



# Wireless Device Over the Air Performance Report

APPLICANT : Panasales Clearance Centre Pty. Ltd. TA Cellsafe Pty. Ltd  
EQUIPMENT : Smart Radi Chip  
BRAND NAME : Cellsafe  
MODEL NAME : Smart radi chip for iphone X  
TEST DATE(S) : Nov. 07, 2017

*Roc Zhou*

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Technical Manager: Johnny Chen

**SPORTON International (ShenZhen) INC.**  
1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan District,  
Shenzhen City, Guangdong Province, China



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### Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
OT7N0803	1.0	Initial issue of report	Nov. 09, 2017



## 1. Administration Data

### 1.1 Testing Laboratory

<b>Test Site</b>	SPORTON International (ShenZhen) INC.
<b>Test Site Location</b>	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan District, Shenzhen City, Guangdong Province, China TEL: +86-755-8637-9589 FAX: +86-755-8637-9595

### 1.2 Applicant

<b>Company Name</b>	Panasales Clearance Centre Pty. Ltd. TA Cellsafe Pty. Ltd
<b>Address</b>	14/1866 Princes Highway, Clayton VIC 3168 Australia
<b>Contact Person</b>	Ivy Xiao / 1045624817@qq.com
<b>Telephone Number</b>	18603059650

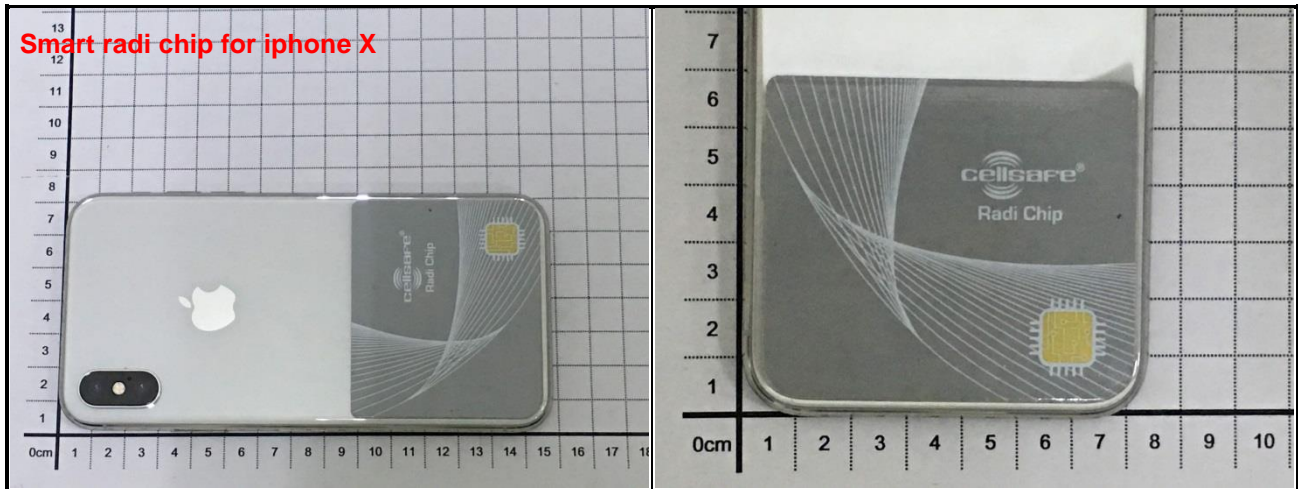


## **2. General Information**

### **2.1 Description of Equipment Under Test (EUT)**

<b>Product Feature &amp; Specification</b>	
<b>EUT Type</b>	Smart Radi Chip
<b>Brand Name</b>	Cellsafe
<b>Model Name</b>	Smart radi chip for iphone X
<b>Air Interface Tested</b>	WCDMA FDD II / V
<b>Device Power Class</b>	WCDMA FDD II : 3 WCDMA FDD V : 3
<b>Primary Mechanical Mode</b>	Monoblock

## 2.2 Product Photo

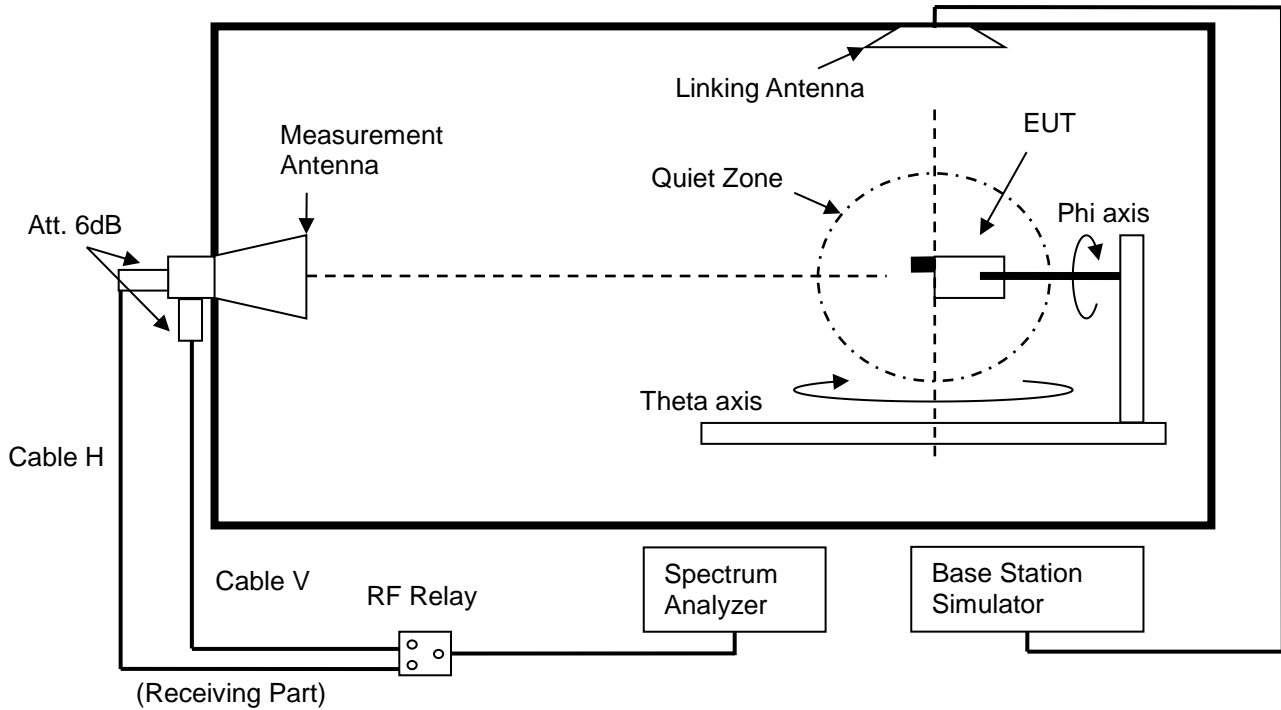


## 2.3 Test Equipment List

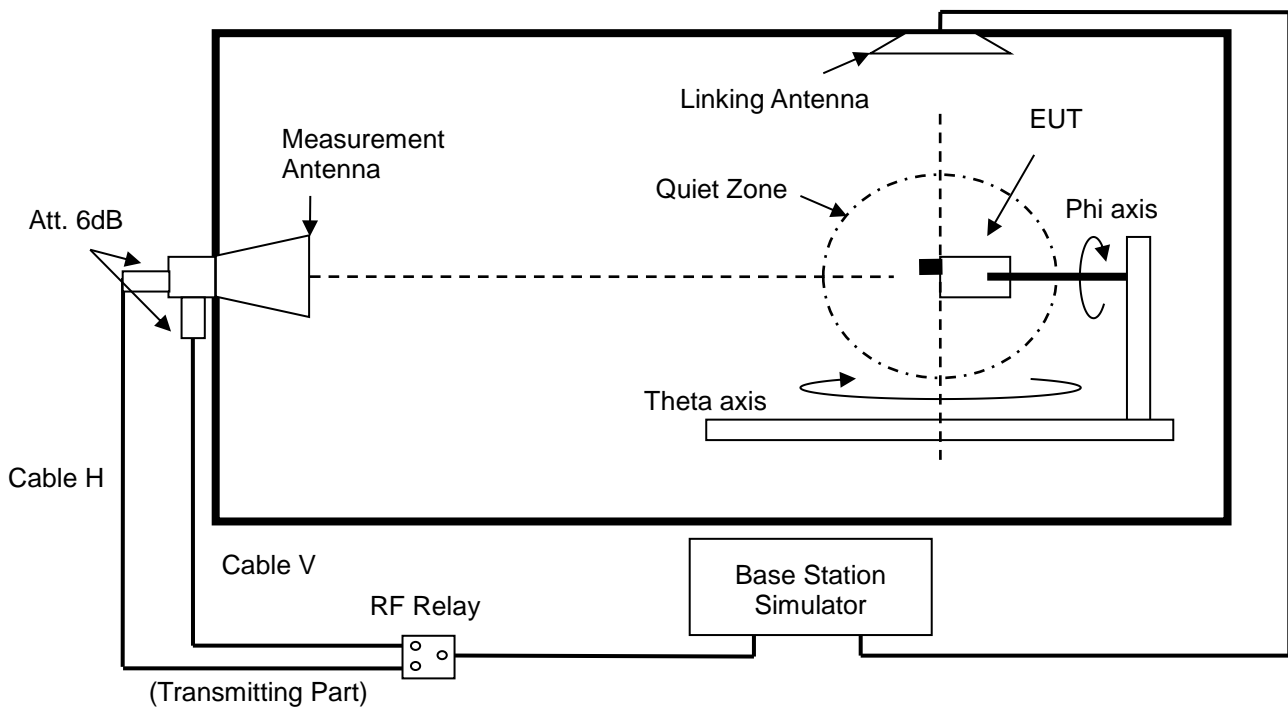
Name	Manufacturer	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
Base Station Simulator	Agilent	E5515C	GB46311195	2017/02/20	2018/02/19
Spectrum Analyzer	R&S	FSP 7	100946	2017/10/18	2018/10/17
Diagonal Dual Polarized Horn	ETS-Lindgren	3164-06	00126506	NCR	NCR
Multi-Devices Controller	ETS-Lindgren	2090-OPT1	00075985	NCR	NCR
Medium Duty Holder	ETS-Lindgren	2015	N/A	NCR	NCR

### 3. Measurement Environment

#### 3.1 TRP Measurement Setup



#### 3.2 TIS Measurement Setup





#### 4. Summary of Test Result

##### 4.1 Ambient Condition

Temperature (°C):	22°C	Humidity (%):	38%
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##### 4.2 Measurement Uncertainty

The maximum expanded measurement uncertainty (k=2, at a 95% confidence level) as below:

<b>TRP</b>					
Normal	699-798 MHz	814-894 MHz	1710-1755 MHz	1850-1995 MHz	2300-2800 MHz
Free Space	1.38	1.27	1.49	1.49	1.68
<b>TIS</b>					
Normal	699-798 MHz	814-894 MHz	1850-1995 MHz	2110-2155 MHz	2300-2800 MHz
Free Space	1.59	1.50	1.69	1.72	1.85





### 4.3 Summary Table

**WCDMA TRP Result:**

Band	CH	Freq. (MHz)	Free Space					
			Without radi chip			With radi chip		
			TRP (dBm)	NHPRP ±45 (dBm)	NHPRP ±30 (dBm)	TRP (dBm)	NHPRP ±45 (dBm)	NHPRP ±30 (dBm)
WCDMA FDD II	9400	1880.0	17.3	15.5	13.1	16.8	15.0	12.6
WCDMA FDD V	4183	836.6	17.1	16.4	15.2	16.9	16.2	15.0

**WCDMA EIS Result:**

Band	CH	Freq. (MHz)	Polarization	EIS					
				Position		Without radi chip	Position		With radi chip
				Theta	Phi		Theta	Phi	
WCDMA FDD II	9800	1960.0	Theta	30	60	-109.5	30	60	-109.0
WCDMA FDD V	4408	881.6	Theta	90	330	-108.4	90	330	-107.4

#### 4.4 Photographs of Test Configuration

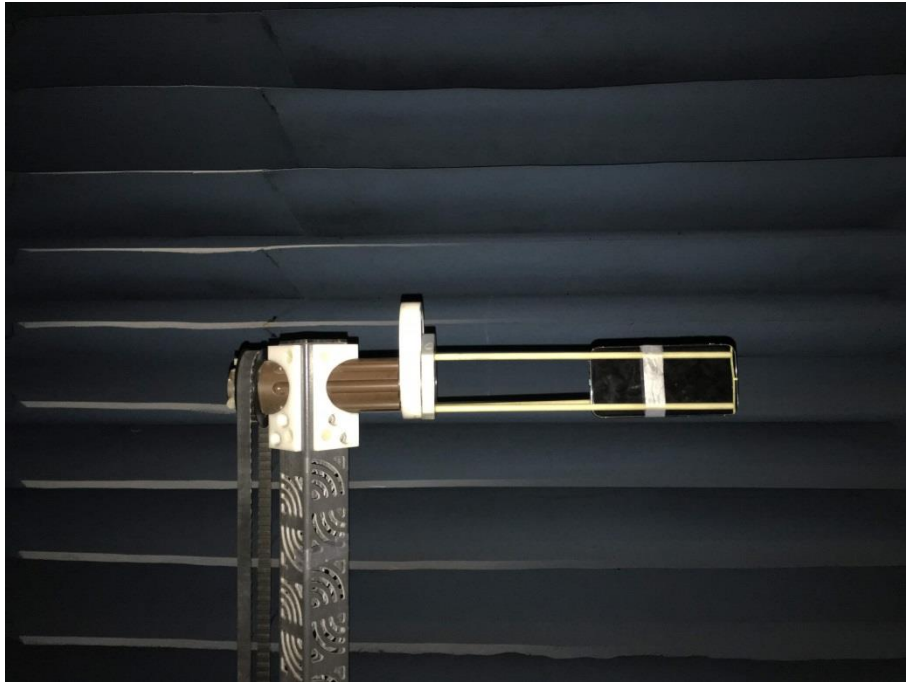


Fig. 4-4-1 Free Space – iphone X without radi chip



Fig. 4-4-2 Free Space – iphone X with radi chip