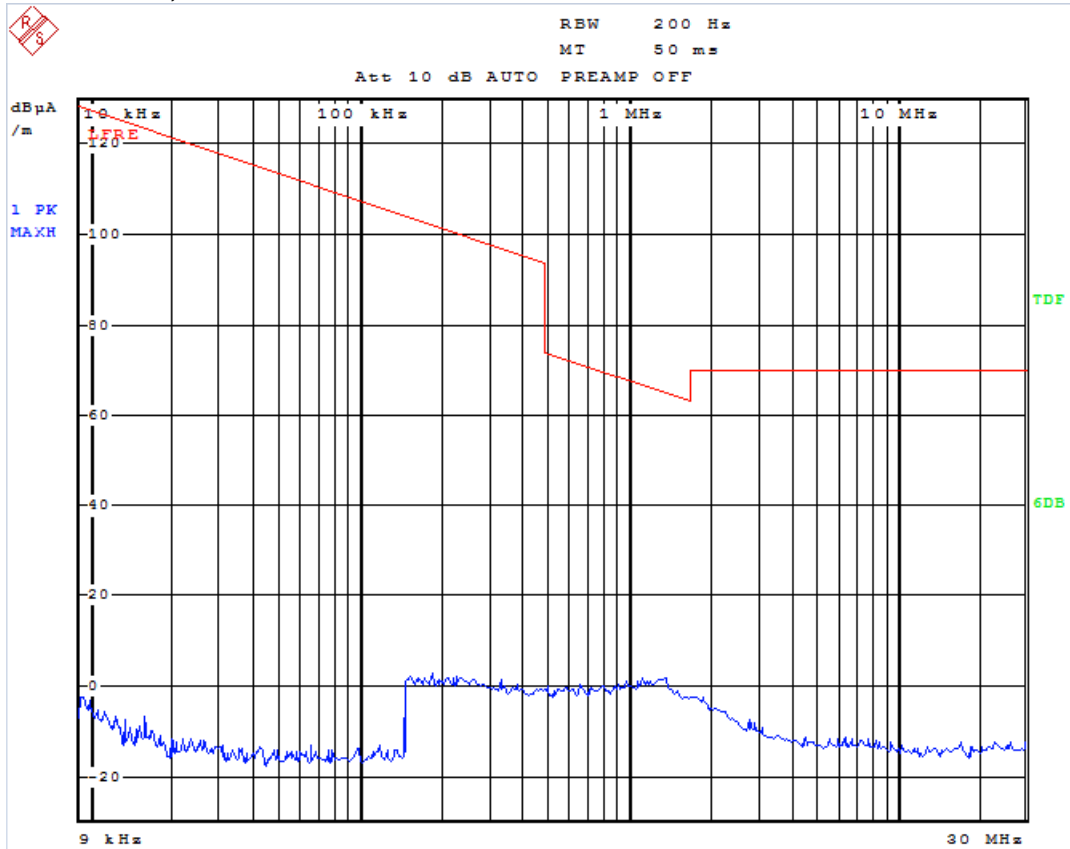


Date: 2.JUL.2014 10:00:17

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Test Report No.

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Channel 107.3MHz, Y

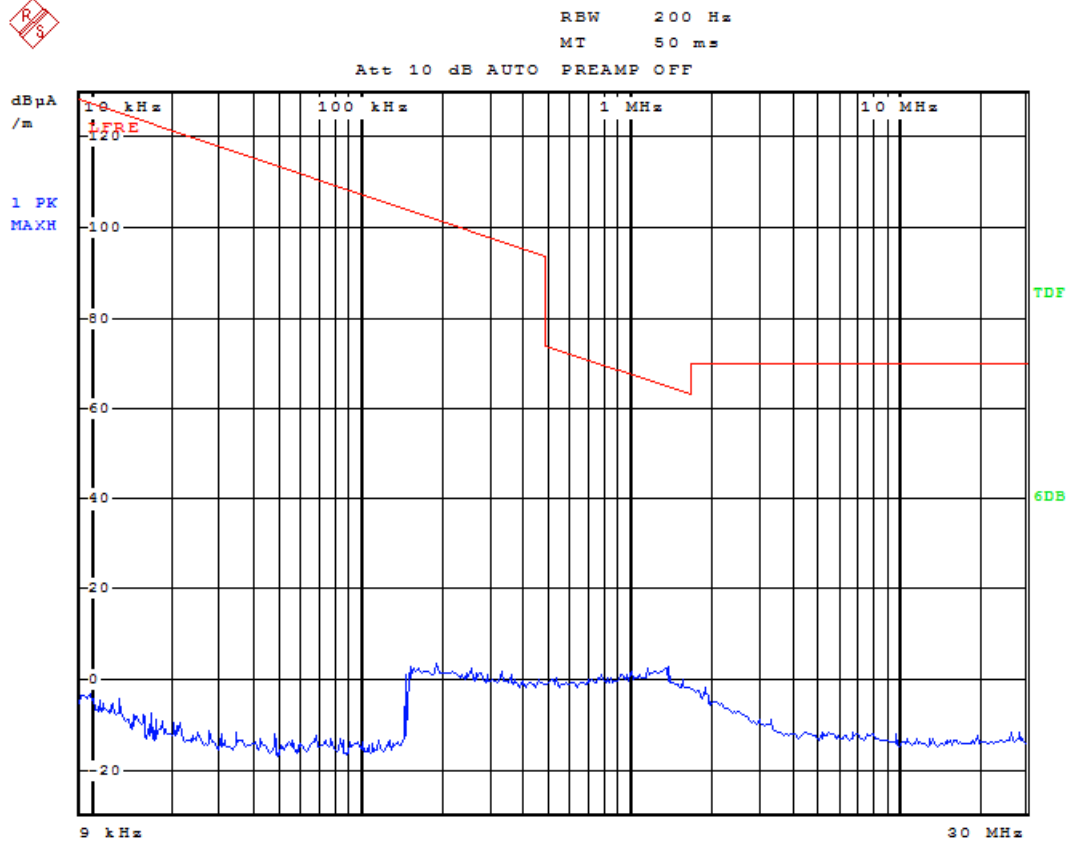


Date: 2.JUL.2014 09:54:29

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Channel 107.3MHz, Z



Date: 2.JUL.2014 09:58:20

Test plots of out band emission, 30MHz-1GHz



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

Tel:+86-0755-26503290

Fax: +86-0755-26503396

Job No.: PZ #794

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT:

Mode: TX 106.7MHz

Model: ISFM30

Manufacturer: AAMP

Polarization: Vertical

Power Source: DC 12V

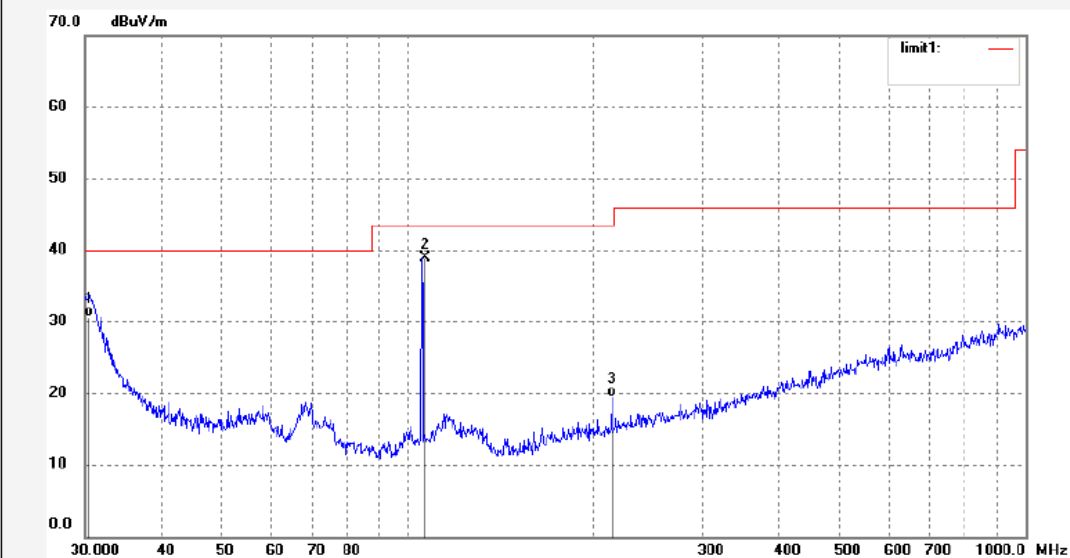
Date: 14/06/30/

Time:

Engineer Signature: PEI

Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	30.4246	40.71	-9.96	30.75	40.00	-9.25	QP			
2	106.7000	52.94	-13.93	39.01	/	/	peak			
3	213.4036	31.43	-11.98	19.45	43.50	-24.05	QP			



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

Site: 2# Chamber

Tel:+86-0755-26503290

Fax: +86-0755-26503396

Job No.: PZ #796

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT:

Mode: TX 106.7MHz

Model: ISFM30

Manufacturer: AAMP

Polarization: Horizontal

Power Source: DC 12V

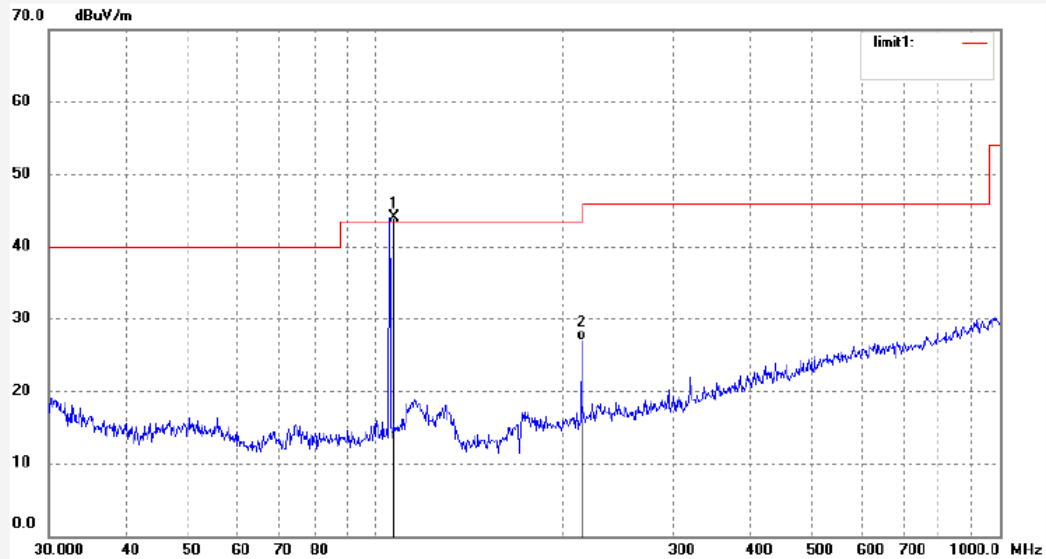
Date: 14/06/30/

Time:

Engineer Signature: PEI

Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	106.7000	57.89	-13.93	43.96	/	/	peak			
2	213.4034	39.04	-11.98	27.06	43.50	-16.44	QP			

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

Site: 2# Chamber

Tel:+86-0755-26503290

Fax: +86-0755-26503396

Job No.: PZ #798

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT:

Mode: TX 107.1MHz

Model: ISFM30

Manufacturer: AAMP

Polarization: Horizontal

Power Source: DC 12V

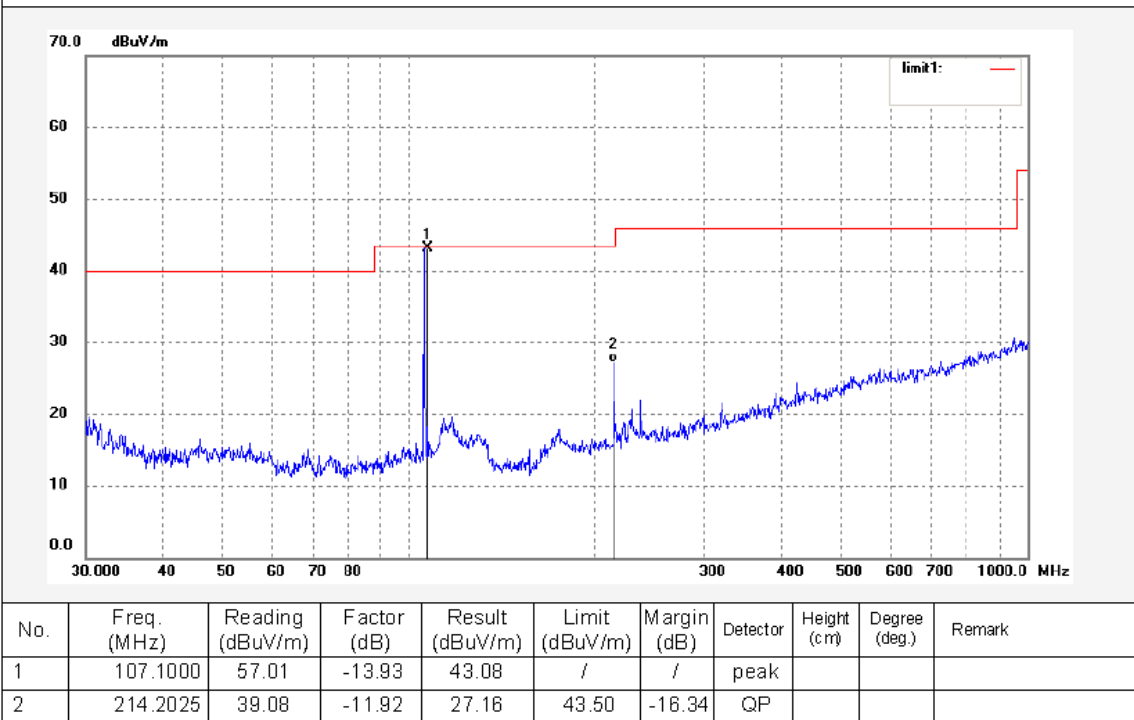
Date: 14/06/30/

Time:

Engineer Signature: PEI

Distance:

Note:



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

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PZ #799

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT:

Mode: TX 107.1MHz

Model: ISFM30

Manufacturer: AAMP

Polarization: Vertical

Power Source: DC 12V

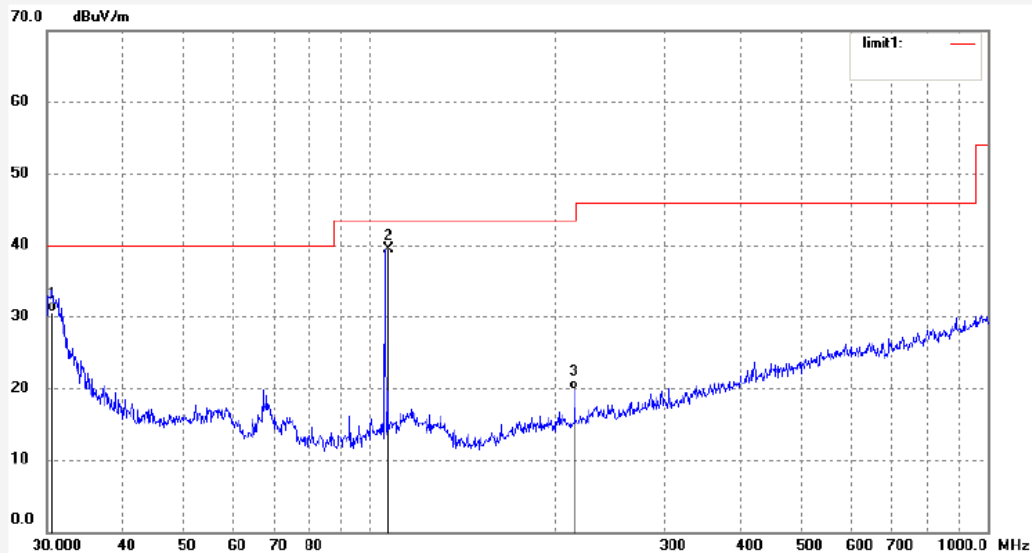
Date: 14/06/30/

Time:

Engineer Signature: PEI

Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	30.6392	40.71	-9.98	30.73	40.00	-9.27	QP			
2	107.1000	53.38	-13.93	39.45	/	/	peak			
3	214.2046	31.72	-11.92	19.80	43.50	-23.70	QP			

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

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PZ #800

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT:

Mode: TX 107.3MHz

Model: ISFM30

Manufacturer: AAMP

Polarization: Vertical

Power Source: DC 12V

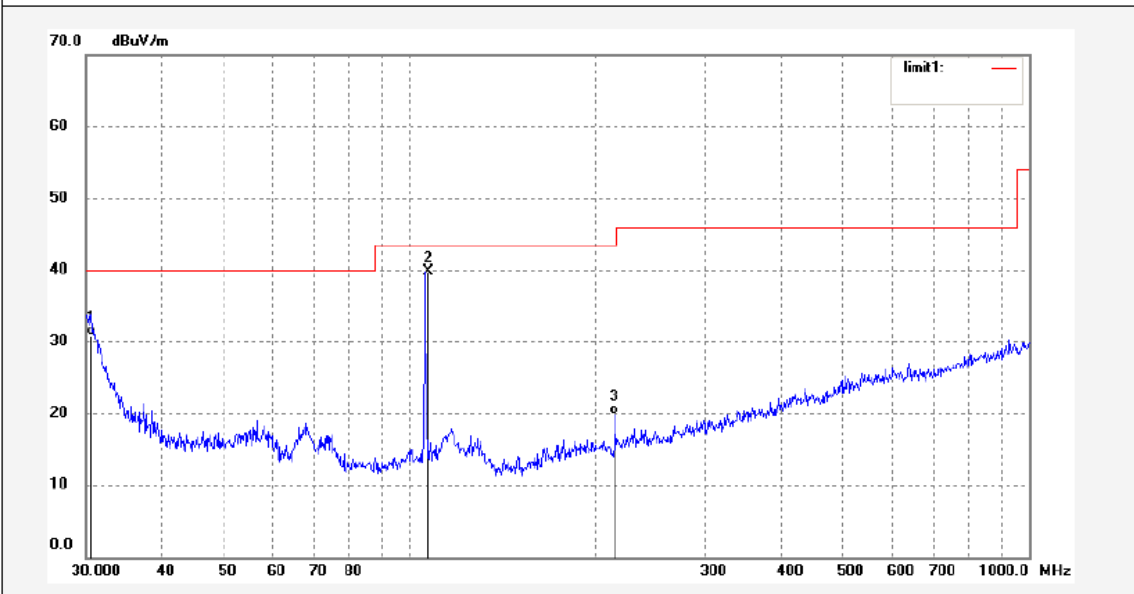
Date: 14/06/30/

Time:

Engineer Signature: PEI

Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	30.6392	40.87	-9.98	30.89	40.00	-9.11	QP			
2	107.3000	53.72	-13.93	39.79	/	/	peak			
3	214.6063	31.80	-11.90	19.90	43.50	-23.60	QP			

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

Site: 2# Chamber

Tel:+86-0755-26503290

Fax: +86-0755-26503396

Job No.: PZ #801

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT:

Mode: TX 107.3MHz

Model: ISFM30

Manufacturer: AAMP

Polarization: Horizontal

Power Source: DC 12V

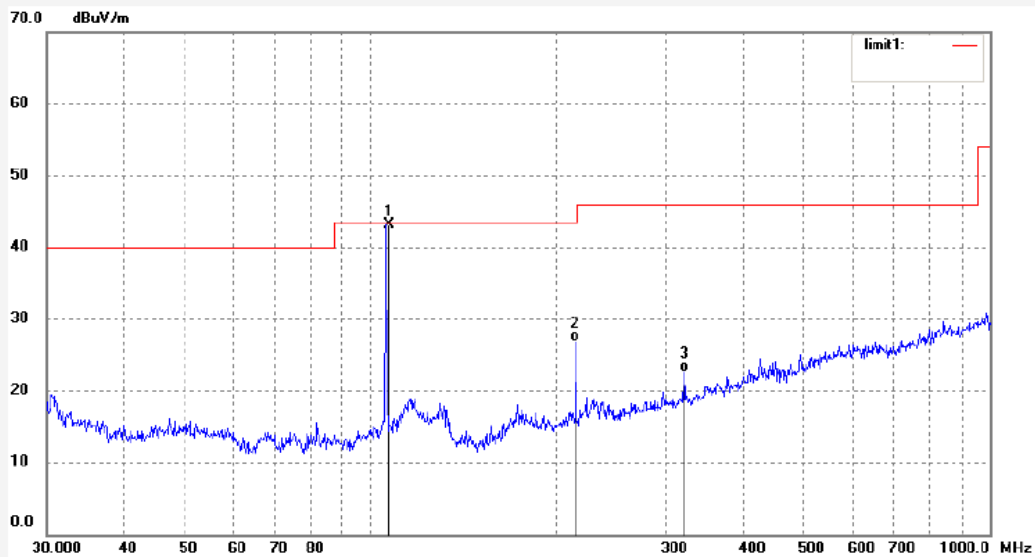
Date: 14/06/30/

Time:

Engineer Signature: PEI

Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	107.3000	57.10	-13.93	43.17	/	/	peak			
2	214.6057	38.79	-11.90	26.89	43.50	-16.61	QP			
3	321.9100	31.25	-8.67	22.58	46.00	-23.42	QP			

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Test plots of out band emission, 1GHz-2GHz



ACCURATE TECHNOLOGY CO., LTD.

F 1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax: +86-0755-26503396

Job No.: PZ #814

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT:

Mode: TX 106.7MHz

Model: ISFM30

Manufacturer: AAMP

Polarization: Vertical

Power Source: DC 12V

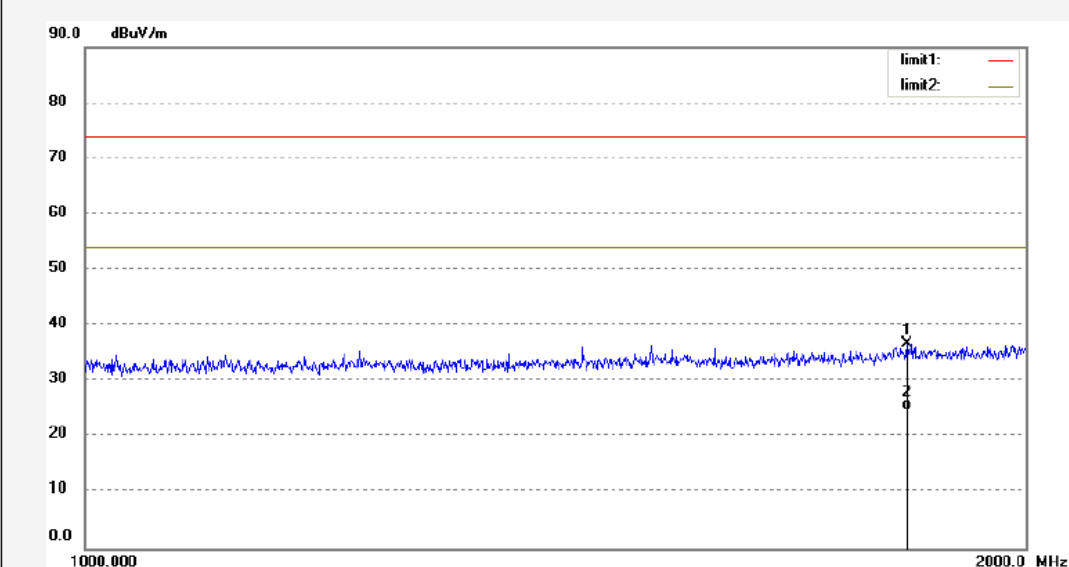
Date: 14/07/02/

Time:

Engineer Signature: PEI

Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1832.417	46.56	-9.71	36.85	74.00	-37.15	peak			
2	1832.417	34.56	-9.71	24.85	54.00	-29.15	AVG			

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ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

Tel:+86-0755-26503290

Fax: +86-0755-26503396

Job No.: PZ #815

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT:

Mode: TX 106.7MHz

Model: ISFM30

Manufacturer: AAMP

Polarization: Horizontal

Power Source: DC 12V

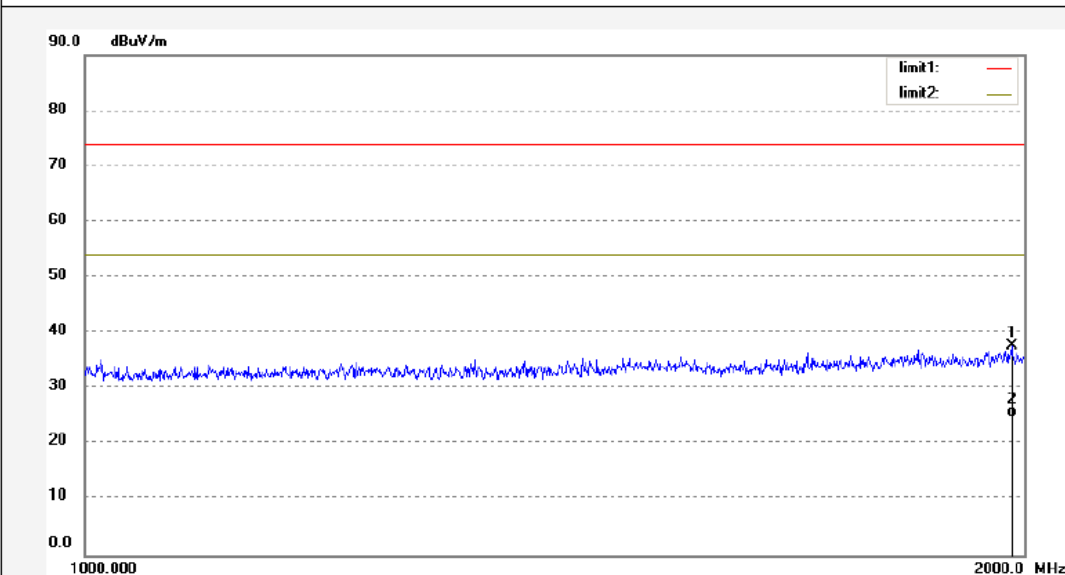
Date: 14/07/02/

Time:

Engineer Signature: PEI

Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1982.023	46.88	-9.12	37.76	74.00	-36.24	peak			
2	1982.023	33.88	-9.12	24.76	54.00	-29.24	AVG			

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

Site: 2# Chamber

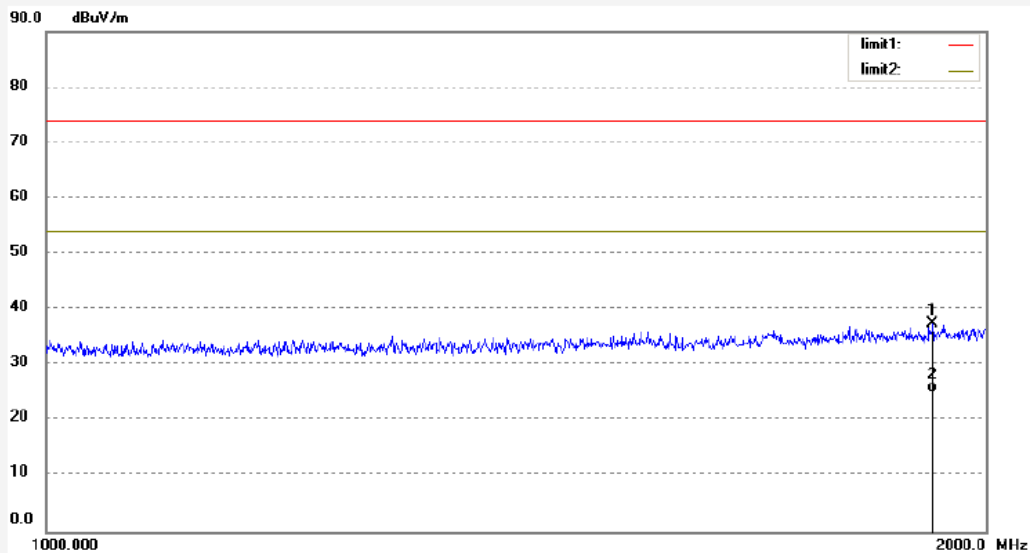
Tel:+86-0755-26503290

Fax: +86-0755-26503396

Job No.: PZ #816
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT:
Mode: TX 107.1MHz
Model: ISFM30
Manufacturer: AAMP

Polarization: Horizontal
Power Source: DC 12V
Date: 14/07/02/
Time:
Engineer Signature: PEI
Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1923.705	46.98	-9.53	37.45	74.00	-36.55	peak			
2	1923.705	34.58	-9.53	25.05	54.00	-28.95	AVG			

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

Site: 2# Chamber

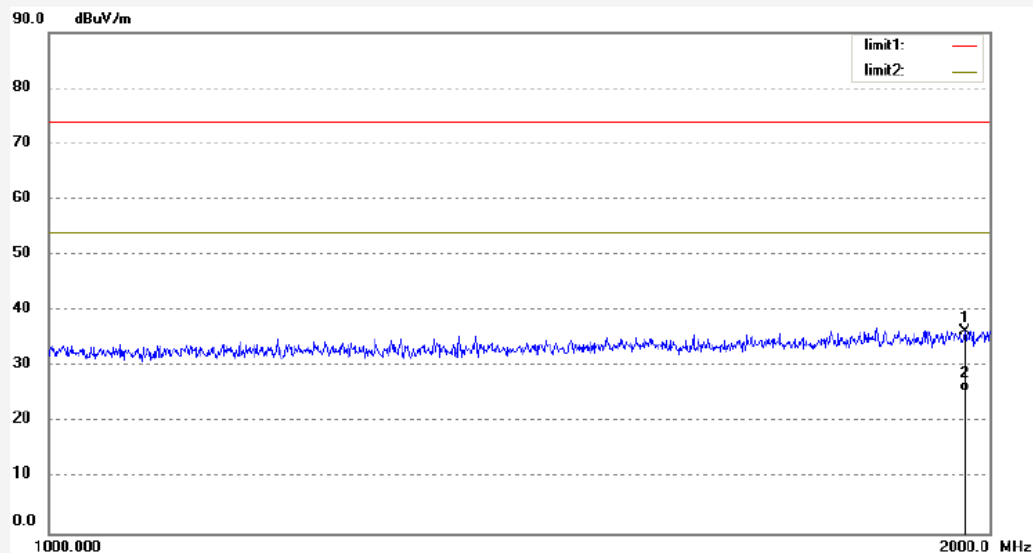
Tel: +86-0755-26503290

Fax: +86-0755-26503396

Job No.: PZ #817
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT:
Mode: TX 107.1MHz
Model: ISFM30
Manufacturer: AAMP

Polarization: Vertical
Power Source: DC 12V
Date: 14/07/02/
Time:
Engineer Signature: PEI
Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1964.208	45.62	-9.22	36.40	74.00	-37.60	peak			
2	1964.208	34.76	-9.22	25.54	54.00	-28.46	AVG			

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ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

Tel:+86-0755-26503290

Fax: +86-0755-26503396

Job No.: PZ #818

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT:

Mode: TX 107.3MHz

Model: ISFM30

Manufacturer: AAMP

Polarization: Vertical

Power Source: DC 12V

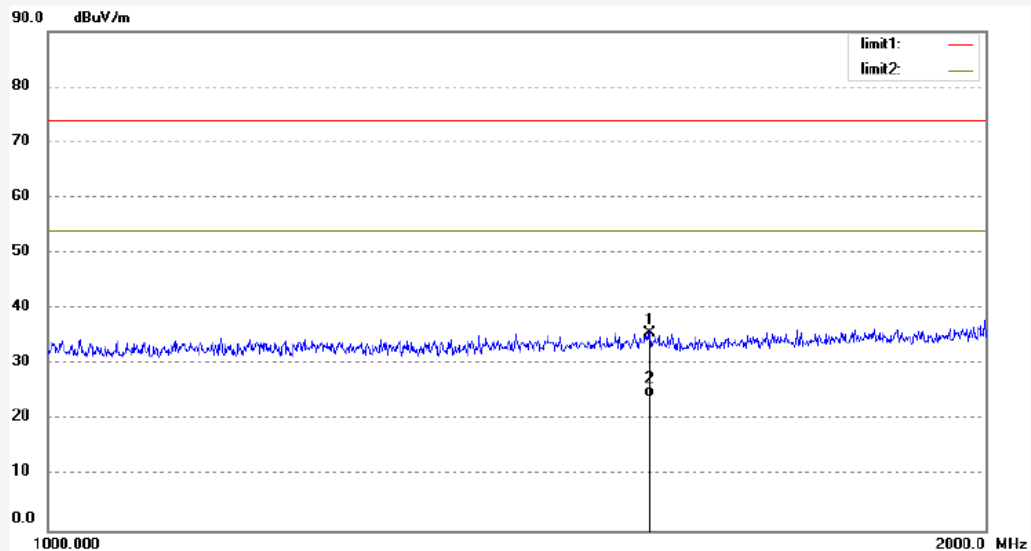
Date: 14/07/02/

Time:

Engineer Signature: PEI

Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1560.799	46.63	-11.00	35.63	74.00	-38.37	peak			
2	1560.799	35.14	-11.00	24.14	54.00	-29.86	AVG			

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ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

Tel: +86-0755-26503290

Fax: +86-0755-26503396

Job No.: PZ #819

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT:

Mode: TX 107.3MHz

Model: ISFM30

Manufacturer: AAMP

Polarization: Horizontal

Power Source: DC 12V

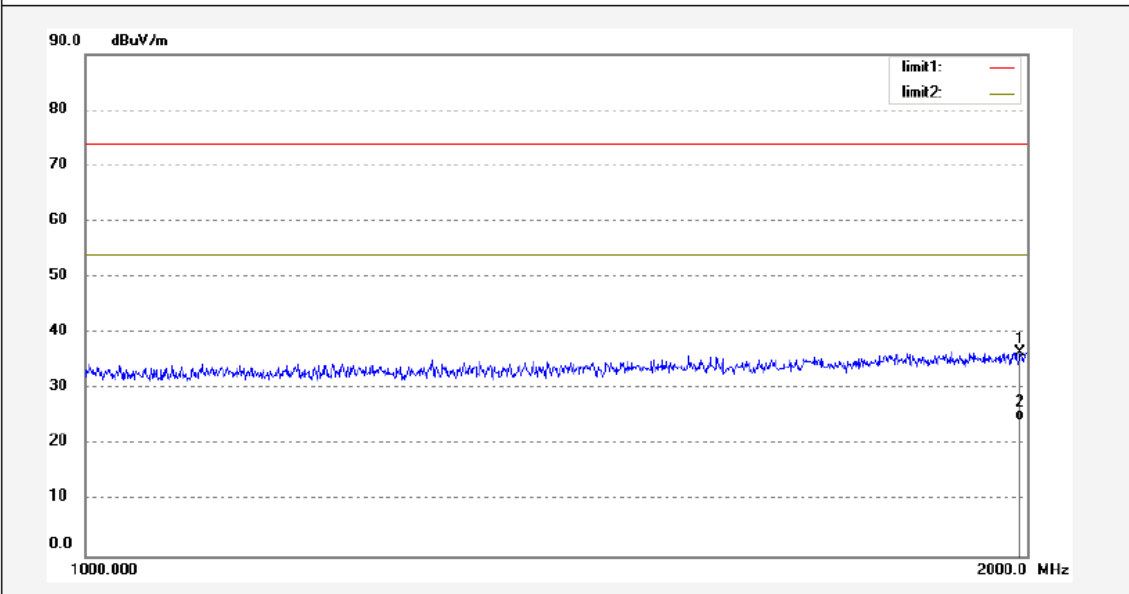
Date: 14/07/02/

Time:

Engineer Signature: PEI

Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1990.300	45.72	-9.06	36.66	74.00	-37.34	peak			
2	1990.300	33.44	-9.06	24.38	54.00	-29.62	AVG			

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Test plots of out band emission, band edge



ACCURATE TECHNOLOGY CO., LTD.

F 1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax: +86-0755-26503396

Job No.: PZ #802

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT:

Mode: TX 106.7MHz

Model: ISFM30

Manufacturer: AAMP

Polarization: Horizontal

Power Source: DC 12V

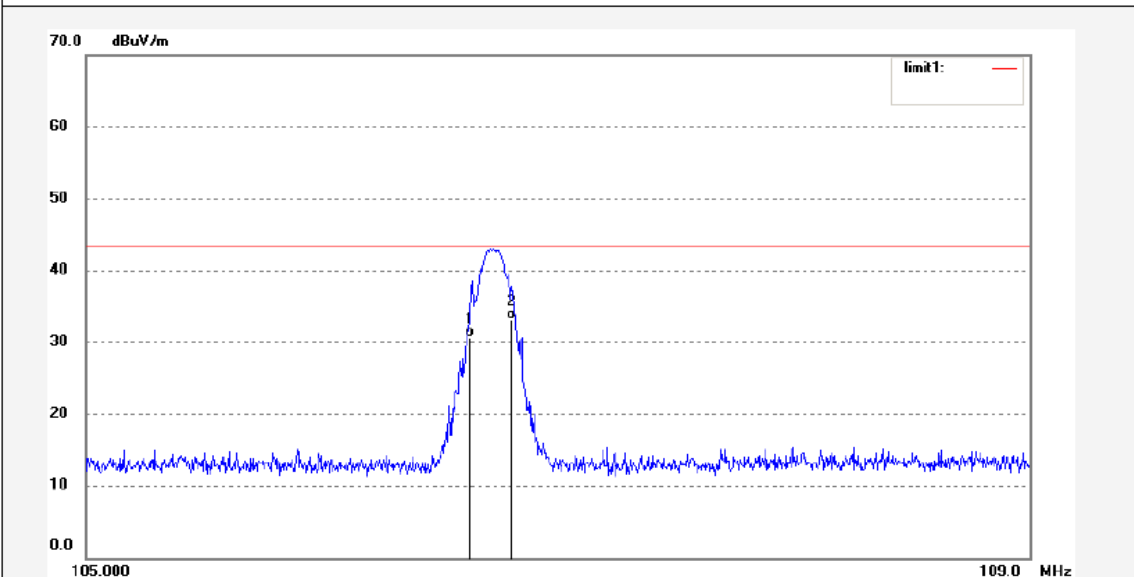
Date: 14/06/30/

Time:

Engineer Signature: PEI

Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	106.6000	44.63	-13.93	30.70	43.50	-12.80	QP			
2	106.8000	47.13	-13.93	33.20	43.50	-10.30	QP			

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ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PZ #803

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT:

Mode: TX 106.7MHz

Model: ISFM30

Manufacturer: AAMP

Polarization: Vertical

Power Source: DC 12V

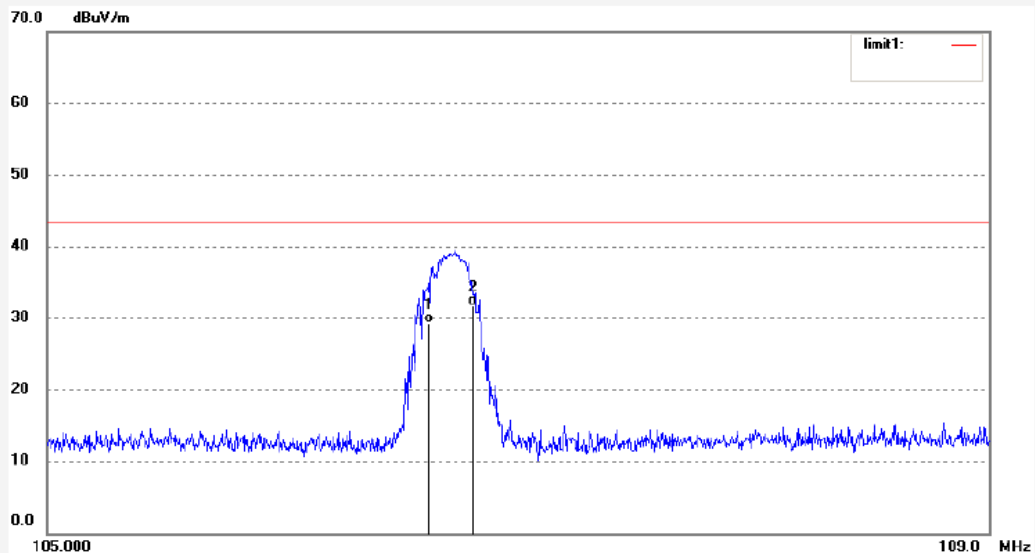
Date: 14/06/30/

Time:

Engineer Signature: PEI

Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	106.6000	43.23	-13.93	29.30	43.50	-14.20	QP			
2	106.8000	45.63	-13.93	31.70	43.50	-11.80	QP			

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

Site: 2# Chamber

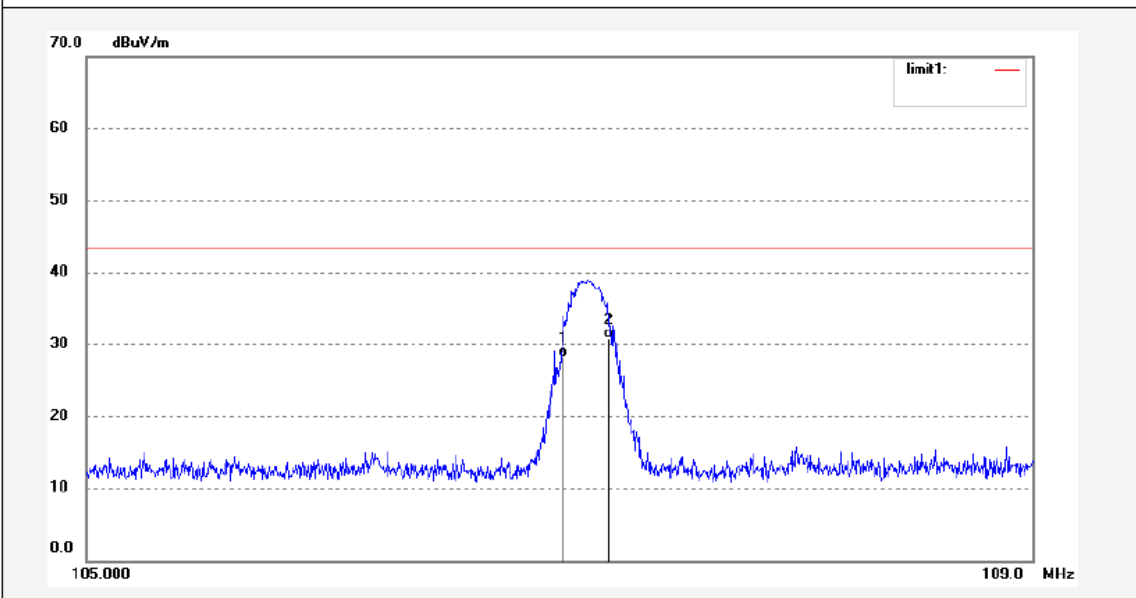
Tel:+86-0755-26503290

Fax: +86-0755-26503396

Job No.: PZ #804
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT:
Mode: TX 107.1MHz
Model: ISFM30
Manufacturer: AAMP

Polarization: Vertical
Power Source: DC 12V
Date: 14/06/30/
Time:
Engineer Signature: PEI
Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	107.0000	42.13	-13.93	28.20	43.50	-15.30	QP			
2	107.2000	44.83	-13.93	30.90	43.50	-12.60	QP			

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ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

Tel:+86-0755-26503290

Fax: +86-0755-26503396

Job No.: PZ #805

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT:

Mode: TX 107.1MHz

Model: ISFM30

Manufacturer: AAMP

Polarization: Horizontal

Power Source: DC 12V

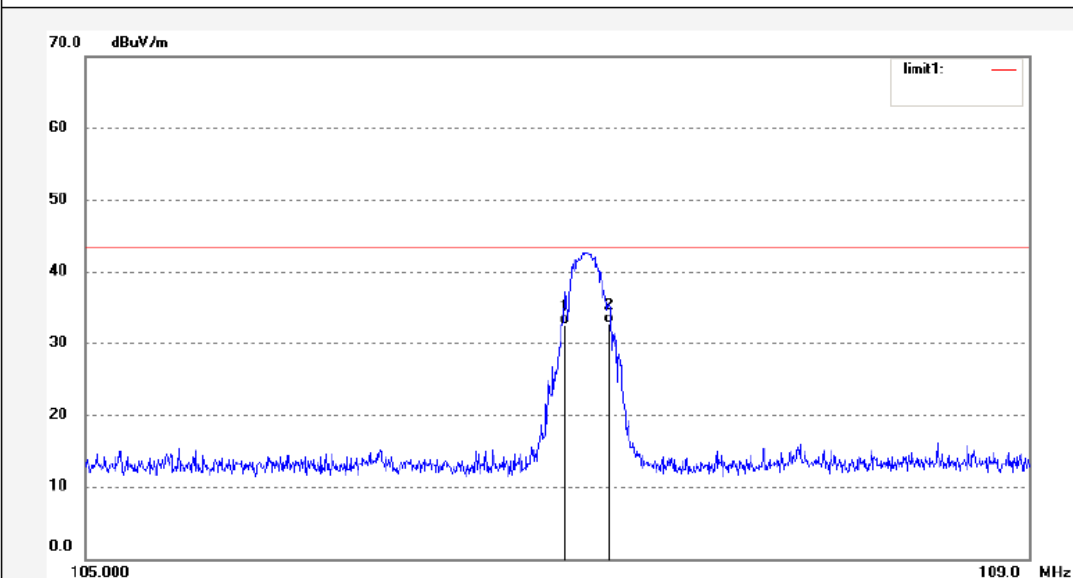
Date: 14/06/30/

Time:

Engineer Signature: PEI

Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	107.0000	46.53	-13.93	32.60	43.50	-10.90	QP			
2	107.2000	46.83	-13.93	32.90	43.50	-10.60	QP			

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Test Report No.

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ACCURATE TECHNOLOGY CO., LTD.

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

Site: 2# Chamber

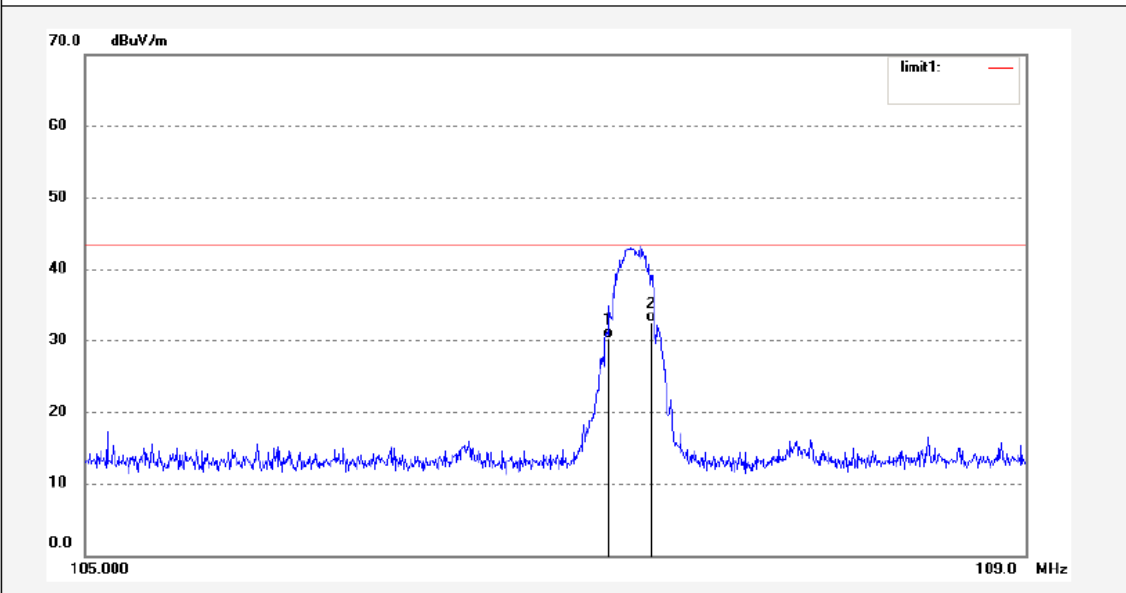
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: PZ #808
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT:
Mode: TX 107.3MHz
Model: ISFM30
Manufacturer: AAMP

Polarization: Horizontal
Power Source: DC 12V
Date: 14/08/30/
Time:
Engineer Signature: PEI
Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	107.2000	44.23	-13.93	30.30	43.50	-13.20	QP			
2	107.4000	46.53	-13.93	32.60	43.50	-10.90	QP			

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ACCURATE TECHNOLOGY CO., LTD.

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Site: 2# Chamber

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Fax: +86-0755-26503396

Job No.: PZ #807

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT:

Mode: TX 107.3MHz

Model: ISFM30

Manufacturer: AAMP

Polarization: Vertical

Power Source: DC 12V

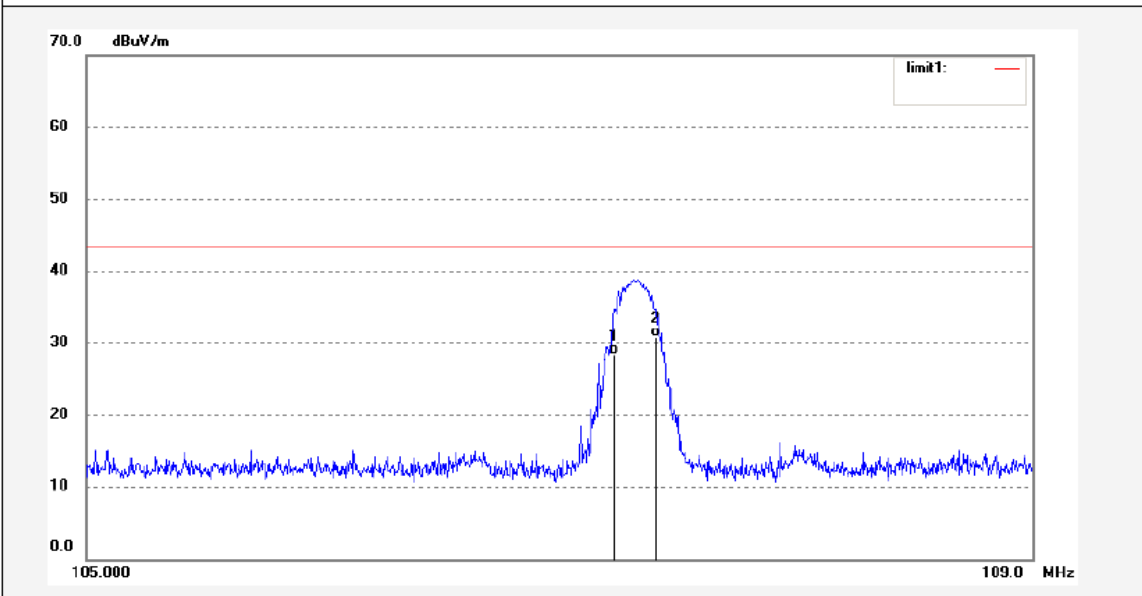
Date: 14/06/30/

Time:

Engineer Signature: PEI

Distance:

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	107.2000	42.42	-13.93	28.49	43.50	-15.01	QP			
2	107.4000	44.83	-13.93	30.90	43.50	-12.60	QP			

6. Safety Human Exposure

6.1 Radio Frequency Exposure Compliance

6.1.1 Electromagnetic Fields

RESULT:

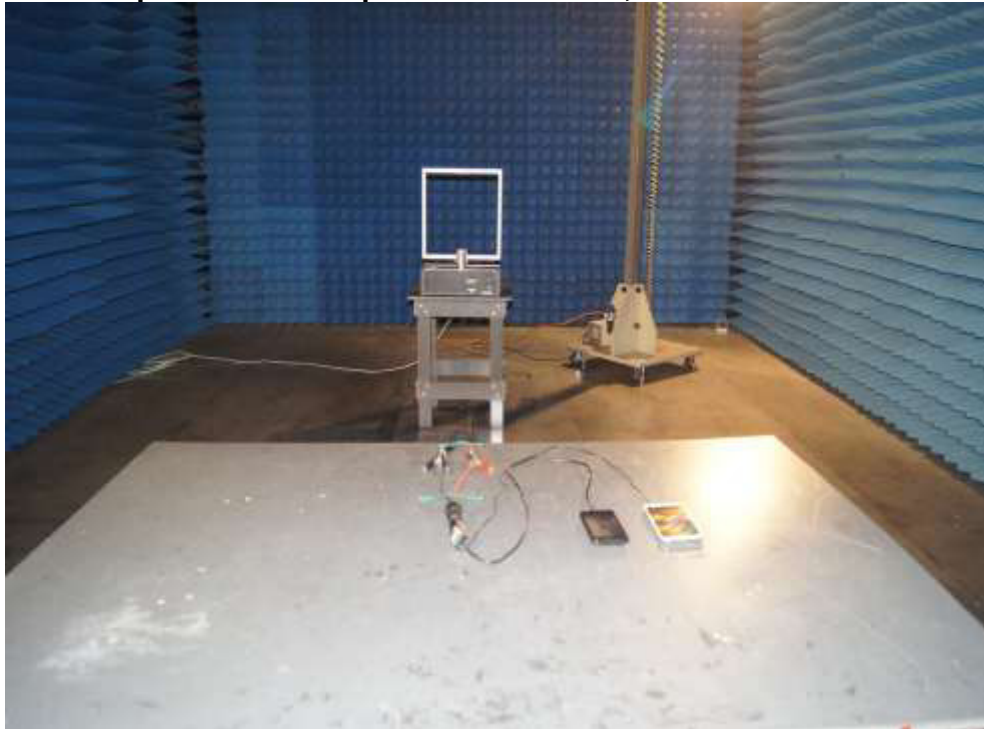
Pass

Test standard : FCC KDB Publication 447498 D01 v05r01

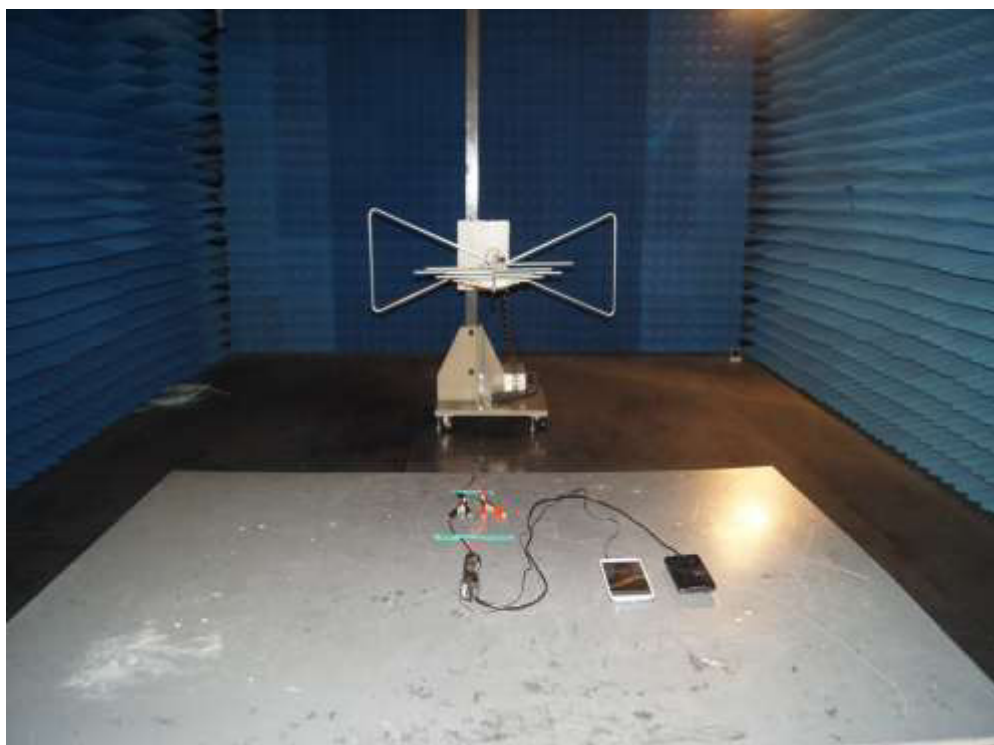
The separation distance of the EUT should be 5mm. The highest radiated emission level is 44.94 dBuV/m at 3 m distance, which is around 0.00000936 mW EIRP. Such radiated power is far below the SAR exclusion threshold level 10mW (Appendix A, SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 50 mm), hence the EUT is excluded from SAR evaluation according to FCC KDB publication 447498 D01: Mobile and Portable RF Exposure. Guidance v05r01.

7. Photographs of the Test Set-Up

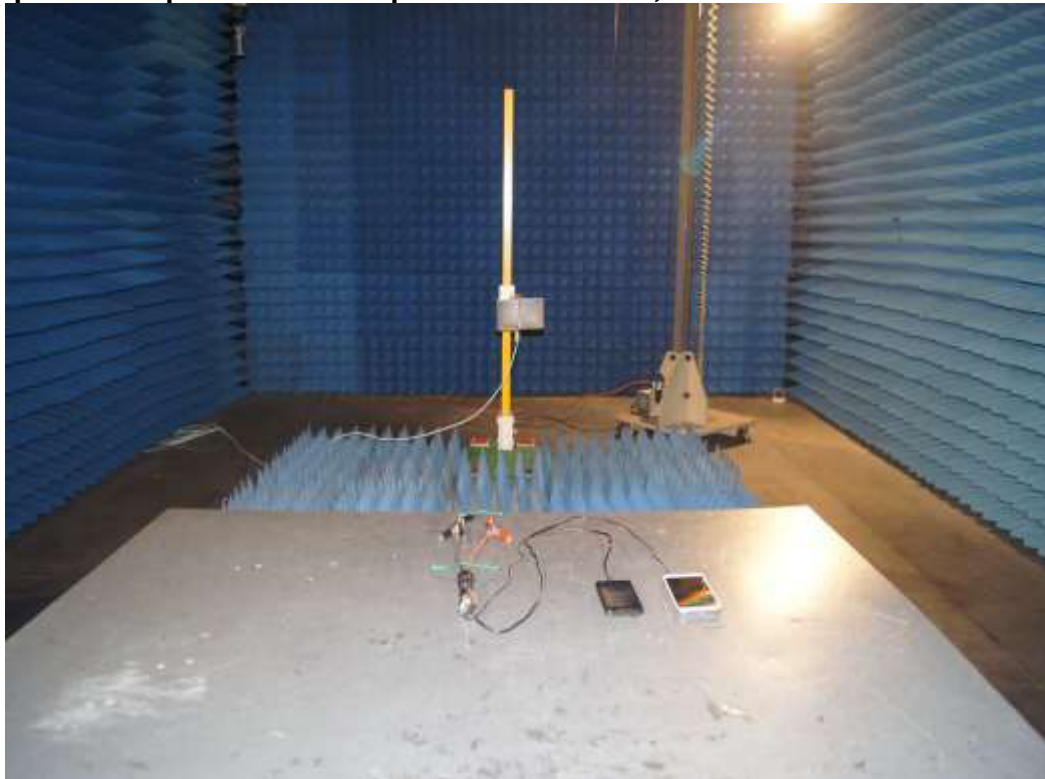
Photograph 1: Set-up for Radiated Spurious Emissions, 9 KHz-30MHz



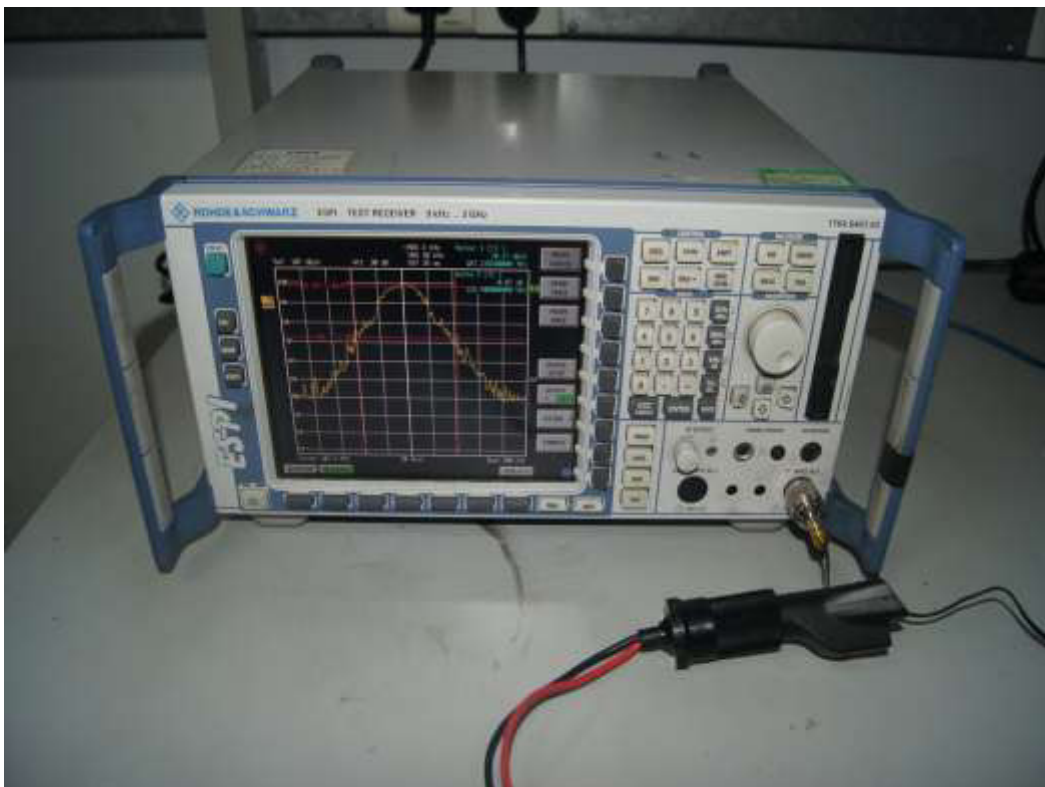
Photograph 2: Set-up for Radiated Spurious Emissions, 30MHz-1GHz



Photograph 3: Set-up for Radiated Spurious Emissions, 1GHz-2GHz



Photograph 4: Set-up for bandwidth test



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