

#### FCC/IC - TEST REPORT

Report Number	:	68.760.14.192.01		Date of Issue:	August 4, 2014	
Model	<u>:</u>	i47				
Product Type	<u>:</u>	Mobile Phone				
Applicant	<u>:</u>	PERI INTERNATI	ONAL LI	MITED	_	
Address	<u>:</u>	RM 1605C HO KI	NG COM	IM CTR 2-16 FA	YUEN ST MONGKOK	
		KLN HONG KON	G			
Production Facility	: PERI INTERNATIONAL LIMITED					
Address	: RM 1605C HO KING COMM CTR 2-16 FA YUEN ST MONGKOK					
	KLN HONG KONG					
Test Result	:	■ Positive □	l Negativ	/e		
Total pages including Appendices	: _	17				

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch is a subcontractor to TÜV SÜD Product Service GmbH according to the principles outlined in ISO 17025.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch reports apply only to the specific samples tested under stated test conditions. Construction of the actual test samples has been documented. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. The manufacturer/importer is responsible to the Competent Authorities in Europe for any modifications made to the production units which result in non-compliance to the relevant regulations. TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch shall have no liability for any deductions, inferences or generalizations drawn by the client or others from TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch issued reports.

This report is the confidential property of the client. As a mutual protection to our clients, the public and ourselves, extracts from the test report shall not be reproduced except in full without our written approval.



## 1 Table of Contents

1 Table of Contents	2
2 Details about the Test Laboratory	3
3 Description of the Equipment Under Test	4
4 Summary of Test Standards	5
5 Summary of Test Results	6
6 General Remarks	7
7 Systems test configuration	8
8 Technical Requirement	9
8.1 Conducted Emission Test	9
8.2 Radiated Emission Test 30MHz – 1000MHz	13



## 2 Details about the Test Laboratory

#### **Details about the Test Laboratory**

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland Business Park,

Nantou Checkpoint Road 2, Nanshan District,

Shenzhen City, 518052,

P. R. China

Telephone: 86 755 8828 6998 Fax: 86 755 8828 5299

Test Site 1

Company name: Attestation of Global Compliance(Shenzhen) Co., Ltd.

2 F, Building 2, No.1-No.4, Chaxi Sanwei Technical Industrial Park, Gushu,

Xixiang Street, Bao'an District,

Shenzhen, China

FCC -

Registration No.

259865

Telephone: 86 755 2978 4239 Fax: 86 755 2600 8484



# 3 Description of the Equipment Under Test

Product: 2.4inch 3G Feature Phone

Model no.: i47

FCC ID: 2ACRY-3GI47

IC ID: NIL

Brand Name: SEA LION

Options and accessories: NIL

Rating: AC100-240V 50/60 Hz 0.15A

Description of the EUT: Class B Equipment



# 4 Summary of Test Standards

Test Standards						
FCC Part 15 Subpart B 10-1-13 Edition	Unintentional Radiators					
ICES-003 Issue 5 August 2012	Information Technology Equipment (ITE)  – Limits and methods of measurement					



# 5 Summary of Test Results

Emission Tests								
FCC Part 15 Subpart B 10-1-13 Edition/ICES-003 Iss	FCC Part 15 Subpart B 10-1-13 Edition/ICES-003 Issue 5							
Test Condition	Pages	Т	est Resul	t				
		Pass	Fail	N/A				
Conducted Emission on AC	8	$\boxtimes$						
150kHz to 30MHz								
Radiated Emission	12	$\boxtimes$						
30MHz to 1000MHz								



### 6 General Remarks

o General Kemark	3	
Remarks		
Nil.		
SUMMARY:		
All tests according to the regulation	s cited on page 5 were	
■ - Performed		
☐ - <b>Not</b> Performed		
The Equipment under Test		
■ - Fulfills the general approval re	quirements.	
☐ - Does not fulfill the general app	roval requirements.	
Sample Received Date:	July 10, 2014	
Testing Start Date:	July 11, 2014	
Testing End Date:	August 4, 2014	
- TÜV SÜD Certification and Testin	g (China) Co., Ltd. She	nzhen Branch -
Reviewed by:	Prepared b	py:
Johnshi		Alem X3ong
John Zhi EMC Project Manager		Alan Xiong EMC Project Engineer
LIVIO FIOJECTIVIANAGEI		LIVIO I TOJECI LITUITEEL



# 7 Systems test configuration

The equipment under test (EUT) was configured to measure its highest possible emission level. The test modes were adapted according to the operation manual for use, more detailed description as follows:

#### **Test Configuration List:**

TEST MODE	DESCRIPTION	REMARK
TC1	Playing &Charging	1KHz Color Bar
TC2	Downloading	Connect to Notebook

### Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.(SHIELD)	S/N(LENGTH)
NoteBook	Lenovo	X220	

#### **EUT Cable List and Details:**

CABLE DESCRIPTION	LENGTH (M)	SHIELDED/ UNSHIELDED	WITH CORE/ WITHOUT CORE
USB Cable	0.8	Shielded	Without Core
Earphone Cable	1.2	Unshielded	Without Core



## 8 Technical Requirement

### **8.1 Conducted Emission Test**

#### **Test Method**

- 1. The EUT was placed on a table, which is 0.8m above ground plane
- 2. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.).
- 3. Maximum procedure was performed to ensure EUT compliance
- 4. A EMI test receiver is used to test the emissions from both sides of AC line

#### Limit

According to §15.107, conducted emissions limit as below:

Frequency	QP Limit	AV Limit
MHz	dΒμV	dΒμV
0.150-0.500	66-56*	56-46*
0.500-5	56	46
5-30	60	50

Decreasing linearly with logarithm of the frequency



#### **Conducted Emission**

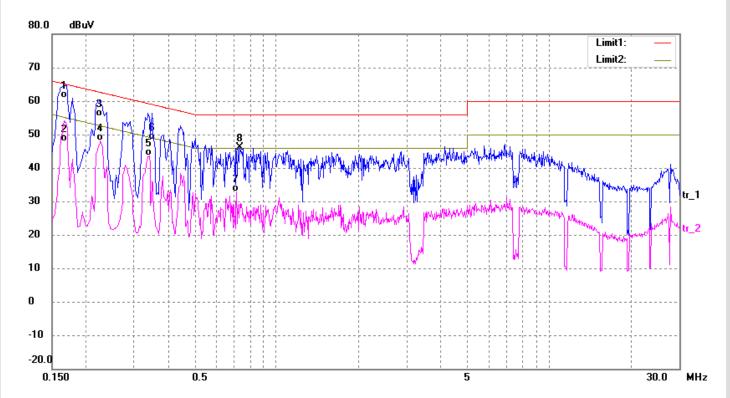
Product Type : 2.4inch 3G Feature Phone

M/N : i47

Operating Condition : Playing & Charging

Test Specification : Line

Comment : AC 120V/60Hz



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.1660	51.31	9.50	60.81	65.16	-4.35	QP
2	0.1660	38.50	9.50	48.00	55.16	-7.16	AVG
3	0.2220	45.79	9.50	55.29	62.74	-7.45	QP
4	0.2260	38.63	9.50	48.13	52.60	-4.47	AVG
5	0.3420	34.22	9.50	43.72	49.15	-5.43	AVG
6	0.3500	38.83	9.50	48.33	58.96	-10.63	QP
7	0.7140	23.19	9.71	32.90	46.00	-13.10	AVG
8	0.7340	36.30	9.73	46.03	56.00	-9.97	QP



#### **Conducted Emission**

Product Type : 2.4inch 3G Feature Phone

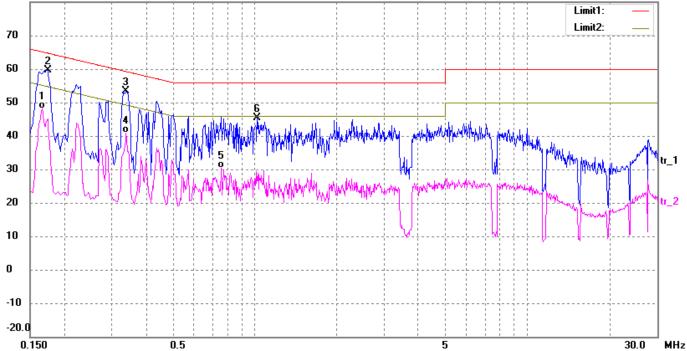
M/N : i47

Operating Condition : Playing & Charging

Test Specification : Neutral

Comment : AC 120V/60Hz

80.0 dBuV



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.1660	38.65	9.50	48.15	55.16	-7.01	AVG
2	0.1740	50.19	9.50	59.69	64.77	-5.08	QP
3	0.3380	43.92	9.50	53.42	59.25	-5.83	QP
4	0.3380	31.38	9.50	40.88	49.25	-8.37	AVG
5	0.7580	20.58	9.76	30.34	46.00	-15.66	AVG
6	1.0220	35.33	10.00	45.33	56.00	-10.67	QP



### **Test Equipment List**

#### **Conducted emission test**

Equipment	Manufacturer	Model No.	Serial No.	Cal. due. date
EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2015-05-06
L.I.S.N	Schwarz beck	NSLK8126	8126-224	2015-05-06
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2015-05-06



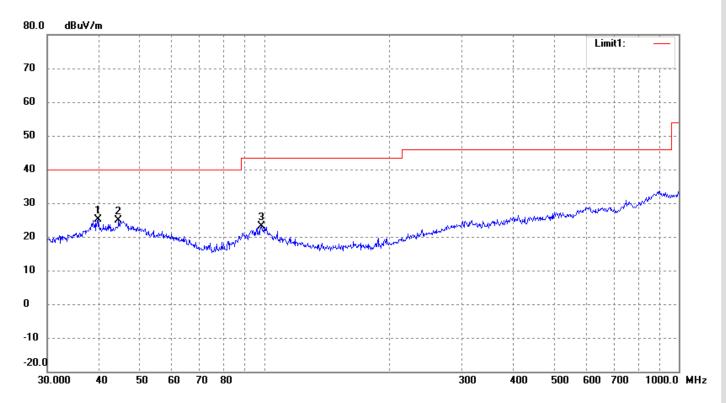
## 8.2 Radiated Emission Test 30MHz - 1000MHz

Product Type : 2.4inch 3G Feature Phone

M/N : i47

Operating Condition : Playing & Charging

Ant. Polarity Horizontal Comment : 30-1000MHz



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	39.7147	17.90	7.17	25.07	40.00	-14.93	359	200	QP
2	44.5868	18.02	6.80	24.82	40.00	-15.18	359	200	QP
3	98.4866	17.43	5.75	23.18	43.50	-20.32	359	200	QP



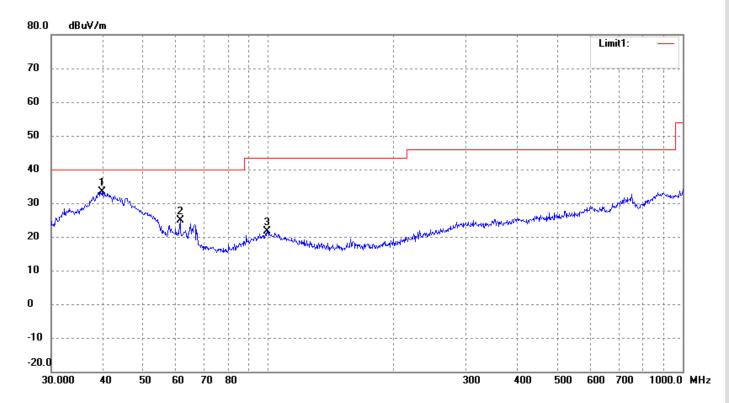
## Radiated Emission Test 30MHz - 1000MHz

Product Type : 2.4inch 3G Feature Phone

M/N : i47

Operating Condition : Playing & Charging

Ant. Polarity Vertical
Comment : 30-1000MHz



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	39.8542	24.12	9.23	33.35	40.00	-6.65	359	100	QP
2	61.3463	19.95	4.95	24.90	40.00	-15.10	359	100	QP
3	99.5281	15.62	6.01	21.63	43.50	-21.87	359	100	QP

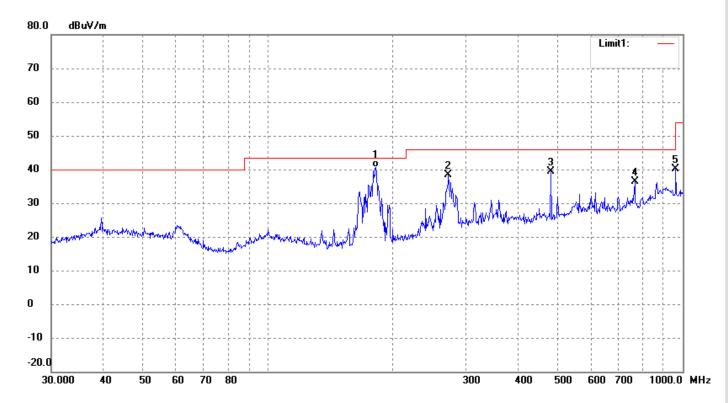


## Radiated Emission Test 30MHz - 1000MHz

Product Type : 2.4inch 3G Feature Phone

M/N : 147

Operating Condition : Downloading Ant. Polarity Horizontal Comment : 30-1000MHz



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	181.9202	37.86	2.84	40.70	43.50	-2.80	359	200	QP
2	272.2776	30.53	7.87	38.40	46.00	-7.60	359	200	QP
3	480.5276	29.34	10.12	39.46	46.00	-6.54	359	200	QP
4	766.0571	22.18	14.30	36.48	46.00	-9.52	359	200	QP
5	962.1622	23.78	16.38	40.16	54.00	-13.84	359	200	QP

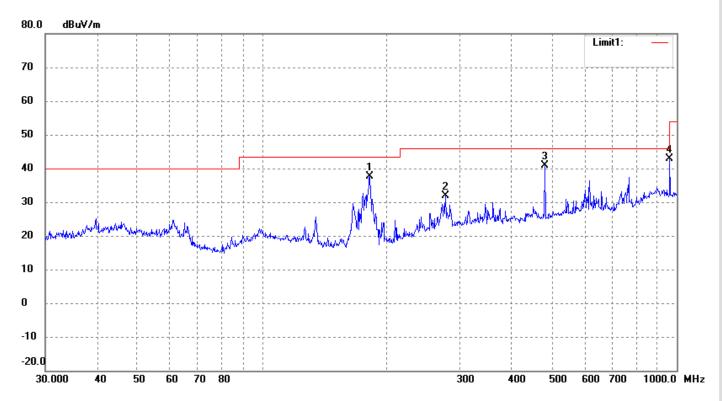


## Radiated Emission Test 30MHz - 1000MHz

Product Type : 2.4inch 3G Feature Phone

M/N : 147

Operating Condition : Downloading Ant. Polarity Vertical : 30-1000MHz



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	181.9202	34.87	2.84	37.71	43.50	-5.79	359	100	QP
2	277.0935	23.75	8.20	31.95	46.00	-14.05	359	100	QP
3	480.5276	30.80	10.12	40.92	46.00	-5.08	359	100	QP
4	962.1623	26.49	16.38	42.87	54.00	-11.13	359	100	QP



### **Test Equipment List**

#### **Radiated Emission Test**

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
Spectrum Analyzer	R&S	FSP	836079/035	2015-05-06
EMI Test Receiver	R&S	ESVB	825471/005	2015-05-06
Pre-amplifier	Agilent	8447F	3113A06717	2015-05-06
Trilog Broadband Antenna	SCHWARZBECK	VULB9163	9163-333	2015-04-19
Loop Antenna	SCHWARZECK	HFRA 5165	9365	2015-04-19