

## RF Exposure Report

**Report No.:** SA141028D04

**FCC ID:** 2ADH2-4COM-30KH-IT

**Test Model:** 4Com-30KH IT-14

**Received Date:** Oct. 28, 2014

**Test Date:** Jan. 5 ~ Mar. 25, 2015

**Issued Date:** Apr. 2, 2015

**Applicant:** 4Com PLC

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**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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(R.O.C.)



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### Release Control Record

Issue No.	Description	Date Issued
SA141028D04	Original release.	Apr. 2, 2015

## 1 Certificate of Conformity

**Product:** Art Desk Phone

**Brand:** 4Com

**Test Model:** 4Com-30KH IT-14

**Sample Status:** Engineering sample

**Applicant:** 4Com PLC

**Test Date:** Jan. 5 ~ Mar. 25, 2015

**Standards:** FCC Part 2 (Section 2.1091)

KDB 447498 D03

IEEE C95.1

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

**Prepared by :**



**Date:**

Apr. 2, 2015

Annie Chang / Supervisor

**Approved by :**



**Date:**

Apr. 2, 2015

Rex Lai / Assistant Manager

## 2 RF Exposure

### 2.1 Limits For Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

### 2.2 MPE Calculation Formula

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

P<sub>d</sub> = power density in mW/cm<sup>2</sup>

P<sub>out</sub> = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

### 2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user.

So, this device is classified as **Mobile Device**.

### 3 Calculation Result Of Maximum Conducted Power

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
2412-2462	20.18	4.9	20	0.0641	1
Bluetooth LE	3.76	4.9	20	0.0015	1
Bluetooth+EDR	3.75	4.9	20	0.0015	1

NOTE: WLAN & BT can transmit simultaneously.

#### Conclusion:

The formula of calculated the MPE is:

$CPD1 / LPD1 + CPD2 / LPD2 + \dots \text{etc.} < 1$

CPD = Calculation power density

LPD = Limit of power density

$WLAN + BT = 0.0641 + 0.0015 = 0.0656$

**Therefore the maximum calculations of above situations are less than the “1” limit.**

--- END ---