



Report No:SZ15120017E01

OTA performance



TEST REPORT

Issued to

Cellsafe PTY LTD

For

Radi chip for Samsung S6

Model Name: Radi Chip for Samsung S6/S6 edge
 Trade Name: Cellsafe Radi chip
 Brand Name: Cellsafe
 Standard: Test plan for Mobile Station Over the Air Performance
 Revision_2_2_2
 Test date: 2015-12-17
 Issue date: 2016-4-11

by

Shenzhen Morlab Communications Technology Co., Ltd.



Tested by Wang Guoqiang
 Wang Guoqiang
 Date 2016.4.11

Approved by Huang Pulong
 Huang Pulong
 Date

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 Mo Huina
 Date 2016.4.11



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General Information

1.1 Identification of the Responsible Testing Laboratory

Company Name: Shenzhen Morlab Communications Technology Co., Ltd.
Address: 3/F, Electronic Testing Building, Shahe Road, Nanshan District, Shenzhen, 518055 P. R. China
Responsible Test Lab Manager: Mr. Shu Luan
Telephone: +86 755 86130228
Facsimile: +86 755 86130218

1.2 Identification of the Responsible Testing Location

Name: Shenzhen Morlab Communications Technology Co., Ltd.
Address: 3/F, Electronic Testing Building, Shahe Road, Nanshan District, Shenzhen, 518055 P. R. China

1.3 List of Test Equipments

No	Type	Specification
1	8960-5515C System Simulator	Manufacturer: Agilent
2	CMU 200 System Simulator	Manufacturer: R&S
3	E5071B Vector Network Analyzer	Manufacturer: Agilent
4	4*4*4 Full Anechoic Chamber	Manufacturer: Satimo
5	SG24 Multi-probe Antenna Measurement System	Manufacturer: Satimo
6	Simulated Head	Manufacturer: IndexSAR

2. Technical Information

Note: Provide by applicant.

2.1 Applicant Information

Company: Cellsafe PTY. LTD
Address: NA
Contact: NA
Telephone: NA
Fax: NA

2.2 Photographs of the EUT

Please reference annex A.

2.3 Identification of all used EUT

The EUT Identity consists of numerical and letter characters (see the table below), the first five numerical characters indicates the Type of the EUT defined by Morlab, the next letter character indicates the test sample, and the following two numerical characters indicates the software version of the test sample.

EUT Identity	IMEI	Hardware Version	Software Version
EUT01	(n.a.)	(n.a.)	(n.a.)

3. Test Results

3.1 Applied Reference Documents

No	Identity	Document Title
1	Test Plan for Mobile Station Over the Air Performance	Method of Measurement for Radiated RF Power and Receiver Performance V2.2.2

3.2 Test Conditions

3.2.1 Test Environment Conditions

During the measurement, the environmental conditions were within the listed ranges:

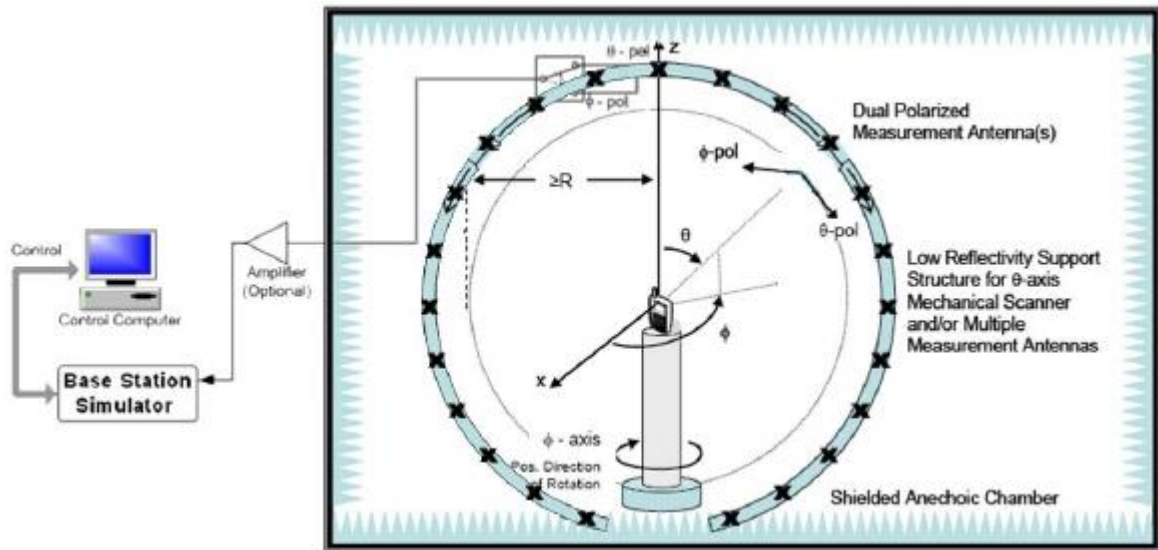
Temperature (°C):	20 - 25
Relative Humidity (%):	30 - 60
Atmospheric Pressure (kPa):	86 - 106

3.2.2 Measurement Uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

TRP Uncertainty in Measurement of GSM1800 in Freespace:	±1.751dB
TRP Uncertainty in Measurement of WCDMA2100 in Freespace:	±1.845dB
TIS Uncertainty in Measurement of GSM1800 in Freespace:	±1.713dB
TIS Uncertainty in Measurement of WCDMA2100 in Freespace:	±1.799dB

3.2.3 Test Setup





3.3 Summary of test results For Samsung s6

3.3.1 Total Radiated Power (TRP)

Band	Frequency	TRP(-dBm)	
		Original	with Cellsafe Chip
WCDMA	1950MHz	19.3256	18.254
	2100MHz	19.3657	18.156
	836.6MHz	18.3269	17.255
	897.6MHz	18.9211	17.326

3.3.2 Total Isotropic Sensitivity (TIS)

Band	Frequency	TIS(-dBm)	
		Original	with Cellsafe Chip
WCDMA	1950MHz	105.9633	105.3651
	2100MHz	106.321	105.0232
	836.6MHz	105.0525	104.636
	897.6MHz	104.39631	104.3236

3.4 Summary of test results For samsung s6 edge

3.4.1 Total Radiated Power (TRP)

Band	Frequency	TRP(-dBm)	
		Original	with Cellsafe Chip
WCDMA	1950MHz	20.3233	19.256
	2100MHz	19.6361	18.544
	836.6MHz	18.0369	17.2031
	897.6MHz	18.3622	17.2363

3.4.2 Total Isotropic Sensitivity (TIS)

Band	Frequency	TIS(-dBm)	
		Original	with Cellsafe Chip
WCDMA	1950MHz	107.0566	105.9523
	2100MHz	107.6364	106.323
	836.6MHz	106.3256	105.0369
	897.6MHz	105.935	105.1231

2. Testing environment for samsung s6



3. Testing environent for samsung s6 edge

