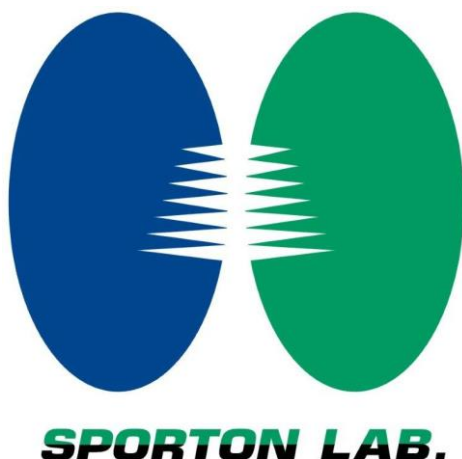




Wireless Device Over the Air Performance Report

APPLICANT : Panasales Clearance centre Pty. Ltd. TA Cellsafe Pty Ltd.
EQUIPMENT : Cellsafe UNIVERSAL RADI-CHIP
BRAND NAME : CELLSAFE
MODEL NAME : UNIVERSAL RADI-CHIP
TEST DATE(S) : May 24, 2017 ~ May 26, 2017

Roc Zhou

Test Engineer: Roc Zhou

Mark Qu

Technical Manager: Mark Qu

SPORTON International (ShenZhen) INC.

***1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan District,
Shenzhen City, Guangdong Province, China***



Table of Contents

Revision History	3
1. Administration Data	4
1.1 Testing Laboratory	4
1.2 Applicant	4
2. General Information	5
2.1 Description of Equipment Under Test (EUT)	5
2.2 Product Photo	6
2.3 Test Equipment List	7
3. Measurement Environment	8
3.1 TRP Measurement Setup	8
3.2 TIS Measurement Setup	8
4. Summary of Test Result	9
4.1 Ambient Condition	9
4.2 Measurement Uncertainty	9
4.3 Summary Table	10
4.4 Photographs of Test Configuration	14

Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
OT753113	1.0	Initial issue of report	Jun. 05, 2017

1. Administration Data

1.1 Testing Laboratory

Test Site	SPORTON International (ShenZhen) INC.
Test Site Location	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

Company Name	Panasales Clearance centre Pty. Ltd. TA Cellsafe Pty Ltd.
Address	14/1866 Princes Highway, Clayton VIC 3168 Australia
Contact Person	Nicole Bennett / sales@cellsafe.com.au
Telephone Number	61 3 9544 4886

2. General Information

2.1 Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	Cellsafe UNIVERAL RADI-CHIP
Brand Name	CELLSAFE
Model Name	UNIVERSAL RADI-CHIP
Air Interface Tested	WCDMA FDD II / V
Device Power Class	WCDMA FDD II : 3 WCDMA FDD V : 3
Primary Mechanical Mode	Monoblock

2.2 Product Photo

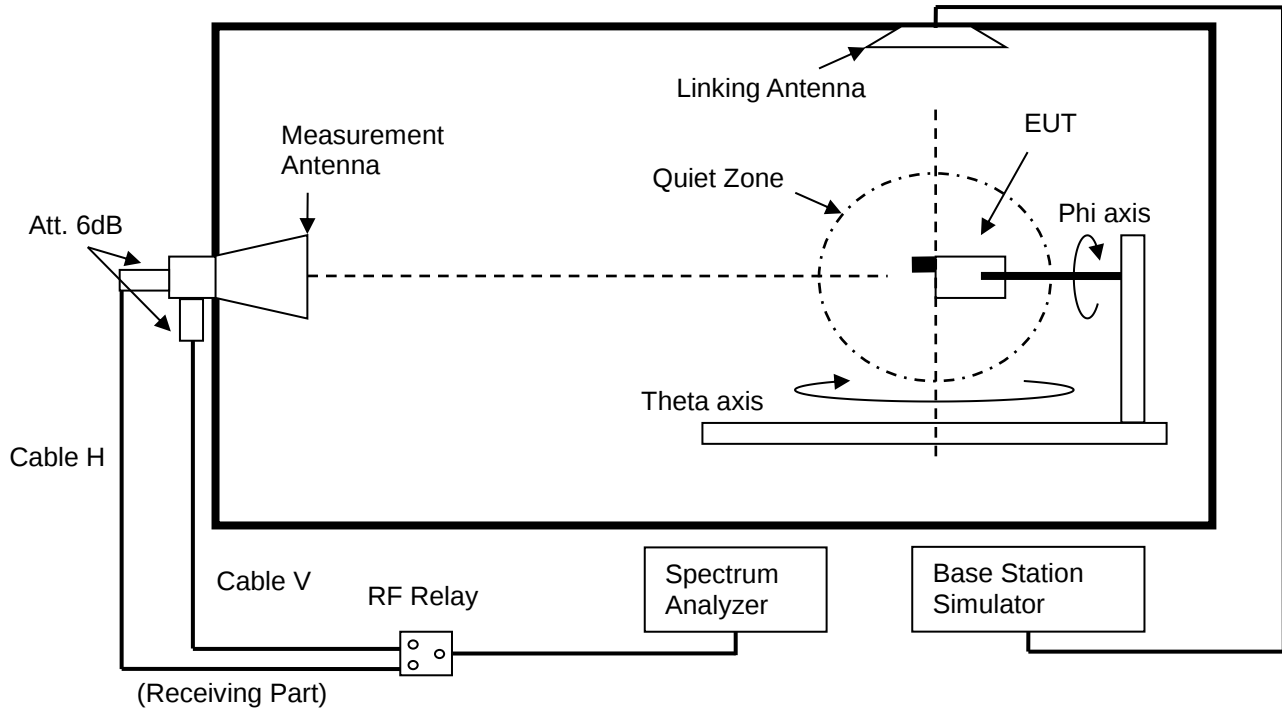


**2.3 Test Equipment List**

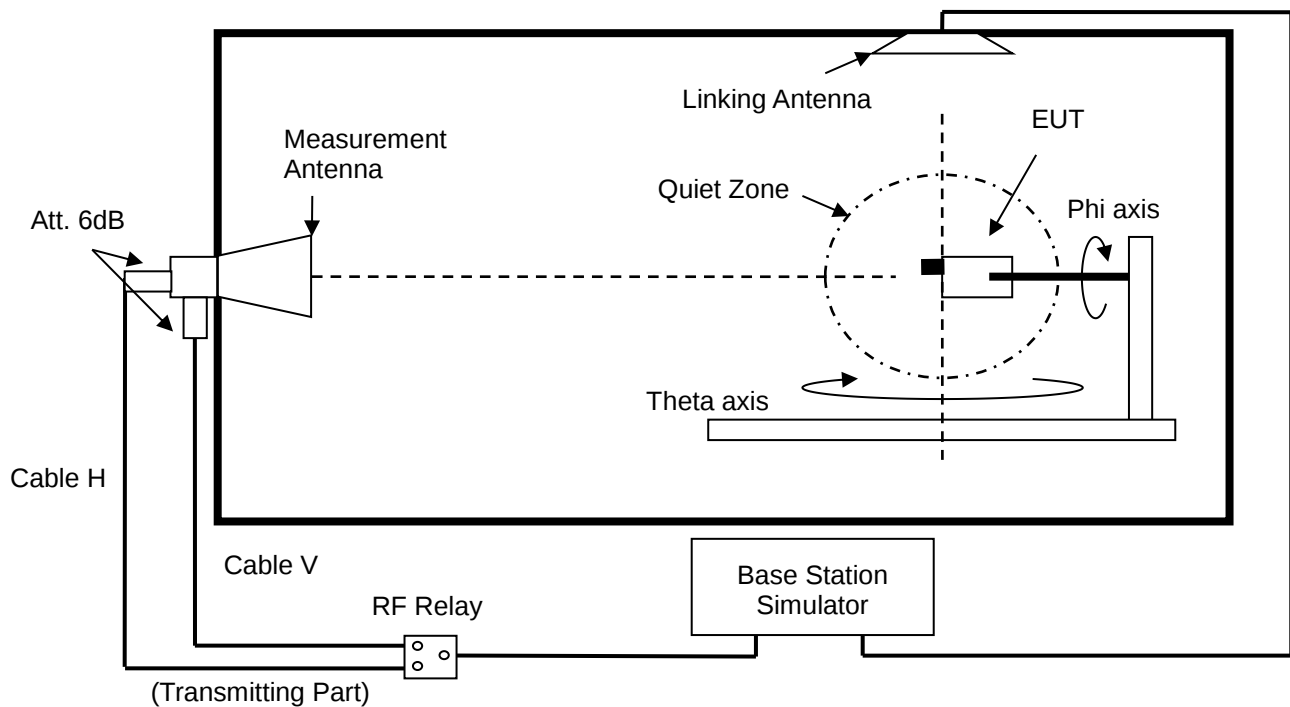
Name	Manufacturer	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
Base Station Simulator	R&S	CMU200	112352	2016/10/11	2017/10/10
Spectrum Analyzer	R&S	FSV 7	101634	2016/07/16	2017/07/15
Switch Control Mainframe	Agilent	3499A	MY42005451	2012/01/16	NCR
Diagonal Dual Polarized Horn	ETS-Lindgren	3164-08	00102954	NCR	NCR
Multi-Devices Controller	ETS-Lindgren	2090-OPT1	00108147	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%
--------------------------	------	----------------------	-----

4.2 Measurement Uncertainty

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

TRP					
Normal	699-798 MHz	814-894 MHz	1710-1755 MHz	1850-1995 MHz	2300-2800 MHz
Free Space	1.41	1.22	1.26	1.31	1.39
TIS					
Normal	699-798 MHz	814-894 MHz	1850-1995 MHz	2110-2155 MHz	2300-2800 MHz
Free Space	1.68	1.53	1.60	1.57	1.67

4.3 Summary Table

For HUAWEI P9:

WCDMA TRP Result:

Band	CH	Freq. (MHz)	Free Space	
			Without radi chip	With radi chip
			TRP (dBm)	TRP (dBm)
WCDMA FDD II	9400	1880.0	18.3	18.1
WCDMA FDD V	4183	836.6	18.3	18.2

WCDMA EIS Result:

Band	CH	Freq. (MHz)	EIS					
			Position		Without radi chip	Position		With radi chip
			Theta	Phi		Theta	Phi	
WCDMA FDD II	9800	1960.0	30	0	-109.8	30	0	-109.9
WCDMA FDD V	4408	881.6	90	90	-109.3	90	90	-108.8

For OPPO R9S:

WCDMA TRP Result:

Band	CH	Freq. (MHz)	Free Space	
			Without radi chip	With radi chip
			TRP (dBm)	TRP (dBm)
WCDMA FDD II	9400	1880.0	15.9	15.7
WCDMA FDD V	4183	836.6	15.6	15.7

WCDMA EIS Result:

Band	CH	Freq. (MHz)	EIS					
			Position		Without radi chip	Position		With radi chip
			Theta	Phi		Theta	Phi	
WCDMA FDD II	9800	1960.0	30	120	-110.1	30	120	-110.1
WCDMA FDD V	4408	881.6	90	60	-98.3	90	60	-99.3

For S7:

WCDMA TRP Result:

Band	CH	Freq. (MHz)	Free Space	
			Without radi chip	With radi chip
			TRP (dBm)	TRP (dBm)
WCDMA FDD II	9400	1880.0	16.4	16.7
WCDMA FDD V	4183	836.6	15.6	14.5

WCDMA EIS Result:

Band	CH	Freq. (MHz)	EIS					
			Position		Without radi chip	Position		With radi chip
			Theta	Phi		Theta	Phi	
WCDMA FDD II	9800	1960.0	120	180	-109.6	120	180	-111.7
WCDMA FDD V	4408	881.6	90	90	-104.6	90	90	-104.6

For S7 EDGE:

WCDMA TRP Result:

Band	CH	Freq. (MHz)	Free Space	
			Without radi chip	With radi chip
			TRP (dBm)	TRP (dBm)
WCDMA FDD II	9400	1880.0	16.7	16.6
WCDMA FDD V	4183	836.6	16.5	16.3

WCDMA EIS Result:

Band	CH	Freq. (MHz)	EIS					
			Position		Without radi chip	Position		With radi chip
			Theta	Phi		Theta	Phi	
WCDMA FDD II	9800	1960.0	120	210	-111.7	120	210	-112.3
WCDMA FDD V	4408	881.6	90	90	-107.6	90	90	-107.6

**For S8:****WCDMA TRP Result:**

Band	CH	Freq. (MHz)	Free Space	
			Without radi chip	With radi chip
			TRP (dBm)	TRP (dBm)
WCDMA FDD II	9400	1880.0	19.9	19.2
WCDMA FDD V	4183	836.6	18.7	17.4

WCDMA EIS Result:

Band	CH	Freq. (MHz)	EIS					
			Position		Without radi chip	Position		With radi chip
			Theta	Phi		Theta	Phi	
WCDMA FDD II	9662	1932.4	180	30	-113.4	180	30	-111.9
	9800	1960.0	180	30	-114.3	180	30	-112.8
	9938	1987.6	180	30	-113.5	180	30	-111.5
WCDMA FDD V	4357	871.4	90	90	-109.1	90	90	-108.6
	4408	881.6	90	90	-108.8	90	90	-108.8
	4458	891.6	90	90	-106.2	90	90	-106.2

**For S8 Plus:****WCDMA TRP Result:**

Band	CH	Freq. (MHz)	Free Space	
			Without radi chip	With radi chip
			TRP (dBm)	TRP (dBm)
WCDMA FDD II	9400	1880.0	19.9	19.4
WCDMA FDD V	4183	836.6	17.0	17.0

WCDMA EIS Result:

Band	CH	Freq. (MHz)	EIS					
			Position		Without radi chip	Position		With radi chip
			Theta	Phi		Theta	Phi	
WCDMA FDD II	9662	1932.4	120	180	-113.4	120	180	-112.1
	9800	1960.0	120	180	-114.7	120	180	-111.7
	9938	1987.6	120	180	-109.5	120	180	-108.2
WCDMA FDD V	4357	871.4	90	90	-108.1	90	90	-108.1
	4408	881.6	90	90	-107.8	90	90	-108.3
	4458	891.6	90	90	-107.7	90	90	-107.7

4.4 Photographs of Test Configuration



Fig. 4-4-1 Free Space – HUAWEI P9 without radi chip



Fig. 4-4-2 Free Space – HUAWEI P9 with radi chip



Fig. 4-4-3 Free Space – OPPO R9S without radi chip



Fig. 4-4-4 Free Space – OPPO R9S with radi chip



Fig. 4-4-5 Free Space – S7 without radi chip



Fig. 4-4-6 Free Space – S7 with radi chip



Fig. 4-4-7 Free Space – S7 EDGE without radi chip



Fig. 4-4-8 Free Space – S7 EDGE with radi chip

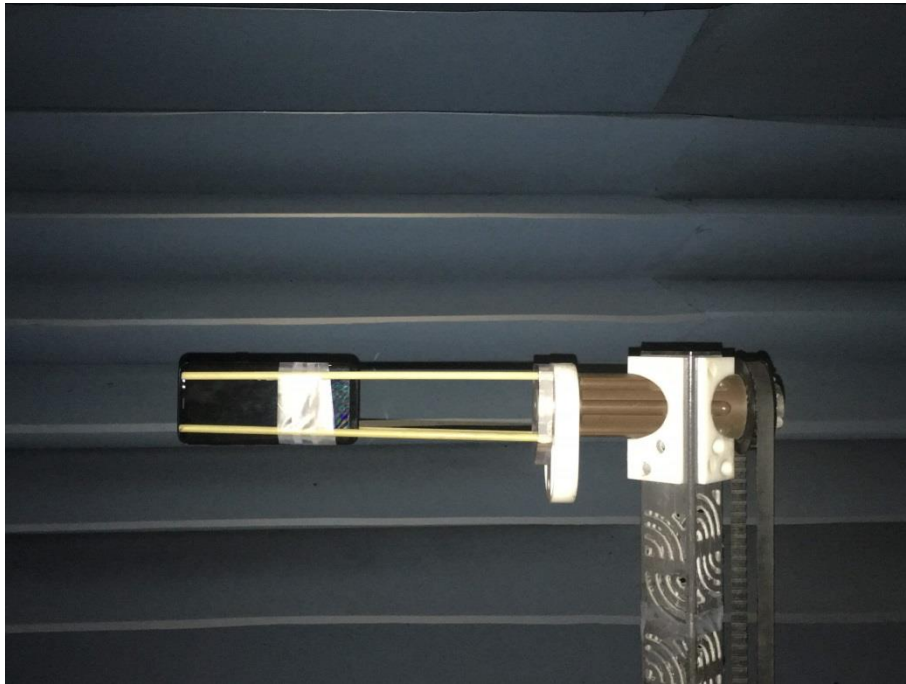


Fig. 4-4-9 Free Space – S8 without radi chip

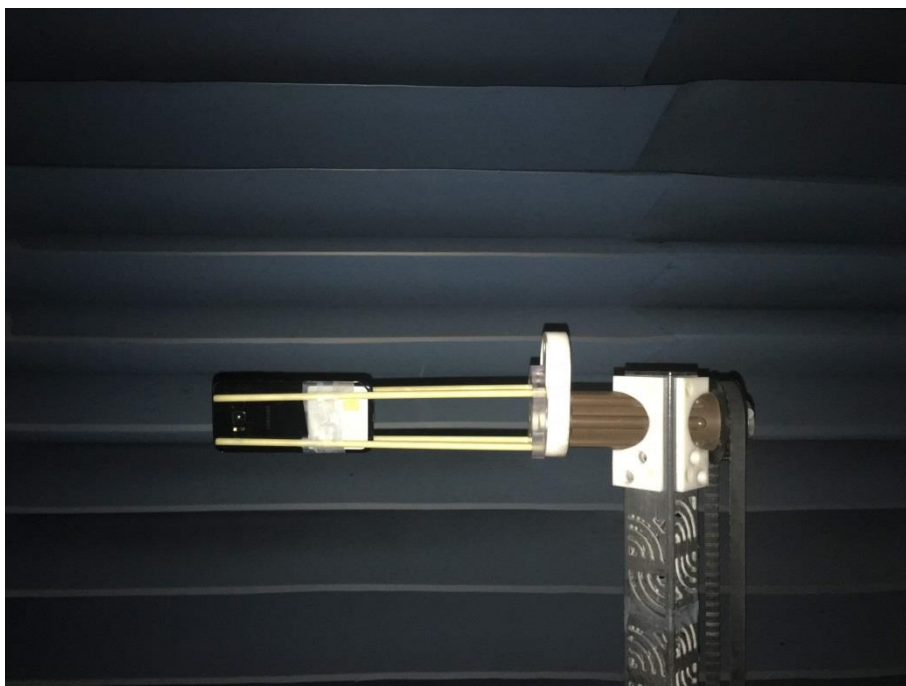


Fig. 4-4-10 Free Space – S8 with radi chip



Fig. 4-4-11 Free Space – S8 Plus without radi chip



Fig. 4-4-12 Free Space – S8 Plus with radi chip