

**CCT Tech Advanced Products Limited**

Application  
For  
Certification

900MHz 40 Channel Analog Modulation Cordless Phone with Caller ID

**(FCC ID: NC8P9122G)**

07071271  
KL/ ac  
April 28, 2007

- The evaluation data of the report will be kept for 3 years from the date of issuance.
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**Intertek Testing Services Hong Kong Ltd.**

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### LIST OF EXHIBITS

#### *INTRODUCTION*

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## INTERTEK TESTING SERVICES

### MEASUREMENT/TECHNICAL REPORT

**CCT Tech Advanced Products Limited - Model: P9121G, P9122G**  
**FCC ID: NC8P9122G**

This report concerns (check one:)      Original Grant   X        Class II Change     

Equipment Type : DXT - Cordless Telephone

Deferred grant requested per 47 CFR 0.457(d)(1)(ii)?      Yes           No   X  

If yes, defer until :               
date

Company Name agrees to notify the Commission  
by:                                     

date

of the intended date of announcement of the product so that the grant can be issued  
on that date.

Transition Rules Request per 15.37 ?      Yes           No   X  

If no, assumed Part 15, Subpart C for intentional radiator - the new 47 CFR [04-05-05  
Edition] Provision.

Report prepared by:

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# INTERTEK TESTING SERVICES

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## INTERTEK TESTING SERVICES

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### List of attached file

Exhibit type	File Description	filename
Test Report	Test Report	report.pdf
Operation Description	Technical Description	descri.pdf
Test Setup Photo	Radiated & Conducted Emission for Base	config photos.doc
Test Setup Photo	Radiated Emission for Handset	
Test Report	Emission Plot	emission.pdf
Test Report	Conducted Emission Test Result	conduct.pdf
External Photo	External Photo	external photos.doc
Internal Photo	Internal Photo	internal photos.doc
Block Diagram	Block Diagram	block.pdf
Schematics	Circuit Diagram	circuit.pdf
ID Label/Location	Label Artwork and Location	label.pdf
User Manual	User Manual	manual1.pdf, manual2.pdf, manual3.pdf

# **INTERTEK TESTING SERVICES**

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## **EXHIBIT 1 GENERAL DESCRIPTION**

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### 1.0 General Description

#### 1.1 Product Description

The P9121G is a 900MHz 40 Channel Analog Modulation Cordless Phone, while P9122G is a 900MHz 40 Channel Analog Modulation Cordless Phone with Caller ID. The unit is capable of either tone or pulse dialing. The internal power supply's isolation is accomplished through a power transformer having an adequate dielectric rating. The circuit wiring is consistent under the requirement of part 68.

For P9121G, the handset unit consists of a keypad with twelve standard keys (0,...9,\*,#), seven function keys (VOL down, VOL up, redial, memory, format/program, flash, ringer on/off), and one channel switch key. A Talk key is provided to control pick/release telephone line in a toggle base.

For P9122G, the handset unit consists of a keypad with twelve standard keys (0,...9,\*,#), seven function keys (CID/VOL down, CID/VOL up, redial, memory, format, exit/channel/delete, flash/program). A Talk key is provided to control pick/release telephone line in a toggle base.

Each base unit has a page key, which is used to page the corresponding handset unit.

The antennas used in base units and handsets are integral, and the tested samples are prototype.

The circuit description is saved with filename: descri.pdf

Connection between the device and the telephone network is accomplished through the use of USOC RJ11C in the 2-wire loop calling central office line.

## INTERTEK TESTING SERVICES

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### 1.2 Related Submittal(s) Grants

This is an Application for Certification of a cordless telephone system. Four transmitters are included in this Application. This specific report details the emission characteristics of each transmitter. The receivers and digital device portion are subject to the verification authorization process, in accordance with 15.101(b). A verification report has been prepared for the receiver sections and digital device portion of each device. The device is also subject to Part 68 Registration.

### 1.3 Test Methodology

Both AC mains line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.4 (2003). All measurements were performed in Open Area Test Sites. Preliminary scans were performed in the Open Area Test Sites only to determine worst case modes. All Radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the "**Justification Section**" of this Application.

### 1.4 Test Facility

The open area test site and conducted measurement facility used to collect the radiated data and conducted data are located at Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong. This test facility and site measurement data have been fully placed on file with the FCC.



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### **EXHIBIT 2 SYSTEM TEST CONFIGURATION**

## INTERTEK TESTING SERVICES

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### 2.0 System Test Configuration

#### 2.1 Justification

For emissions testing, the equipment under test (EUT) was setup to transmit continuously to simplify the measurement methodology. Care was taken to ensure proper power supply voltages during testing. During testing, all cables were manipulated to produce worst case emissions. The handset was powered by a fully charged battery.

For the measurements, the EUT is attached to a plastic stand if necessary and placed on the wooden turntable. If the base unit attaches to peripherals, they are connected and operational (as typical as possible). The handset is remotely located as far from the antenna and the base as possible to ensure full power transmission from the base. Else, the base is wired to transmit full power without modulation.

The signal is maximized through rotation and placement in the three orthogonal axes. The antenna height and polarization are varied during the search for maximum signal level. The antenna height is varied from 1 to 4 meters. Radiated emissions are taken at three meters unless the signal level is too low for measurement at that distance. If necessary, a pre-amplifier is used and/or the test is conducted at a closer distance.

All readings are extrapolated back to the equivalent three meter reading using inverse scaling with distance. Analyzer resolution is 100 kHz or greater for frequencies below 1000 MHz. The resolution is 1 MHz or greater for frequencies above 1000 MHz. The spurious emissions more than 20 dB below the permissible value are not reported.

Radiated emission measurement were performed the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

#### 2.2 EUT Exercising Software

The EUT exercise program used during radiated and conducted testing was designed to exercise the various system components in a manner similar to a typical use.

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### 2.3 Support Equipment List and Description

The FCC ID's for all equipment, plus descriptions of all cables used in the tested system are:

#### *HARDWARE:*

An AC adaptor and a battery (provided with the unit) were used to power the device. Their description are listed below.

- (1) Base Units: An AC adaptor (120VAC to 9VDC 200mA, Model: DU28090020C) (Supplied by Client)
- (2) Handsets: A "Ni-Cd" type rechargeable battery (3.6V 600mAh) (Supplied by Client)

#### *CABLES:*

- (1) Telecommunication cable with RJ11C connectors (1m, unshielded), terminated (Supplied by Intertek)

#### *OTHERS:*

There are no special accessories necessary for compliance of this product.

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### 2.4 Measurement Uncertainty

When determining of the test conclusion, the Measurement Uncertainty test has been considered.

### 2.5 Equipment Modification

Any modifications installed previous to testing by CCT Tech Advanced Products Limited will be incorporated in each production model sold/leased in the United States.

No modifications were installed by ETL Division, Intertek Testing Services Hong Kong Ltd.

All the items listed under section 2.0 of this report are confirmed by:

*Confirmed by:*

*Lam Chun Cheong, Kenneth  
Assistant Supervisor  
Intertek Testing Services  
Agent for CCT Tech Advanced Products Limited*



\_\_\_\_\_  
Signature

\_\_\_\_\_  
April 28, 2007

\_\_\_\_\_  
Date

## **INTERTEK TESTING SERVICES**

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### **EXHIBIT 3 EMISSION RESULTS**

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### 3.0 Emission Results

Data is included of the worst case configuration (the configuration which resulted in the highest emission levels). A sample calculation, configuration photographs and data tables of the emissions are included.

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### 3.1 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CF - AG$$

where       $FS$  = Field Strength in  $\text{dB}\mu\text{V}/\text{m}$   
               $RA$  = Receiver Amplitude (including preamplifier) in  $\text{dB}\mu\text{V}$   
               $CF$  = Cable Attenuation Factor in  $\text{dB}$   
               $AF$  = Antenna Factor in  $\text{dB}$   
               $AG$  = Amplifier Gain in  $\text{dB}$

In the following table(s), the reading shown on the data table reflects the preamplifier gain. An example for the calculations in the following table is as follows:-

$$FS = RR + LF$$

where       $FS$  = Field Strength in  $\text{dB}\mu\text{V}/\text{m}$   
               $RR = RA - AG$  in  $\text{dB}\mu\text{V}$   
               $LF = CF + AF$  in  $\text{dB}$

Assume a receiver reading of  $52.0 \text{ dB}\mu\text{V}$  is obtained. The antenna factor of  $7.4 \text{ dB}$  and cable factor of  $1.6 \text{ dB}$  is added. The amplifier gain of  $29 \text{ dB}$  is subtracted, giving a field strength of  $32 \text{ dB}\mu\text{V}/\text{m}$ . This value in  $\text{dB}\mu\text{V}/\text{m}$  was converted to its corresponding level in  $\mu\text{V}/\text{m}$ .

$RA = 52.0 \text{ dB}\mu\text{V}$	
$AF = 7.4 \text{ dB}$	$RR = 23.0 \text{ dB}\mu\text{V}$
$CF = 1.6 \text{ dB}$	$LF = 9.0 \text{ dB}$
$AG = 29.0 \text{ dB}$	
$FS = RR + LF$	
$FS = 23 + 9 = 32 \text{ dB}\mu\text{V}/\text{m}$	

Level in  $\mu\text{V}/\text{m}$  = Common Antilogarithm  $[(32 \text{ dB}\mu\text{V}/\text{m})/20] = 39.8 \mu\text{V}/\text{m}$

## **INTERTEK TESTING SERVICES**

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### 3.2 Radiated Emission Configuration Photograph - Base Unit

Worst Case Radiated Emission  
at

Model P9121G: 451.050 MHz

Model P9122G: 902.100 MHz

For electronic filing, the worst case radiated emission configuration photographs are saved with filename: config photos.doc



## INTERTEK TESTING SERVICES

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### 3.3 Radiated Emission Data - Base Unit

The data on the following pages list the significant emission frequencies, the limit and the margin of compliance.

Judgement -

Model P9121G: Passed by 6.6 dB margin

Model P9122G: Passed by 7.2 dB margin

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#### **TEST PERSONNEL:**



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*Tester Signature*

Jess Tang, Lead Engineer  
*Typed/Printed Name*

April 28, 2007

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*Date*

## INTERTEK TESTING SERVICES

Company: CCT Tech Advanced Products Limited Date of Test: March 6-April 24, 2007  
Model: P9121G  
Mode : TX-First Channel

Table 1, Base unit

### Radiated Emissions

Polarization	Frequency (MHz)	Reading (dB $\mu$ V)	Pre- Amp (dB)	Antenna Factor (dB)	Net at 3m (dB $\mu$ V/m)	Limit at 3m (dB $\mu$ V/m)	Margin (dB)
V	902.100	69.4	16	32.0	85.4	94.0	-8.6
V	451.050	29.4	16	26.0	39.4	46.0	-6.6
H	*1353.150	47.7	33	26.1	40.8	54.0	-13.2
H	1804.200	46.2	33	27.2	40.4	54.0	-13.6
H	*2706.300	42.1	33	30.4	39.5	54.0	-14.5
H	*3608.400	39.0	33	33.3	39.3	54.0	-14.7
H	*4510.500	37.2	33	34.9	39.1	54.0	-14.9

- NOTES: 1. Peak detector is used for the emission measurement.
2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
3. Negative value in the margin column shows emission below limit.
4. Horn antenna is used for the emission over 1000MHz.
5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- \* Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

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## INTERTEK TESTING SERVICES

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Company: CCT Tech Advanced Products Limited Date of Test: March 6-April 24, 2007  
Model: P9121G  
Mode : TX-Last Channel

Table 2, Base unit

### Radiated Emissions

Polarization	Frequency (MHz)	Reading (dB $\mu$ V)	Pre- Amp (dB)	Antenna Factor (dB)	Net at 3m (dB $\mu$ V/m)	Limit at 3m (dB $\mu$ V/m)	Margin (dB)
V	904.050	69.6	16	32.0	85.6	94.0	-8.4
V	452.025	29.3	16	26.0	39.3	46.0	-6.7
H	*1356.075	47.8	33	26.1	40.9	54.0	-13.1
H	1808.100	46.0	33	27.2	40.2	54.0	-13.8
H	*2712.150	42.2	33	30.4	39.6	54.0	-14.4
H	*3616.200	38.9	33	33.3	39.2	54.0	-14.8
H	*4520.250	37.1	33	34.9	39.0	54.0	-15.0

- NOTES:
1. Peak detector is used for the emission measurement.
  2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
  3. Negative value in the margin column shows emission below limit.
  4. Horn antenna is used for the emission over 1000MHz.
  5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- \* Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

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## INTERTEK TESTING SERVICES

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Company: CCT Tech Advanced Products Limited Date of Test: March 6-April 24, 2007  
Model: P9122G  
Mode : TX-First Channel

Table 3, Base unit

### Radiated Emissions

Polarization	Frequency (MHz)	Reading (dB $\mu$ V)	Pre- Amp (dB)	Antenna Factor (dB)	Net at 3m (dB $\mu$ V/m)	Limit at 3m (dB $\mu$ V/m)	Margin (dB)
V	902.100	70.8	16	32.0	86.8	94.0	-7.2
V	451.050	24.6	16	26.0	34.6	46.0	-11.4
H	*1353.150	47.8	33	26.1	40.9	54.0	-13.1
H	1804.200	48.2	33	27.2	42.4	54.0	-11.6
H	*2706.300	45.7	33	30.4	43.1	54.0	-10.9
H	*3608.400	43.5	33	33.3	43.8	54.0	-10.2
H	*4510.500	41.0	33	34.9	42.9	54.0	-11.1
H	*5412.600	39.3	33	35.7	42.0	54.0	-12.0

- NOTES: 1. Peak detector is used for the emission measurement.
2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
3. Negative value in the margin column shows emission below limit.
4. Horn antenna is used for the emission over 1000MHz.
5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- \* Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

## INTERTEK TESTING SERVICES

Company: CCT Tech Advanced Products Limited Date of Test: March 6-April 24, 2007  
Model: P9122G  
Mode : TX-Last Channel

Table 4, Base unit

### Radiated Emissions

Polarization	Frequency (MHz)	Reading (dB $\mu$ V)	Pre- Amp (dB)	Antenna Factor (dB)	Net at 3m (dB $\mu$ V/m)	Limit at 3m (dB $\mu$ V/m)	Margin (dB)
V	904.050	70.4	16	32.0	86.4	94.0	-7.6
V	452.025	25.1	16	26.0	35.1	46.0	-10.9
H	*1356.075	47.7	33	26.1	40.8	54.0	-13.2
H	1808.100	48.4	33	27.2	42.6	54.0	-11.4
H	*2712.150	46.1	33	30.4	43.5	54.0	-10.5
H	*3616.200	43.6	33	33.3	43.9	54.0	-10.1
H	*4520.250	40.7	33	34.9	42.6	54.0	-11.4
H	*5424.300	39.4	33	35.7	42.1	54.0	-11.9

- NOTES: 1. Peak detector is used for the emission measurement.
2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
3. Negative value in the margin column shows emission below limit.
4. Horn antenna is used for the emission over 1000MHz.
5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- \* Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

## **INTERTEK TESTING SERVICES**

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### 3.4 Radiated Emission Configuration Photograph - Handset

Worst Case Radiated Emission  
at

Model P9121G: 462.950 MHz

Model P9122G: 463.925 MHz

For electronic filing, the worst case radiated emission configuration photographs are saved with filename: config photos.doc

## INTERTEK TESTING SERVICES

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### 3.5 Radiated Emission Data - Handset

The data on the following pages list the significant emission frequencies, the limit and the margin of compliance.

Judgement -

Model P9121G: Passed by 6.6 dB margin

Model P9122G: Passed by 8.2 dB margin

\*\*\*\*\*

#### **TEST PERSONNEL:**



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*Tester Signature*

Jess Tang, Lead Engineer  
*Typed/Printed Name*

April 27, 2007

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*Date*

## INTERTEK TESTING SERVICES

Company: CCT Tech Advanced Products Limited Date of Test: March 6-April 24, 2007  
Model: P9121G  
Mode : TX-First Channel

Table 5, Handset

### Radiated Emissions

Polarization	Frequency (MHz)	Reading (dB $\mu$ V)	Pre- Amp (dB)	Antenna Factor (dB)	Net at 3m (dB $\mu$ V/m)	Limit at 3m (dB $\mu$ V/m)	Margin (dB)
V	925.900	67.2	16	33.0	84.2	94.0	-9.8
V	462.950	29.4	16	26.0	39.4	46.0	-6.6
H	*1388.850	47.8	33	26.1	40.9	54.0	-13.1
H	1851.800	46.0	33	27.2	40.2	54.0	-13.8
H	*2777.700	45.0	33	30.4	42.4	54.0	-11.6
H	*3703.600	45.1	33	33.3	45.4	54.0	-8.6
H	*4629.500	37.7	33	34.9	39.6	54.0	-14.4
H	5555.400	35.6	33	36.6	39.2	54.0	-14.8

- NOTES: 1. Peak detector is used for the emission measurement.
2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
3. Negative value in the margin column shows emission below limit.
4. Horn antenna is used for the emission over 1000MHz.
5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- \* Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang



## INTERTEK TESTING SERVICES

Company: CCT Tech Advanced Products Limited Date of Test: March 6-April 24, 2007  
Model: P9121G  
Mode : TX-Last Channel

Table 6, Handset

### Radiated Emissions

Polarization	Frequency (MHz)	Reading (dB $\mu$ V)	Pre- Amp (dB)	Antenna Factor (dB)	Net at 3m (dB $\mu$ V/m)	Limit at 3m (dB $\mu$ V/m)	Margin (dB)
V	927.850	66.9	16	33.0	83.9	94.0	-10.1
V	463.925	29.0	16	26.0	39.0	46.0	-7.0
H	*1391.775	47.7	33	26.1	40.8	54.0	-13.2
H	1855.700	46.0	33	27.2	40.2	54.0	-13.8
H	*2783.550	45.1	33	30.4	42.5	54.0	-11.5
H	*3711.400	45.0	33	33.3	45.3	54.0	-8.7
H	*4639.250	37.6	33	34.9	39.5	54.0	-14.5
H	5567.100	35.4	33	36.6	39.0	54.0	-15.0

- NOTES: 1. Peak detector is used for the emission measurement.
2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
3. Negative value in the margin column shows emission below limit.
4. Horn antenna is used for the emission over 1000MHz.
5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- \* Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

## INTERTEK TESTING SERVICES

Company: CCT Tech Advanced Products Limited Date of Test: March 6-April 24, 2007  
Model: P9122G  
Mode : TX-First Channel

Table 7, Handset

### Radiated Emissions

Polarization	Frequency (MHz)	Reading (dB $\mu$ V)	Pre- Amp (dB)	Antenna Factor (dB)	Net at 3m (dB $\mu$ V/m)	Limit at 3m (dB $\mu$ V/m)	Margin (dB)
V	925.900	66.9	16	33.0	83.9	94.0	-10.1
V	462.950	27.4	16	26.0	37.4	46.0	-8.6
H	*1388.850	50.5	33	26.1	43.6	54.0	-10.4
H	1851.800	50.6	33	27.2	44.8	54.0	-9.2
H	*2314.750	47.5	33	29.4	43.9	54.0	-10.1
H	*2777.700	45.8	33	30.4	43.2	54.0	-10.8
H	*3703.600	44.3	33	33.3	44.6	54.0	-9.4
H	*4629.500	43.5	33	34.9	45.4	54.0	-8.6
H	5555.400	39.8	33	36.6	43.4	54.0	-10.6

- NOTES: 1. Peak detector is used for the emission measurement.
2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
3. Negative value in the margin column shows emission below limit.
4. Horn antenna is used for the emission over 1000MHz.
5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- \* Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

## INTERTEK TESTING SERVICES

Company: CCT Tech Advanced Products Limited Date of Test: March 6-April 24, 2007  
Model: P9122G  
Mode : TX-Last Channel

Table 8, Handset

### Radiated Emissions

Polarization	Frequency (MHz)	Reading (dB $\mu$ V)	Pre- Amp (dB)	Antenna Factor (dB)	Net at 3m (dB $\mu$ V/m)	Limit at 3m (dB $\mu$ V/m)	Margin (dB)
V	927.850	66.6	16	33.0	83.6	94.0	-10.4
V	463.925	27.8	16	26.0	37.8	46.0	-8.2
H	*1391.775	50.7	33	26.1	43.8	54.0	-10.2
H	1855.700	50.0	33	27.2	44.2	54.0	-9.8
H	*2319.625	47.4	33	29.4	43.8	54.0	-10.2
H	*2783.550	45.8	33	30.4	43.2	54.0	-10.8
H	*3711.400	44.2	33	33.3	44.5	54.0	-9.5
H	*4639.250	43.4	33	34.9	45.3	54.0	-8.7
H	5567.100	39.6	33	36.6	43.2	54.0	-10.8

- NOTES: 1. Peak detector is used for the emission measurement.
2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
3. Negative value in the margin column shows emission below limit.
4. Horn antenna is used for the emission over 1000MHz.
5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- \* Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

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## INTERTEK TESTING SERVICES

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### 3.6 Radiated Emission on the Bandedge

From the following plots, they show that the fundamental emissions are confined in the specified band (902MHz and 928MHz). In case of the fundamental emissions are within two standard bandwidths from the bandedge, the delta measurement technique is used for determining bandedge compliance. Standard bandwidth is the bandwidth specified by ANSI C63.4 (2003) for frequency being measured.

Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).

Please refer to the following plots for radiated emission on the bandedge:

Plot B1A1 (for model P9121G): Base Unit - Low Channel Emissions  
Plot B1B1 (for model P9121G): Base Unit - High Channel Emissions  
Plot H1A1 (for model P9121G): Handset - Low Channel Emissions  
Plot H1B1\* (for model P9121G): Handset - High Channel Emissions

Plot B1A2 (for model P9122G): Base Unit - Low Channel Emissions  
Plot B1B2 (for model P9122G): Base Unit - High Channel Emissions  
Plot H1A2 (for model P9122G): Handset - Low Channel Emissions  
Plot H1B2\* (for model P9122G): Handset - High Channel Emissions

For electronic filing, the above plots are saved with filename: emission.pdf

\* Bandedge compliance is determined by applying marker-delta method, i.e.

Resultant field strength (for model P9121G, Handset)

= Fundamental emissions - delta from the plot

= 83.9dB $\mu$ V/m - 44.78dB

= 39.12dB $\mu$ V/m

Resultant field strength (for model P9122G, Handset)

= Fundamental emissions - delta from the plot

= 83.6dB $\mu$ V/m - 45.74dB

= 37.86dB $\mu$ V/m

The resultant field strength meets the general radiated emission limit in section 15.209, which does not exceed 54dB $\mu$ V/m.

## **INTERTEK TESTING SERVICES**

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### 3.7 Line Conducted Configuration Photograph - Base Unit

#### Worst Case Line-Conducted Configuration

For electronic filing, the worst case line conducted configuration photographs are saved with filename: config photos.doc

## INTERTEK TESTING SERVICES

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### 3.8 Line Conducted Emission Data

The data on the following pages list the significant emission frequencies, the limit, and the margin of compliance.

Judgement -

Model P9121G, P9122G: Passed by more than 20 dB margin

#### **TEST PERSONNEL:**



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*Tester Signature*

Jess Tang, Lead Engineer  
*Typed/Printed Name*

April 27, 2007

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*Date*

## **INTERTEK TESTING SERVICES**

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Company: CCT Tech Advanced Products Limited Date of Test: March 6-April 24, 2007  
Model: P9121G, P9122G

### **Conducted Emissions**

For electronic filing, the conducted emission test result is saved with filename:  
conduct.pdf

## **INTERTEK TESTING SERVICES**

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### **EXHIBIT 4 EQUIPMENT PHOTOGRAPHS**



## INTERTEK TESTING SERVICES

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### 4.0 Equipment Photographs

For electronic filing, the photographs are saved with filename: external photos.doc & internal photos.doc

## **INTERTEK TESTING SERVICES**

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### **EXHIBIT 5 PRODUCT LABELLING**

## INTERTEK TESTING SERVICES

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### 5.0 **Product Labelling**

For electronic filing, the FCC ID label artwork and location is saved with filename: label.pdf

## **INTERTEK TESTING SERVICES**

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### **EXHIBIT 6 TECHNICAL SPECIFICATIONS**

## INTERTEK TESTING SERVICES

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### 6.0 Technical Specifications

For electronic filing, the block diagram and circuit diagram are saved with filename: block.pdf and circuit.pdf respectively.

**EXHIBIT 7  
INSTRUCTION MANUAL**

## INTERTEK TESTING SERVICES

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### 7.0 Instruction Manual

For electronic filing, a preliminary copy of the Instruction Manual is saved with filename: manual1.pdf, manual2.pdf, manual3.pdf

The required FCC Information to the User is stated on P.5, 18, 19 and P.5, 26, 27 for Model: P9121G and Model: P9122G respectively of the Instruction Manuals.

This manual will be provided to the end-user with each unit sold/leased in the United States.

## **INTERTEK TESTING SERVICES**

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### **EXHIBIT 8 SECURITY CODE INFORMATION**



## INTERTEK TESTING SERVICES

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### 8.0 Security Code Information

The telephone has an internal security code with 65,536 possible combinations. Each time the HANDSET is placed on the BASE UNIT, the code is randomly set to a new combination.