

Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 1 of 189

## ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

# INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 22 SUBPART H, PART 24 SUBPART E and PART 90 S REQUIREMENT

*OF* 

**Product Name:** Juno T41/5

**Trimble Brand Name:** 

RH42G **Marketing Name:** 

**Model No.:** JUNO/T41/5-BWC2RFG

**Model Difference:** N/A

FCC ID: S9E-JUNO41WN

**Report No.:** ER/2015/60004

**Issue Date:** Jun. 26, 2015

**FCC Rule Part:** 2,22H & 24E & 90S

Prepared for: **Trimble Navigation Limited** 

345 SW Avery Avenue, Corvallis, OR 97333

Prepared by: SGS Taiwan Ltd.

**Electronics & Communication Laboratory** 

No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan

24803

Note: This report shall not be reproduced except in full, without the written approval of SGS Taiwan Ltd. This document may be altered or revised by SGS Taiwan Ltd. personnel only, and shall be noted in the revision section of the document.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms\_and\_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

台灣檢驗科技股份有限公司

SGS Taiwan Ltd.

t (886-2) 2299-3279

f (886-2) 2298-0488

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 www.tw.sqs.com



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 2 of 189

## VERIFICATION OF COMPLIANCE

Trimble Navigation Limited **Applicant:** 

345 SW Avery Avenue, Corvallis, OR 97333

**Product Name:** Juno T41/5

**Brand Name:** Trimble

**Marketing Name:** RH42G

**Model No.:** JUNO/T41/5-BWC2RFG

**Model Difference:** N/A

**FCC ID:** S9E-JUNO41WN

**Report Number:** ER/2015/60004

Date of test: Jun. 03, 2015 ~ Jun. 18, 2015

**Date of EUT Received:** Jun. 03, 2015

## We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. Electronics & Communication Laboratory The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in TIA/EIA-603-C-2004 and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits.

The test results of this report relate only to the tested sample identified in this report.

Test By:	Curry Chen	Date:	Jun. 26, 2015
Prepared By:	Curry Chen/Engineer Utoletta Tang	Date:	Jun. 26, 2015
Approved By:	Violetta Tang / Clerk  Jim Chang / Asst. Manager	Date:	Jun. 26, 2015

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions of Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions for Electronic Documents.

The subject of the subject o Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

台灣檢驗科技股份有限公司

SGS Taiwan Ltd.

t (886-2) 2299-3279

f (886-2) 2298-0488

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 www.tw.sqs.com



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 3 of 189

# **Revision History**

Report Number	Revision	Description	Issue Date
ER/2015/60004	Rev.00	Initial creation of document	Jun. 26, 2015

t (886-2) 2299-3279

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司畫面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SGS Taiwan Ltd.\*\*\* No.134 WitKungRoad NewTaineil@idl.strialPark Wukuplistrict.NewTaineiCity.Taiwan24803/新北市五股區新北產業園區五工路 134 號

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

f (886-2) 2298-0488



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 4 of 189

## **Table of Contents**

1.	GEN	NERAL PRODUCT INFORMATION	6
	1.1.	Product Description	6
	1.2.	Product Feature of Equipment Under Test	8
	1.3.	Test Methodology of Applied Standards	9
	1.4.	Test Facility	9
	1.5.	Special Accessories	9
	1.6.	Equipment Modifications	9
2.	SYS	TEM TEST CONFIGURATION	10
	2.1.	EUT Configuration	10
	2.2.	EUT Exercise	10
	2.3.	Test Procedure	10
	2.4.	Measurement Results Explanation Example	11
	2.5.	Final Amplifier Voltage and Current Information:	11
	2.6.	Configuration of Tested System	12
3.		MARY OF TEST RESULTS	
4.	DES	SCRIPTION OF TEST MODES	
	4.1.	The Worst Test Modes and Channel Details	
5.		ASUREMENT UNCERTAINTY	
6.	<b>KF</b> (	CONDUCTED OUTPUT POWER MEASUREMENT Standard Applicable	
	6.2.	Test Set-up	
	6.3.	Measurement Procedure	
	6.4.	Measurement Equipment Used	
	6.5.	Measurement Result	
7.		ECTIVE RADIATED POWER AND EQUIVALENT ISOTROPIC RADIATED PO	
		ASUREMENT	
	7.1.	Standard Applicable	26
	7.2.	Test SET-UP	26
	7.3.	Measurement Procedure	28
	7.4.	Measurement Equipment Used	30
	7.5.	Measurement Result: (Peak) –using option of peak measurement	31

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有说明,此概告结果僅針测试之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SGS Taiwan Ltd.\*\*

No.134, WukungRoad, NewTaipeilndustrialPark, WukuDistrict, NewTaipeiCity, Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 5 of 189

8.	OCC	CUPIED BANDWIDTH MEASUREMENT	38
	8.1.	Standard Applicable	38
	8.2.	Test Set-up	38
	8.3.	Measurement Procedure	38
	8.4.	Measurement Equipment Used	39
	8.5.	Measurement Result	40
9.	OUT	OF BAND EMISSION AT ANTENNA TERMINALS	68
	9.1.	Standard Applicable	68
	9.2.	Test SET-UP	68
	9.3.	Measurement Procedure	69
	9.4.	Measurement Equipment Used	69
	9.5.	Measurement Result:	69
10.	FIEL	D STRENGTH OF SPURIOUS RADIATION MEASUREMENT	108
	10.1.	Standard Applicable	108
	10.2.	EUT Setup	108
	10.3.	Measurement Procedure:	110
	10.4.	Measurement Equipment Used:	111
	10.5.	Measurement Result:	112
11.	FRE	QUENCY STABILITY MEASUREMENT	154
	11.1.	Standard Applicable:	154
	11.2.	Test Set-up:	154
	11.3.	Measurement Procedure:	154
	11.4.	Measurement Equipment Used:	155
	11.5.	Measurement Result:	156
12.	<b>PEA</b>	K TO AVERAGE RATIO	163
	12.1.	Standard Applicable	163
	12.2.	Test SET-UP	163
	12.3.	Measurement Procedure	163
	12.4.	Measurement Equipment Used	163
	12.5	Measurement Result	164

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司畫面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SGS Taiwan Ltd.\*\*\* No.134 WitKungRoad NewTaineil@idl.strialPark Wukuplistrict.NewTaineiCity.Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 6 of 189

## 1. GENERAL PRODUCT INFORMATION

## 1.1. Product Description

### General:

Product Name:	Juno T41/5		
Brand Name:	Trimble		
Marketing Name:	RH42G		
Model No.:	JUNO/T41	/5-BWC2RFG	
Model Difference:	N/A		
Hardware Version:	V9		
Software Version:	1.0.8(Build 396)		
Data Cable (USB):	Model No.: A9136939, Supplier: Sinbon		
	3.7Vdc Rechargeable Li-ion Battery or 5Vdc from AC/DC Adapter		
Power Supply:	Battery:	Model No.: S11GD103A, Supplier: LICO	
	Adapter:	Model No.: PSA10F-050Q, Supplier: PHIHONG TECHNOLOGY CO.,	

### GPRS / WCDMA/ CDMA:

	Operating Frequency	Rated Power	
	GPRS 850	824.2 MHz– 848.8 MHz	33dBm
	EDGE 850	824.2 MHz- 848.8 MHz	27dBm
	GPRS 1900	1850.2MHz – 1909.8MHz	30dBm
Cellular Phone	EDGE 1900	1850.2MHz – 1909.8MHz	26dBm
Standards Frequency Range and Power	WCDMA/HSUPA/HSDPA /HSPA+ Band II	1852.4MHz – 1907.6MHz	24dBm
	WCDMA/HSUPA/HSDPA /HSPA+ Band V	826.4MHz - 846.6MHz	24dBm
	CDMA/EVDO BC0	824.7 MHz- 848.31MHz	24 dBm
	CDMA/EVDO BC1	1851.25MHz-1908.75MHz	24 dBm
	CDMA/EVDO BC10	817.9 MHz – 823.1 MHz	24 dBm

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approaches of this document is unlawful and offenders may be prosecuted to the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 7 of 189

	GPRS 850	246KGXW
	EDGE 850	250KG7W
	GPRS 1900	243KGXW
	EDGE 1900	253KG7W
	WCDMA Band II	4M16F9W
	HSDPA Band II	4M16F9W
	HSUPA Band II	4M15F9W
T CE ' '	WCDMA Band V	4M18F9W
Type of Emission:	HSDPA Band V	4M17F9W
	HSUPA Band V	4M18F9W
	CDMA BC0	1M27F9W
	EVDO BC0	1M27F9W
	CDMA BC1	1M27F9W
	EVDO BC1	1M28F9W
	CDMA BC10	1M27F9W
	EVDO BC10	1M27F9W
IMEI:	990002189069246	

### Max ERP/EIRP measurement result:

	dBm		W
GPRS 850 Band	22.90	ERP	0.195
EDGE 850 Band	19.45	ERP	0.088
GPRS 1900 Band	30.96	EIRP	1.247
EDGE 1900 Band	29.24	EIRP	0.839
WCDMA Band II	26.86	EIRP	0.485
HSDPA Band II	27.33	EIRP	0.541
HSUPA Band II	27.75	EIRP	0.596
WCDMA Band V	18.52	ERP	0.071
HSDPA Band V	19.28	ERP	0.085
HSUPA Band V	19.42	ERP	0.087
CDMA 2000 BC0	16.02	ERP	0.040
EVDO 2000 BC0	14.48	ERP	0.028
CDMA 2000 BC1	25.17	EIRP	0.329
EVDO 2000 BC1	24.37	EIRP	0.274
CDMA 2000 BC10	15.42	ERP	0.035
EVDO 2000 BC10	14.73	ERP	0.030

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有说明,此概告结果僅針测试之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SGS Taiwan Ltd.\*\*

No.134, WukungRoad, NewTaipeilndustrialPark, WukuDistrict, NewTaipeiCity, Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 8 of 189

### 1.2. Product Feature of Equipment Under Test

The equipment under Test (Hereafter Called: EUT) is Juno T41/5 supporting, GSM / WCDMA / CDMA, Wi-Fi 802.11bgn, Bluetooth with RFID features, and below is details of information

Product Feature			
Product Name:	Juno T41/5		
Brand Name:	Trimble		
Marketing Name:	RH42G		
Model No.:	JUNO/T41/5-BWC2RFG		
Model Difference:	N/A		
FCC ID	S9E-JUNO41WN		
GSM Operating Band(s)	GSM 850 / 1900MHz		
GPRS / EGPRS Multi Slot Class	Class 12		
WCDMA Operating Band(s)	FDD Band II / V		
CDMA / EVDO Operating Band(s)	BC0 / BC1 / BC10		
Wi-Fi Specification	802.11b/g/n		
Bluetooth Version	V2.1+EDR		
RFID Specification	RFID		

Note: The above EUT information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 f (886-2) 2298-0488 www.tw.sqs.com



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 9 of 189

### Test Methodology of Applied Standards

FCC 47 CFR Part 2, 22, 24, Part 90S.

ANSI / TIA / EIA 603C-C-2004

KDB971168 D01 Power Meas license Digital System v02r01

KDB941225 of the Output power Procedure of (SAR Measurement Procedures for 3G Devices, WCDMA / HSPA) was used for EUT and Base station setting.

TS 151 010-1 is used to set, and measure the output power.

### Note:

- All test items have been performed and record as per the above standards.
- The composite system is compliance with FCC Subpart B is authorized under the certi-2. fication procedure.

#### **Test Facility** 1.4.

SGS Taiwan Ltd. Electronics & Communication Laboratory No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan. (TAF code 0513)

FCC Registration Numbers are: 990257

Canada Registration Number: 4620A-5.

### 1.5. Special Accessories

No special accessories were used during testing.

### 1.6. Equipment Modifications

There were no modifications incorporated into the EUT.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Management of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

台灣檢驗科技股份有限公司 t (886-2) 2299-3279

SGS Taiwan Ltd.

f (886-2) 2298-0488

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 www.tw.sqs.com



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 10 of 189

## 2. SYSTEM TEST CONFIGURATION

## 2.1. EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

### 2.2. EUT Exercise

The EUT (Transmitter) was operated in the continuous transmission mode employed with the simulator of the Base Station that fixates at test default channels to fix the Tx frequency which was for the purpose of the measurements.

### 2.3. Test Procedure

### 2.3.1 Conducted Measurement at Antenna Port

According to measurement procured TIA/EIA 603C, the EUT is placed on a turn table which is 0.8 m above ground plane. A low loss of RF cable was used to connect the antenna port of EUT to measurement equipment.

## 2.3.2 Radiated Emissions (ERP/EIRP)

According to measurement procured TIA/EIA 603C, The EUT is a placed on as turn table which is 0.8 m above ground plane. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both Horizontal and Vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes and measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made "while keeping the antenna in the 'cone of radiation' from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response." is still within the 3dB illumination BW of the measurement antenna according to the requirements in Section 8 and 13.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sqs.com/terms\_and\_conditions.htm</u> and, for elec-

tronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sqs.com/terms-e-document.htm">www.sqs.com/terms-e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewT



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 11 of 189

### 2.4. Measurement Results Explanation Example

### For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuation factor between EUT conducted port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly EUT RF output level.

### Note:

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Following shows an offset computation example with cable loss and attenuator.

Low Band: Offset = RF cable loss (dB) + attenuation factor (dB) = 13.7(dB)

High Band: Offset = RF cable loss (dB) + attenuation factor (dB) = 13.9(dB)

### 2.5. Final Amplifier Voltage and Current Information:

- I I I I I I I I I I I I I I I I I I I	. Final Ampinier voltage and Current information.			
Test Mode	DC voltage (V)	DC current (mA)		
GPRS 850	3.7V	276		
GPRS 1900	3.7V	241		
EDGE 850	3.7V	190		
EDGE 1900	3.7V	198		
HSDPA B2	3.7V	763		
HSUPA B5	3.7V	826		
EVDO BC0	3.7V	1014		
EVDO BC1	3.7V	915		
EVDO BC10	3.7V	622		

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/term jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

> t (886-2) 2299-3279 f (886-2) 2298-0488

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 www.tw.sqs.com



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 12 of 189

## 2.6. Configuration of Tested System

Fig. 2-1 Configuration of Tested System (Fixed Channel-Conducted)

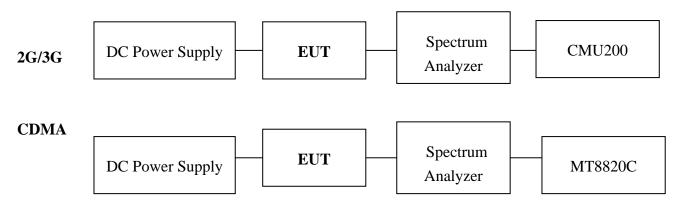
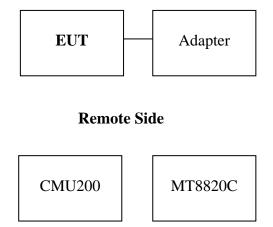


Fig. 2-2 Configuration of Tested System (Fixed Channel-Radiated)



**Table 2-1 Equipment Used in** 

Item	Equipment	Mfr/Brand	Model/ Type No.	Series No.	Data Cable	Power Cord
1.	Universal Radio Com- munication Tester	R&S	CMU200	102189	shielded	Un-shielded
2.	Universal Radio Com- munication Tester	Anritsu	MT8820C	6200307563	shielded	Un-shielded
3.	DC Power Supply	HP	E3640A	MY40005907	shielded	Un-shielded

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of the proposition of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 13 of 189

## 3. SUMMARY OF TEST RESULTS

FCC Rules	<b>Description Of Test</b>	Result
§2.1046(a)	RF Power Output	Compliant
\$2.1046(a) \$22.913(a)(2) \$24.232(c) \$90.635	ERP/ EIRP measurement	Compliant
§2.1049(h)	Occupied Bandwidth	Compliant
\$2.1051 \$22.917(a) \$24.238(a) \$90.691	Out of Band Emissions at Antenna Terminals and Band Edge	Compliant
\$2.1053 \$22.917(a) \$24.238(a) \$90.691(a)(1)(2)	Field Strength of Spurious Radiation	Compliant
§24.232(d)	Peak to Average Ratio	Compliant
\$2.1055(a)(1) \$22.355 \$24.235 \$90.231	Frequency Stability	Compliant

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate is unleastful and difference may be prosequed to the full lest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 14 of 189

### 4. DESCRIPTION OF TEST MODES

### 4.1. The Worst Test Modes and Channel Details

- 1. The EUT has been tested under operating condition.
- 2. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports. The worst case was found as listed below. Following channel(s) was (were) selected for the final test as listed below:

BAND	ERP/EIRP	RADIATED EMISSION
GPRS/EDGE 850	H-plan	H-plan
GPRS/EDGE 1900	E1-plan	E1-plan
WCDMA/HSPA Band II	E1-plan	E1-plan
WCDMA/HSPA Band V	H-plan	H-plan
CDMA / EVDO BC 0	E2-plan	E2-plan
CDMA / EVDO BC 1	E2-plan	E2-plan
CDMA / EVDO BC 10	H-plan	H-plan

### GSM/GPRS/EDGE MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
ERP	128 to 251	128, 190, 251	GPRS/EDGE 850
EIRP	512 to 810	512, 661, 810	GPRS/EDGE 1900
FREQUENCY STABILITY	128 to 251	190	GPRS 850
FREQUENCI STABILITI	512 to 810	661	GPRS 1900
OCCUPIED BANDWIDTH	128 to 251	128, 190, 251	GPRS/EDGE 850
OCCUPIED BANDWIDTH	512 to 810	512, 661, 810	GPRS/EDGE 1900
PEAK TO AVERAGE RATIO	128 to 251	128, 190, 251	GPRS/EDGE 850
FEAR TO AVERAGE RATIO	512 to 810	512, 661, 810	GPRS/EDGE 1900
BAND EDGE	128 to 251	128, 251	GPRS/EDGE 850
BAND EDGE	512 to 810	512, 810	GPRS/EDGE 1900
CONDUCTED EMISSION	128 to 251	128, 190, 251	GPRS/EDGE 850
CONDUCTED EMISSION	512 to 810	512, 661, 810	GPRS/EDGE 1900
RADIATED EMISSION	128 to 251	128, 190, 251	GPRS 850
RADIATED EMISSION	512 to 810	512, 661, 810	GPRS 1900

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices other wind an analysis stated the less that will be the sample (s) tested and such an analysis (s) are retained for 90 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 15 of 189

### WCDMA/HSPA MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
ERP	4132 to 4233	4132, 4183, 4233	WCDMA/HSPA Band V
EIRP	9262 to 9538	9262, 9400, 9583	WCDMA/HSPA Band II
EDEOLIENCY STADILITY	4132 to 4233	4183	WCDMA Band II
FREQUENCY STABILITY	9262 to 9538	9400	WCDMA Band V
OCCUPIED BANDWIDTH	4132 to 4233	4132, 4183, 4233	WCDMA/HSPA Band II
OCCUPIED BANDWIDTH	9262 to 9538	9262, 9400, 9583	WCDMA/HSPA Band V
PEAK TO AVERAGE RATIO	4132 to 4233	4132, 4183, 4233	WCDMA/HSPA Band II
FEAR TO AVERAGE RATIO	9262 to 9538	9262, 9400, 9583	WCDMA/HSPA Band V
BAND EDGE	4132 to 4233	4132, 4233	HSUPA Band II
BAND EDGE	9262 to 9538	9262, 9583	HSUPA Band V
CONDUCTED EMISSION	4132 to 4233	4132, 4183, 4233	HSUPA Band II
CONDUCTED EMISSION	9262 to 9538	9262, 9400, 9583	HSUPA Band V
RADIATED EMISSION	4132 to 4233	4132, 4183, 4233	HSUPA Band II
RADIATED EMISSION	9262 to 9538	9262, 9400, 9583	HSUPA Band V

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate is unleastful and difference may be prosequed to the full lest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 16 of 189

### CDMA/EVDO MODE

MIND VDO MIODE			
TEST ITEM	AVAILABLE	TESTED	MODE
TEST TIENT	CHANNEL	CHANNEL	WODE
ERP	1013 to 777	1013, 384, 777	CDMA/EVDO BC0
EKF	476 to 684	476, 580, 684	CDMA/EVDO BC10
EIRP	25 to 1175	25, 600, 1175	CDMA/EVDO BC1
	1013 to 777	1013, 384, 777	CDMA BC0
FREQUENCY STABILITY	25 to 1175	25, 600, 1175	CDMA BC1
	476 to 684	476, 580, 684	CDMA BC10
	1013 to 777	1013, 384, 777	CDMA/EVDO BC0
OCCUPIED BANDWIDTH	25 to 1175	25, 600, 1175	CDMA/EVDO BC1
	476 to 684	476, 580, 684	CDMA/EVDO BC10
	1013 to 777	1013, 384, 777	CDMA/EVDO BC0
PEAK TO AVERAGE RATIO	25 to 1175	25, 600, 1175	CDMA/EVDO BC1
	476 to 684	476, 580, 684	CDMA/EVDO BC10
	1013 to 777	1013, 384, 777	CDMA BC0
BAND EDGE	25 to 1175	25, 600, 1175	CDMA BC1
	476 to 684	476, 580, 684	CDMA BC10
	1013 to 777	1013, 384, 777	CDMA BC0
CONDUCTED EMISSION	25 to 1175	25, 600, 1175	CDMA BC1
	476 to 684	476, 580, 684	CDMA BC10
	1013 to 777	1013, 384, 777	CDMA BC0
EMISSION MASK	25 to 1175	25, 600, 1175	CDMA BC1
	476 to 684	476, 580, 684	CDMA BC10
	1013 to 777	1013, 384, 777	CDMA BC0
RADIATED EMISSION	25 to 1175	25, 600, 1175	CDMA BC1
	476 to 684	476, 580, 684	CDMA BC10

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有说明,此概告结果僅針测试之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SGS Taiwan Ltd.\*\*

No.134, WukungRoad, NewTaipeilndustrialPark, WukuDistrict, NewTaipeiCity, Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 17 of 189

### 5. MEASUREMENT UNCERTAINTY

Test Items	Uncertainty			
RF Power Output	+/- 1.10 dB			
ERP/ EIRP measurement	Vertical Polarization = +/- 4.74dB Horizontal Polarization =+/- 4.62dB			
99% Occupied Bandwidth	+/- 5.19 Hz			
Out of Band Emissions at Antenna	+/- 0.70 dB			
Terminals and Band Edge				
Peak to Average Ratio	+/- 0.70 dB			
Frequency Stability vs. Temperature	+/- 5.19 Hz			
Frequency Stability vs.  Voltage	+/- 5.19 Hz			
Temperature	+/- 0.65 °C			
Humidity	+/- 4.6 %			
DC / AC Power Source	DC= +/- 0.13%, AC=+/- 0.2%			

Radiated Spurious Emission:

_	30MHz - 180MHz: +/- 3.37dB
Magazzarantzara	180MHz -417MHz: +/- 3.19dB
Measurement uncertainty (Polarization : <b>Vertical</b> )	0.417GHz-1GHz: +/- 3.19dB
	1GHz - 18GHz: +/- 4.04dB
	18GHz - 40GHz: +/- 4.04dB

Measurement uncertainty (Polarization : <b>Horizontal</b> )	30MHz - 167MHz: +/- 4.22dB
	167MHz -500MHz: +/- 3.44dB
	0.5GHz-1GHz: +/- 3.39dB
	1GHz - 18GHz: +/- 4.08dB
	18GHz - 40GHz: +/- 4.08dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate is unleastful and difference may be prosequed to the full lest extent of the law

pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law SGS Taiwan Ltd.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

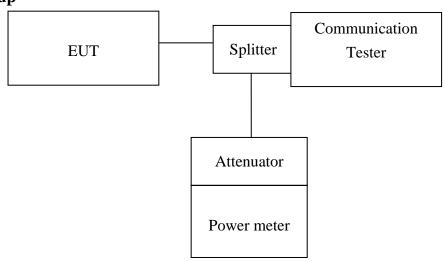
Page: 18 of 189

### 6. RF CONDUCTED OUTPUT POWER MEASUREMENT

## 6.1. Standard Applicable

A base station simulator was used to establish communication with the EUT. Its parameters were set to transmit the maximum power on the EUT. The measured power in the radio frequency on the transmitter output terminals.

## 6.2. Test Set-up



Note: Measurement setup for testing on Antenna connector

## 6.3. Measurement Procedure

The transmitter output was connected to a calibrated attenuator, the other end of which was connected to a power meter. Transmitter output was read off the power meter in dBm. The power output at the transmitter antenna port was determined by adding the value of the attenuator to the power meter reading. TS 151 010-1 is reference to conduct the test measurement of output power.

The Procedure of KDB941225 (SAR Measurement Procedures for 3G devices, (WCDMA/HSPA) was used for EUT and Base station setting. RMC 12.2kps is used for this testing, and KDB 971168 D01 Power Meas License Digital System as the supplemental test methodology to adjust the proper setting obtaining the measurement results

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms\_and\_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 t (886-2) 2299-3279 f (886-2) 2298-0488 www.tw.sqs.com



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 19 of 189

## 6.4. Measurement Equipment Used

Conducted Emission (measured at antenna port) Test Site										
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.					
TYPE		NUMBER	NUMBER	CAL.						
Power Meter	Anritsu	ML2495A	1005007	12/20/2014	12/19/2015					
Power Sensor	Anritsu	MA2411B	917032	12/20/2014	12/19/2015					
Radio Communication Analyzer	R&S	CMU200	102189	02/11/2015	02/10/2016					
Radio Communication Analyzer	Anritsu	MT8820C	6200995019	10/08/2014	10/09/2015					
DC Block	Mini-Circuits	BLK-18-S+	1	01/02/2015	01/01/2016					
Attenuator	Mini-Circuit	BW-S10W2+	002	01/02/2015	01/01/2016					
Splitter	Agilent	11636B	N/A	01/02/2015	01/01/2016					
DC Power Supply	Agilent	E3640A	MY52410006	11/10/2014	11/09/2015					



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 20 of 189

### 6.5. Measurement Result

## **RF** Conducted Output Power

## **GPRS/EDGE (GMSK; 8-PSK) Result:**

EUT Mode	Frequency (MHz)	СН	Peak Power (4DN 1UP) Class 8 (dBm)	Average Burst Power (4DN 1UP) Class 8 (dBm)	Peak Power (4DN 2UP)	Average Burst Power (4DN 2UP) Class 10 (dBm)	Peak Power (4DN 3UP)	Average Burst Power (4DN 3UP) Class 12 (dBm)	Peak Power (4DN 4UP)	Average Burst Power (4DN 4UP) Class 12 (dBm)
CDDG	824.2	128	33.20	33.10	30.80	30.70	28.70	28.60	27.40	27.30
GPRS 850	836.6	190	33.20	33.10	30.40	30.30	28.60	28.50	27.30	27.20
	848.8	251	33.00	32.90	30.40	30.20	28.30	28.20	27.00	26.90
GPRS 1900	1850.2	512	29.40	29.20	26.00	25.90	24.00	23.80	22.50	22.30
	1880.0	661	28.90	28.70	25.50	25.30	23.10	23.00	21.50	21.40
	1909.8	810	28.30	28.10	25.10	25.00	22.80	22.70	21.40	21.30

EUT Mode	Frequency (MHz)	СН	Peak Power (4DN 1UP) Class 8 (dBm)	Average Burst Power (4DN 1UP) Class 8 (dBm)	Peak Power (4DN 2UP)	Average Burst Power (4DN 2UP) Class 10 (dBm)	Peak Power (4DN 3UP)	Average Burst Power (4DN 3UP) Class 12 (dBm)	Peak Power (4DN 4UP)	Average Burst Power (4DN 4UP) Class 12 (dBm)
ED CE	824.2	128	30.70	27.70	27.90	24.80	26.20	22.90	25.50	21.90
EDGE 850	836.6	190	30.50	27.50	27.70	24.60	26.00	22.70	25.00	21.70
	848.8	251	30.30	27.20	27.50	24.30	25.70	22.40	24.60	21.30
EDGE 1900	1850.2	512	28.00	24.80	24.80	21.60	23.50	20.00	22.10	18.80
	1880.0	661	27.40	24.10	24.20	20.90	22.80	19.30	21.60	18.20
1,00	1909.8	810	27.10	23.80	23.80	20.60	22.40	18.90	21.30	17.80

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approaches of this document is unlawful and offenders may be prosecuted to the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 21 of 189

### CDMA2000/EVDO Result:

	-		CDMA	EVDO	
EUT Mode	Frequency (MHz)	СН	Avg. Power (dBm)	Avg. Power (dBm)	
BC0	824.7	1013	24.01	23.89	
	836.52	384	24.43	24.38	
	848.31	777	24.12	24.01	
	1851.25	25	24.47	24.21	
BC1	1880	600	24.32	24.02	
	1908.75	1175	24.35	24.12	
	817.9	476	24.34	24.21	
BC10	820.5	580	24.45	24.22	
	823.1	684	24.25	24.17	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司畫面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SGS Taiwan Ltd.\*\*\* No.134 WitKungRoad NewTaineil@idl.strialPark Wukuplistrict.NewTaineiCity.Taiwan24803/新北市五股區新北產業園區五工路 134 號

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 22 of 189

### **WCDMA MODE:**

The following tests were completed according to the test requirements outlined in section 5.2 of the 3GPP TS34.121-1 V8.4.0 specification. The EUT supports power Class 3, which has a nominal maximum output power of 24 dBm (+1.7/-3.7). RMC 12.2kps is used for this testing.

### **Results:**

EUT N	<b>Iode</b>		WCDMA HSDPA Band II Band II			HSUPA Band II		
Frequency	СН	Peak Power	Avg. Power	Peak Power Avg. Power		Peak Power	Avg. Power	
(MHz)		(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	
1852.4	9262	26.70	22.84	25.93	22.45	26.41	22.72	
1880.0	9400	26.03	22.68	26.01	22.41	26.18	22.46	
1907.6	9538	25.32	22.14	25.63	22.01	25.77	22.08	

EUT N	Mode	WCI Ban	OMA ad V		OPA id V	HSUPA Band V		
Frequency	СН	Peak Power Avg. Power		Peak Power Avg. Power		Peak Power Avg. Power		
(MHz)		(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	
826.4	4132	26.96	23.59	27.33	23.68	27.08	23.46	
836.6	4183	27.81	24.50	28.12	24.46	27.99	24.33	
846.6	4233	27.03	23.78	27.62	23.90	27.51	23.65	

Note: The results above reflect max power with all up bits.

Cable loss offset: Low Band: 13.7dB, High Band: 13.9dB

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

台灣檢驗科技股份有限公司

SGS Taiwan Ltd.

f (886-2) 2298-0488 t (886-2) 2299-3279



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 23 of 189

### **HSDPA Release 8 MODE:**

The following 4 Sub-Tests were completed according to the test requirements outlined in section 5.2A of the 3GPP TS34.121-1 V8.4.0 specification. All TX RMS power requirements for Power Class 3 were met according to table 5.2AA.5 and 5.2B.5 All UE channels and power ratio's are set according to table C10.1.4 & C11.1.3 in the 3GPP TS34.121-1 V8.4.0. RMC 12.2kps is used for this testing.

## **HSDPA SUB-TEST Setting**

Table C.10.1.4: β values for transmitter characteristics tests with HS-DPCCH(FOR HSDPA)

Sub-test	$eta_{ m c}$	$eta_{ m d}$	$eta_{ m d} (SF)$	$\beta_c/\beta_d$	β <sub>HS</sub> (Note1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)	RMC (Kbps)
1	2/15	15/15	64	2/15	4/15	0.0	0.0	12.2
2	12/15 (Note 4)	15/15 (Note 4)	64	12/15 (Note 4)	24/15	1.0	0.0	12.2
3	15/15	8/15	64	15/8	30/15	1.5	0.5	12.2
4	15/15	4/15	64	15/4	30/15	1.5	0.5	12.2

Note: The recommended HSDPA MPRs are implemented as per following sub-tests.

### **Results:**

Mode	Sub-test	Avg.	Power (di	Bm)	Power Class 3 Limita-	Comments
		9262	9400	9538	tion (dBm)	
	1	23.06	22.93	22.33	20.3dBm – 25.7dBm	Pass
HSDPA	2	22.77	22.57	22.01	20.3dBm – 25.7dBm	Pass
(B2)	3	22.60	22.45	21.84	19.8dBm – 25.7dBm	Pass
	4	22.65	22.49	21.90	19.8dBm – 25.7dBm	Pass

Mode	Sub-test	Avg.	Power (di	Bm)	Power Class 3 Limita-	Comments
		4132	4183	4233	tion (dBm)	
	1	23.81	24.75	23.97	20.3dBm – 25.7dBm	Pass
HSDPA	2	23.52	24.39	23.65	20.3dBm – 25.7dBm	Pass
(B5)	3	23.35	24.27	23.48	19.8dBm – 25.7dBm	Pass
	4	23.40	24.31	23.54	19.8dBm – 25.7dBm	Pass

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and <a href="conditions.htm">conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 24 of 189

### HSPA (HSDPA & HSUPA) Release 8 MODE

The following 5 Sub-Tests were completed according to the test requirements outlined in section 5.2A of the 3GPP TS34.121-1 V8.4.0 specification. All TX RMS power requirements for Power Class 3 were met according to table 5.2AA.5 and 5.2B.5 All UE channels and power ratio's are set according to table C11.1.3 in the 3GPP TS34.121-1 V8.4.0. RMC 12.2kps is used for this testing

## **HSPA SUB-TEST Setting**

Table C.11.1.3: β values for transmitter characteristics tests with HS-DPCCH and E-DCH(FOR HSUPA)

Sub- test	βς	$eta_{ m d}$	β <sub>d</sub> (SF)	$\beta_c/\beta_d$	$eta_{ m HS}$	$eta_{ec}$	$eta_{ed}$	β <sub>ed</sub> (SF)	$\beta_{ed} \\ (Codes)$	CM (dB)	MPR (dB)	AG Index	E-TFCI	RMC (Kbps)
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/225	1309/225	4	1	1.0	0.0	20	75	12.2
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67	12.2
3	15/15	9/15	64	15/9	30/15	30/15	β <sub>ed</sub> 1: 47/15 β <sub>ed</sub> 2: 47/15	4 4	2	2.0	1.0	15	92	12.2
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71	12.2
5	15/15 (Note 4)	15/15 (Note 4)	64	15/15 (Note 4)	30/15	24/15	134/15	4	1	1.0	0.0	21	81	12.2

Note: The recommended HSUPA MPRs are implemented as per following sub-tests. Results:

Mode	Sub-test	Avg.	Power (di	Bm)	Power Class 3 Limita-	Comments
		9262	9400	9538	tion (dBm)	
	1	22.80	22.61	22.05	18.8dBm – 25.7dBm	Pass
	2	20.86	20.69	20.09	16.8dBm – 25.7dBm	Pass
HSUPA(B2)	3	21.77	21.67	21.08	17.8dBm – 25.7dBm	Pass
	4	20.91	20.75	20.17	16.8dBm – 25.7dBm	Pass
	5	22.66	22.44	21.94	18.8dBm – 25.7dBm	Pass

Mode	Sub-test	Avg.	Power (di	Bm)	Power Class 3 Limita-	Comments	
		4132	4183	4233	tion (dBm)		
	1	23.55	24.43	23.69	18.8dBm – 25.7dBm	Pass	
	2	21.61	22.51	21.73	16.8dBm – 25.7dBm	Pass	
HSUPA(B5)	3	22.52	23.49	22.72	17.8dBm – 25.7dBm	Pass	
	4	21.66	22.57	21.81	16.8dBm – 25.7dBm	Pass	
	5	23.41	24.26	23.58	18.8dBm – 25.7dBm	Pass	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm.

Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 25 of 189

### **Minimum Communications Power Measurement**

### PCS 1900 band

PCL	0	1	2	3	4	5	6	7	8
Output power (dBm)	27.2	25.1	23.2	21	19.4	17.3	15.3	13.2	12.1

PCL	9	10	11	12	13	14	15
Output power (dBm)	10.1	8.4	6.3	4.5	2.3	0.4	-1.2

Note: The EUT output power was controlled by simulator. Set Communication Tester CMU200 PCL as above, and get the mobile phone output power reading.

### WCDMA/HSDPA/HSUPA band II, IV, V

The EUT output power was controlled by simulator. Set Communication Tester CMU200 function key "UE Power Control" and enter max rated power 24dBm. The EUT is going to be set to max output power to 24dBm. Then record the read (see page 23 for measurement data). The min. power was measures by a function key "minimum power" then record the read. It is -52.3dBm. The power variation can be 0.1dB step by setting.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

台灣檢驗科技股份有限公司

SGS Taiwan Ltd.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 t (886-2) 2299-3279 f (886-2) 2298-0488



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 26 of 189

# 7. EFFECTIVE RADIATED POWER AND EQUIVALENT ISOTROPIC RADI-ATED POWER MEASUREMENT

## 7.1. Standard Applicable

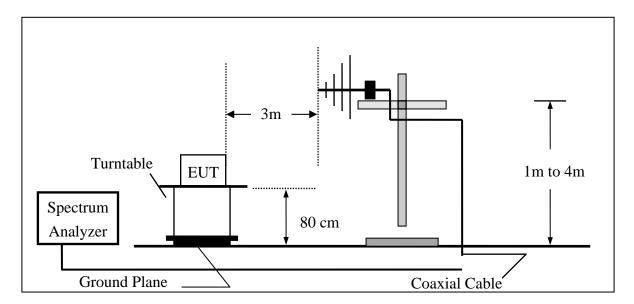
FCC 22.913(a) Mobile station is limited to 7W.

FCC 24.232(b) Mobile station is limited to 2W.

Part 90 Subpart (R) Mobile stations are limited to 100W

### 7.2. Test SET-UP

(A) Radiated Power Test Set-Up, Frequency Below 1000MHz



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卽天。本報告未經本公司書面許可,不可都份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm.

Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 t (886-2) 2299-3279

台灣檢驗科技股份有限公司

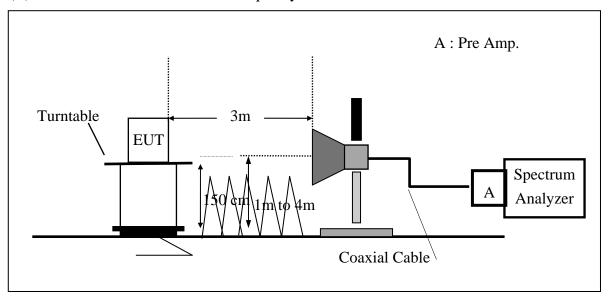
f (886-2) 2298-0488



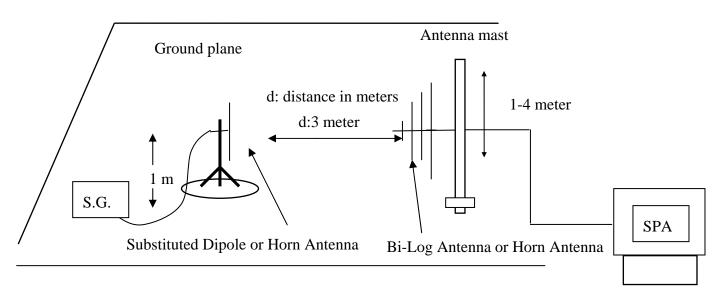
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 27 of 189

## (B) Radiated Power Test Set-UP Frequency Over 1 GHz



### (C) Substituted Method Test Set-UP



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 28 of 189

### 7.3. Measurement Procedure

- 1. The testing follows the Measurement Procedure of FCC KDB 971168 D01
- 2. The EUT was placed on a non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.
- 3. During the measurement, the EUT was communication with the station. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna from 4m to 1m. The reading was recorded and the field strength (E in dBuV/m) was calculated
- 4. The testing follows the Measurement Procedure of FCC KDB 971168 D01
- 5. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a tx cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step b. Record the power level of S.G.
- 6. ERP = S.G. output (dBm) + Antenna Gain (dBd) Cable Loss (dB)
- 7. ERP = S.G. output (dBm) + Antenna Gain (dBd) Cable Loss (dB)
- 8. Spectrum setting:
  - (1) Detector = Peak, marker the highest value of the detector by maximum hold, set RBW wide enough to capture the entire signal of emission, and VBW > =3xRBW.
  - (2) KDB 971168 D01 is adopted, and the procedure as lists under item 4, Measurement of the Average Power over the Fundamental Signal Bandwidth, is followed to set correspondingly for the acquisition of proper measurement data.

Set frequency = nominal signal center frequency;

Set span =  $2 \times \text{occupied BW}$ ;

Set RBW  $\approx 1 \sim 5\%$  of the span, not to exceed 1 MHz

Set  $VBW = 3 \times RBW$ ;

Select average power (RMS) detector

Set sweep time and number of measurement points to achieve a minimum of 1 millisecond/pt integration time (ex. Point = 601points, then sweet time =  $601*10^{-3}$  = 6s.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms\_and\_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 t (886-2) 2299-3279 www.tw.sqs.com



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 29 of 189

Activate trace averaging routine over a minimum of 10 sweeps;

Activate marker/span pair and set span = signal or channel bandwidth;

Activate the band/interval power marker function;

Record the band power level;

Record adjusted value as the average signal power level. Then activate the occupied bandwidth measurement function.

The proper adjustment due to limitation of spectrum capability is given compensated to spectrum with conversion factor of 10\*log (TBW/RBW), where TBW is the transmission of UE exceeding the maximum BW UE can extends, and RBW is the resolution BW in UE.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 30 of 189

## 7.4. Measurement Equipment Used

ERP,	ERP, EIRP MEASUREMENT EQUIPMENT List 966 Chamber												
EQUIPMENT TYPE	MFR	MODEL	SERIAL	LAST CAL.	CAL DUE.								
		NUMBER	NUMBER										
EXA Spectrum Analyzer	Agilent	N9010A	MY50420195	12/22/2014	12/21/2015								
Bilog Antenna	SCHWAZBECK	VULB9168	378	12/23/2014	12/22/2015								
Bilog Antenna	SCHWAZBECK	VULB9160	3158	10/31/2014	10/30/2015								
Horn antenna	ETS.LINDGREN	3117	123995	05/05/2015	05/04/2016								
Horn antenna	ETS.LINDGREN	3117	123991	12/19/2014	12/18/2015								
Horn Antenna	Schwarzbeck	BBHA9170	184	12/25/2014	12/24/2015								
Horn Antenna	Schwarzbeck	BBHA9170	185	07/29/2014	07/28/2015								
Network Analyze	Anritsu	MS4644A	1216312	05/23/2015	05/22/2016								
Signal Generator	Agilent	E4438C	MY45093613	08/06/2014	08/05/2015								
Pre-Amplifier	Agilent	8447D	1937A02834	01/02/2015	01/01/2016								
Pre-Amplifier	Agilent	8449B	3008A00578	01/02/2015	01/01/2016								
Pre-Amplifier	EMC Instruments Corp.	EMC184045	980135	01/02/2015	01/01/2016								
Attenuator	Mini-Circuit	BW-S10W2+	004	01/02/2015	01/01/2016								
Radio Communication Analyzer	R&S	CMU200	102189	02/11/2015	02/10/2016								
Radio Communication Analyzer	Anritsu	MT8820C	6200995019	10/08/2014	10/09/2015								
Turn Table	HD	DT420	N/A	N.C.R	N.C.R								
Antenna Tower	HD	MA240-N	240/657	N.C.R	N.C.R								
Controller	HD	HD100	N/A	N.C.R	N.C.R								
Low Loss Cable	HUBER+SUHNER	966_Tx	10m	01/02/2015	01/01/2016								
Low Loss Cable	HUBER+SUHNER	966_Rx	3m	01/02/2015	01/01/2016								
3m Site NSA	SGS	966 chamber	N/A	07/15/2014	07/14/2015								

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate is unleastful and difference may be prosequed to the full lest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 31 of 189

## 7.5. Measurement Result: (Peak) –using option of peak measurement

	EUT			Measurement							
Operation Band	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit			
	MHz		V/H	dBm	dBd	dB	dBm	dBm			
	924.2	128	V	21.91	3.45	-2.94	22.43	38.45			
	824.2	128	Н	18.59	3.45	-2.94	19.11	38.45			
CDDC 950	836.6	190	V	22.01	3.46	-2.97	22.50	38.45			
GPRS 850	830.0	190	Н	17.12	3.46	-2.97	17.60	38.45			
	0.40.0	251	V	22.44	3.47	-3.01	22.90	38.45			
	848.8		Н	19.59	3.47	-3.01	20.05	38.45			

	EUT				Measur	ement		
Operation Band	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
	0242	120	V	18.93	3.45	-2.94	19.45	38.45
	824.2	128	Н	16.06	3.45	-2.94	16.58	38.45
EDGE 850	926.6	100	V	18.37	3.46	-2.97	18.85	38.45
EDGE 830	836.6	190	Н	13.95	3.46	-2.97	14.43	38.45
Q	010 0	251	V	18.42	3.47	-3.01	18.88	38.45
	848.8	231	Н	15.82	3.47	-3.01	16.28	38.45

### Remark:

(1) The RBW, VBW of SPA for frequency RBW=300 KHz, VBW=1MHz

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approaches of this document is unlawful and offenders may be prosecuted to the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

t (886-2) 2299-3279

f (886-2) 2298-0488

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 www.tw.sgs.com



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 32 of 189

	EUT				Measur	ement		
Operation Band	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
	MHz		V/H	dBm	dBi	dB	dBm	dBm
	1850.2	512	V	30.01	4.84	-4.49	30.37	33.01
	1830.2	312	Н	27.71	4.84	-4.49	28.07	33.01
CDDC 1000	1880.0	661	V	30.7	4.79	-4.53	30.96	33.01
GPRS 1900	1000.0	661	Н	28.63	4.79	-4.53	28.90	33.01
	1909.8	810	V	30.33	4.74	-4.57	30.50	33.01
	1909.8	610	Н	27.24	4.74	-4.57	27.41	33.01

	EUT				Measur	ement		
Operation Band	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
	MHz		V/H	dBm	dBi	dB	dBm	dBm
	1850.2	512	V	28.82	4.84	-4.49	29.18	33.01
	1830.2	312	Н	28.03	4.84	-4.49	28.39	33.01
EDCE 1000	1880.0	661	V	28.97	4.79	-4.53	29.24	33.01
EDGE 1900	1000.0	661	Н	27.58	4.79	-4.53	27.85	33.01
	1000.9	910	V	28.92	4.74	-4.57	29.10	33.01
	1909.8	810	Н	26.59	4.74	-4.57	26.77	33.01

### Remark:

(1) The RBW, VBW of SPA for frequency RBW=300 KHz, VBW=1MHz

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate is unleastful and difference may be prosequed to the full lest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. t (886-2) 2299-3279



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 33 of 189

	EUT				Measur	ement		
Operation Band	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
	MHz		V/H	dBm	dBi	dB	dBm	dBm
	1852.4	9262	V	26.51	4.84	-4.49	26.86	33.01
	1832.4	9202	Н	23.02	4.84	-4.49	23.38	33.01
WCDMA D2	1880.0	9400	V	26.36	4.79	-4.53	26.63	33.01
WCDMA B2	1000.0	9400	Н	23.83	4.79	-4.53	24.10	33.01
	1007.6	9538	V	23.02	4.75	-4.56	23.20	33.01
	1907.6	9338	Н	23.29	4.75	-4.56	23.48	33.01

	EUT				Measur	ement		
Operation Band	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
	MHz		V/H	dBm	dBi	dB	dBm	dBm
	1952 4	0262	V	26.83	4.84	-4.49	27.18	33.01
	1852.4	9262	Н	23.76	4.84	-4.49	24.11	33.01
HCDDA D2	1880.0	9400	V	27.06	4.79	-4.53	27.33	33.01
HSDPA B2	1880.0	9400	Н	25.15	4.79	-4.53	25.42	33.01
	1907.6	9538	V	24.59	4.75	-4.56	24.77	33.01
	1907.0	9338	Н	24.39	4.75	-4.56	24.57	33.01

	EUT				Measur	ement		
Operation Band	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
	MHz		V/H	dBm	dBi	dB	dBm	dBm
	1852.4	9262	V	26.8	4.84	-4.49	27.15	33.01
	1832.4	9202	Н	23.31	4.84	-4.49	23.66	33.01
HCHDA D2	1880.0	9400	V	27.48	4.79	-4.53	27.75	33.01
HSUPA B2	1000.0	9400	Н	24	4.79	-4.53	24.27	33.01
	1007.6	9538	V	24.53	4.75	-4.56	24.71	33.01
	1907.6	9338	Н	23.94	4.75	-4.56	24.13	33.01

### Remark:

(1) The RBW, VBW of SPA for frequency RBW= 5MHz, VBW= 8MHz

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate is unleastful and difference may be prosequed to the full lest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 34 of 189

	EUT				Measur	ement		
Operation Band	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
	926.4	4132	V	17.07	3.46	-2.94	17.59	38.45
	826.4	4132	Н	12.37	3.46	-2.94	12.88	38.45
WCDMA D5	926.6	4183	V	18.03	3.46	-2.97	18.52	38.45
WCDMA B5	836.6	4183	Н	12.31	3.46	-2.97	12.80	dBm 38.45 38.45
	846.6	4233	V	16.73	3.47	-3	17.19	38.45
	040.0	4233	Н	13.06	3.47	-3	13.53	38.45

	EUT				Measur	ement		
Operation Band	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
	826.4	4132	V	17.61	3.46	-2.94	18.12	38.45
	820.4	4132	Н	13.01	3.46	-2.94	13.52	38.45
LICDDA DE	926.6	4102	V	18.79	3.46	-2.97	19.28	38.45
HSDPA B5	836.6	4183	Н	13.44	3.46	-2.98	13.93	38.45
	916.6	4233	V	18.55	3.47	-3	19.01	38.45
	846.6	4233	Н	15.15	3.47	-3	15.62	38.45

	EUT				Measur	ement		
Operation Band	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
	926.4	4132	V	17.28	3.46	-2.94	17.80	38.45
	826.4	4132	Н	13.46	3.46	-2.95	13.97	38.45
LICIIDA D5	836.6	4183	V	18.94	3.46	-2.97	19.42	38.45
HSUPA B5	650.0	4163	Н	13.48	3.46	-2.97	13.97	dBm 38.45 38.45
	846.6	4233	V	18.88	3.47	-3	19.34	38.45
	040.0	4233	Н	14.79	3.47	-3	15.26	38.45

### Remark:

(1) The RBW, VBW of SPA for frequency RBW=300 KHz, VBW=1MHz

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate is unleastful and difference may be prosequed to the full lest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 35 of 189

	EUT				Measur	ement		
Operation Band	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
	924.7	1013	V	4.67	3.46	-2.94	5.18	38.45
	824.7	1013	Н	14.48	3.45	-2.94	15.00	38.45
CDMA	836.52	384	V	11.4	3.46	-2.97	11.89	38.45
BC0	830.32	364	Н	15.53	3.46	-2.97	16.02	38.45
	848.31	777	V	9.79	3.47	-3	10.25	38.45
	040.31	///	Н	14.84	3.47	-3.01	15.30	38.45

	EUT				Measur	ement		Limit  dBm  38.45  38.45				
Operation Band	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit				
	MHz		V/H	dBm	dBd	dB	dBm	dBm				
	824.7	1013	V	4.25	3.46	-2.94	4.77	38.45				
	824.7	1013	Н	13.67	3.46	-2.94	14.18	38.45				
EVDO 2000	836.52	384	V	10.45	3.46	-2.97	10.94	38.45				
BC0	830.32	364	Н	13.99	3.46	-2.97	14.48	38.45				
	949 21	777	V	8.03	3.47	-3	8.50	38.45				
	848.31	///	Н	13.87	3.47	-3.01	14.33	38.45				

### Remark:

(1) The RBW, VBW of SPA for frequency RBW=300 KHz, VBW=1MHz

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate is unleastful and difference may be prosequed to the full lest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

> t (886-2) 2299-3279 f (886-2) 2298-0488 www.tw.sgs.com



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 36 of 189

	EUT				Measur	ement		
Operation Band	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
	MHz		V/H	dBm	dBi	dB	dBm	dBm
	1851.25	25	V	14.11	4.84	-4.49	14.47	33.00
	1831.23	23	Н	20.41	4.84	-4.49	20.76	33.00
CDMA	1880.0	600	V	17.6	4.79	-4.53	17.86	33.00
BC1	1880.0	600	Н	24.91	4.79	-4.53	25.17	33.00
	1908.75	1175	V	15.22	4.75	-4.56	15.40	33.00
	1700.73	11/3	Н	24.52	4.75	-4.56	24.70	33.00

	EUT				Measur	ement		
Operation Band	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
	MHz		V/H	dBm	dBi	dB	dBm	dBm
	1851.25	25	V	12.93	4.84	-4.49	13.28	33.00
	1831.23	23	Н	20.18	4.84	-4.49	20.54	33.00
EVDO 2000	1000.0	600	V	17.07	4.79	-4.53	17.34	33.00
BC1	1880.0	600	Н	24.05	4.79	-4.53	24.31	33.00
	1009.75	1175	V	14.86	4.75	-4.56	15.04	33.00
	1908.75	11/3	Н	24.19	4.75	-4.56	24.37	33.00

### Remark:

(1) The RBW, VBW of SPA for frequency RBW=300 KHz, VBW=1MHz

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate is unleastful and difference may be prosequed to the full lest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

t (886-2) 2299-3279

f (886-2) 2298-0488

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 www.tw.sgs.com



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 37 of 189

EUT			Measurement					
Operation Band	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
	017.0	176	V	7.74	3.45	-2.92	8.27	50.00
	817.9	9 476	Н	14.88	3.45	-2.92	15.42	50.00
CDMA	820.5	580	V	7.79	3.45	-2.93	8.32	50.00
BC10	820.3	380	Н	14.74	3.45	-2.93	15.26	50.00
	823.1	922.1 (94	V	6.99	3.45	-2.93	7.51	50.00
		823.1 684	Н	14.2	3.45	-2.93	14.72	50.00

EUT			Measurement					
Operation Band	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
	MHz		V/H	dBm	dBd	dB	dBm	dBm
	017.0	817.9 476	V	6.66	3.45	-2.92	7.2	50.00
	817.9		Н	14.19	3.45	-2.92	14.73	50.00
EVDO 2000	920.5	500	V	7.79	3.45	-2.93	8.32	50.00
BC10	820.5 580	Н	13.77	3.45	-2.93	14.29	50.00	
	823.1 684	694	V	5.68	3.45	-2.93	6.19	50.00
		Н	13.41	3.45	-2.93	13.93	50.00	

# Remark:

(1) The RBW, VBW of SPA for frequency RBW=300 KHz, VBW=1MHz

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate is unleastful and difference may be prosecuted to the full lest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

> t (886-2) 2299-3279 f (886-2) 2298-0488 www.tw.sgs.com



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

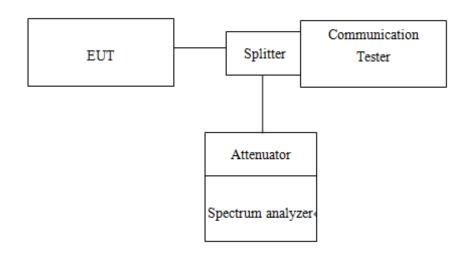
Page: 38 of 189

# OCCUPIED BANDWIDTH MEASUREMENT

# 8.1. Standard Applicable

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power.

# 8.2. Test Set-up



## 8.3. Measurement Procedure

The EUT's output RF connector was connected with a short cable to the spectrum analyzer, RBW was set to about 1% of emission BW, VBW= 3 times RBW, -26dBc display line was placed on the screen (or 26dB bandwidth), the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace. Then set RBW to 99% bandwidth, RBW= 1%, VBW= 3 RBW, with span > 2 \* Signal BW, set % Power = 99%.

NOTE: For the plot of bandwidth measurement, the marker of the 99% bandwidth is diamond-shape while the marker of the 26dB BW is arrow-mark

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sqs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

> t (886-2) 2299-3279 f (886-2) 2298-0488

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 39 of 189

# 8.4. Measurement Equipment Used

Conducted Emission (measured at antenna port) Test Site						
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.	
TYPE		NUMBER	NUMBER	CAL.		
Spectrum Analyzer	Agilent	E4446A	MY51100003	01/29/2015	01/28/2016	
Radio Communication Analyzer	R&S	CMU200	102189	02/11/2015	02/10/2016	
Radio Communication Analyzer	Anritsu	MT8820C	6200995019	10/08/2014	10/09/2015	
DC Block	Mini-Circuits	BLK-18-S+	1	01/02/2015	01/01/2016	
Attenuator	Mini-Circuit	BW-S10W2+	002	01/02/2015	01/01/2016	
Splitter	Agilent	11636B	N/A	01/02/2015	01/01/2016	
DC Power Supply	Agilent	E3640A	MY52410006	11/10/2014	11/09/2015	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate is unleastful and difference may be prosecuted to the full lest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 40 of 189

## 8.5. Measurement Result

## 99% Bandwidth

Frequency	СН	99% Bandwidth (kHz)		
(MHz)	CII	GPRS 850	<b>EDGE 850</b>	
824.20	128	246.039	240.259	
836.60	190	242.491	230.957	
848.80	251	246.496	250.426	

Frequency	СН	99% Bandwidth (kHz)		
(MHz)		GPRS 1900	EDGE 1900	
1850.20	512	242.553	249.671	
1880.00	661	242.787	253.300	
1909.80	810	242.942	243.970	

Frequency	СН	99% Bandwidth (MHz)			
(MHz)	Cn	WCDMA II	HSDPA II	HSUPA II	
1850.20	9262	4.1307	4.1374	4.1263	
1880.00	9400	4.1494	4.1637	4.1311	
1909.80	9538	4.1550	4.1397	4.1548	

Frequency	СН	99% Bandwidth (MHz)			
(MHz)	Ch	WCDMA V	HSDPA V	HSUPA V	
826.40	4132	4.1807	4.1710	4.1634	
836.60	4183	4.1751	4.1662	4.1649	
846.60	4233	4.1591	4.1580	4.1767	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate is unleastful and difference may be prosecuted to the full lest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 41 of 189

Frequency	СН	99% Bandwidth (MHz)		
(MHz)	Cii	CDMA BC0	EVDO BC0	
824.7	1013	1.2673	1.2634	
836.52	384	1.2701	1.2650	
848.31	777	1.2678	1.2673	

Frequency	СН	99% Bandwidth (MHz)		
(MHz)	CII	CDMA BC1	EVDO BC1	
1851.25	25	1.2657	1.2706	
1880	600	1.2663	1.2691	
1908.75	1175	1.2692	1.2761	

Frequency	СН	99% Bandwidth (MHz)		
(MHz)	CII	CDMA BC10	EVDO BC10	
817.9	476	1.2640	1.2673	
820.5	580	1.2604	1.2651	
823.1	684	1.2676	1.2658	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司畫面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SGS Taiwan Ltd.\*\*\* No.134 WitKungRoad NewTaineil@idl.strialPark Wukuplistrict.NewTaineiCity.Taiwan24803/新北市五股區新北產業園區五工路 134 號

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 f (886-2) 2298-0488



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 42 of 189

# 26dB Bandwidth

Frequency	СН	26dB Bandwidth (kHz)		
(MHz)	Cn	GPRS 850	EDGE 850	
824.20	128	319.218	307.726	
836.60	190	323.458	301.282	
848.80	251	318.974	316.718	

Frequency	СН	26dB Bandwidth (kHz)		
(MHz)	CII	GPRS 1900	EDGE 1900	
1850.20	512	318.579	321.936	
1880.00	661	319.628	314.778	
1909.80	810	317.041	305.303	

Frequency (MHz)	СН	26dB Bandwidth (MHz)		
	Ch	WCDMA II	HSDPA II	HSUPA II
1850.20	9262	4.634	4.647	4.635
1880.00	9400	4.620	4.642	4.667
1909.80	9538	4.635	4.624	4.630

Frequency (MHz)	СН	26dB Bandwidth (MHz)		
		WCDMA V	HSDPA V	HSUPA V
826.40	4132	4.736	4.726	4.706
836.60	4183	4.722	4.698	4.717
846.60	4233	4.701	4.724	4.713

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate is unleastful and difference may be prosecuted to the full lest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 43 of 189

Frequency (MHz)	СН	26dB Bandwidth (MHz)		
	CII	CDMA BC0	EVDO BC0	
824.7	1013	1.410	1.401	
836.52	384	1.415	1.417	
848.31	777	1.407	1.418	

Frequency (MHz)	СН		26dB Bandwidth (MHz)		
		CDMA BC1	EVDO BC1		
1851.25	25	1.420	1.417		
1880	600	1.421	1.414		
1908.75	1175	1.420	1.425		

Frequency (MHz)	СН	26dB Bandwidth (MHz)		
	Ch	CDMA BC10	EVDO BC10	
817.9	476	1.415	1.409	
820.5	580	1.409	1.402	
823.1	684	1.411	1.410	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司畫面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SGS Taiwan Ltd.\*\*\* No.134 WitKungRoad NewTaineil@idl.strialPark Wukuplistrict.NewTaineiCity.Taiwan24803/新北市五股區新北產業園區五工路 134 號

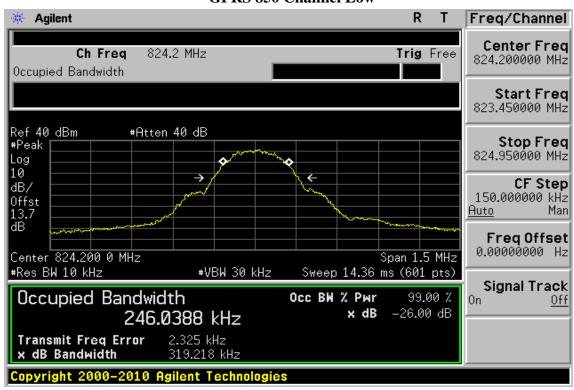
No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 www.tw.sqs.com

Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

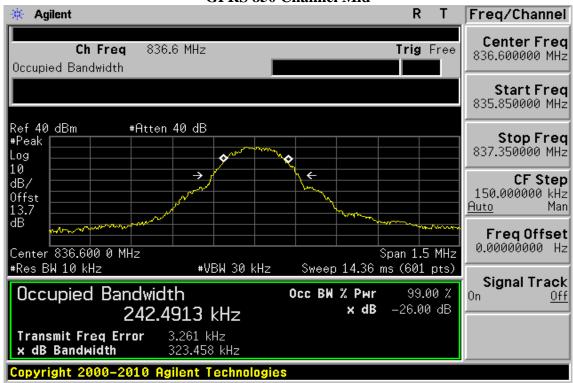
Page: 44 of 189

# 99% & 26dB Bandwidth Test Data

## **GPRS 850 Channel Low**



## **GPRS 850 Channel Mid**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

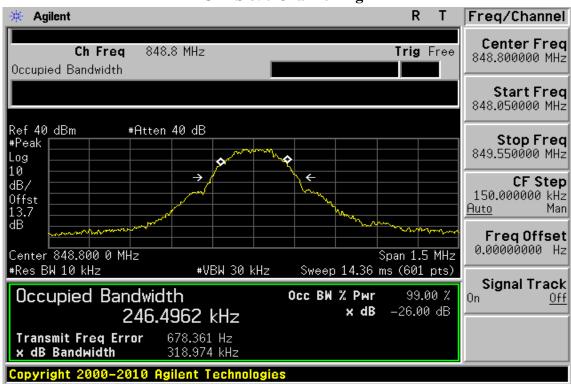
台灣檢驗科技股份有限公司

t (886-2) 2299-3279

Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 45 of 189

# **GPRS 850 Channel High**



## **EDGE 850 Channel Low**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for so days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留句天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format document, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format document, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions for electronic format document, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format document, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions for Electronic Document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention o Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

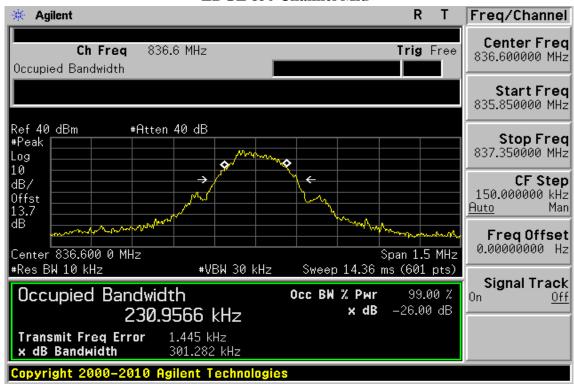
SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

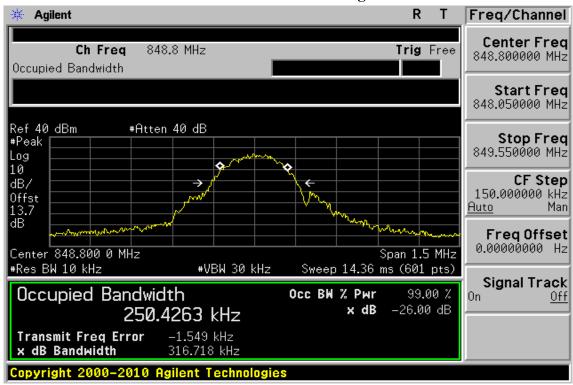
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 46 of 189

## **EDGE 850 Channel Mid**



# **EDGE 850 Channel High**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for so days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留句天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format document, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format document, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions for electronic format document, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format document, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions for Electronic Document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention o Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

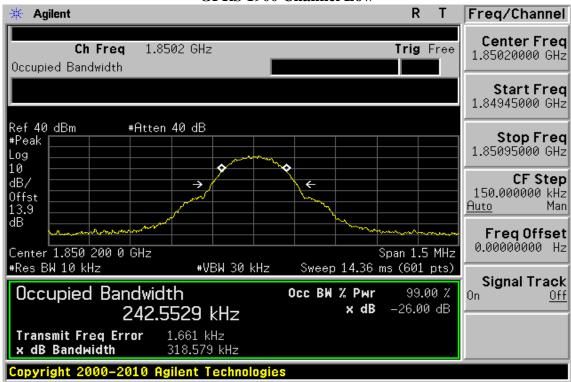
t (886-2) 2299-3279



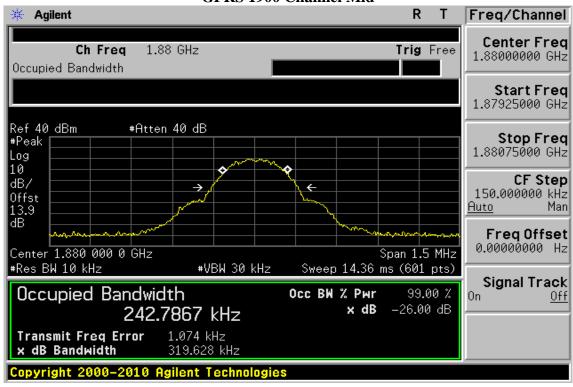
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 47 of 189

## **GPRS 1900 Channel Low**



## **GPRS 1900 Channel Mid**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

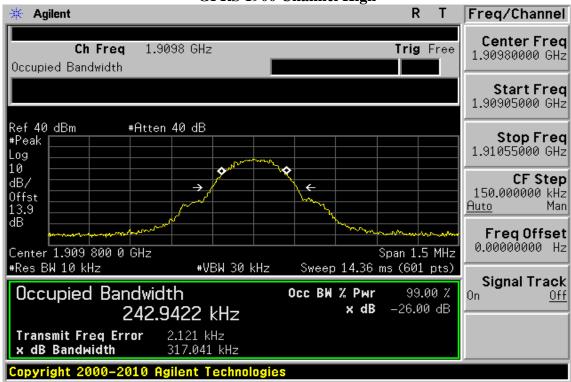
No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

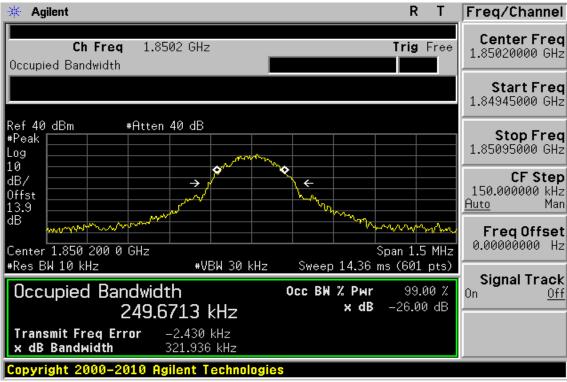
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 48 of 189

# **GPRS 1900 Channel High**



## **EDGE 1900 Channel Low**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

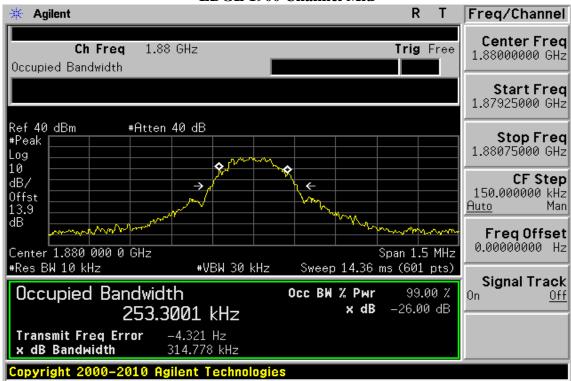
t (886-2) 2299-3279



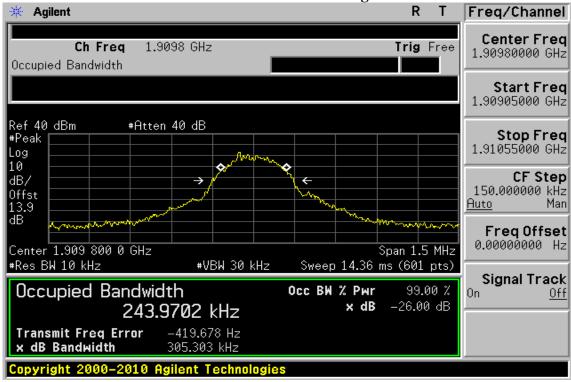
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 49 of 189

## **EDGE 1900 Channel Mid**



**EDGE 1900 Channel High** 



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

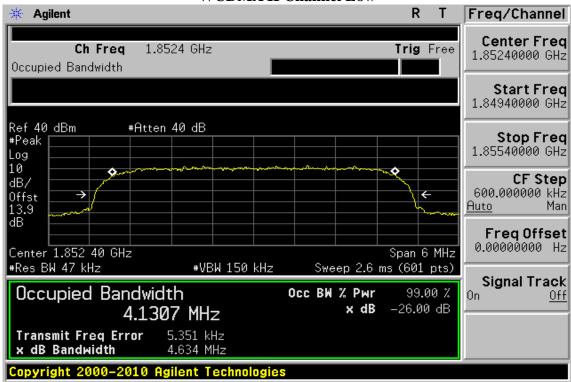
No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



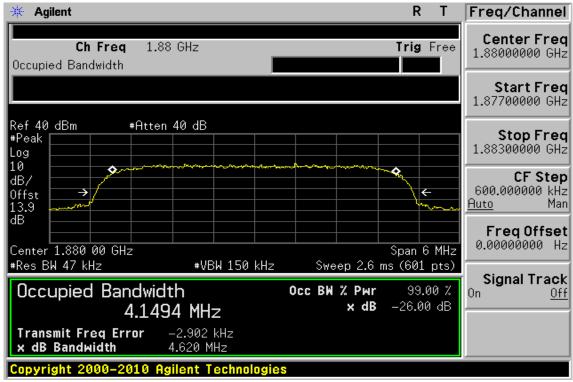
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 50 of 189

## WCDMA II Channel Low



## WCDMA II Channel Mid



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

f (886-2) 2298-0488

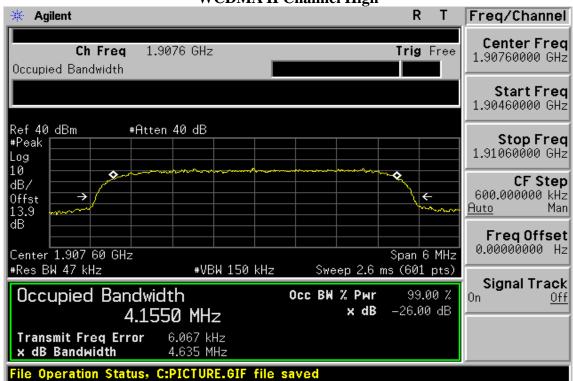
www.tw.sqs.com



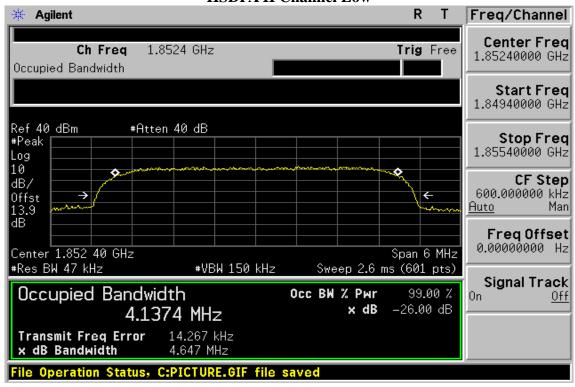
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 51 of 189

# **WCDMA II Channel High**



## **HSDPA II Channel Low**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

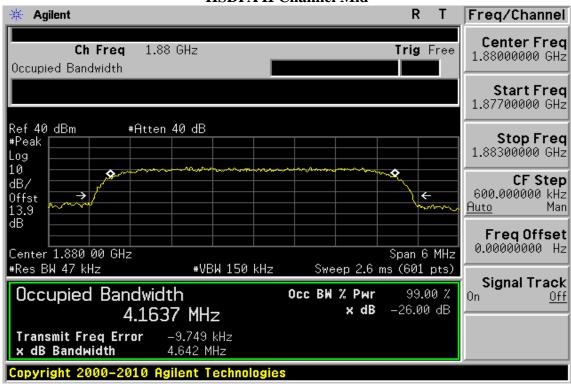
No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



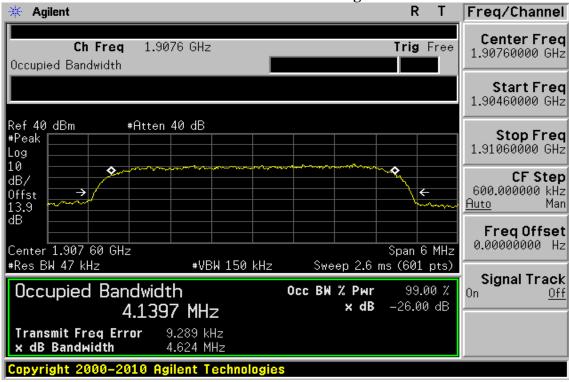
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 52 of 189

## **HSDPA II Channel Mid**



**HSDPA II Channel High** 



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

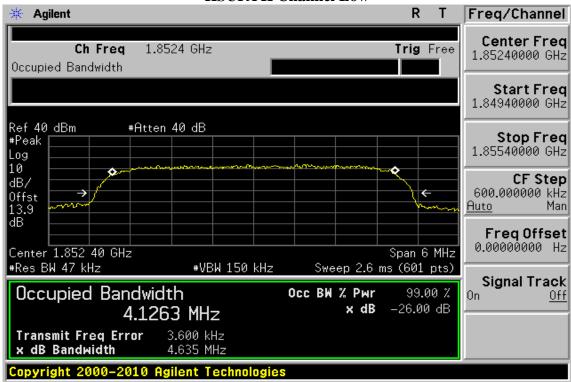
No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



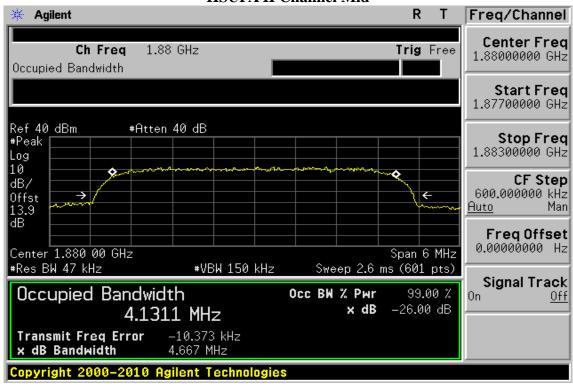
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 53 of 189

## **HSUPA II Channel Low**



## **HSUPA II Channel Mid**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

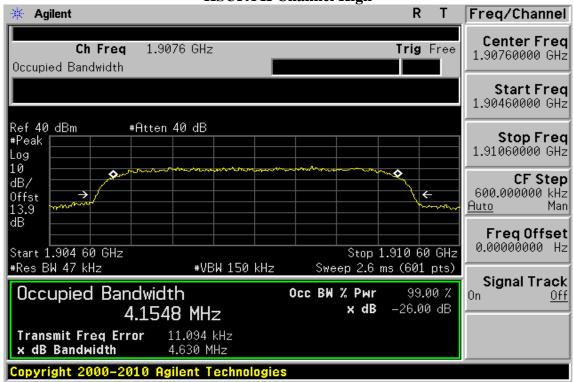
台灣檢驗科技股份有限公司



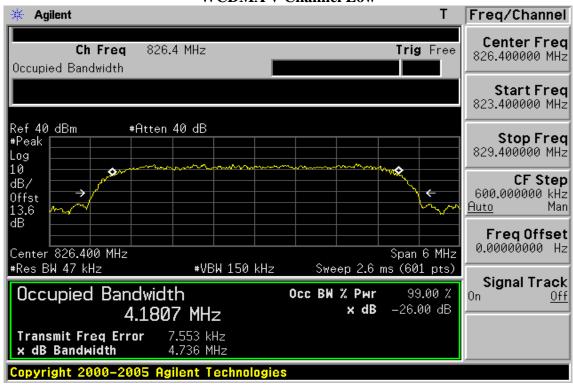
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 54 of 189

## **HSUPA II Channel High**



## WCDMA V Channel Low



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

f (886-2) 2298-0488

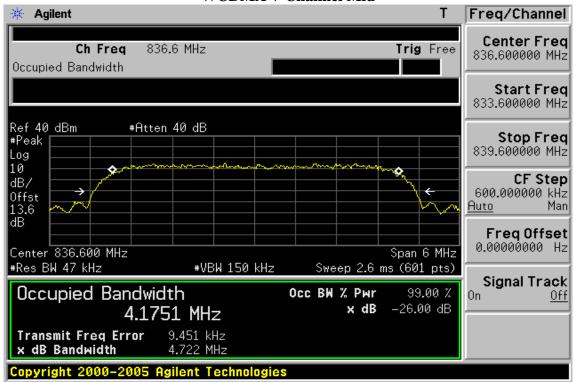
www.tw.sqs.com



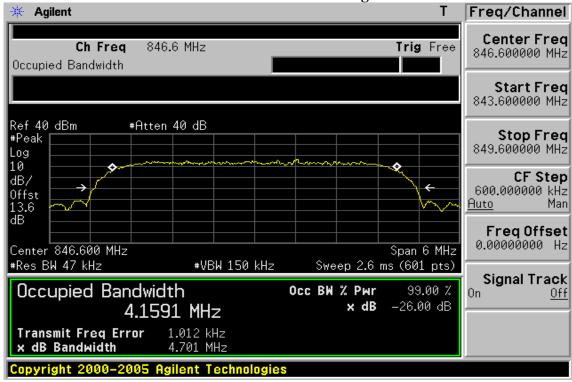
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 55 of 189

## **WCDMA V Channel Mid**



WCDMA V Channel High



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

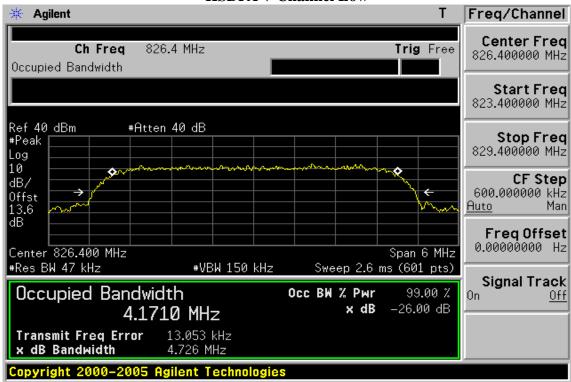
f (886-2) 2298-0488

www.tw.sqs.com

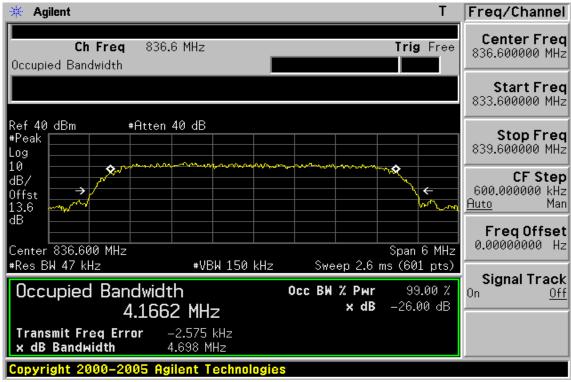
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 56 of 189

## **HSDPA V Channel Low**



## **HSDPA V Channel Mid**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

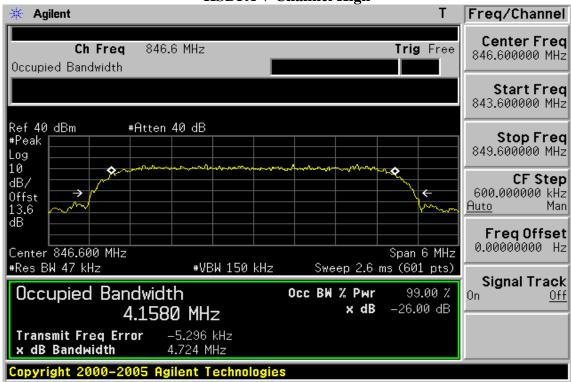
Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

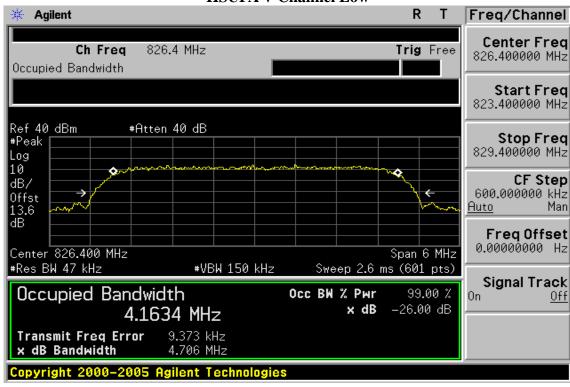
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 57 of 189

# **HSDPA V Channel High**



## **HSUPA V Channel Low**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

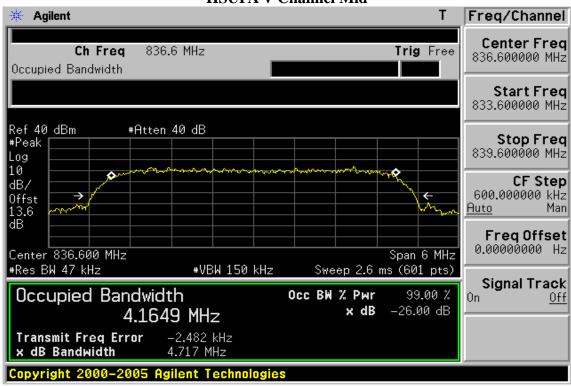
Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

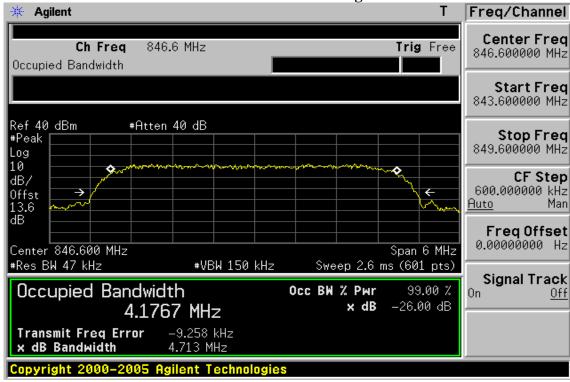
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 58 of 189

## **HSUPA V Channel Mid**



**HSUPA V Channel High** 



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

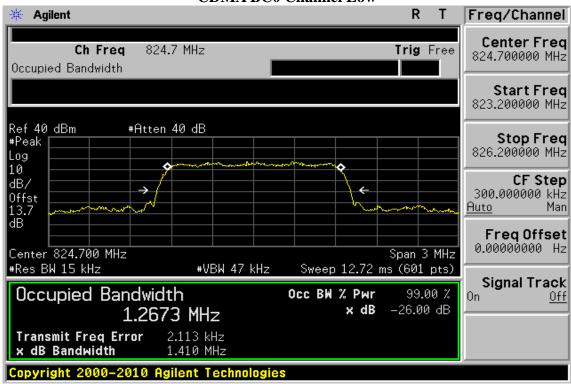
台灣檢驗科技股份有限公司



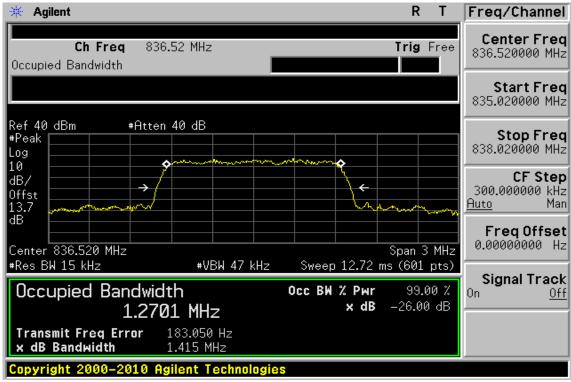
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 59 of 189

## **CDMA BC0 Channel Low**



## **CDMA BC0 Channel Mid**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

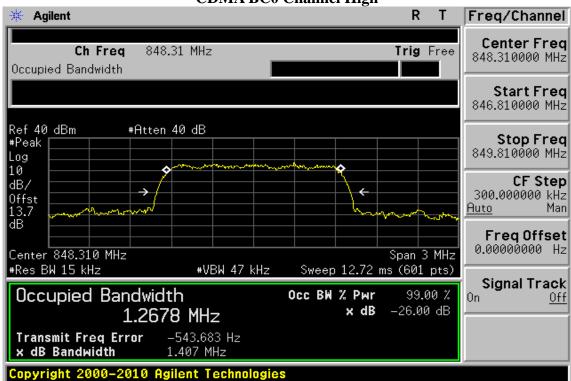
f (886-2) 2298-0488 www.tw.sqs.com



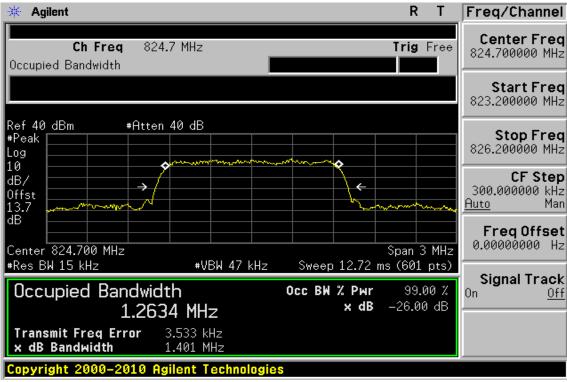
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 60 of 189

# **CDMA BC0 Channel High**



## **EVDO BC0 Channel Low**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

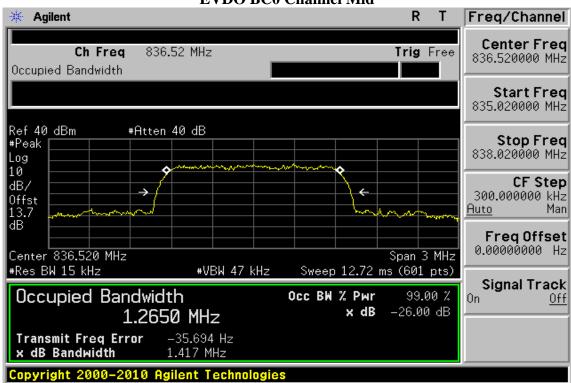
台灣檢驗科技股份有限公司



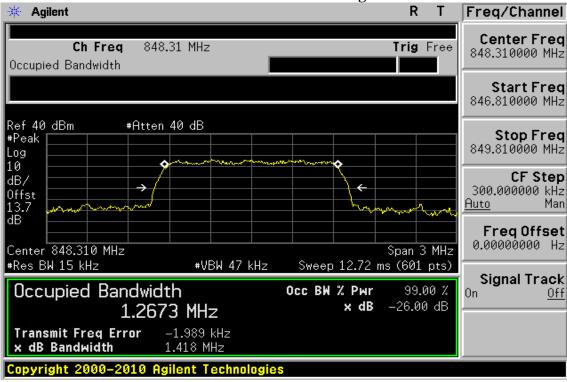
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 61 of 189

## **EVDO BC0 Channel Mid**



**EVDO BC0 Channel High** 



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

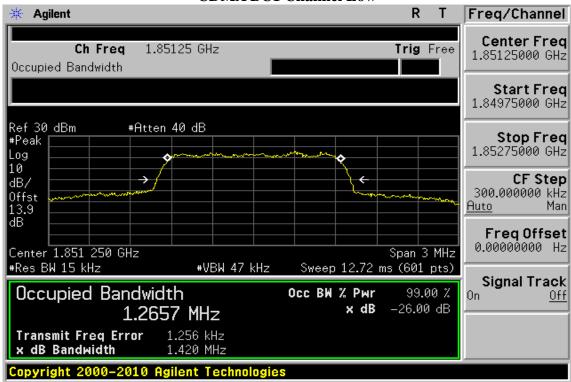
www.tw.sqs.com



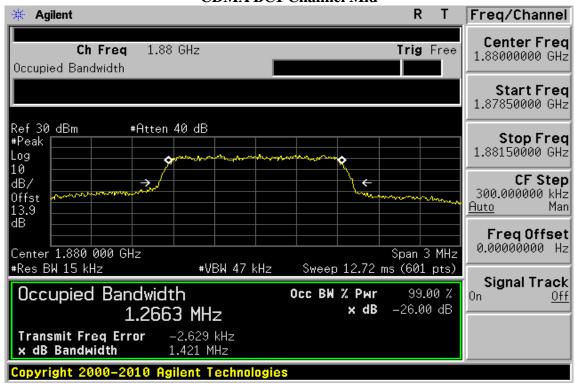
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 62 of 189

## **CDMA BC1 Channel Low**



## **CDMA BC1 Channel Mid**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

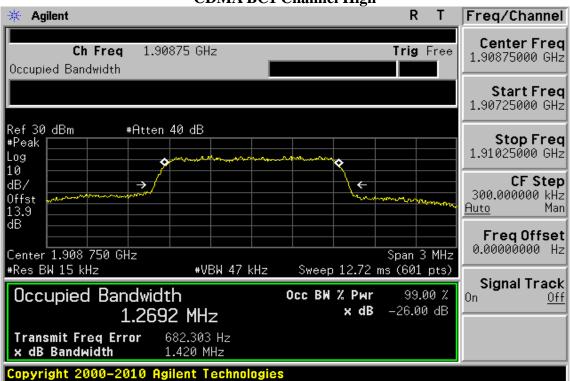
t (886-2) 2299-3279



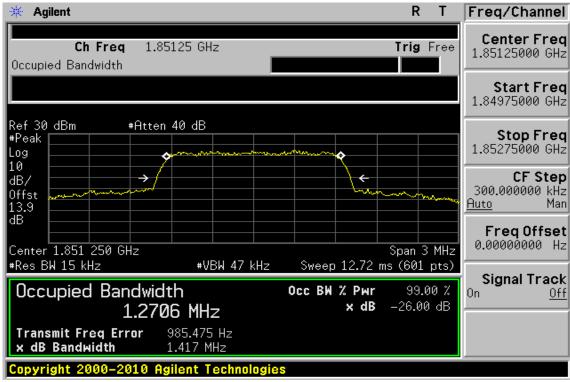
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 63 of 189

## **CDMA BC1 Channel High**



## **EVDO BC1 Channel Low**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

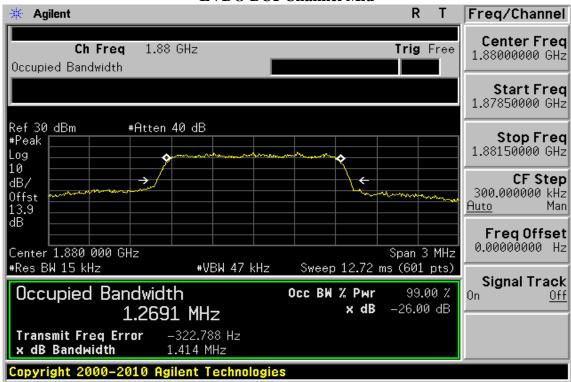
No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



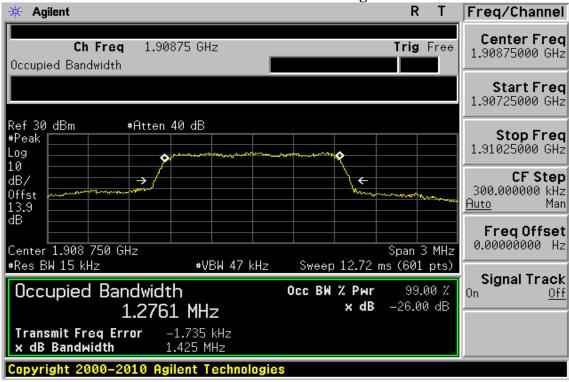
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 64 of 189

## **EVDO BC1 Channel Mid**



**EVDO BC1 Channel High** 



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

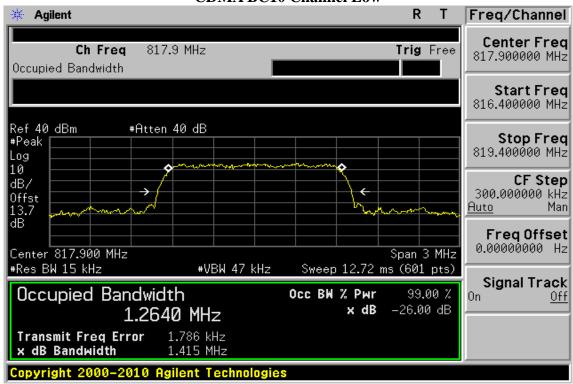
f (886-2) 2298-0488 www.tw.sqs.com



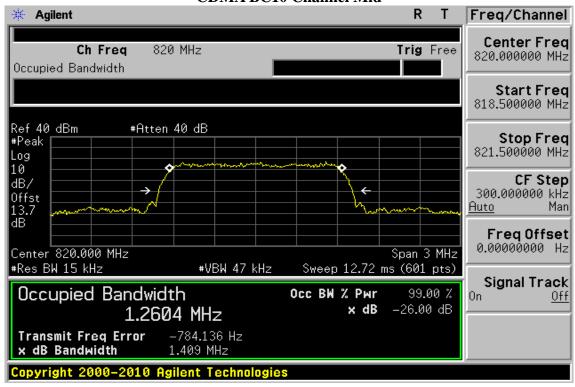
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 65 of 189

## **CDMA BC10 Channel Low**



## **CDMA BC10 Channel Mid**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

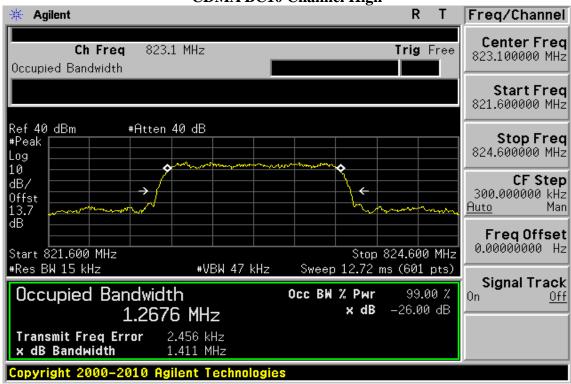
No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



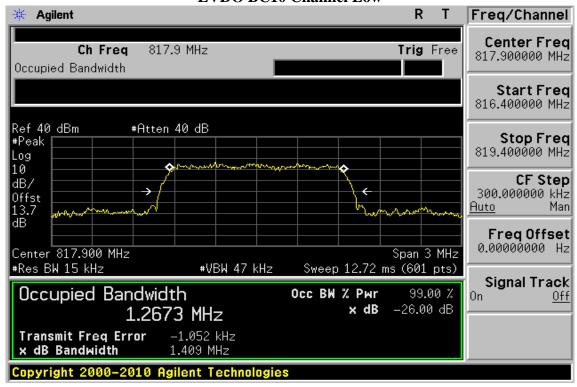
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 66 of 189

# **CDMA BC10 Channel High**



## **EVDO BC10 Channel Low**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

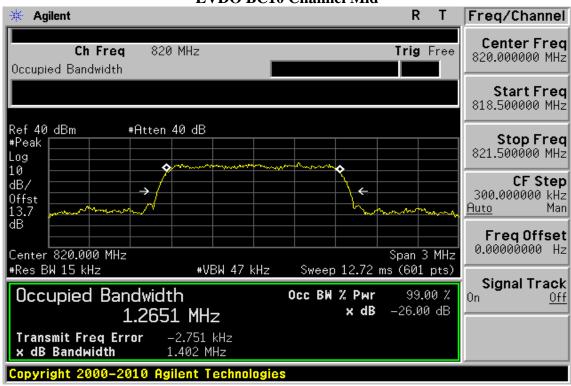
台灣檢驗科技股份有限公司



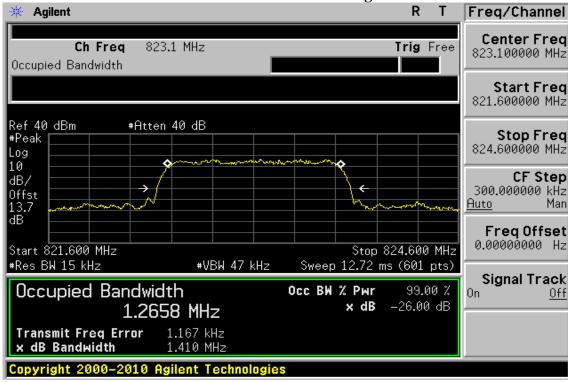
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 67 of 189

## **EVDO BC10 Channel Mid**



**EVDO BC10 Channel High** 



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 68 of 189

# 9. OUT OF BAND EMISSION AT ANTENNA TERMINALS

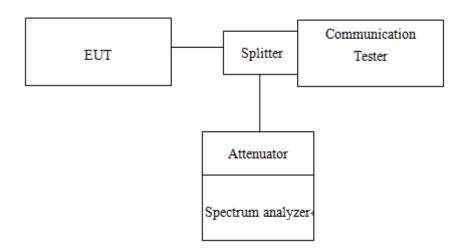
# 9.1. Standard Applicable

FCC §22.917(a), §24.238(a), §90.691(a)(1)the magnitude of each spurious and harmonic emission that can be detected when the equipment is operated under the conditions specified in the instruction manual and/ or alignment procedure, shall not be less than 43 + 10 log (mean output power in watts) dBc below the mean power output outside a license's frequency block (-13dBm).

# FCC §90.691(a)(2)

For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 Log10(f/6.1) decibels or 50 + 10 Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

# 9.2. Test SET-UP



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sqs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 www.tw.sqs.com



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 69 of 189

## 9.3. Measurement Procedure

## **Conducted Emission**

The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation The resolution bandwidth of the spectrum analyzer was set at 1MHz, sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic.

- 1. To connect Antenna Port of EUT to Spectrum.
- 2. Set RBW = 1MHz & VBW = 1MHz on Spectrum.
- 3. Allow trace to fully stabilize
- 4. Repeat above procedures until all default test channel measured were complete.

# **Band Edge**

- To connect Antenna Port of EUT to Spectrum.
- 2. The band edge of low and high channels for the highest RF powers was measured. Setting RBW  $\geq$ 1% EBW.
- 3. Allow trace to fully stabilize
- 4. Repeat above procedures until all default test channel measured were complete.

# 9.4. Measurement Equipment Used

Conducted Emission (measured at antenna port) Test Site						
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.	
TYPE		NUMBER	NUMBER	CAL.		
Spectrum Analyzer	Agilent	E4446A	MY51100003	01/29/2015	01/28/2016	
Radio Communication Analyzer	R&S	CMU200	102189	02/11/2015	02/10/2016	
Radio Communication Analyzer	Anritsu	MT8820C	6200995019	10/08/2014	10/09/2015	
DC Block	Mini-Circuits	BLK-18-S+	1	01/02/2015	01/01/2016	
Attenuator	Mini-Circuit	BW-S10W2+	002	01/02/2015	01/01/2016	
Splitter	Agilent	11636B	N/A	01/02/2015	01/01/2016	
DC Power Supply	Agilent	E3640A	MY52410006	11/10/2014	11/09/2015	

# 9.5. Measurement Result:

Refer to next pages.

NOTE: The occurrence of the spike on the conducted emission is the signal of the fundamental emission.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms\_and\_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

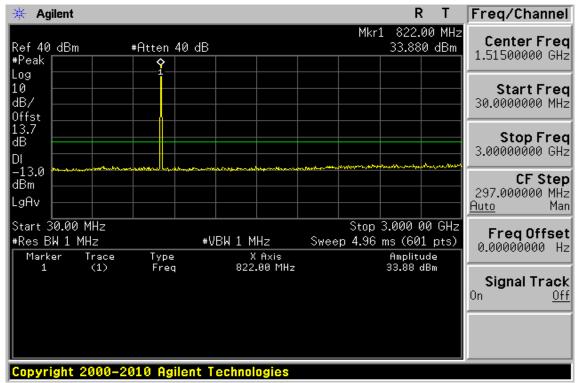
No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 t (886-2) 2299-3279 f (886-2) 2298-0488 www.tw.sqs.com

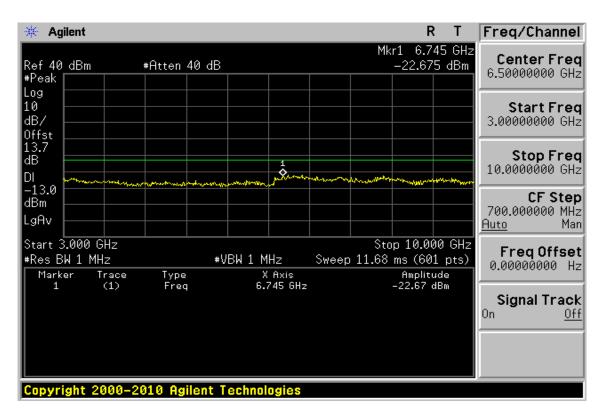


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 70 of 189

## Out of Band emission at antenna terminals - GPRS 850 Channel Lowest





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

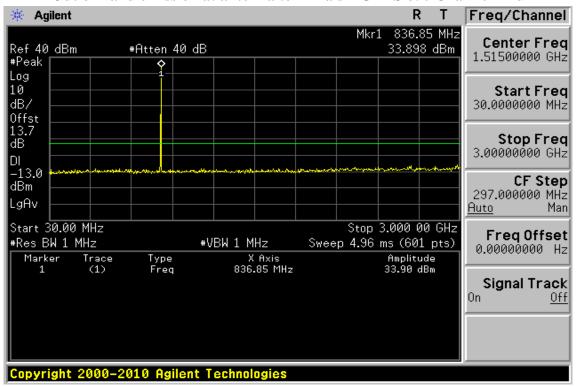
www.tw.sqs.com

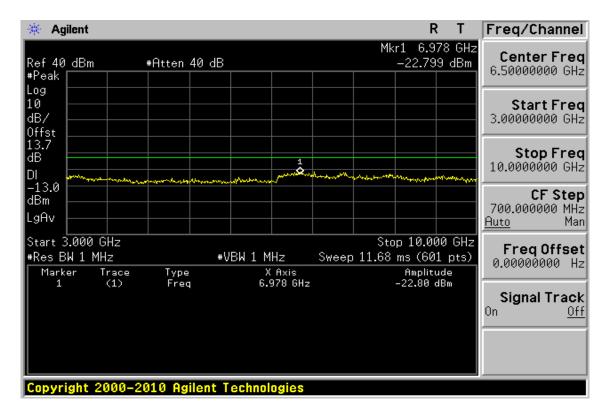


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 71 of 189

## Out of Band emission at antenna terminals – GPRS 850 Channel Mid





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for elec-Trois occurrents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms-e-document.htm">www.sgs.com/terms-e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

SGS Taiwan Ltd.

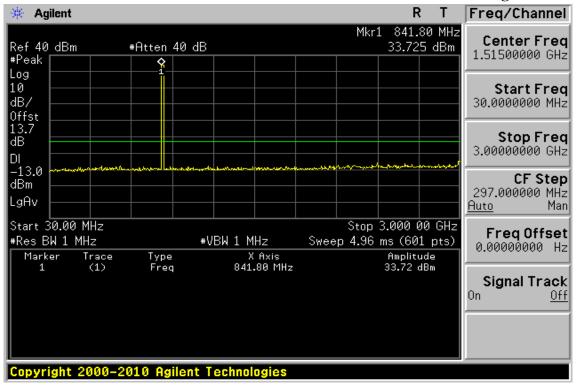
t (886-2) 2299-3279

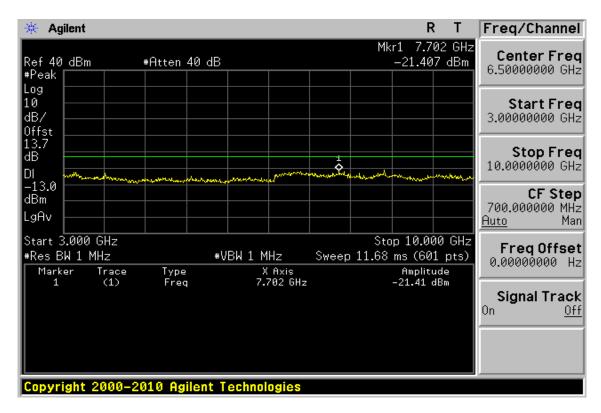


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 72 of 189

# Out of Band emission at antenna terminals – GPRS 850 Channel Highest





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for elec-Trois occurrents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms-e-document.htm">www.sgs.com/terms-e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

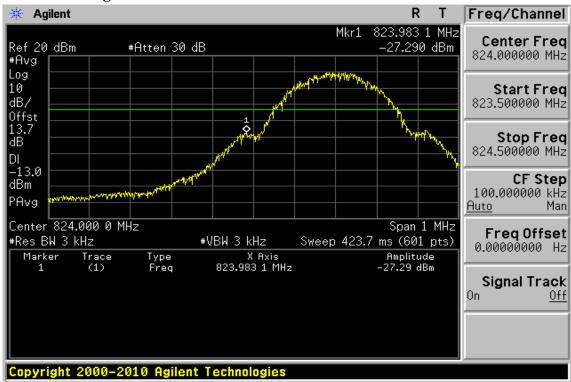
台灣檢驗科技股份有限公司 t (886-2) 2299-3279 f (886-2) 2298-0488

www.tw.sqs.com

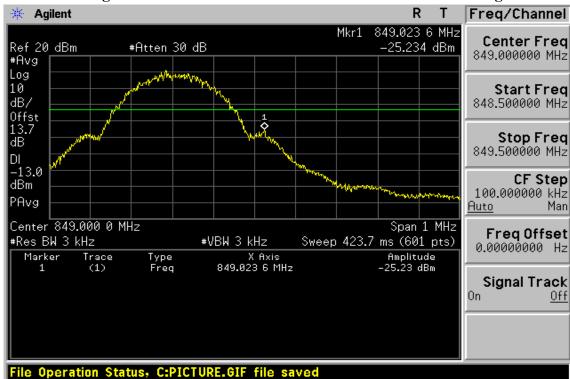
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 73 of 189

## Band edge emission at antenna terminals - GPRS 850 Channel Lowest



## Band edge emission at antenna terminals - GPRS 850 Channel Highest



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

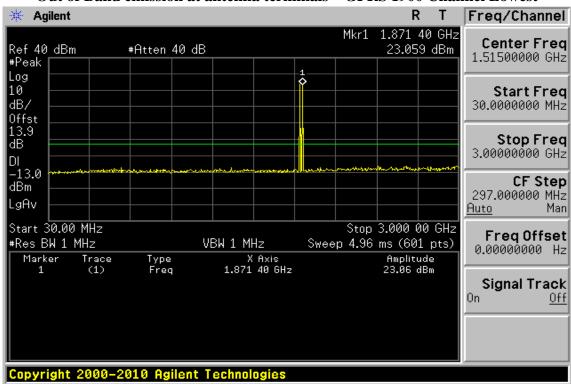
台灣檢驗科技股份有限公司

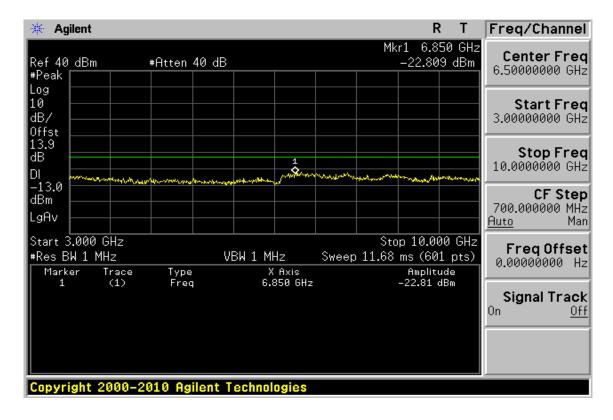


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 74 of 189

### Out of Band emission at antenna terminals - GPRS 1900 Channel Lowest





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

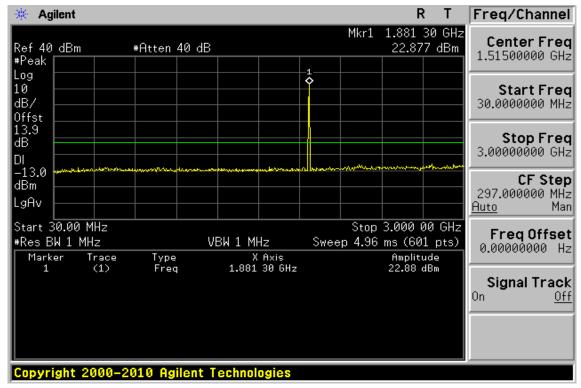
No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

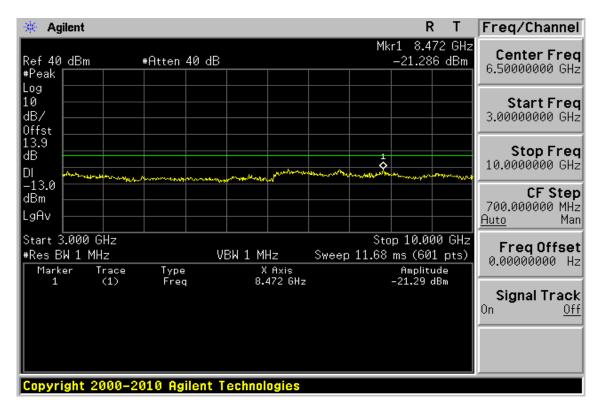


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 75 of 189

### Out of Band emission at antenna terminals – GPRS 1900 Channel Mid





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

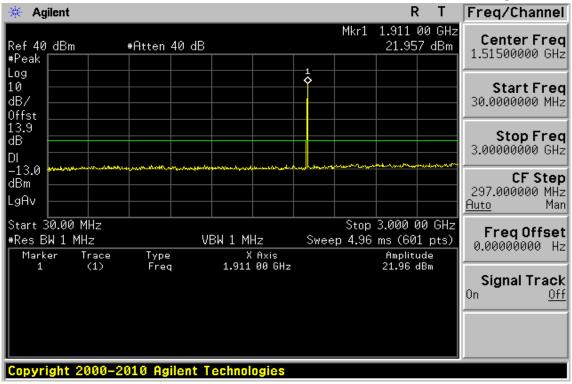
f (886-2) 2298-0488

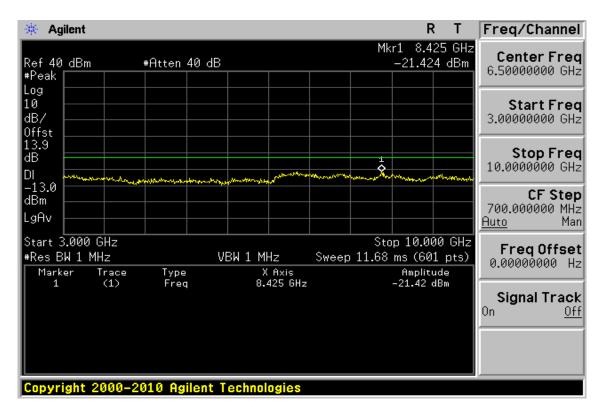


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 76 of 189

## Out of Band emission at antenna terminals – GPRS 1900 Channel Highest





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for elec-Trois occurrents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms-e-document.htm">www.sgs.com/terms-e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

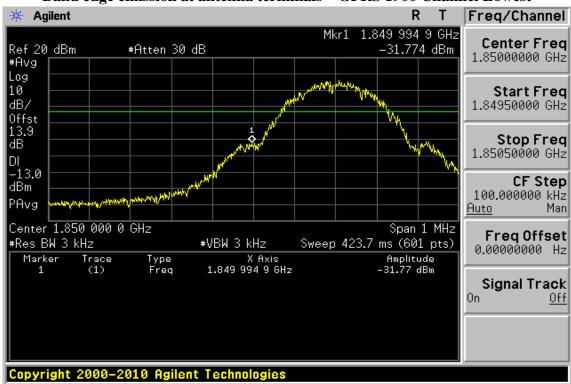
台灣檢驗科技股份有限公司

t (886-2) 2299-3279

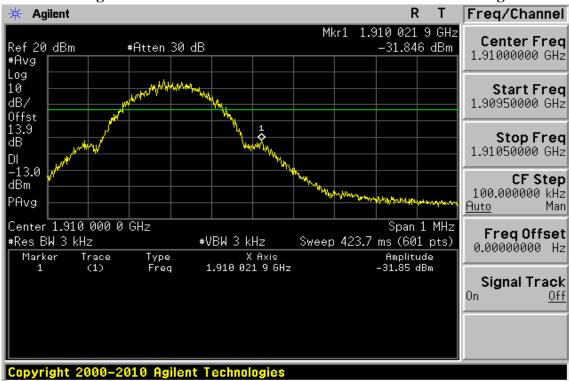
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 77 of 189

## Band edge emission at antenna terminals - GPRS 1900 Channel Lowest



## Band edge emission at antenna terminals - GPRS 1900 Channel Highest



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

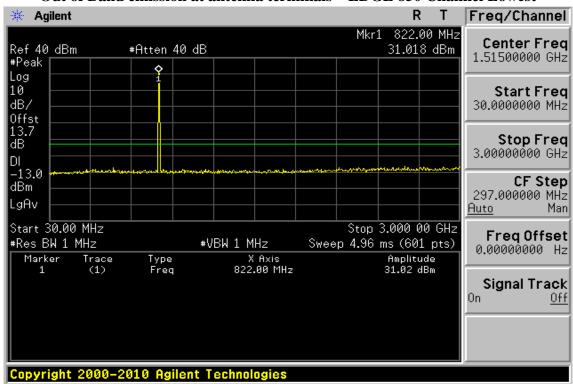
t (886-2) 2299-3279

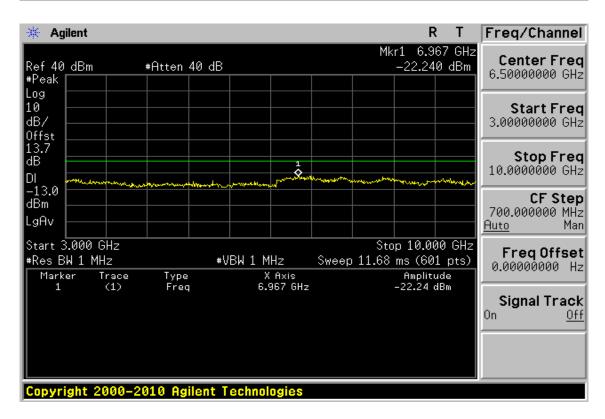


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 78 of 189

### Out of Band emission at antenna terminals – EDGE 850 Channel Lowest





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or ap-

pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

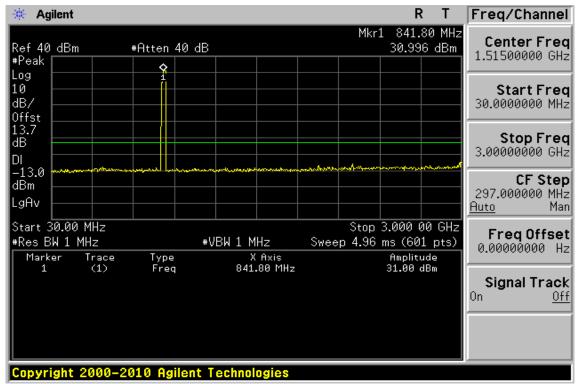
f (886-2) 2298-0488

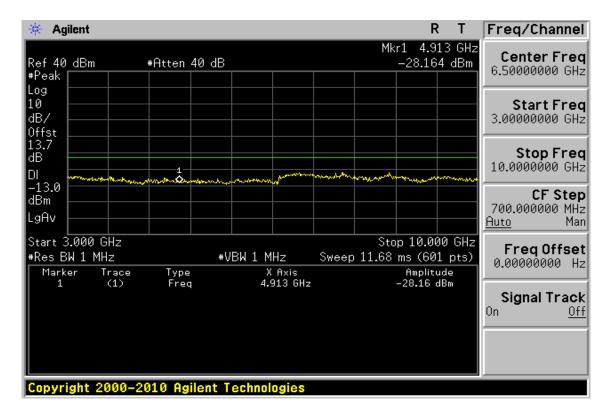


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 79 of 189

### Out of Band emission at antenna terminals – EDGE 850 Channel Mid





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for elec-Trois occurrents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms-e-document.htm">www.sgs.com/terms-e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

SGS Taiwan Ltd.

t (886-2) 2299-3279

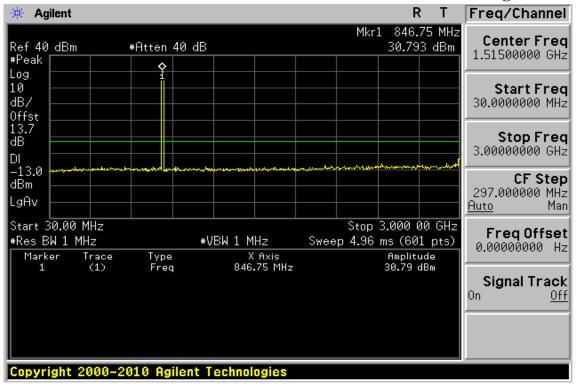
f (886-2) 2298-0488

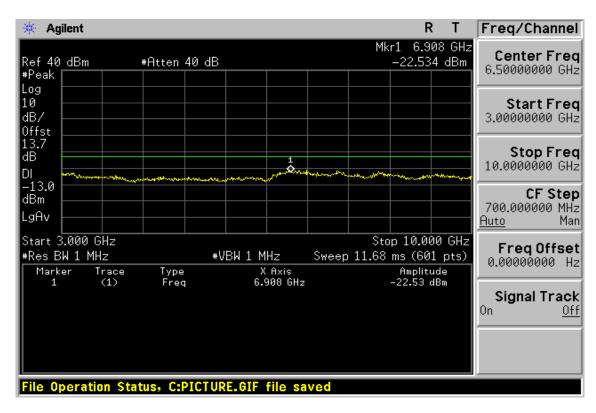


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 80 of 189

## Out of Band emission at antenna terminals – EDGE 850 Channel Highest





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for elec-Trois occurrents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms-e-document.htm">www.sgs.com/terms-e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

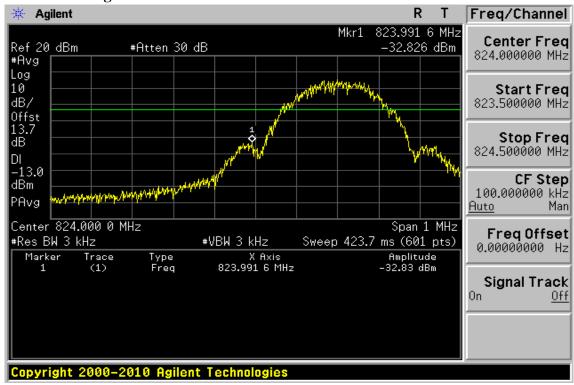
t (886-2) 2299-3279

f (886-2) 2298-0488

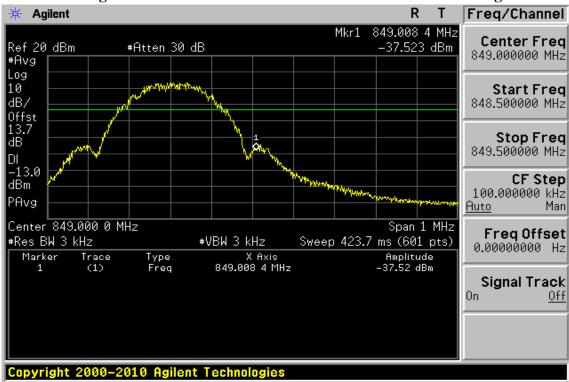
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 81 of 189

## Band edge emission at antenna terminals – EDGE 850 Channel Lowest



### Band edge emission at antenna terminals – EDGE 850 Channel Highest



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for elec-

tronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

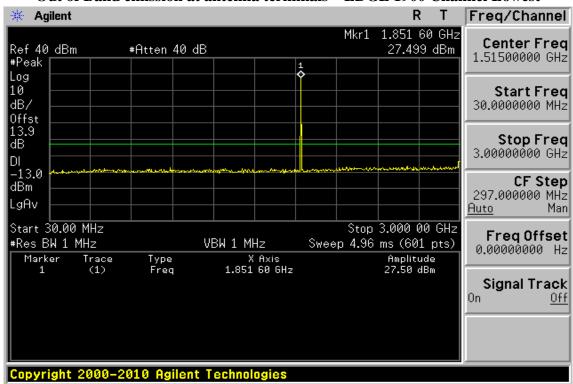
台灣檢驗科技股份有限公司

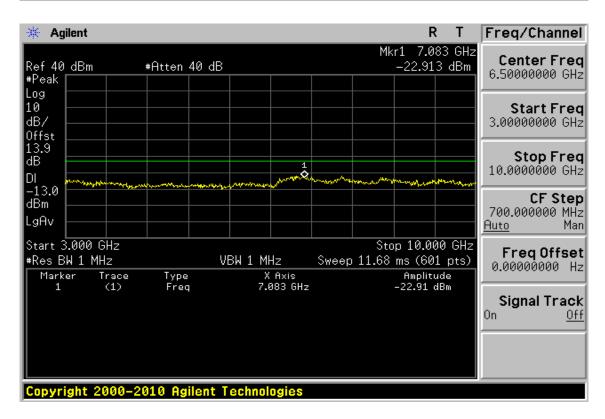


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 82 of 189

### Out of Band emission at antenna terminals - EDGE 1900 Channel Lowest





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

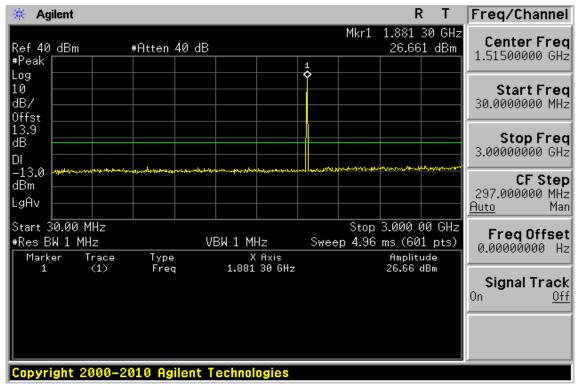
f (886-2) 2298-0488

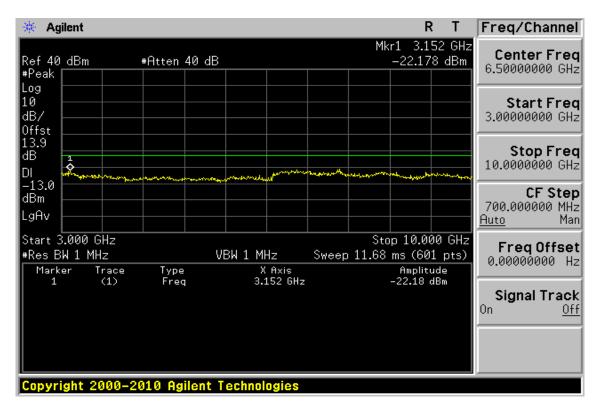


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 83 of 189

### Out of Band emission at antenna terminals – EDGE 1900 Channel Mid





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

SGS Taiwan Ltd.

t (886-2) 2299-3279

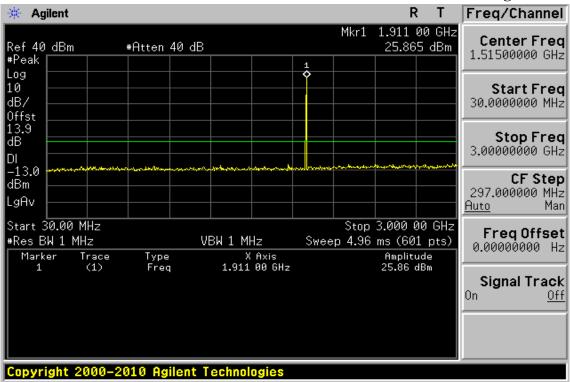
f (886-2) 2298-0488

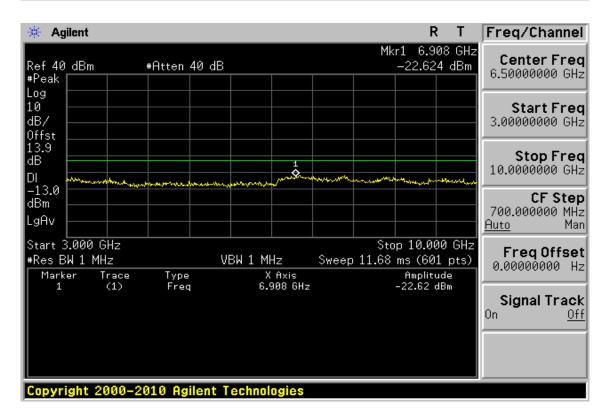


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 84 of 189

## Out of Band emission at antenna terminals – EDGE 1900 Channel Highest





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for elec-Trois occurrents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms-e-document.htm">www.sgs.com/terms-e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

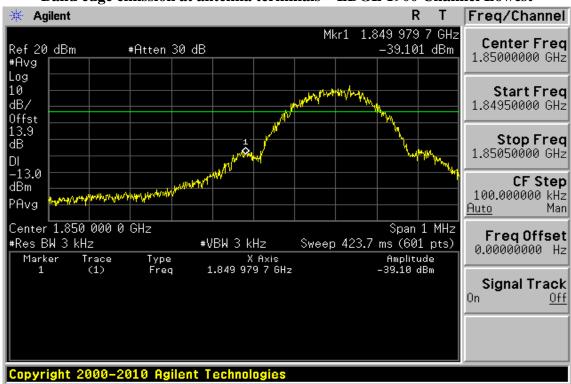
No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

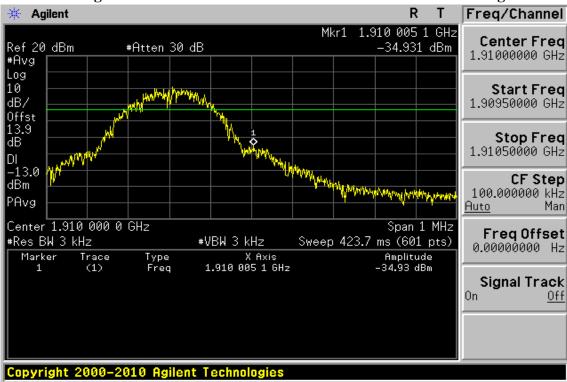
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 85 of 189

## Band edge emission at antenna terminals - EDGE 1900 Channel Lowest



## Band edge emission at antenna terminals - EDGE 1900 Channel Highest



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

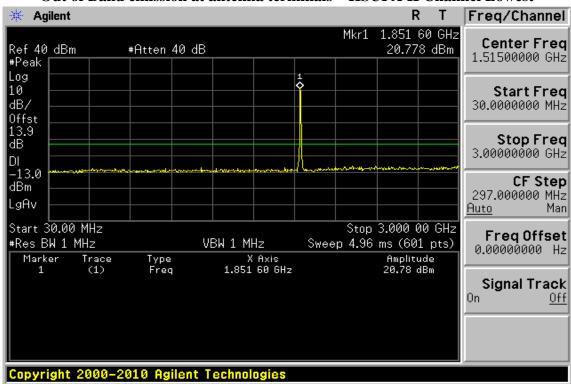
t (886-2) 2299-3279

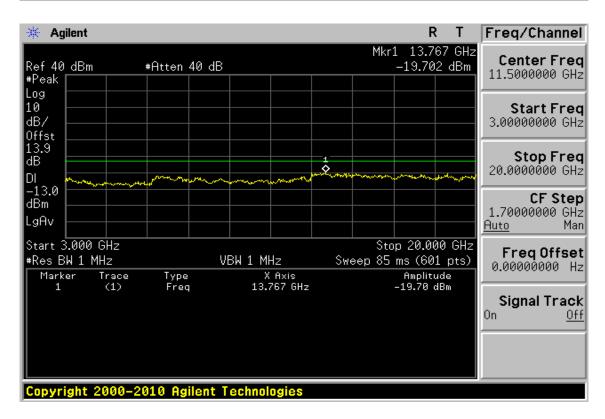


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 86 of 189

### Out of Band emission at antenna terminals - HSUPA II Channel Lowest





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

SGS Taiwan Ltd.

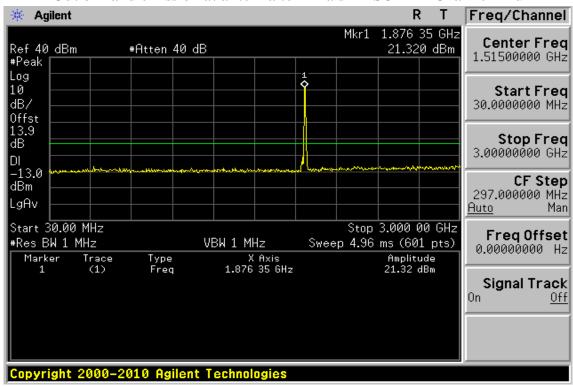
t (886-2) 2299-3279

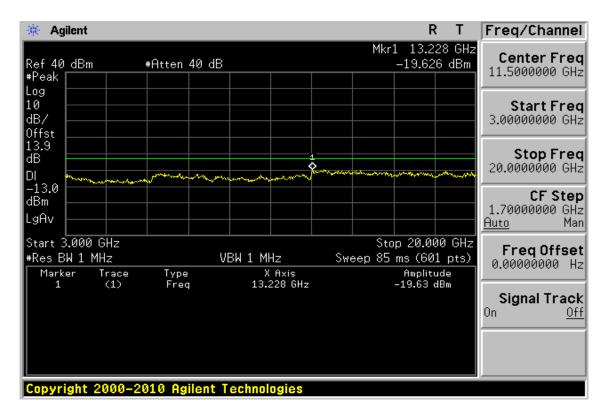


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 87 of 189

#### Out of Band emission at antenna terminals – HSUPA II Channel Mid





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for elec-Trois occurrents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms-e-document.htm">www.sgs.com/terms-e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

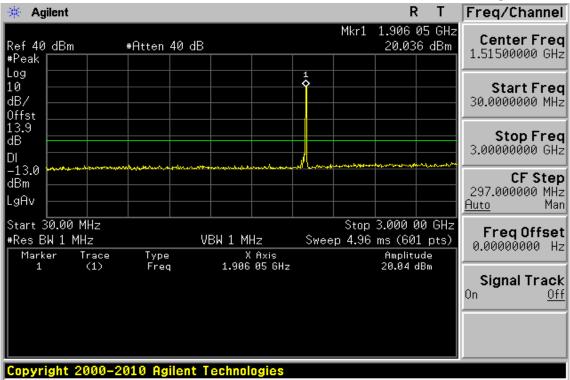
t (886-2) 2299-3279

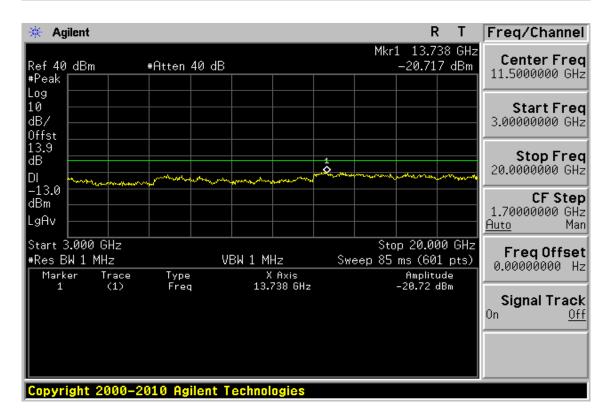


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 88 of 189

## Out of Band emission at antenna terminals – HSUPA II Channel Highest





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for elec-Trois occurrents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms-e-document.htm">www.sgs.com/terms-e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

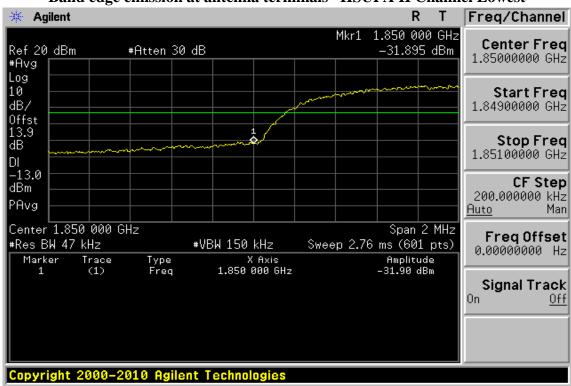
台灣檢驗科技股份有限公司

t (886-2) 2299-3279

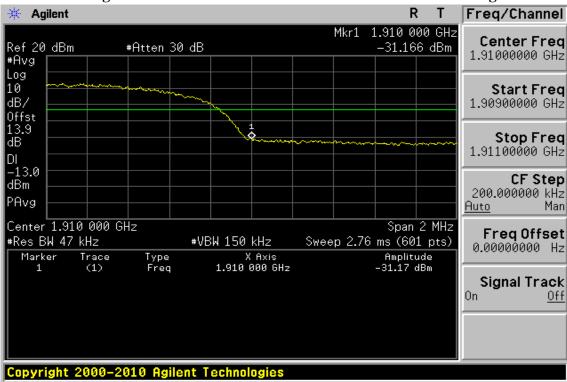
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 89 of 189

## Band edge emission at antenna terminals -HSUPA II Channel Lowest



## Band edge emission at antenna terminals -HSUPA II Channel Highest



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for elec-

This document is issued by the Company subject to its General Conditions of Service printed overleat, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm</a> and and conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or ap-

pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

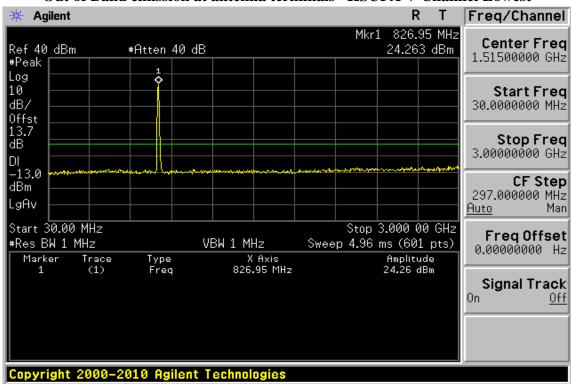
| No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

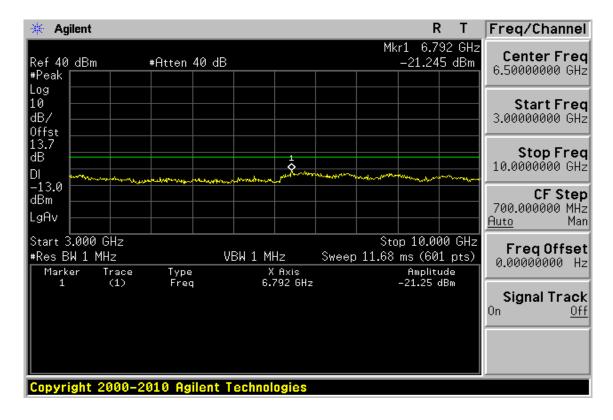


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 90 of 189

### Out of Band emission at antenna terminals -HSUPA V Channel Lowest





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

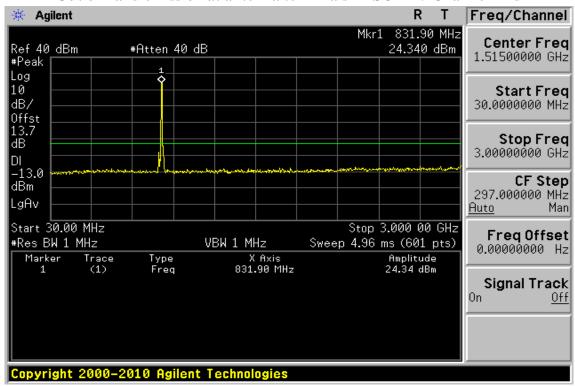
f (886-2) 2298-0488

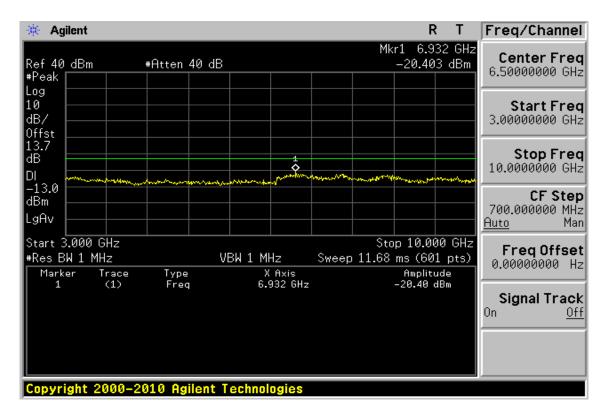


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 91 of 189

#### Out of Band emission at antenna terminals –HSUPA V Channel Mid





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for elec-Trois occurrents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms-e-document.htm">www.sgs.com/terms-e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

SGS Taiwan Ltd.

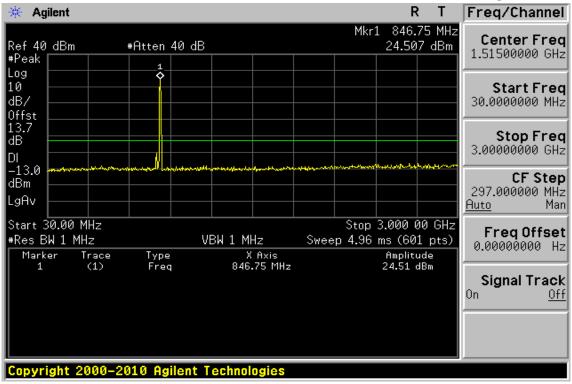
t (886-2) 2299-3279

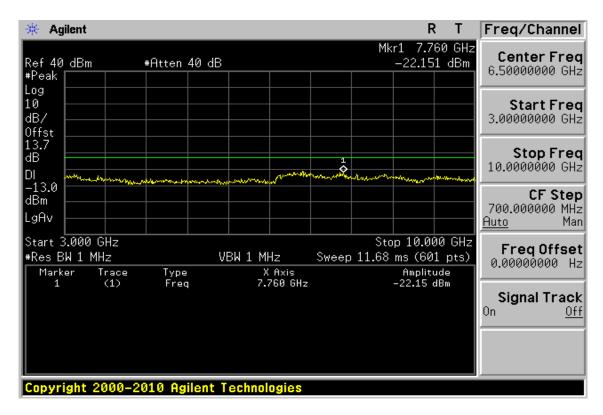


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 92 of 189

## Out of Band emission at antenna terminals -HSUPA V Channel Highest





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for elec-Trois occurrents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms-e-document.htm">www.sgs.com/terms-e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

f (886-2) 2298-0488

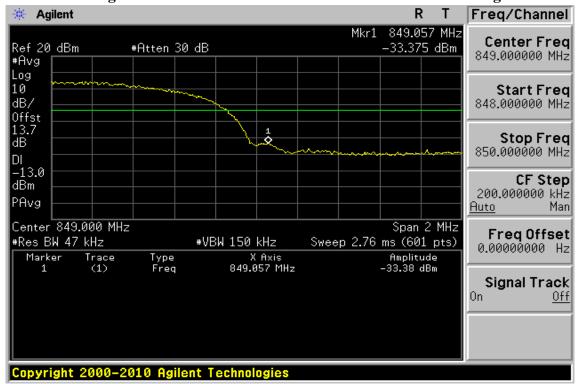
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 93 of 189

### Band edge emission at antenna terminals -HSUPA V Channel Lowest



# Band edge emission at antenna terminals -HSUPA V Channel Highest



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

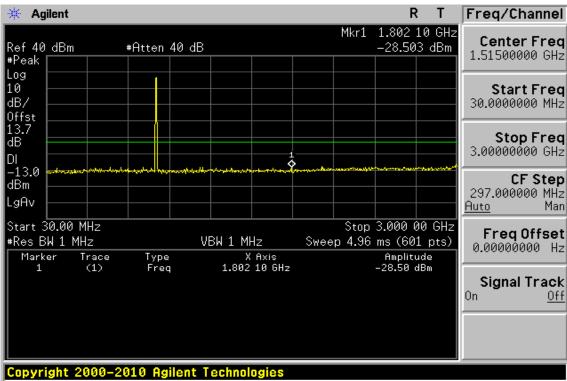
f (886-2) 2298-0488

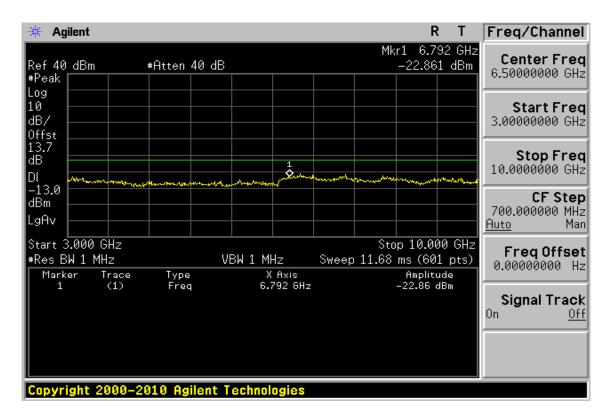


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 94 of 189

### Out of Band emission at antenna terminals - CDMA BC0 Channel Lowest





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

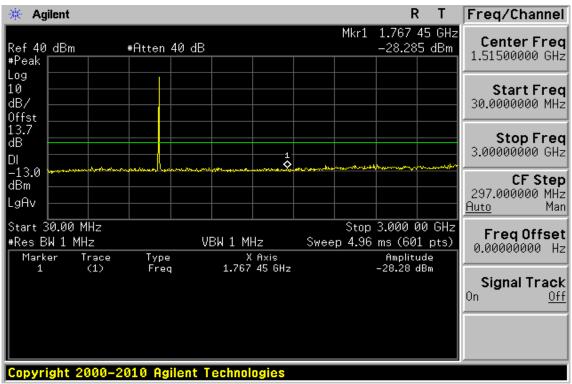
t (886-2) 2299-3279

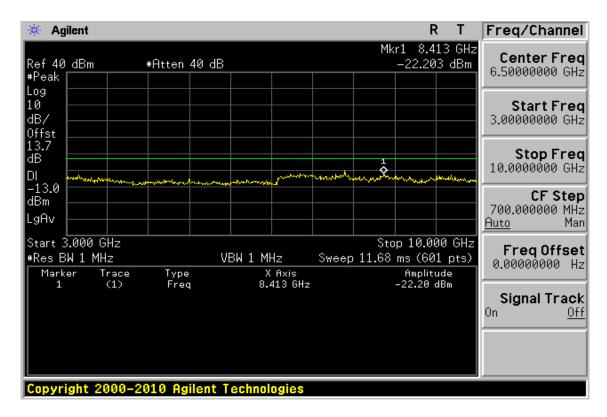


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 95 of 189

### Out of Band emission at antenna terminals – CDMA BC0 Channel Mid





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for elec-Trois occurrents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms-e-document.htm">www.sgs.com/terms-e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

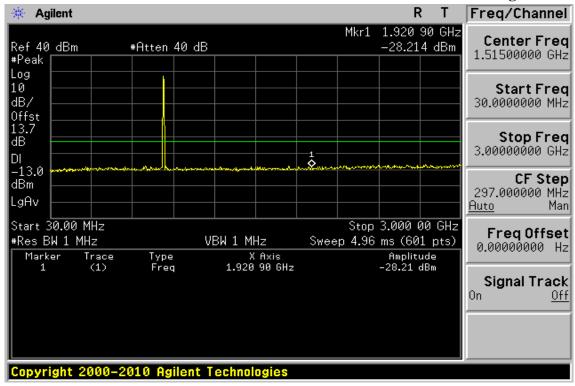
f (886-2) 2298-0488

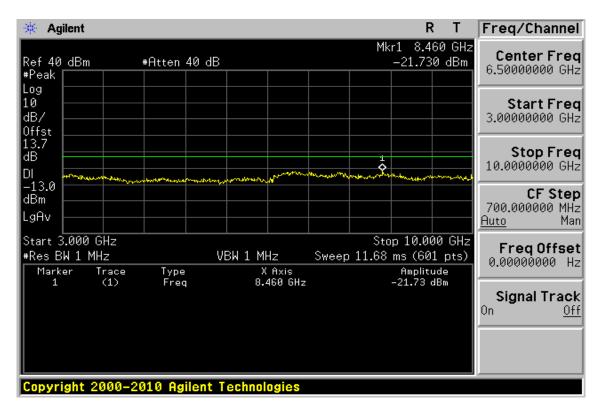


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 96 of 189

## Out of Band emission at antenna terminals – CDMA BC0 Channel Highest





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for elec-Trois occurrents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms-e-document.htm">www.sgs.com/terms-e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

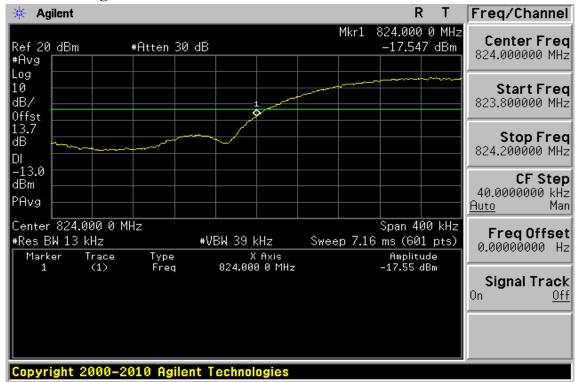
f (886-2) 2298-0488



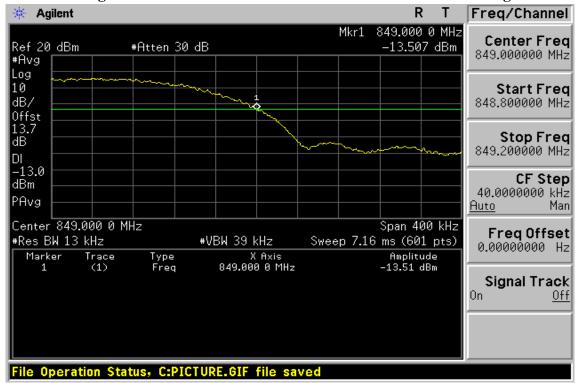
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 97 of 189

## Band edge emission at antenna terminals - CDMA BC0 Channel Lowest



# Band edge emission at antenna terminals - CDMA BC0 Channel Highest



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

SGS Taiwan Ltd.

t (886-2) 2299-3279

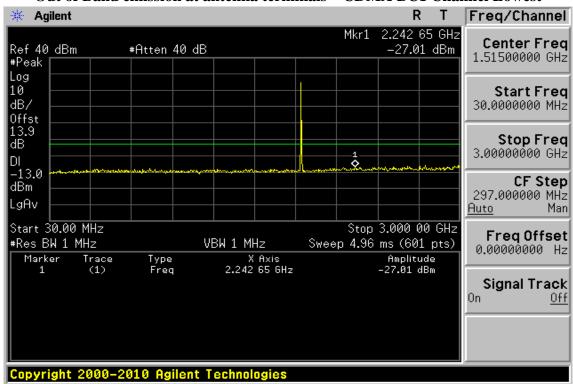
f (886-2) 2298-0488

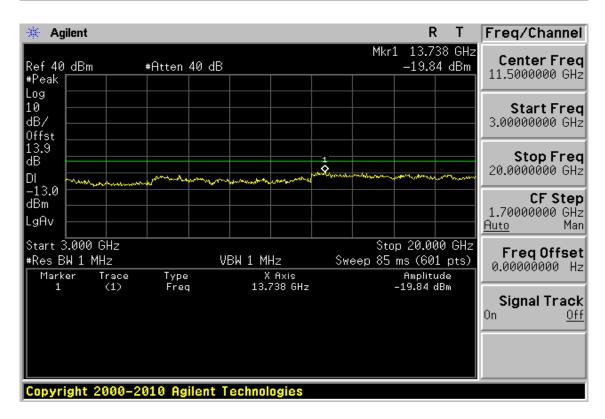


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 98 of 189

### Out of Band emission at antenna terminals - CDMA BC1 Channel Lowest





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for elec-

tronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

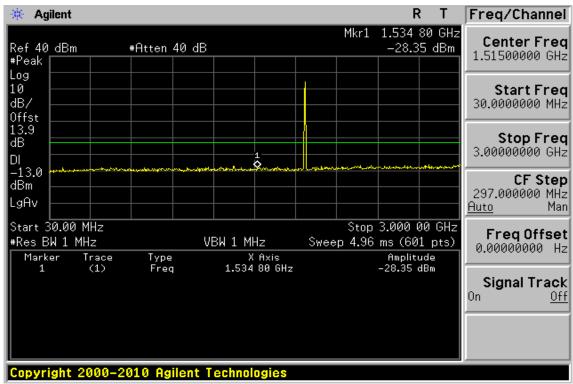
f (886-2) 2298-0488

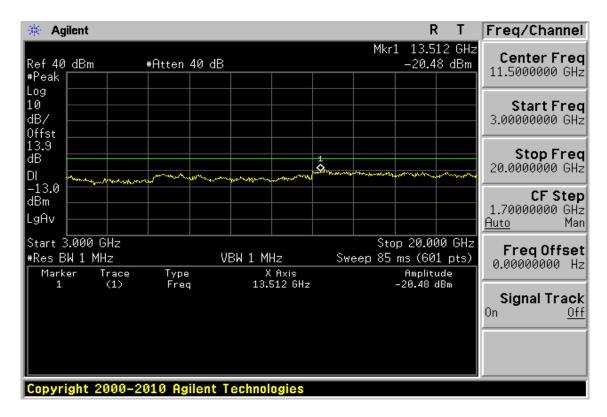


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 99 of 189

### Out of Band emission at antenna terminals – CDMA BC1 Channel Mid





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for elec-Trois occurrents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms-e-document.htm">www.sgs.com/terms-e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

SGS Taiwan Ltd.

t (886-2) 2299-3279

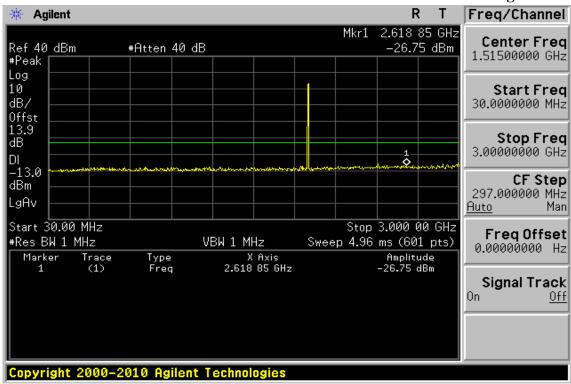
f (886-2) 2298-0488

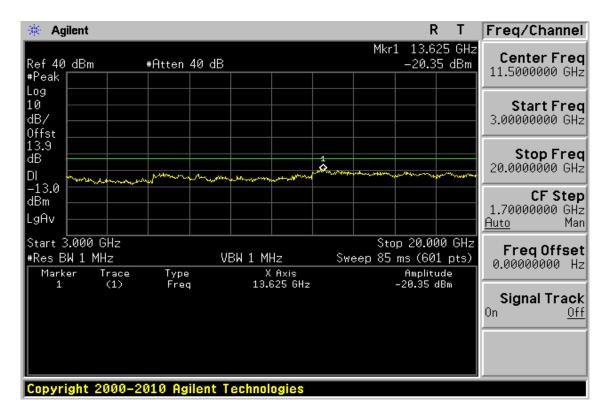


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 100 of 189

## Out of Band emission at antenna terminals – CDMA BC1 Channel Highest





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for elec-Trois occurrents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms-e-document.htm">www.sgs.com/terms-e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

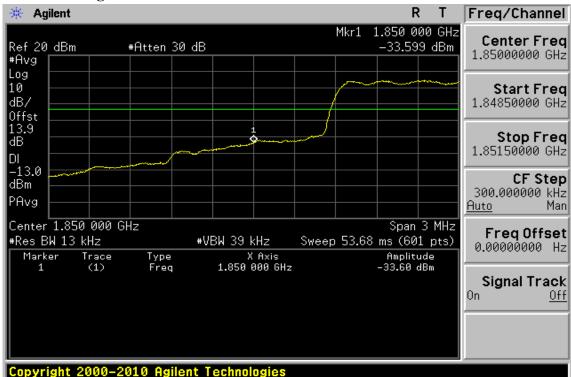
t (886-2) 2299-3279

f (886-2) 2298-0488

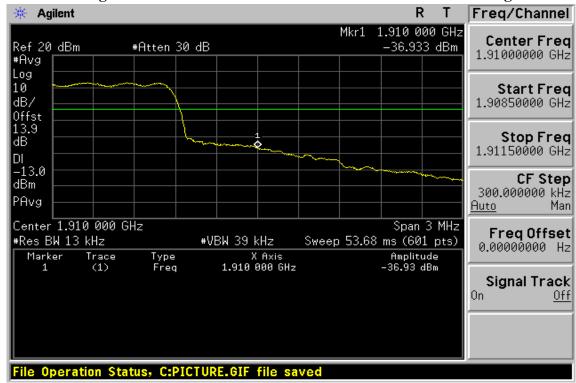
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 101 of 189

## Band edge emission at antenna terminals - CDMA BC1 Channel Lowest



# Band edge emission at antenna terminals - CDMA BC1 Channel Highest



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

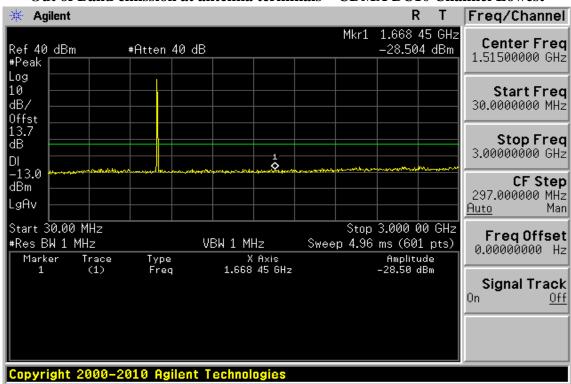
台灣檢驗科技股份有限公司

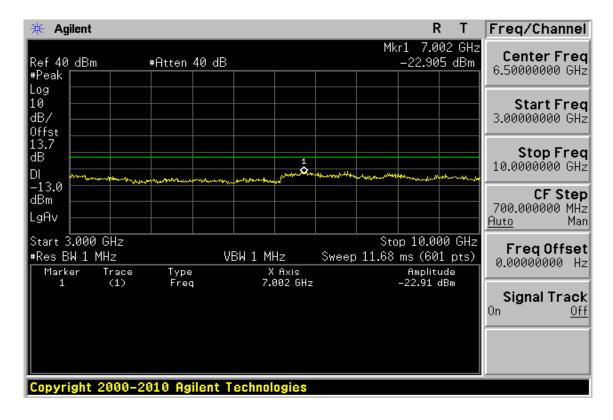


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 102 of 189

### Out of Band emission at antenna terminals - CDMA BC10 Channel Lowest





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

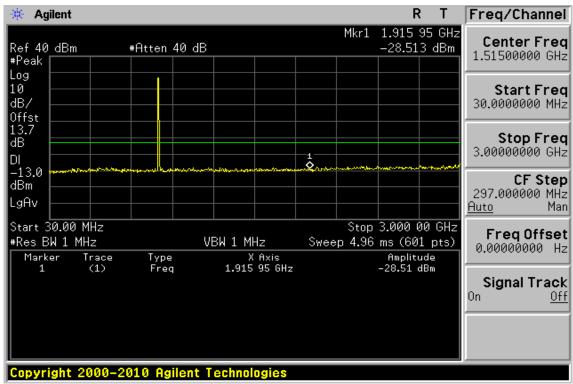
t (886-2) 2299-3279

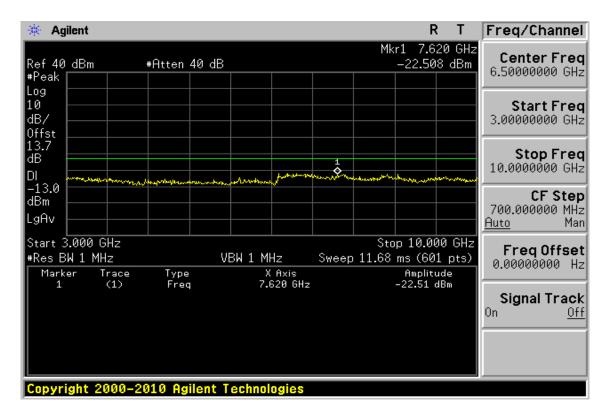


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 103 of 189

### Out of Band emission at antenna terminals – CDMA BC10 Channel Mid





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for elec-Trois occurrents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms-e-document.htm">www.sgs.com/terms-e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

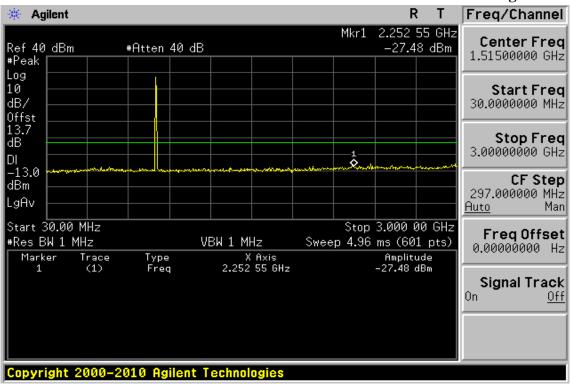
f (886-2) 2298-0488

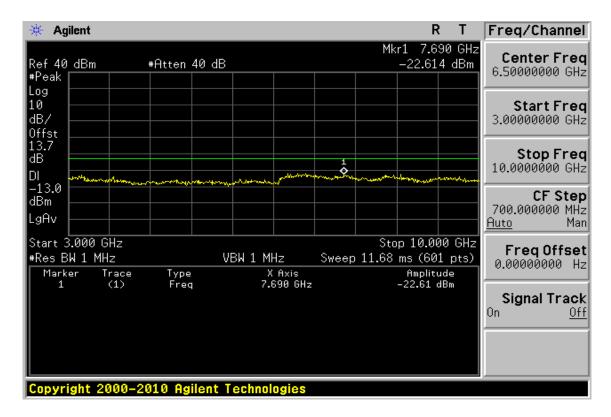


Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 104 of 189

## Out of Band emission at antenna terminals – CDMA BC10 Channel Highest





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for elec-Trois occurrents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms-e-document.htm">www.sgs.com/terms-e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

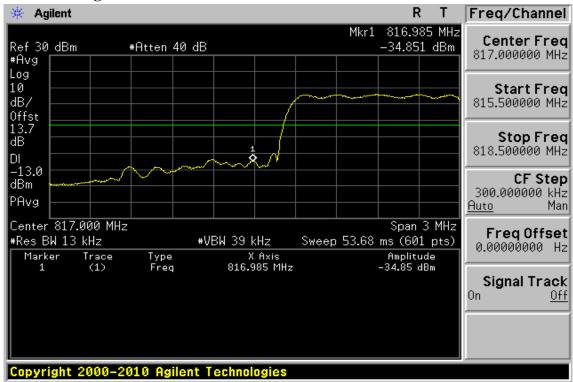
台灣檢驗科技股份有限公司



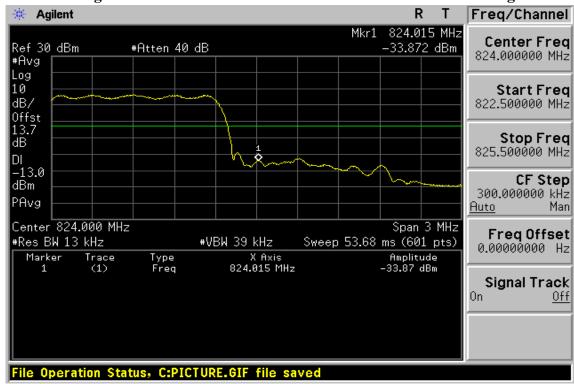
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 105 of 189

## Band edge emission at antenna terminals – CDMA BC10 Channel Lowest



# Band edge emission at antenna terminals - CDMA BC10 Channel Highest



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

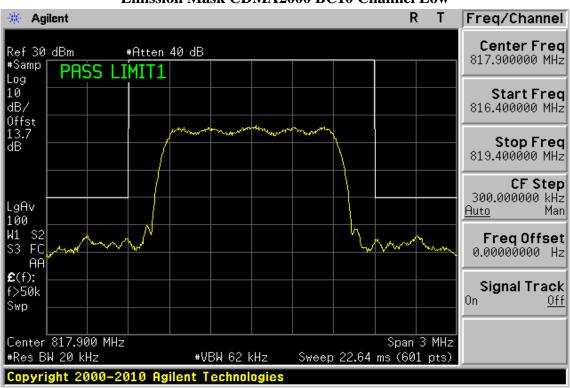
t (886-2) 2299-3279

f (886-2) 2298-0488

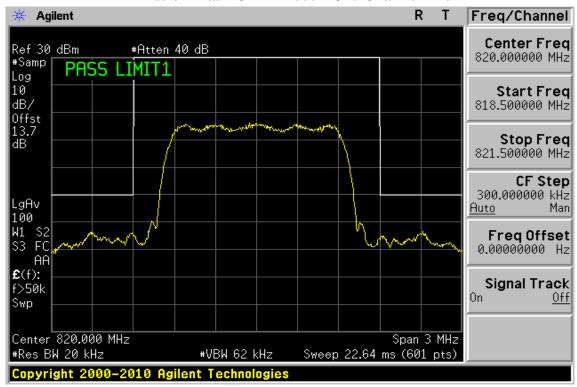
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 106 of 189

#### **Emission Mask CDMA2000 BC10 Channel Low**



### **Emission Mask CDMA2000 BC10 Channel Mid**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Unless otherwise stated the results snown in this test report refer only to the sample(s) tested and such sample(s) are retained for so days only. 

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm.

Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of the stream of the st Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

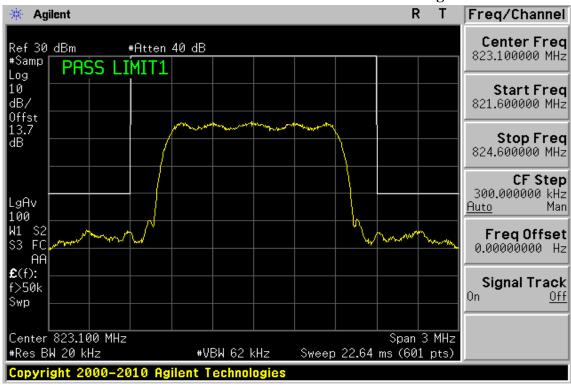
台灣檢驗科技股份有限公司



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 107 of 189

## **Emission Mask CDMA2000 BC10 Channel High**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the proposition from exercision Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 108 of 189

# 10. FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

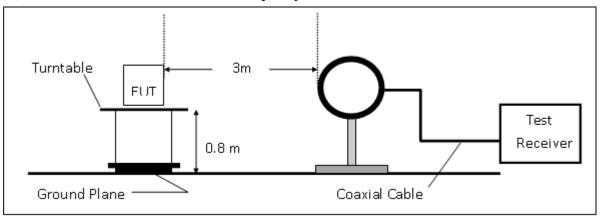
# 10.1. Standard Applicable

According to FCC §2.1053,

FCC  $\S22.917(a)$ ,  $\S24.238(a)$ ,  $\S90.691(a)(1)$ the magnitude of each spurious and harmonic emission that can be detected when the equipment is operated under the conditions specified in the instruction manual and/ or alignment procedure, shall not be less than  $43 + 10 \log$  (mean output power in watts) dBc below the mean power output outside a license's frequency block (-13dBm).

## 10.2. EUT Setup

(A) Radiated Emission Test Set-UP Frequency Below 30MHz.



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留⑪天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

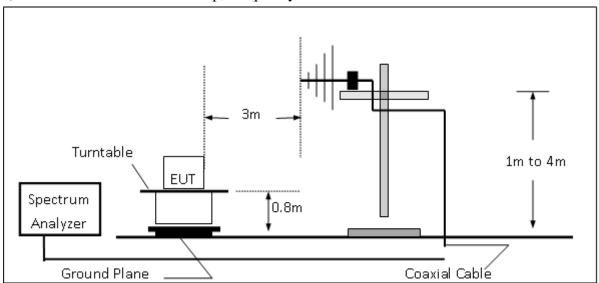
d. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



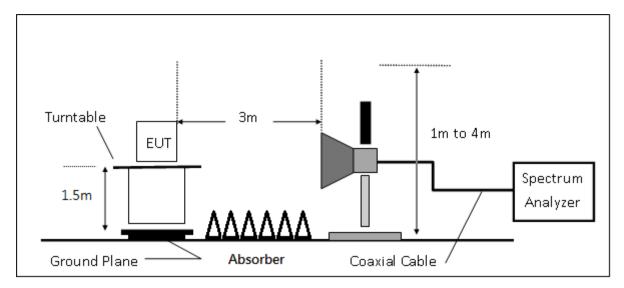
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 109 of 189

## (B) Radiated Emission Test Set-Up, Frequency form 30MHz to 1000MHz



# (C) Radiated Emission Test Set-UP Frequency Over 1 GHz



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 110 of 189

## 10.3. Measurement Procedure:

The EUT was placed on a non-conductive; the measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

The frequency range up to tenth harmonic was investigated for each of three fundamental frequencies (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method.

The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.

ERP= S.G. output (dBm) + Antenna Gain (dBd) – Cable Loss (dB)

EIRP = S.G. output (dBm) + Antenna Gain (dBi) – Cable Loss (dB)

EIRP (dBm) = SG Level(dBm) + Antenna Gain(dBi) + Cable Loss(dB)

Note: "F": denotes Fundamental Frequency.; "H": denotes Harmonic Frequency.

"E": denotes Band Edge Frequency.; "S": denotes Spurious Frequency.

"---": denotes Noise Floor.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for elec-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134, WuKungRoad, NewTaipeiIndustrialPark, WukuDistrict, NewTaipeiCity, Taiwan24803/新北市五股區新北產業園區五工路134號



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 111 of 189

# 10.4. Measurement Equipment Used:

ERP,	EIRP MEASUREM	ENT EQUIPM	ENT List 966	Chamber	
EQUIPMENT TYPE	MFR	MODEL	SERIAL	LAST CAL.	CAL DUE.
		NUMBER	NUMBER		
EXA Spectrum Analyzer	Agilent	N9010A	MY50420195	12/22/2014	12/21/2015
Bilog Antenna	SCHWAZBECK	VULB9168	378	12/23/2014	12/22/2015
Bilog Antenna	SCHWAZBECK	VULB9160	3158	10/31/2014	10/30/2015
Horn antenna	ETS.LINDGREN	3117	123995	05/05/2015	05/04/2016
Horn antenna	ETS.LINDGREN	3117	123991	12/19/2014	12/18/2015
Horn Antenna	Schwarzbeck	BBHA9170	184	12/25/2014	12/24/2015
Horn Antenna	Schwarzbeck	BBHA9170	185	07/29/2014	07/28/2015
Network Analyze	Anritsu	MS4644A	1216312	05/23/2015	05/22/2016
Signal Generator	Agilent	E4438C	MY45093613	08/06/2014	08/05/2015
Pre-Amplifier	Agilent	8447D	1937A02834	01/02/2015	01/01/2016
Pre-Amplifier	Agilent	8449B	3008A00578	01/02/2015	01/01/2016
Pre-Amplifier	EMC Instruments Corp.	EMC184045	980135	01/02/2015	01/01/2016
Attenuator	Mini-Circuit	BW-S10W2+	004	01/02/2015	01/01/2016
Radio Communication Analyzer	R&S	CMU200	102189	02/11/2015	02/10/2016
Radio Communication Analyzer	Anritsu	MT8820C	6200995019	10/08/2014	10/09/2015
Turn Table	HD	DT420	N/A	N.C.R	N.C.R
Antenna Tower	HD	MA240-N	240/657	N.C.R	N.C.R
Controller	HD	HD100	N/A	N.C.R	N.C.R
Low Loss Cable	HUBER+SUHNER	966_Tx	10m	01/02/2015	01/01/2016
Low Loss Cable	HUBER+SUHNER	966_Rx	3m	01/02/2015	01/01/2016
Filter 800-1000	Micro-Tronics	EWT	M2	01/02/2015	01/01/2016
Filter 1800-2000	Micro-Tronics	EWT	M2	01/02/2015	01/01/2016
Filter 1700-1800	Micro-Tronics	BRC15751	001	01/02/2015	01/01/2016
1GHz High Pass Filter	Micro-Tronics	HPM50108	32	01/02/2015	01/01/2016
2GHz High Pass Filter	Micro-Tronics	HPM50110	36	01/02/2015	01/01/2016
3m Site NSA	SGS	966 chamber	N/A	07/15/2014	07/14/2015

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approaches of this document is unlawful and offenders may be prosecuted to the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

SGS Taiwan Ltd.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 112 of 189

### 10.5. Measurement Result:

Radiated Spurious Emission Measurement Result: GPRS 850 Mode

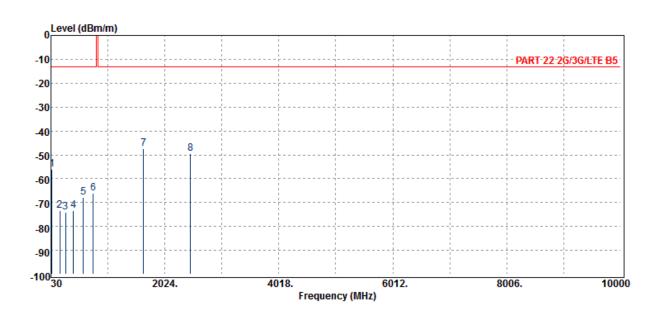
**ARFCN** Test Date :2015-06-12 :CH 128

Operation Band :GPRS 850 Temp./Humi. :24 deg\_C / 60 RH

Fundamental Frequency :824.2 MHz Engineer :Curry

Operation Mode :TX LOW

Measurement Antenna Pol. :VERTICAL EUT Pol. :H Plane



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
47.46	S	-56.23	-43.45	-11.89	-0.89	-13.00	-43.23
188.11	S	-73.33	-74.17	2.35	-1.51	-13.00	-60.33
286.08	S	-73.93	-75.58	3.39	-1.73	-13.00	-60.93
419.94	S	-73.21	-74.75	3.51	-1.97	-13.00	-60.21
593.57	S	-67.85	-68.55	3.46	-2.76	-13.00	-54.85
768.17	S	-65.94	-66.54	3.34	-2.74	-13.00	-52.94
1648.40	Н	-47.46	-46.30	3.05	-4.21	-13.00	-34.46
2472.60	Н	-49.42	-47.69	3.59	-5.32	-13.00	-36.42

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Orniess otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) tested to the retained for 90 days only. See the Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

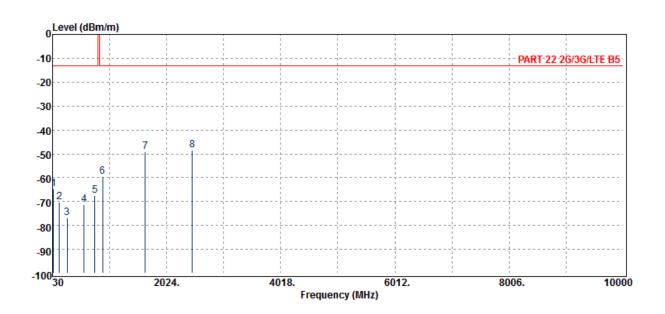
Page: 113 of 189

**ARFCN** :CH 128 **Test Date** :2015-06-12

**Operation Band** :GPRS 850 Temp./Humi. :24 deg\_C / 60 RH

Fundamental Frequency :824.2 MHz Engineer :Curry Operation Mode :TX LOW

EUT Pol. :H Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
51.34	S	-64.69	-52.72	-11.05	-0.92	-13.00	-51.69
147.37	S	-70.29	-66.69	-2.23	-1.37	-13.00	-57.29
288.99	S	-76.71	-78.38	3.42	-1.74	-13.00	-63.71
581.93	S	-71.32	-72.08	3.49	-2.73	-13.00	-58.32
773.02	S	-67.50	-68.10	3.36	-2.75	-13.00	-54.50
903.00	S	-59.66	-59.79	3.26	-3.13	-13.00	-46.66
1648.40	Н	-49.01	-47.85	3.05	-4.21	-13.00	-36.01
2472.60	Н	-48.45	-46.72	3.59	-5.32	-13.00	-35.45

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

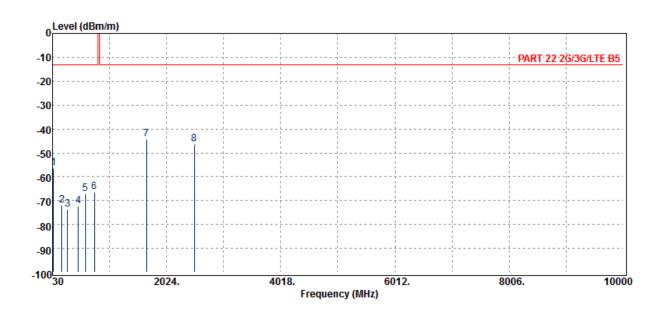
Page: 114 of 189

**ARFCN** :CH 190 **Test Date** :2015-06-12

**Operation Band** :GPRS 850 Temp./Humi. :24 deg\_C / 60 RH

Fundamental Frequency :836.6 MHz Engineer :Curry Operation Mode :TX MID

EUT Pol. :H Plane :VERTICAL Measurement Antenna Pol.



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
47.46	S	-56.38	-43.60	-11.89	-0.89	-13.00	-43.38
191.99	S	-72.13	-73.38	2.77	-1.52	-13.00	-59.13
293.84	S	-73.81	-75.55	3.50	-1.76	-13.00	-60.81
480.08	S	-72.23	-73.64	3.60	-2.18	-13.00	-59.23
600.36	S	-67.29	-67.99	3.44	-2.75	-13.00	-54.29
762.35	S	-66.32	-66.91	3.32	-2.72	-13.00	-53.32
1673.20	Н	-44.29	-43.04	3.01	-4.26	-13.00	-31.29
2509.80	Н	-46.23	-44.55	3.67	-5.35	-13.00	-33.23

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

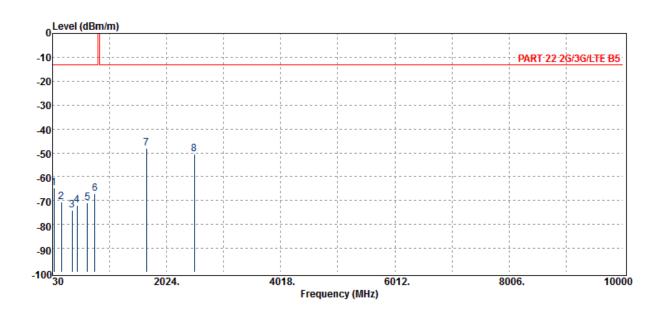
Page: 115 of 189

**ARFCN** :CH 190 **Test Date** :2015-06-12

**Operation Band** :GPRS 850 Temp./Humi. :24 deg\_C / 60 RH

Fundamental Frequency :836.6 MHz Engineer :Curry Operation Mode :TX MID

EUT Pol. :H Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
52.31	S	-64.66	-52.97	-10.78	-0.92	-13.00	-51.66
183.26	S	-70.52	-70.55	1.54	-1.51	-13.00	-57.52
374.35	S	-73.89	-75.63	3.69	-1.96	-13.00	-60.89
457.77	S	-72.12	-73.44	3.41	-2.09	-13.00	-59.12
640.13	S	-71.08	-72.00	3.60	-2.67	-13.00	-58.08
767.20	S	-67.03	-67.64	3.34	-2.74	-13.00	-54.03
1673.20	Н	-48.22	-46.97	3.01	-4.26	-13.00	-35.22
2509.80	Н	-50.38	-48.70	3.67	-5.35	-13.00	-37.38

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

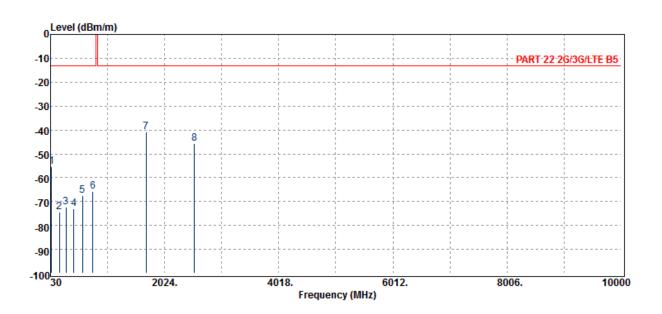
Page: 116 of 189

**ARFCN** :CH 251 **Test Date** :2015-06-12

**Operation Band** :GPRS 850 Temp./Humi. :24 deg\_C / 60 RH

Fundamental Frequency :848.8 MHz Engineer :Curry Operation Mode :TX HIGH

EUT Pol. :H Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
47.46	S	-55.37	-42.59	-11.89	-0.89	-13.00	-42.37
182.29	S	-74.29	-74.17	1.38	-1.50	-13.00	-61.29
300.63	S	-72.48	-74.32	3.62	-1.79	-13.00	-59.48
437.40	S	-73.03	-74.41	3.41	-2.03	-13.00	-60.03
592.60	S	-67.56	-68.26	3.46	-2.76	-13.00	-54.56
771.08	S	-65.77	-66.37	3.35	-2.75	-13.00	-52.77
1697.60	Н	-41.00	-39.68	2.96	-4.28	-13.00	-28.00
2546.40	Н	-45.78	-44.12	3.75	-5.41	-13.00	-32.78

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

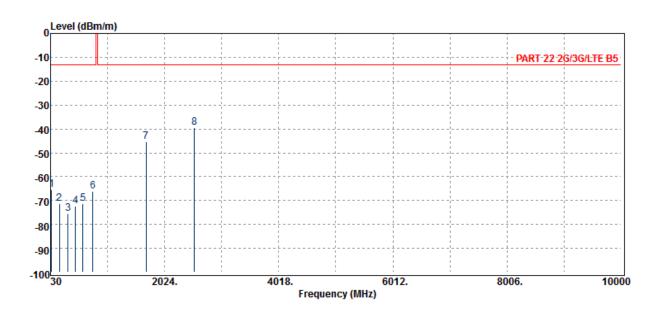
Page: 117 of 189

**ARFCN** :CH 251 **Test Date** :2015-06-12

**Operation Band** :GPRS 850 Temp./Humi. :24 deg\_C / 60 RH

Fundamental Frequency :848.8 MHz Engineer :Curry Operation Mode :TX HIGH

EUT Pol. :H Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
51.34	S	-65.34	-53.38	-11.05	-0.92	-13.00	-52.34
186.17	S	-71.27	-71.78	2.03	-1.51	-13.00	-58.27
333.61	S	-75.38	-77.18	3.72	-1.91	-13.00	-62.38
464.56	S	-72.36	-73.73	3.47	-2.11	-13.00	-59.36
595.51	S	-71.13	-71.83	3.46	-2.76	-13.00	-58.13
770.11	S	-66.26	-66.86	3.35	-2.74	-13.00	-53.26
1697.60	Н	-45.26	-43.94	2.96	-4.28	-13.00	-32.26
2546.40	Н	-39.47	-37.82	3.75	-5.41	-13.00	-26.47

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 118 of 189

## Radiated Spurious Emission Measurement Result: GPRS 1900 Mode

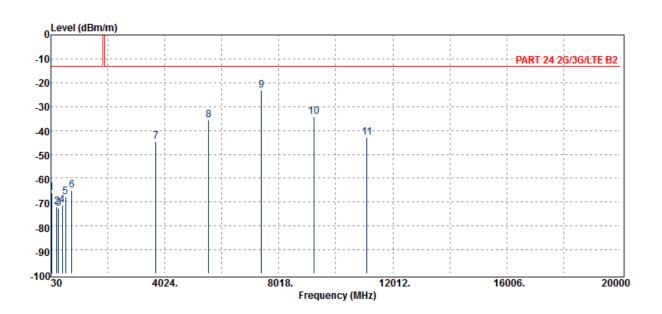
:CH 512 **Test Date** :2015-06-16 **ARFCN** 

**Operation Band** :GPRS 1900 Temp./Humi. :22 deg\_C / 53 RH

**Fundamental Frequency** :1850.2 MHz Engineer :Curry

Operation Mode :TX LOW

EUT Pol. :E1 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
44.55	S	-66.04	-54.93	-10.24	-0.87	-13.00	-53.04
238.55	S	-72.02	-75.85	5.44	-1.60	-13.00	-59.02
294.81	S	-72.66	-76.56	5.67	-1.76	-13.00	-59.66
425.76	S	-71.27	-74.91	5.62	-1.99	-13.00	-58.27
540.22	S	-67.84	-71.09	5.77	-2.52	-13.00	-54.84
759.44	S	-65.09	-67.83	5.46	-2.72	-13.00	-52.09
3700.40	Н	-44.63	-46.18	8.43	-6.88	-13.00	-31.63
5550.60	Н	-35.75	-37.31	10.10	-8.55	-13.00	-22.75
7400.80	Н	-23.19	-25.10	11.60	-9.69	-13.00	-10.19
9251.00	Н	-34.21	-36.05	12.75	-10.91	-13.00	-21.21
11101.20	Н	-42.82	-43.80	13.04	-12.07	-13.00	-29.82

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the proposition from exercising Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

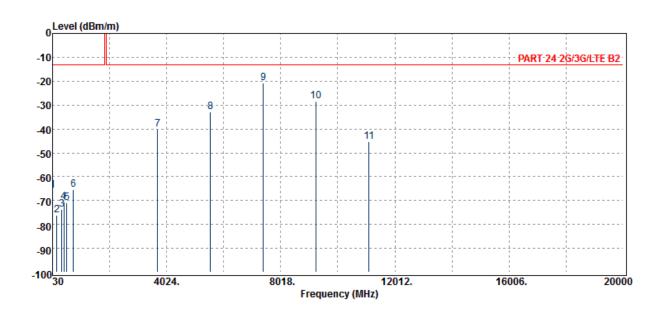
Page: 119 of 189

**ARFCN** :CH 512 **Test Date** :2015-06-16

:GPRS 1900 **Operation Band** Temp./Humi. :22 deg\_C / 53 RH

Fundamental Frequency :1850.2 MHz Engineer :Curry Operation Mode :TX LOW

EUT Pol. :E1 Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
32.91	S	-65.64	-52.89	-11.98	-0.76	-13.00	-52.64
180.35	S	-76.00	-77.69	3.20	-1.50	-13.00	-63.00
350.10	S	-73.73	-77.67	5.91	-1.97	-13.00	-60.73
434.49	S	-70.60	-74.15	5.58	-2.02	-13.00	-57.60
522.76	S	-70.98	-74.38	5.83	-2.43	-13.00	-57.98
764.29	S	-65.48	-68.22	5.48	-2.73	-13.00	-52.48
3700.40	Н	-40.05	-41.59	8.43	-6.88	-13.00	-27.05
5550.60	Н	-32.82	-34.37	10.10	-8.55	-13.00	-19.82
7400.80	Н	-20.63	-22.54	11.60	-9.69	-13.00	-7.63
9251.00	Н	-28.40	-30.23	12.75	-10.91	-13.00	-15.40
11101.20	Н	-45.33	-46.30	13.04	-12.07	-13.00	-32.33

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

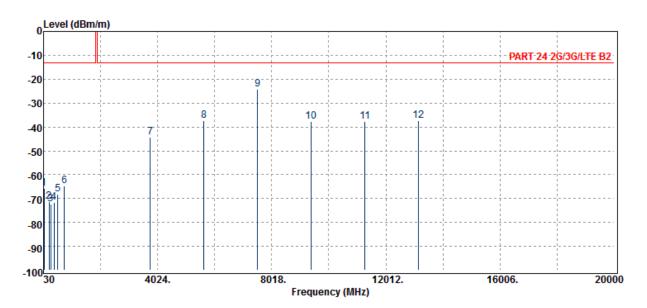
Page: 120 of 189

**ARFCN** :CH 661 **Test Date** :2015-06-16

:GPRS 1900 **Operation Band** Temp./Humi. :22 deg\_C / 53 RH

Fundamental Frequency :1880.0 MHz Engineer :Curry Operation Mode :TX MID

EUT Pol. :E1 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
44.55	S	-65.74	-54.63	-10.24	-0.87	-13.00	-52.74
219.15	S	-71.21	-75.16	5.51	-1.56	-13.00	-58.21
287.05	S	-72.39	-76.20	5.55	-1.74	-13.00	-59.39
405.39	S	-71.52	-75.31	5.74	-1.94	-13.00	-58.52
528.58	S	-68.04	-71.39	5.81	-2.46	-13.00	-55.04
764.29	S	-64.64	-67.38	5.48	-2.73	-13.00	-51.64
3760.00	Н	-44.46	-45.90	8.46	-7.02	-13.00	-31.46
5640.00	Н	-37.48	-39.00	10.11	-8.59	-13.00	-24.48
7520.00	Н	-24.39	-26.40	11.72	-9.71	-13.00	-11.39
9400.00	Н	-37.57	-39.29	12.72	-11.00	-13.00	-24.57
11280.00	Н	-37.83	-38.63	13.11	-12.32	-13.00	-24.83
13160.00	Н	-37.54	-37.34	13.56	-13.77	-13.00	-24.54

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

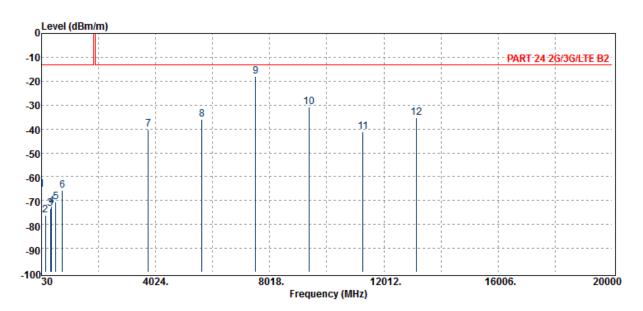
Page: 121 of 189

**ARFCN** :CH 661 **Test Date** :2015-06-16

:GPRS 1900 **Operation Band** Temp./Humi. :22 deg\_C / 53 RH

Fundamental Frequency :1880.0 MHz Engineer :Curry Operation Mode :TX MID

EUT Pol. :E1 Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
30.97	S	-65.57	-52.35	-12.47	-0.74	-13.00	-52.57
173.56	S	-76.22	-76.78	2.05	-1.49	-13.00	-63.22
341.37	S	-73.33	-77.28	5.89	-1.94	-13.00	-60.33
382.11	S	-72.24	-76.11	5.82	-1.95	-13.00	-59.24
529.55	S	-70.75	-74.09	5.81	-2.47	-13.00	-57.75
764.29	S	-65.87	-68.61	5.48	-2.73	-13.00	-52.87
3760.00	Н	-40.26	-41.70	8.46	-7.02	-13.00	-27.26
5640.00	Н	-36.00	-37.52	10.11	-8.59	-13.00	-23.00
7520.00	Н	-18.02	-20.02	11.72	-9.71	-13.00	-5.02
9400.00	Н	-30.89	-32.62	12.72	-11.00	-13.00	-17.89
11280.00	Н	-41.26	-42.05	13.11	-12.32	-13.00	-28.26
13160.00	Н	-35.21	-35.01	13.56	-13.77	-13.00	-22.21

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 122 of 189

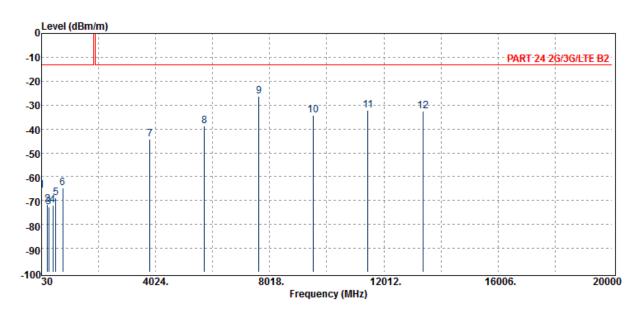
**ARFCN** :CH 810 **Test Date** :2015-06-16

:GPRS 1900 **Operation Band** Temp./Humi. :22 deg\_C / 53 RH

Fundamental Frequency :1909.8 MHz Engineer :Curry Operation Mode

:TX HIGH

EUT Pol. :E1 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
30.00	S	-65.88	-52.42	-12.73	-0.73	-13.00	-52.88
238.55	S	-71.63	-75.47	5.44	-1.60	-13.00	-58.63
288.99	S	-72.67	-76.50	5.57	-1.74	-13.00	-59.67
433.52	S	-71.88	-75.44	5.58	-2.02	-13.00	-58.88
524.70	S	-68.81	-72.20	5.82	-2.44	-13.00	-55.81
777.87	S	-64.65	-67.41	5.52	-2.77	-13.00	-51.65
3819.60	Н	-44.45	-45.90	8.50	-7.05	-13.00	-31.45
5729.40	Н	-38.64	-40.12	10.12	-8.64	-13.00	-25.64
7639.20	Н	-26.38	-28.40	11.81	-9.79	-13.00	-13.38
9549.00	Н	-34.19	-35.80	12.69	-11.08	-13.00	-21.19
11458.80	Н	-32.11	-32.83	13.18	-12.46	-13.00	-19.11
13368.60	Н	-32.69	-32.38	13.77	-14.09	-13.00	-19.69

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

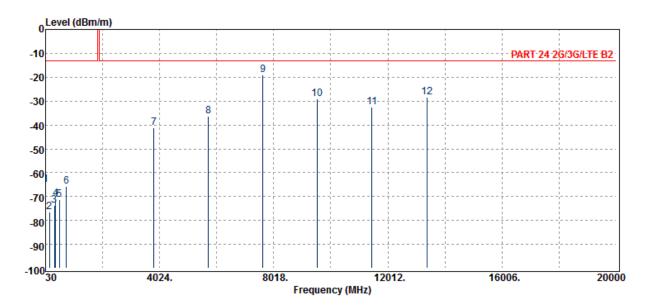
Page: 123 of 189

**ARFCN** :CH 810 **Test Date** :2015-06-16

:GPRS 1900 **Operation Band** Temp./Humi. :22 deg\_C / 53 RH

Fundamental Frequency :1909.8 MHz Engineer :Curry Operation Mode :TX HIGH

EUT Pol. :E1 Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
31.94	S	-65.02	-52.04	-12.22	-0.75	-13.00	-52.02
172.59	S	-76.52	-76.92	1.89	-1.49	-13.00	-63.52
338.46	S	-73.77	-77.72	5.88	-1.93	-13.00	-60.77
389.87	S	-71.04	-74.89	5.80	-1.95	-13.00	-58.04
513.06	S	-71.36	-74.85	5.86	-2.38	-13.00	-58.36
759.44	S	-65.83	-68.57	5.46	-2.72	-13.00	-52.83
3819.60	Н	-41.20	-42.64	8.50	-7.05	-13.00	-28.20
5729.40	Н	-36.31	-37.79	10.12	-8.64	-13.00	-23.31
7639.20	Н	-19.17	-21.19	11.81	-9.79	-13.00	-6.17
9549.00	Н	-28.96	-30.57	12.69	-11.08	-13.00	-15.96
11458.80	Н	-32.38	-33.10	13.18	-12.46	-13.00	-19.38
13368.60	Н	-28.52	-28.21	13.77	-14.09	-13.00	-15.52

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 124 of 189

# Radiated Spurious Emission Measurement Result: HSUPA II Mode

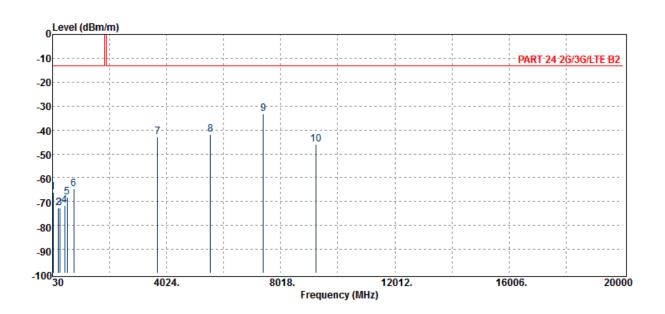
**ARFCN** :CH 9262 Test Date :2015-06-16

Temp./Humi. **Operation Band** :HSUPA B2 :22 deg\_C / 53 RH

Fundamental Frequency :1852.4 MHz Engineer :Curry

Operation Mode :TX LOW

EUT Pol. :E1 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
44.55	S	-66.15	-55.04	-10.24	-0.87	-13.00	-53.15
242.43	S	-72.82	-76.67	5.47	-1.62	-13.00	-59.82
278.32	S	-72.74	-76.54	5.52	-1.72	-13.00	-59.74
450.01	S	-71.75	-75.18	5.49	-2.07	-13.00	-58.75
537.31	S	-68.13	-71.40	5.78	-2.51	-13.00	-55.13
769.14	S	-64.87	-67.63	5.49	-2.74	-13.00	-51.87
3704.80	Н	-42.95	-44.49	8.43	-6.89	-13.00	-29.95
5557.20	Н	-42.00	-43.57	10.10	-8.54	-13.00	-29.00
7409.60	Н	-33.14	-35.04	11.61	-9.71	-13.00	-20.14
9262.00	Н	-45.87	-47.72	12.75	-10.90	-13.00	-32.87

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sqs.com



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

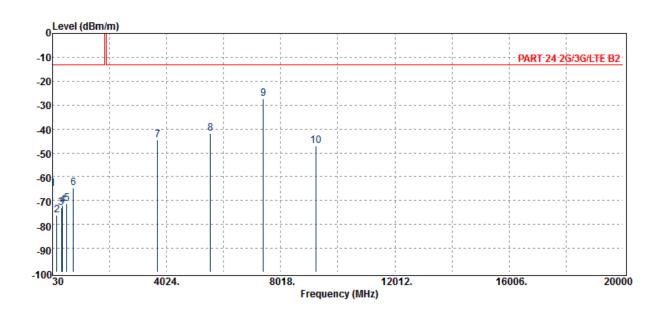
Page: 125 of 189

**ARFCN** :CH 9262 Test Date :2015-06-16

**Operation Band** :HSUPA B2 Temp./Humi. :22 deg\_C / 53 RH

Fundamental Frequency Engineer :Curry :1852.4 MHz Operation Mode :TX LOW

EUT Pol. :E1 Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
31.94	S	-64.93	-51.96	-12.22	-0.75	-13.00	-51.93
174.53	S	-76.13	-76.86	2.22	-1.49	-13.00	-63.13
343.31	S	-72.91	-76.86	5.89	-1.94	-13.00	-59.91
385.02	S	-71.85	-75.71	5.81	-1.95	-13.00	-58.85
523.73	S	-71.28	-74.67	5.83	-2.43	-13.00	-58.28
766.23	S	-64.88	-67.63	5.48	-2.73	-13.00	-51.88
3704.80	Н	-44.58	-46.12	8.43	-6.89	-13.00	-31.58
5557.20	Н	-42.01	-43.58	10.10	-8.54	-13.00	-29.01
7409.60	Н	-27.27	-29.17	11.61	-9.71	-13.00	-14.27
9262.00	Н	-47.12	-48.97	12.75	-10.90	-13.00	-34.12

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 126 of 189

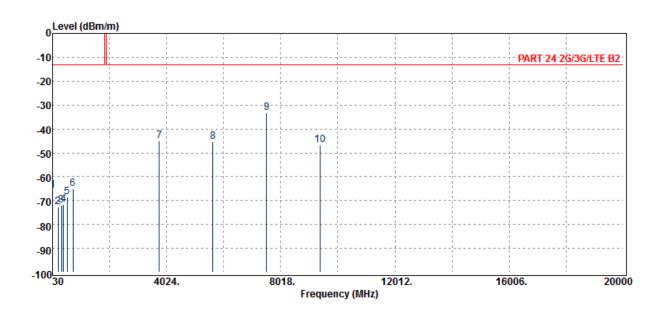
**ARFCN** :CH 9400 **Test Date** :2015-06-16

**Operation Band** :HSUPA B2 Temp./Humi. :22 deg\_C / 53 RH

Fundamental Frequency Engineer :1880.0 MHz :Curry Operation Mode

:TX MID

EUT Pol. :E1 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
30.97	S	-65.79	-52.58	-12.47	-0.74	-13.00	-52.79
223.03	S	-72.62	-76.52	5.47	-1.57	-13.00	-59.62
335.55	S	-71.94	-75.90	5.87	-1.92	-13.00	-58.94
416.06	S	-71.48	-75.20	5.68	-1.96	-13.00	-58.48
542.16	S	-68.64	-71.87	5.76	-2.53	-13.00	-55.64
741.01	S	-65.15	-67.93	5.45	-2.67	-13.00	-52.15
3760.00	Н	-45.00	-46.44	8.46	-7.02	-13.00	-32.00
5640.00	Н	-45.22	-46.74	10.11	-8.59	-13.00	-32.22
7520.00	Н	-33.22	-35.23	11.72	-9.71	-13.00	-20.22
9400.00	Н	-46.62	-48.35	12.72	-11.00	-13.00	-33.62

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 127 of 189

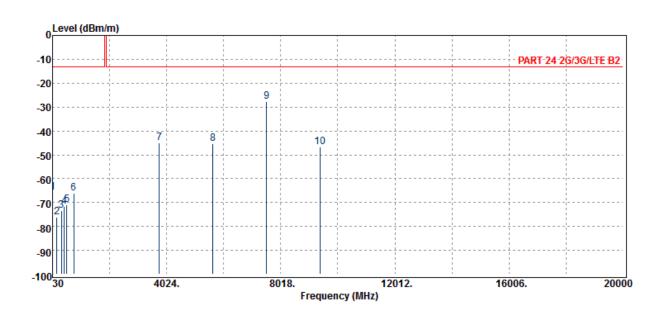
**ARFCN** :CH 9400 **Test Date** :2015-06-16

**Operation Band** :HSUPA B2 Temp./Humi. :22 deg\_C / 53 RH

Fundamental Frequency Engineer :Curry :1880.0 MHz Operation Mode

:TX MID

EUT Pol. :E1 Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
32.91	S	-65.62	-52.88	-11.98	-0.76	-13.00	-52.62
174.53	S	-76.17	-76.90	2.22	-1.49	-13.00	-63.17
346.22	S	-73.49	-77.43	5.90	-1.95	-13.00	-60.49
436.43	S	-71.58	-75.13	5.57	-2.02	-13.00	-58.58
525.67	S	-70.87	-74.25	5.82	-2.44	-13.00	-57.87
768.17	S	-66.08	-68.83	5.49	-2.74	-13.00	-53.08
3760.00	Н	-45.13	-46.57	8.46	-7.02	-13.00	-32.13
5640.00	Н	-45.18	-46.70	10.11	-8.59	-13.00	-32.18
7520.00	Н	-27.67	-29.67	11.72	-9.71	-13.00	-14.67
9400.00	Н	-46.62	-48.34	12.72	-11.00	-13.00	-33.62

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

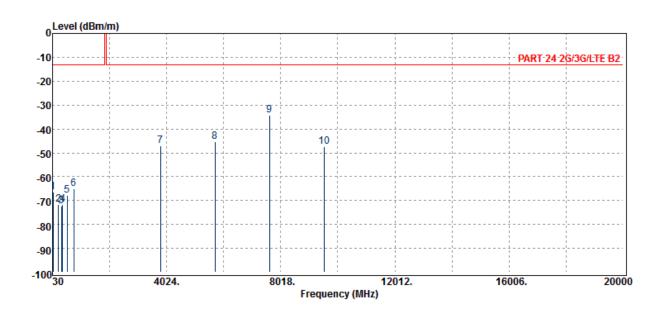
Page: 128 of 189

**ARFCN** :CH 9538 **Test Date** :2015-06-16

**Operation Band** :HSUPA B2 Temp./Humi. :22 deg\_C / 53 RH

Fundamental Frequency :1907.6 MHz Engineer :Curry Operation Mode :TX HIGH

EUT Pol. :E1 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
44.55	S	-66.58	-55.47	-10.24	-0.87	-13.00	-53.58
236.61	S	-71.75	-75.59	5.44	-1.60	-13.00	-58.75
347.19	S	-72.24	-76.18	5.90	-1.96	-13.00	-59.24
388.90	S	-71.76	-75.61	5.80	-1.95	-13.00	-58.76
543.13	S	-67.98	-71.20	5.76	-2.54	-13.00	-54.98
776.90	S	-64.89	-67.64	5.52	-2.77	-13.00	-51.89
3815.20	Н	-47.10	-48.55	8.49	-7.05	-13.00	-34.10
5722.80	Н	-45.16	-46.65	10.12	-8.63	-13.00	-32.16
7630.40	H	-34.10	-36.12	11.81	-9.78	-13.00	-21.10
9538.00	Н	-47.43	-49.06	12.69	-11.07	-13.00	-34.43

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

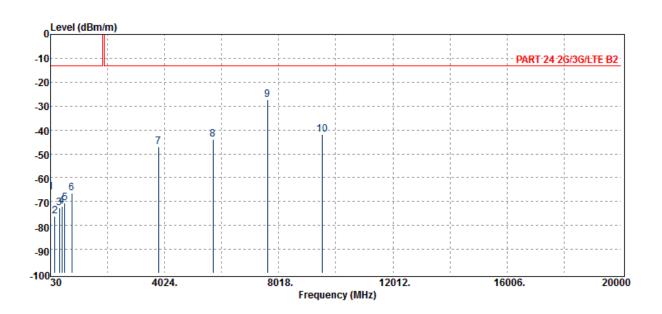
Page: 129 of 189

**ARFCN** :CH 9538 **Test Date** :2015-06-16

**Operation Band** :HSUPA B2 Temp./Humi. :22 deg\_C / 53 RH

Fundamental Frequency :1907.6 MHz Engineer :Curry Operation Mode :TX HIGH

EUT Pol. :E1 Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
30.97	S	-66.19	-52.97	-12.47	-0.74	-13.00	-53.19
179.38	S	-76.28	-77.81	3.03	-1.50	-13.00	-63.28
340.40	S	-72.56	-76.51	5.89	-1.93	-13.00	-59.56
421.88	S	-71.85	-75.51	5.65	-1.98	-13.00	-58.85
527.61	S	-70.60	-73.96	5.81	-2.46	-13.00	-57.60
769.14	S	-66.32	-69.07	5.49	-2.74	-13.00	-53.32
3815.20	Н	-47.20	-48.64	8.49	-7.05	-13.00	-34.20
5722.80	Н	-43.92	-45.41	10.12	-8.63	-13.00	-30.92
7630.40	Н	-27.41	-29.44	11.81	-9.78	-13.00	-14.41
9538.00	Н	-41.78	-43.40	12.69	-11.07	-13.00	-28.78

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 130 of 189

# Radiated Spurious Emission Measurement Result: HSUPA V Mode

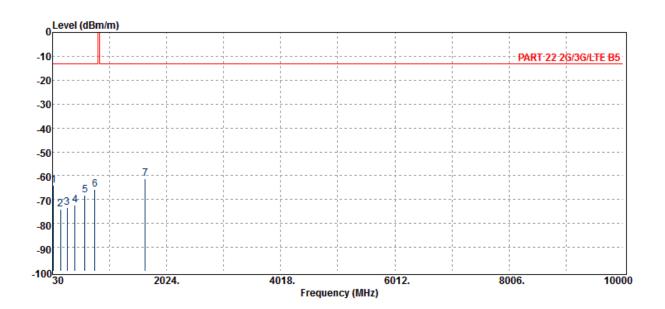
**ARFCN** :CH 4132 Test Date :2015-06-12

**Operation Band** :HSUPA B5 Temp./Humi. :24 deg\_C / 60 RH

Fundamental Frequency :826.4 MHz Engineer :Curry

Operation Mode :TX LOW

EUT Pol. :H Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
48.43	S	-64.00	-51.39	-11.72	-0.90	-13.00	-51.00
173.56	S	-74.04	-72.45	-0.10	-1.49	-13.00	-61.04
286.08	S	-73.19	-74.84	3.39	-1.73	-13.00	-60.19
420.91	S	-72.28	-73.81	3.50	-1.98	-13.00	-59.28
595.51	S	-68.21	-68.91	3.46	-2.76	-13.00	-55.21
767.20	S	-65.62	-66.22	3.34	-2.74	-13.00	-52.62
1652.80	Н	-61.22	-60.05	3.05	-4.22	-13.00	-48.22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

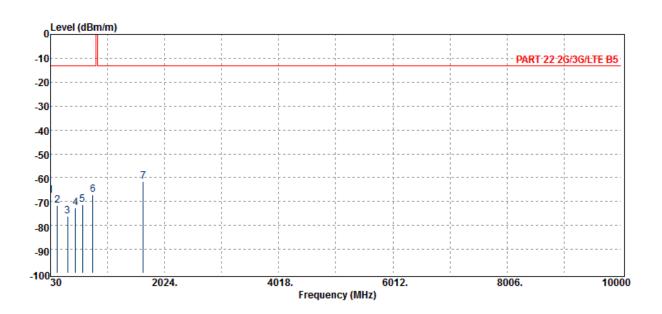
Page: 131 of 189

**ARFCN** :CH 4132 **Test Date** :2015-06-12

**Operation Band** :HSUPA B5 Temp./Humi. :24 deg\_C / 60 RH

Fundamental Frequency Engineer :826.4 MHz :Curry Operation Mode :TX LOW

EUT Pol. :H Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
30.00	S	-67.60	-51.99	-14.88	-0.73	-13.00	-54.60
147.37	S	-71.74	-68.14	-2.23	-1.37	-13.00	-58.74
326.82	S	-76.26	-78.07	3.70	-1.89	-13.00	-63.26
466.50	S	-72.76	-74.14	3.49	-2.11	-13.00	-59.76
588.72	S	-71.16	-71.88	3.47	-2.76	-13.00	-58.16
766.23	S	-67.20	-67.80	3.33	-2.73	-13.00	-54.20
1652.80	Н	-61.49	-60.32	3.05	-4.22	-13.00	-48.49

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 132 of 189

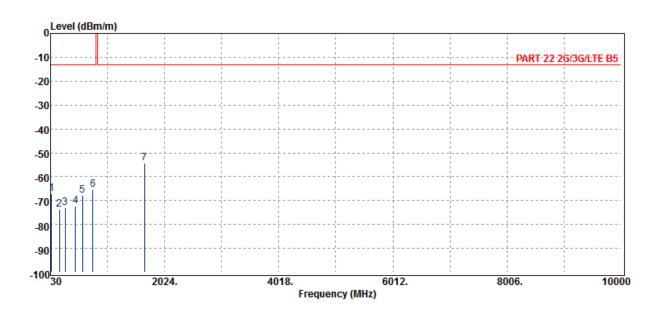
**ARFCN** :CH 4183 **Test Date** :2015-06-12

**Operation Band** :HSUPA B5 Temp./Humi. :24 deg\_C / 60 RH

Fundamental Frequency :836.6 MHz Engineer :Curry Operation Mode

:TX MID

EUT Pol. :H Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
47.46	S	-67.08	-54.29	-11.89	-0.89	-13.00	-54.08
186.17	S	-73.72	-74.23	2.03	-1.51	-13.00	-60.72
287.05	S	-73.12	-74.78	3.40	-1.74	-13.00	-60.12
465.53	S	-72.35	-73.72	3.48	-2.11	-13.00	-59.35
591.63	S	-67.87	-68.57	3.47	-2.76	-13.00	-54.87
769.14	S	-65.52	-66.13	3.34	-2.74	-13.00	-52.52
1673.20	Н	-54.49	-53.24	3.01	-4.26	-13.00	-41.49

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 133 of 189

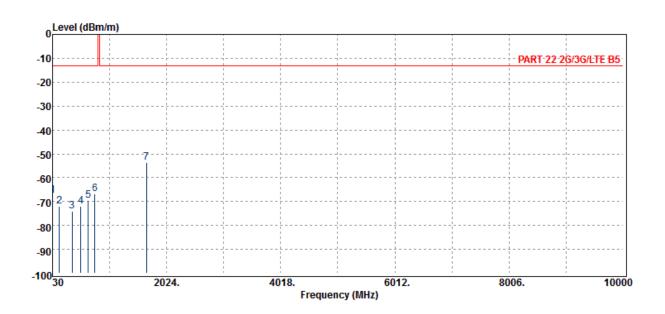
**ARFCN** :CH 4183 **Test Date** :2015-06-12

**Operation Band** :HSUPA B5 Temp./Humi. :24 deg\_C / 60 RH

Fundamental Frequency :836.6 MHz Engineer :Curry Operation Mode

:TX MID

EUT Pol. :H Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
30.97	S	-67.52	-52.16	-14.62	-0.74	-13.00	-54.52
145.43	S	-71.94	-68.25	-2.32	-1.36	-13.00	-58.94
374.35	S	-73.94	-75.67	3.69	-1.96	-13.00	-60.94
527.61	S	-72.05	-73.26	3.66	-2.46	-13.00	-59.05
651.77	S	-69.68	-70.65	3.63	-2.66	-13.00	-56.68
773.02	S	-66.88	-67.49	3.36	-2.75	-13.00	-53.88
1673.20	Н	-53.51	-52.26	3.01	-4.26	-13.00	-40.51

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

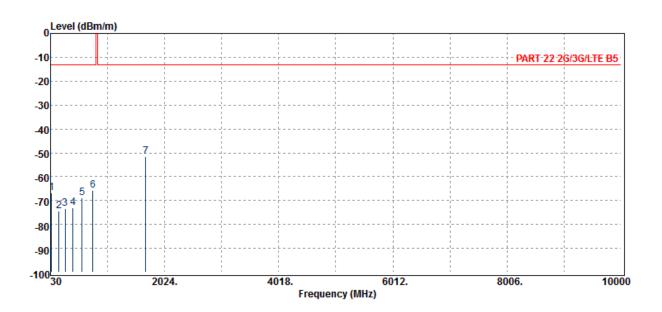
Page: 134 of 189

**ARFCN** :CH 4233 **Test Date** :2015-06-12

**Operation Band** :HSUPA B5 Temp./Humi. :24 deg\_C / 60 RH

Fundamental Frequency :846.6 MHz Engineer :Curry Operation Mode :TX HIGH

EUT Pol. :H Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
47.46	S	-66.63	-53.85	-11.89	-0.89	-13.00	-53.63
178.41	S	-74.25	-73.47	0.72	-1.50	-13.00	-61.25
286.08	S	-73.21	-74.87	3.39	-1.73	-13.00	-60.21
421.88	S	-73.01	-74.52	3.50	-1.98	-13.00	-60.01
581.93	S	-68.77	-69.53	3.49	-2.73	-13.00	-55.77
770.11	S	-65.92	-66.52	3.35	-2.74	-13.00	-52.92
1693.20	Н	-51.70	-50.40	2.97	-4.27	-13.00	-38.70

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

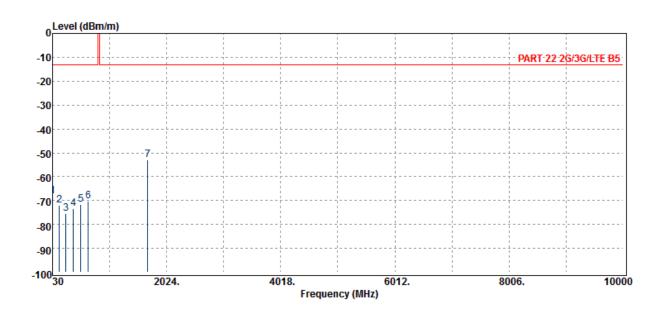
Page: 135 of 189

**ARFCN** :CH 4233 **Test Date** :2015-06-12

**Operation Band** :HSUPA B5 Temp./Humi. :24 deg\_C / 60 RH

Fundamental Frequency :846.6 MHz Engineer :Curry Operation Mode :TX HIGH

EUT Pol. :H Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
32.91	S	-68.17	-53.28	-14.13	-0.76	-13.00	-55.17
146.40	S	-72.07	-68.42	-2.27	-1.37	-13.00	-59.07
261.83	S	-75.27	-77.26	3.67	-1.67	-13.00	-62.27
397.63	S	-73.39	-75.07	3.63	-1.95	-13.00	-60.39
527.61	S	-71.53	-72.74	3.66	-2.46	-13.00	-58.53
650.80	S	-70.26	-71.23	3.63	-2.66	-13.00	-57.26
1693.20	Н	-52.95	-51.65	2.97	-4.27	-13.00	-39.95

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is understanded by the responsibility is to the full plant of this document. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 136 of 189

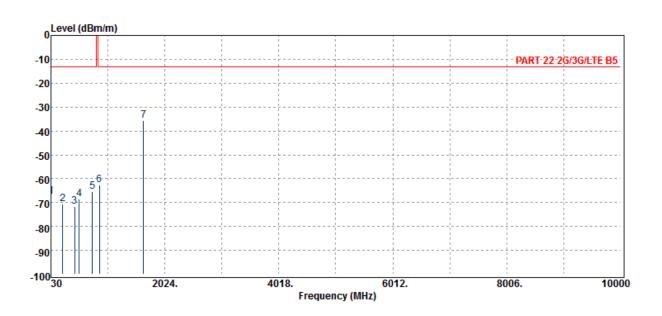
# Radiated Spurious Emission Measurement Result: CDMA BC0 Mode

**ARFCN** :CH 1013 Test Date :2015-06-18

**Operation Band** :CDMA 850 Temp./Humi. :23 deg\_C / 52 RH Fundamental Frequency :824.7 MHz Engineer :Curry

Operation Mode :TX LOW

EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
30.97	S	-67.59	-54.38	-12.47	-0.74	-13.00	-54.59
236.61	S	-70.48	-74.32	5.44	-1.60	-13.00	-57.48
443.22	S	-71.80	-75.28	5.53	-2.05	-13.00	-58.80
520.82	S	-68.51	-71.93	5.84	-2.42	-13.00	-55.51
753.62	S	-65.49	-68.23	5.44	-2.70	-13.00	-52.49
879.72	S	-62.56	-64.97	5.50	-3.09	-13.00	-49.56
1649.40	Н	-35.68	-34.51	3.05	-4.21	-13.00	-22.68

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

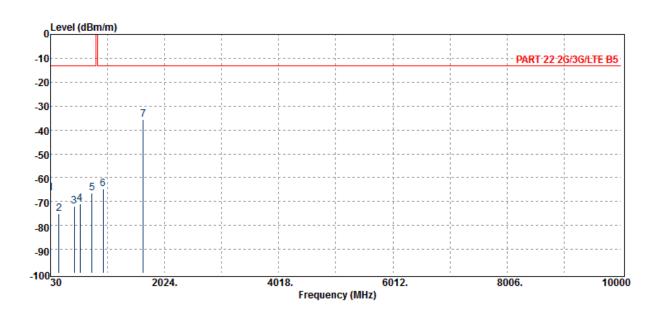
Page: 137 of 189

**ARFCN** :CH 1013 **Test Date** :2015-06-18

**Operation Band** :CDMA 850 Temp./Humi. :23 deg\_C / 52 RH

Fundamental Frequency :824.7 MHz Engineer :Curry Operation Mode :TX LOW

EUT Pol. :E2 Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
30.97	S	-66.31	-53.10	-12.47	-0.74	-13.00	-53.31
175.50	S	-75.17	-76.06	2.38	-1.49	-13.00	-62.17
443.22	S	-72.03	-75.51	5.53	-2.05	-13.00	-59.03
546.04	S	-70.99	-74.19	5.75	-2.55	-13.00	-57.99
754.59	S	-66.28	-69.02	5.45	-2.71	-13.00	-53.28
946.65	S	-64.77	-66.96	5.39	-3.20	-13.00	-51.77
1649.40	Н	-35.53	-34.37	3.05	-4.21	-13.00	-22.53

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

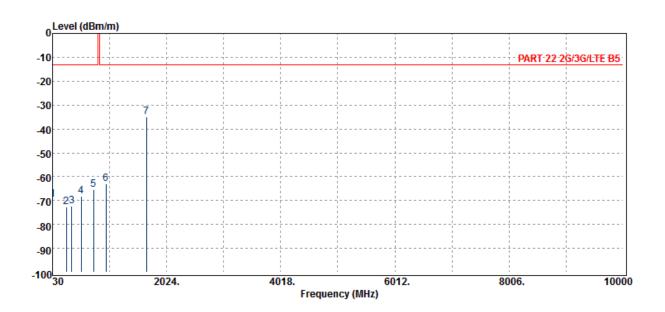
Page: 138 of 189

**ARFCN** :CH 384 **Test Date** :2015-06-18

**Operation Band** :CDMA 850 Temp./Humi. :23 deg\_C / 52 RH

Fundamental Frequency :836.52 MHz Engineer :Curry Operation Mode :TX MID

EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
31.94	S	-69.55	-56.58	-12.22	-0.75	-13.00	-56.55
270.56	S	-72.64	-76.68	5.74	-1.69	-13.00	-59.64
367.56	S	-72.24	-76.14	5.86	-1.96	-13.00	-59.24
533.43	S	-68.32	-71.63	5.79	-2.49	-13.00	-55.32
750.71	S	-65.55	-68.29	5.43	-2.70	-13.00	-52.55
966.05	S	-62.95	-64.05	4.31	-3.21	-13.00	-49.95
1673.04	Н	-35.05	-33.80	3.01	-4.26	-13.00	-22.05

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

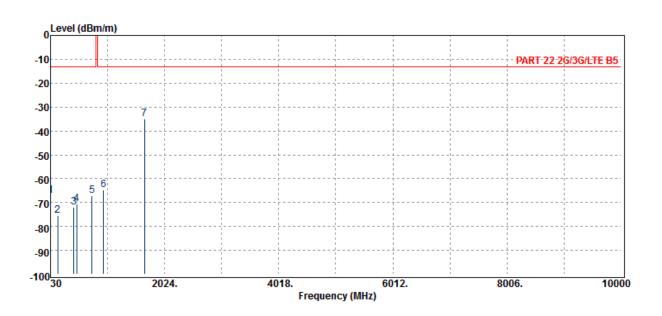
Page: 139 of 189

**ARFCN** :CH 384 **Test Date** :2015-06-18

**Operation Band** :CDMA 850 Temp./Humi. :23 deg\_C / 52 RH

Fundamental Frequency :836.52 MHz Engineer :Curry Operation Mode :TX MID

EUT Pol. :E2 Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
30.97	S	-67.17	-53.95	-12.47	-0.74	-13.00	-54.17
154.16	S	-75.60	-74.52	0.33	-1.41	-13.00	-62.60
435.46	S	-71.87	-75.42	5.57	-2.02	-13.00	-58.87
487.84	S	-70.66	-74.24	5.81	-2.23	-13.00	-57.66
754.59	S	-67.08	-69.82	5.45	-2.71	-13.00	-54.08
960.23	S	-64.62	-66.11	4.70	-3.21	-13.00	-51.62
1673.04	Н	-34.91	-33.66	3.01	-4.26	-13.00	-21.91

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

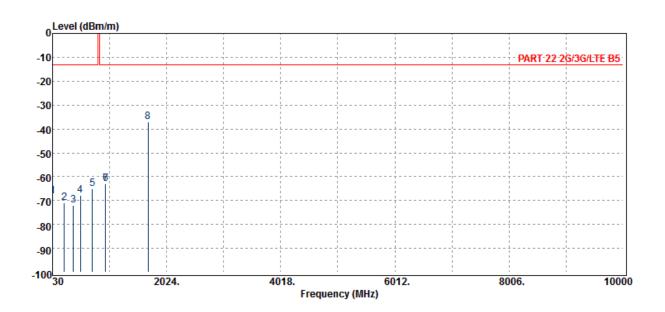
Page: 140 of 189

**ARFCN** :CH 777 **Test Date** :2015-06-18

**Operation Band** :CDMA 850 Temp./Humi. :23 deg\_C / 52 RH

Fundamental Frequency :848.31 MHz Engineer :Curry Operation Mode :TX HIGH

EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
30.97	S	-68.19	-54.97	-12.47	-0.74	-13.00	-55.19
233.70	S	-70.85	-74.72	5.45	-1.59	-13.00	-57.85
390.84	S	-71.84	-75.68	5.80	-1.95	-13.00	-58.84
519.85	S	-67.78	-71.21	5.84	-2.41	-13.00	-54.78
724.52	S	-65.20	-68.05	5.48	-2.63	-13.00	-52.20
955.38	S	-62.96	-64.78	5.02	-3.21	-13.00	-49.96
955.38	Н	-62.96	-64.78	5.02	-3.21	-13.00	-49.96
1696.62	Н	-37.07	-35.76	2.96	-4.28	-13.00	-24.07

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

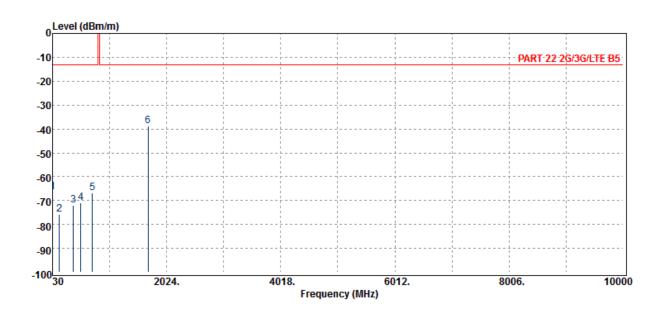
Page: 141 of 189

**ARFCN** :CH 777 **Test Date** :2015-06-18

**Operation Band** :CDMA 850 Temp./Humi. :23 deg\_C / 52 RH

Fundamental Frequency :848.31 MHz Engineer :Curry Operation Mode :TX HIGH

EUT Pol. :E2 Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
30.97	S	-66.48	-53.27	-12.47	-0.74	-13.00	-53.48
152.22	S	-75.61	-74.42	0.20	-1.40	-13.00	-62.61
390.84	S	-71.84	-75.69	5.80	-1.95	-13.00	-58.84
527.61	S	-71.10	-74.45	5.81	-2.46	-13.00	-58.10
727.43	S	-66.86	-69.69	5.48	-2.64	-13.00	-53.86
1696.62	S	-38.62	-37.31	2.96	-4.28	-13.00	-25.62

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 142 of 189

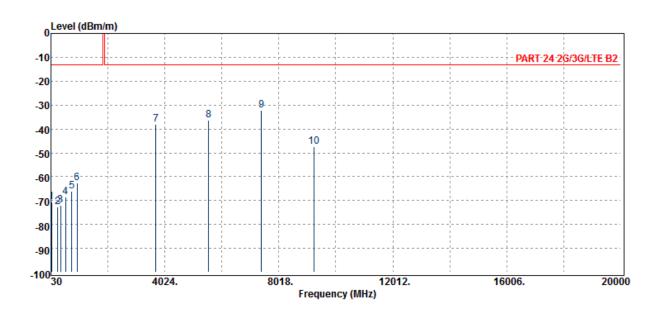
Radiated Spurious Emission Measurement Result: CDMA BC1 Mode

**ARFCN** :CH 25 Test Date :2015-06-18

Temp./Humi. **Operation Band** :CDMA 1900 :23 deg\_C / 52 RH

Fundamental Frequency :1851.25 MHz Engineer :Curry Operation Mode :TX LOW

EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
49.40	S	-70.42	-60.12	-9.40	-0.90	-13.00	-57.42
273.47	S	-72.57	-76.53	5.66	-1.70	-13.00	-59.57
372.41	S	-72.12	-76.01	5.85	-1.96	-13.00	-59.12
547.98	S	-68.68	-71.87	5.74	-2.56	-13.00	-55.68
756.53	S	-65.98	-68.73	5.45	-2.71	-13.00	-52.98
944.71	S	-62.62	-64.82	5.39	-3.20	-13.00	-49.62
3702.50	Н	-38.23	-39.78	8.43	-6.88	-13.00	-25.23
5555.00	Н	-36.35	-37.91	10.10	-8.54	-13.00	-23.35
7405.00	Н	-32.01	-33.91	11.61	-9.70	-13.00	-19.01
9256.25	Н	-47.42	-49.26	12.75	-10.91	-13.00	-34.42

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sqs.com



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

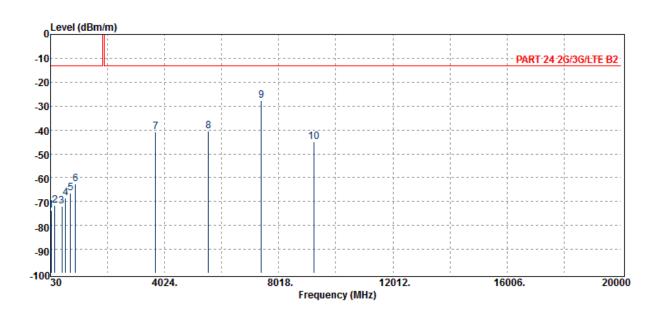
Page: 143 of 189

**ARFCN** :CH 25 **Test Date** :2015-06-18

**Operation Band** :CDMA 1900 Temp./Humi. :23 deg\_C / 52 RH

Fundamental Frequency :1851.25 MHz Engineer :Curry Operation Mode :TX LOW

EUT Pol. :E2 Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
47.46	S	-73.63	-63.00	-9.74	-0.89	-13.00	-60.63
175.50	S	-71.67	-72.56	2.38	-1.49	-13.00	-58.67
432.55	S	-72.08	-75.65	5.59	-2.01	-13.00	-59.08
553.80	S	-68.68	-71.81	5.73	-2.59	-13.00	-55.68
737.13	S	-66.32	-69.11	5.46	-2.67	-13.00	-53.32
910.76	S	-62.74	-65.00	5.41	-3.15	-13.00	-49.74
3702.50	Н	-41.00	-42.54	8.43	-6.88	-13.00	-28.00
5553.75	Н	-40.63	-42.19	10.10	-8.54	-13.00	-27.63
7405.00	Н	-27.69	-29.59	11.61	-9.70	-13.00	-14.69
9256.25	Н	-44.81	-46.66	12.75	-10.91	-13.00	-31.81

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

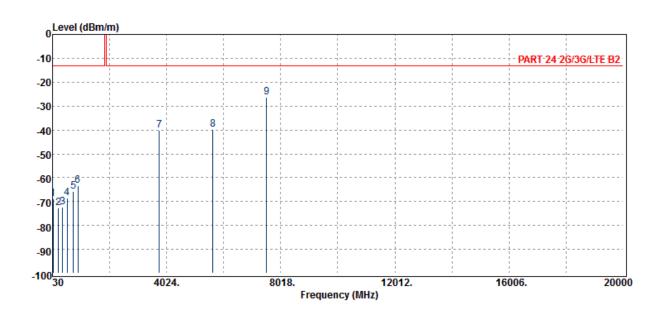
Page: 144 of 189

**ARFCN** :CH 600 **Test Date** :2015-06-18

**Operation Band** :CDMA 1900 Temp./Humi. :23 deg\_C / 52 RH

Fundamental Frequency Engineer :1880 MHz :Curry Operation Mode :TX MID

EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
49.40	S	-68.97	-58.67	-9.40	-0.90	-13.00	-55.97
236.61	S	-72.72	-76.57	5.44	-1.60	-13.00	-59.72
385.02	S	-72.39	-76.25	5.81	-1.95	-13.00	-59.39
549.92	S	-68.60	-71.76	5.74	-2.57	-13.00	-55.60
759.44	S	-65.82	-68.57	5.46	-2.72	-13.00	-52.82
923.37	S	-63.30	-65.53	5.40	-3.16	-13.00	-50.30
3760.00	Н	-40.06	-41.50	8.46	-7.02	-13.00	-27.06
5640.00	Н	-39.67	-41.19	10.11	-8.59	-13.00	-26.67
7520.00	Н	-26.17	-28.17	11.72	-9.71	-13.00	-13.17

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

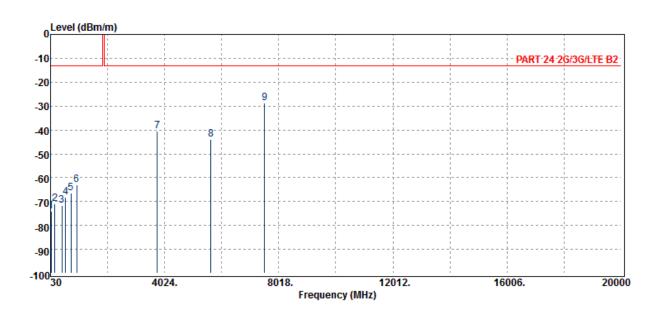
Page: 145 of 189

**ARFCN** :CH 600 **Test Date** :2015-06-18

**Operation Band** :CDMA 1900 Temp./Humi. :23 deg\_C / 52 RH

Fundamental Frequency Engineer :1880 MHz :Curry Operation Mode :TX MID

EUT Pol. :E2 Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
47.46	S	-73.93	-63.29	-9.74	-0.89	-13.00	-60.93
179.38	S	-70.77	-72.30	3.03	-1.50	-13.00	-57.77
428.67	S	-71.77	-75.38	5.61	-2.00	-13.00	-58.77
555.74	S	-68.31	-71.43	5.72	-2.60	-13.00	-55.31
748.77	S	-66.42	-69.16	5.43	-2.69	-13.00	-53.42
950.53	S	-62.83	-64.98	5.35	-3.20	-13.00	-49.83
3760.00	Н	-40.64	-42.08	8.46	-7.02	-13.00	-27.64
5640.00	Н	-43.79	-45.31	10.11	-8.59	-13.00	-30.79
7520.00	Н	-28.56	-30.56	11.72	-9.71	-13.00	-15.56

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

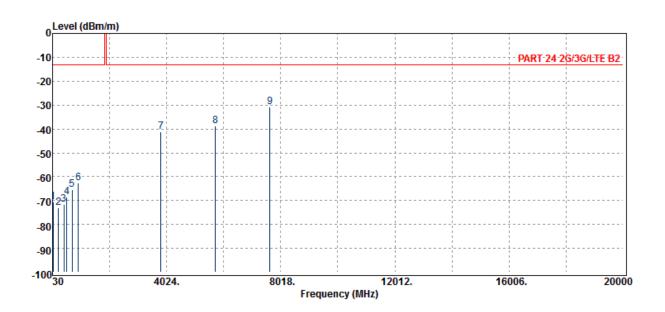
Page: 146 of 189

**ARFCN** :CH 1175 **Test Date** :2015-06-18

**Operation Band** :CDMA 1900 Temp./Humi. :23 deg\_C / 52 RH

Fundamental Frequency :1908.75 MHz Engineer :Curry Operation Mode :TX HIGH

EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
49.40	S	-70.49	-60.19	-9.40	-0.90	-13.00	-57.49
234.67	S	-73.09	-76.95	5.45	-1.59	-13.00	-60.09
429.64	S	-71.56	-75.16	5.60	-2.00	-13.00	-58.56
527.61	S	-68.44	-71.80	5.81	-2.46	-13.00	-55.44
720.64	S	-65.29	-68.15	5.49	-2.63	-13.00	-52.29
937.92	S	-62.77	-64.98	5.39	-3.19	-13.00	-49.77
3817.50	Н	-41.32	-42.77	8.50	-7.05	-13.00	-28.32
5725.00	Н	-38.92	-40.41	10.12	-8.63	-13.00	-25.92
7635.00	Н	-30.80	-32.82	11.81	-9.79	-13.00	-17.80

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 147 of 189

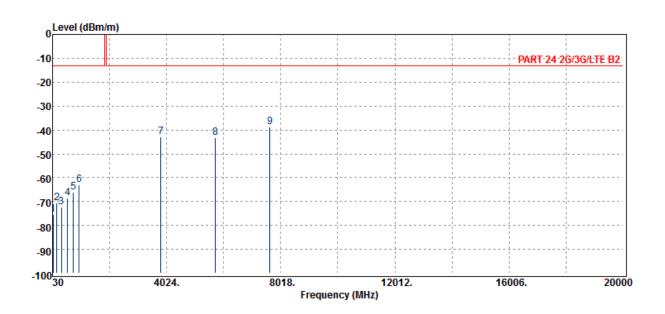
**ARFCN** :CH 1175 **Test Date** :2015-06-18

**Operation Band** :CDMA 1900 Temp./Humi. :23 deg\_C / 52 RH

Fundamental Frequency :1908.75 MHz Engineer :Curry Operation Mode

:TX HIGH

EUT Pol. :E2 Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
47.46	S	-75.33	-64.70	-9.74	-0.89	-13.00	-62.33
177.44	S	-70.66	-71.87	2.71	-1.50	-13.00	-57.66
338.46	S	-72.43	-76.39	5.88	-1.93	-13.00	-59.43
551.86	S	-68.46	-71.61	5.73	-2.58	-13.00	-55.46
752.65	S	-65.97	-68.71	5.44	-2.70	-13.00	-52.97
955.38	S	-63.08	-64.90	5.02	-3.21	-13.00	-50.08
3817.50	Н	-42.74	-44.19	8.50	-7.05	-13.00	-29.74
5726.25	Н	-43.16	-44.64	10.12	-8.63	-13.00	-30.16
7635.00	Н	-38.90	-40.93	11.81	-9.79	-13.00	-25.90

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 148 of 189

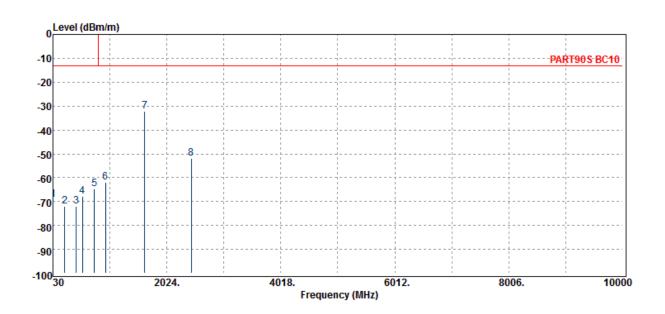
## Radiated Spurious Emission Measurement Result: CDMA BC10 Mode

**ARFCN** :CH 476 Test Date :2015-06-18

**Operation Band** :CDMA BC10 Temp./Humi. :23 deg\_C / 52 RH

Fundamental Frequency :817.9 MHz Engineer :Curry Operation Mode :TX LOW

EUT Pol. :H Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
30.97	S	-69.26	-56.05	-12.47	-0.74	-13.00	-56.26
235.64	S	-71.96	-75.81	5.45	-1.59	-13.00	-58.96
434.49	S	-72.11	-75.67	5.58	-2.02	-13.00	-59.11
548.95	S	-67.84	-71.01	5.74	-2.57	-13.00	-54.84
755.56	S	-64.58	-67.32	5.45	-2.71	-13.00	-51.58
948.59	S	-62.07	-64.25	5.39	-3.20	-13.00	-49.07
1635.80	Н	-32.01	-30.90	3.08	-4.19	-13.00	-19.01
2453.70	Н	-51.81	-50.05	3.55	-5.30	-13.00	-38.81

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

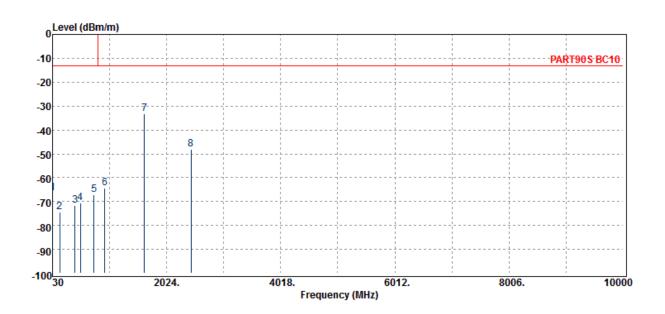
Page: 149 of 189

**ARFCN** :CH 476 **Test Date** :2015-06-18

**Operation Band** :CDMA BC10 Temp./Humi. :23 deg\_C / 52 RH

Fundamental Frequency :817.9 MHz Engineer :Curry Operation Mode :TX LOW

EUT Pol. :H Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
30.97	S	-66.54	-53.33	-12.47	-0.74	-13.00	-53.54
154.16	S	-74.55	-73.47	0.33	-1.41	-13.00	-61.55
419.94	S	-71.53	-75.21	5.66	-1.97	-13.00	-58.53
515.97	S	-70.66	-74.12	5.85	-2.39	-13.00	-57.66
757.50	S	-67.19	-69.93	5.46	-2.71	-13.00	-54.19
944.71	S	-64.46	-66.65	5.39	-3.20	-13.00	-51.46
1635.80	Н	-33.28	-32.17	3.08	-4.19	-13.00	-20.28
2453.70	Н	-48.23	-46.48	3.55	-5.30	-13.00	-35.23

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

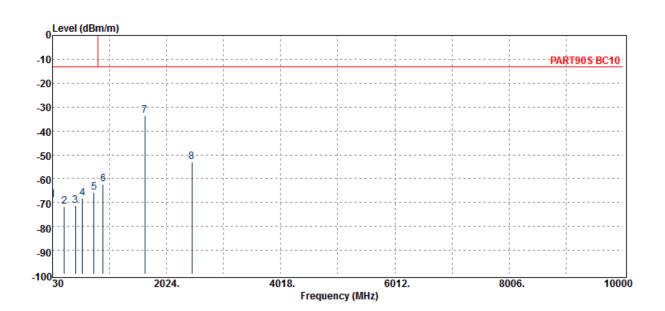
Page: 150 of 189

**ARFCN** :CH 580 **Test Date** :2015-06-18

**Operation Band** :CDMA BC10 Temp./Humi. :23 deg\_C / 52 RH

Fundamental Frequency :820.5 MHz Engineer :Curry Operation Mode :TX MID

EUT Pol. :H Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
30.97	S	-68.76	-55.55	-12.47	-0.74	-13.00	-55.76
237.58	S	-71.63	-75.47	5.44	-1.60	-13.00	-58.63
428.67	S	-71.32	-74.93	5.61	-2.00	-13.00	-58.32
553.80	S	-68.09	-71.23	5.73	-2.59	-13.00	-55.09
756.53	S	-65.64	-68.38	5.45	-2.71	-13.00	-52.64
910.76	S	-62.21	-64.47	5.41	-3.15	-13.00	-49.21
1641.00	Н	-33.55	-32.42	3.07	-4.20	-13.00	-20.55
2461.50	Н	-52.93	-51.18	3.57	-5.31	-13.00	-39.93

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

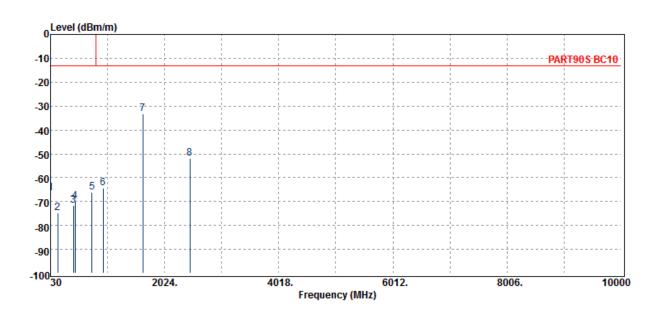
Page: 151 of 189

**ARFCN** :CH 580 **Test Date** :2015-06-18

**Operation Band** :CDMA BC10 Temp./Humi. :23 deg\_C / 52 RH

Fundamental Frequency :820.5 MHz Engineer :Curry Operation Mode :TX MID

EUT Pol. :H Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
30.97	S	-66.56	-53.35	-12.47	-0.74	-13.00	-53.56
153.19	S	-74.83	-73.69	0.27	-1.40	-13.00	-61.83
430.61	S	-71.55	-75.14	5.60	-2.01	-13.00	-58.55
461.65	S	-70.00	-73.50	5.59	-2.10	-13.00	-57.00
756.53	S	-66.17	-68.91	5.45	-2.71	-13.00	-53.17
946.65	S	-64.28	-66.47	5.39	-3.20	-13.00	-51.28
1641.00	Н	-33.09	-31.96	3.07	-4.20	-13.00	-20.09
2461.50	Н	-51.78	-50.03	3.57	-5.31	-13.00	-38.78

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

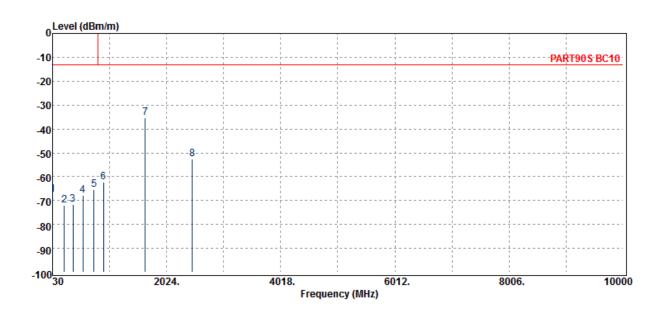
Page: 152 of 189

**ARFCN** :CH 684 **Test Date** :2015-06-18

**Operation Band** :CDMA BC10 Temp./Humi. :23 deg\_C / 52 RH

Fundamental Frequency :823.1 MHz Engineer :Curry Operation Mode :TX HIGH

EUT Pol. :H Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
30.97	S	-67.64	-54.43	-12.47	-0.74	-13.00	-54.64
235.64	S	-71.82	-75.67	5.45	-1.59	-13.00	-58.82
384.05	S	-71.51	-75.38	5.81	-1.95	-13.00	-58.51
556.71	S	-67.72	-70.83	5.72	-2.61	-13.00	-54.72
757.50	S	-65.30	-68.04	5.46	-2.71	-13.00	-52.30
917.55	S	-62.15	-64.40	5.40	-3.16	-13.00	-49.15
1646.20	Н	-35.37	-34.22	3.06	-4.21	-13.00	-22.37
2469.30	Н	-52.67	-50.93	3.58	-5.32	-13.00	-39.67

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

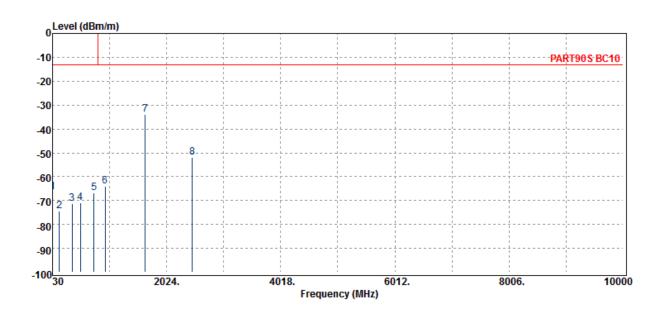
Page: 153 of 189

**ARFCN** :CH 684 **Test Date** :2015-06-18

**Operation Band** :CDMA BC10 Temp./Humi. :23 deg\_C / 52 RH

Fundamental Frequency :823.1 MHz Engineer :Curry Operation Mode :TX HIGH

EUT Pol. :H Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	ERP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBd	dB	dBm	dB
30.97	S	-66.48	-53.26	-12.47	-0.74	-13.00	-53.48
152.22	S	-74.37	-73.17	0.20	-1.40	-13.00	-61.37
375.32	S	-71.28	-75.16	5.84	-1.96	-13.00	-58.28
515.97	S	-70.78	-74.24	5.85	-2.39	-13.00	-57.78
757.50	S	-66.95	-69.69	5.46	-2.71	-13.00	-53.95
947.62	S	-64.14	-66.33	5.39	-3.20	-13.00	-51.14
1646.20	Н	-33.98	-32.83	3.06	-4.21	-13.00	-20.98
2469.30	Н	-52.05	-50.32	3.58	-5.32	-13.00	-39.05

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of containing the containing Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 154 of 189

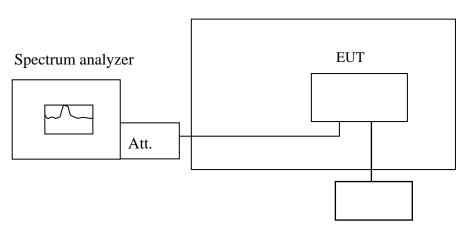
# 11. FREQUENCY STABILITY MEASUREMENT

# 11.1. Standard Applicable:

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

# 11.2. Test Set-up:

# Temperature Chamber



Variable DC Power Supply

Note: Measurement setup for testing on Antenna connector

### 11.3. Measurement Procedure:

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

Set chamber temperature to 25 . Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation (+/- 15%) and endpoint as declared by the manufacturer, record the maximum frequency change.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms\_and\_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 155 of 189

# 11.4. Measurement Equipment Used:

Conc	lucted Emission (n	neasured at a	ntenna port) T	est Site	
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.
TYPE		NUMBER	NUMBER	CAL.	
Spectrum Analyzer	Agilent	E4446A	MY51100003	01/29/2015	01/28/2016
Radio Communication Analyzer	R&S	CMU200	102189	02/11/2015	02/10/2016
Radio Communication Analyzer	Anritsu	MT8820C	6200995019	10/08/2014	10/09/2015
Temperature Chamber	TERCHY	MHG-120LF	911009	05/06/2015	05/05/2016
DC Block	Mini-Circuits	BLK-18-S+	1	01/02/2015	01/01/2016
Attenuator	Mini-Circuit	BW-S10W2+	002	01/02/2015	01/01/2016
Splitter	Agilent	11636B	N/A	01/02/2015	01/01/2016
DC Power Supply	Agilent	E3640A	MY52410006	11/10/2014	11/09/2015

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate is unleastful and difference may be prosequed to the full lest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 156 of 189

## 11.5. Measurement Result:

# FREOUENCY ERROR vs. VOLTAGE

THE QUELTUC I EL	REQUERTED ENGINEER									
	Reference Frequency: GPRS 850 Mid Channel 836.6 MHz									
		Limit: +/- 2.5 ppm								
Power Supply	Environment	Frequency								
	<b>F</b>		Delta (Hz)	Limit (Hz)						
Vdc	Temperature ( )	(MHz)								
4.1	20	836.599999	-3	2091						
3.7	20	836.600002	0	2091						
3.6	20	836.600003	1	2091						
3.0	20	926 600004	2	2001						
(End point)	20	836.600004	2	2091						

## FREQUENCY ERROR vs. TEMPERATURE

MEQUEITOT EI	REQUERCI ERROR VS. TEVII ERATURE									
]	Reference Frequenc	y: GPRS 850 Mid	Channel 836.6 MH	z						
		Limit: +/- 2.5 ppm								
Power Supply	Environment	Frequency	Dolto (Uz)	Limit (Uz)						
Vdc	Temperature ( )	(MHz)	Delta (Hz)	Limit (Hz)						
3.7	50	836.600005	3	2091						
3.7	40	836.599999	-3	2091						
3.7	30	836.599997	-5	2091						
3.7	20	836.600002	0	2091						
3.7	10	836.600004	2	2091						
3.7	0	836.600002	0	2091						
3.7	-10	836.599995	-7	2091						
3.7	-20	836.599994	-8	2091						
3.7	-30	836.600001	-1	2091						

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this decrement is undertile and the produced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 www.tw.sqs.com



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 157 of 189

## FREQUENCY ERROR vs. VOLTAGE

REQUERCI ERROR VS. VOLTAGE					
]	Reference Frequency: GPRS 1900 Mid Channel 1880 MHz				
		Limit: +/- 2.5 ppm			
Power Supply Environment Frequency D. L. C. L. C					
Vdc	Temperature ( )	(MHz)	Delta (Hz)	Limit (Hz)	
4.1	20	1879.999995	-2	4700	
3.7	20	1879.999997	0	4700	
3.6	20	1880.000003	6	4700	
3.0	20	1000 00000	0	4700	
(End point)	20	1880.000006	9	4700	

# FREQUENCY ERROR vs. TEMPERATURE

Reference Frequency: GPRS 1900 Mid Channel 1880 MHz					
Limit: +/- 2.5 ppm					
Power Supply	Environment	Frequency	D-14- (II-)	Limit (II-)	
Vdc	Temperature ( )	(MHz)	Delta (Hz)	Limit (Hz)	
3.7	50	1880.000003	6	4700	
3.7	40	1879.999999	2	4700	
3.7	30	1880.000003	6	4700	
3.7	20	1879.999997	0	4700	
3.7	10	1879.999996	-1	4700	
3.7	0	1880.000006	9	4700	
3.7	-10	1879.999995	-2	4700	
3.7	-20	1880.000001	4	4700	
3.7	-30	1880.000000	3	4700	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate is unleastful and difference may be prosequed to the full lest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

t (886-2) 2299-3279

f (886-2) 2298-0488

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 www.tw.sqs.com



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 158 of 189

FREQUENCY ERROR vs. VOLTAGE

THE QUEITOT ET	REQUERCT ERROR VS. VOETROE				
F	Reference Frequency: WCDMA II Mid Channel 1880 MHz				
	Limit: +/- 2.5 ppm				
Power Supply	Environment	Frequency	Dolto (Hz)	Limit (IIa)	
Vdc	Temperature ( )	(MHz)	Delta (Hz)	Limit (Hz)	
4.1	20	1880.000002	1	4700	
3.7	20	1880.000001	0	4700	
3.6	20	1879.999997	-4	4700	
3.0	20	1070 00000	2	4700	
(End point)	20	1879.999998	-3	4700	

# FREQUENCY ERROR vs. TEMPERATURE

REQUERCT ET	REQUESTET ERROR VS. TEMI ERATURE					
	Reference Frequency: WCDMA II Mid Channel 1880					
		Limit: +/- 2.5 ppm				
Power Supply	Environment	Frequency	Dolto (Hg)	Limit (Hz)		
Vdc	Temperature ( )	(MHz)	Delta (Hz)	Limit (Hz)		
3.7	50	1879.999995	-6	4700		
3.7	40	1879.999994	-7	4700		
3.7	30	1880.000004	3	4700		
3.7	20	1880.000001	0	4700		
3.7	10	1880.000003	2	4700		
3.7	0	1879.999999	-2	4700		
3.7	-10	1879.999994	-7	4700		
3.7	-20	1879.999995	-6	4700		
3.7	-30	1879.999999	-2	4700		

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this decrement is undertile and the produced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 159 of 189

FREQUENCY ERROR vs. VOLTAGE

I KEQUEITOT EI	REQUERCI ERROR VS. VOLTAGE				
R	Reference Frequency: WCDMA V Mid Channel 836.6 MHz				
	Limit: +/- 2.5 ppm				
Power Supply	Environment	Frequency	Dolto (Hz)	Limit (Hz)	
Vdc	Temperature ( )	(MHz)	Delta (Hz)	Limit (Hz)	
4.1	20	836.600004	-4	2091	
3.7	20	836.600008	0	2091	
3.6	20	836.599997	-11	2091	
3.0	20	026 500005	12	2001	
(End point)	20	836.599995	-13	2091	

# FREQUENCY ERROR vs. TEMPERATURE

INEQUERICT ET	MON VS. TEMILE	MITORE			
F	Reference Frequency: WCDMA V Mid Channel 836.6 MHz				
		Limit: +/- 2.5 ppm			
Power Supply	Environment	Frequency	Dolto (Hg)	Limit (Hz)	
Vdc	Temperature ( )	(MHz)	Delta (Hz)	Limit (Hz)	
3.7	50	836.599994	-14	2091	
3.7	40	836.599992	-16	2091	
3.7	30	836.599997	-11	2091	
3.7	20	836.600008	0	2091	
3.7	10	836.599992	-16	2091	
3.7	0	836.599992	-16	2091	
3.7	-10	836.600005	-3	2091	
3.7	-20	836.600006	-2	2091	
3.7	-30	836.599997	-11	2091	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this decrement is undertile and the produced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 160 of 189

## FREOUENCY ERROR vs. VOLTAGE

Reference Frequency: CDMA BC0 Mid Channel 836.6 MHz					
	Limit: +/- 2.5 ppm				
Power Supply	Environment	Frequency	Dolto (Hz)	Limit (Hz)	
Vdc	Temperature ( )	(MHz)	Delta (Hz)	Limit (Hz)	
4.10	25.00	836.519995	-2.00	2091	
3.70	25.00	836.519993	0.00	2091	
3.60	25.00	836.520005	-12.00	2091	
3.0	25.00	026 520002	10.00	2001	
(End point)	25.00	836.520003	-10.00	2091	

# FREQUENCY ERROR vs. TEMPERATURE

Reference Frequency: CDMA BC0 Mid Channel 836.6 MHz				
Limit: +/- 2.5 ppm				
Power Supply	Environment	Frequency	Delta (Hz)	Limit (Hz)
Vdc	Temperature ( )	(MHz)	Della (HZ)	Lillit (HZ)
3.70	50	836.519995	-2.00	2091
3.70	40	836.519992	1.00	2091
3.70	30	836.519997	-4.00	2091
3.70	20	836.519993	0.00	2091
3.70	10	836.519992	1.00	2091
3.70	0	836.519992	1.00	2091
3.70	-10	836.520005	-12.00	2091
3.70	-20	836.520006	-13.00	2091
3.70	-30	836.519997	-4.00	2091

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate is unleastful and difference may be prosequed to the full lest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 f (886-2) 2298-0488 www.tw.sqs.com



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 161 of 189

# FREOUENCY ERROR vs. VOLTAGE

R	Reference Frequency: CDMA BC1 Mid Channel 1880 MHz				
		Limit: +/- 2.5 ppm			
Power Supply	Environment	Frequency	Dolto (Hg)	Limit (IIa)	
Vdc	Temperature ( )	(MHz)	Delta (Hz)	Limit (Hz)	
4.10	25	1879.999993	10.00	4700	
3.70	25	1880.000003	0.00	4700	
3.60	25	1880.000001	2.00	4700	
3.0	25	1070 00007	6.00	4700	
(End point)	25	1879.999997	6.00	4700	

# FREQUENCY ERROR vs. TEMPERATURE

Reference Frequency: CDMA BC1 Mid Channel 1880 MHz				
Limit: +/- 2.5 ppm				
Power Supply	Environment	Frequency	Dolto (Uz)	Limit (Hg)
Vdc	Temperature ( )	(MHz)	Delta (Hz)	Limit (Hz)
3.70	50	1879.999995	8.00	4700
3.70	40	1879.999992	11.00	4700
3.70	30	1879.999997	6.00	4700
3.70	20	1880.000003	0.00	4700
3.70	10	1879.999992	11.00	4700
3.70	0	1879.999992	11.00	4700
3.70	-10	1880.000005	-2.00	4700
3.70	-20	1880.000006	-3.00	4700
3.70	-30	1879.999997	6.00	4700

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate is unleastful and difference may be prosequed to the full lest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 162 of 189

## FREOUENCY ERROR vs. VOLTAGE

Reference Frequency: CDMA BC10 Mid Channel 820.5 MHz					
	Limit: +/- 2.5 ppm				
Power Supply	Environment	Frequency	Dolto (IIa)	Limit (IIa)	
Vdc	Temperature ( )	(MHz)	Delta (Hz)	Limit (Hz)	
4.10	25.00	820.499993	1.00	2091	
3.70	25.00	820.499994	0.00	2091	
3.60	25.00	820.500003	-9.00	2091	
3.0	25.00	020 500006	12.00	2001	
(End point)	25.00	820.500006	-12.00	2091	

# FREOUENCY ERROR vs. TEMPERATURE

7112 & 0 22 1 0 7 22	thon 15. I Elvii E				
Reference Frequency: CDMA BC10 Mid Channel 820.5 MHz					
	Limit: +/- 2.5 ppm				
Power Supply	Environment	Frequency	D-14- (II-)	I imit (II-)	
Vdc	Temperature ( )	(MHz)	Delta (Hz)	Limit (Hz)	
3.70	50	820.500006	-12.00	2091	
3.70	40	820.499996	-2.00	2091	
3.70	30	820.500003	-9.00	2091	
3.70	20	820.499994	0.00	2091	
3.70	10	820.499992	2.00	2091	
3.70	0	820.499996	-2.00	2091	
3.70	-10	820.499998	-4.00	2091	
3.70	-20	820.499999	-5.00	2091	
3.70	-30	820.500009	-15.00	2091	

Note: The battery is rated 3.7Vdc.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate is unleastful and difference may be prosequed to the full lest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

> 台灣檢驗科技股份有限公司 t (886-2) 2299-3279 f (886-2) 2298-0488



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

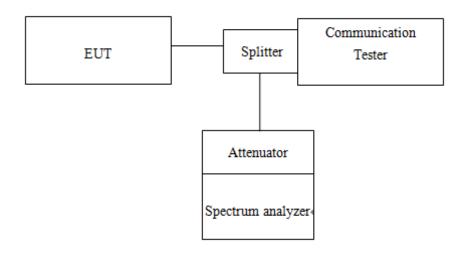
Page: 163 of 189

## 12. PEAK TO AVERAGE RATIO

# 12.1. Standard Applicable

The peak-to-average ration (PAR) of the transmission may not exceed 13dB.

## 12.2. Test SET-UP



## 12.3. Measurement Procedure

- 1. KDB 971168 D01 is employed as the following procedure is proper adjusted accordingly:
- 2. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth; & internal =1ms
- 3. Set the number of counts to a value that stabilizes the measured CCDF curve.

## 12.4. Measurement Equipment Used

Conducted Emission (measured at antenna port) Test Site					
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.
TYPE		NUMBER	NUMBER	CAL.	
Spectrum Analyzer	Agilent	E4446A	MY51100003	01/29/2015	01/28/2016
Radio Communication Analyzer	R&S	CMU200	102189	02/11/2015	02/10/2016
Radio Communication Analyzer	Anritsu	MT8820C	6200995019	10/08/2014	10/09/2015
DC Block	Mini-Circuits	BLK-18-S+	1	01/02/2015	01/01/2016
Attenuator	Mini-Circuit	BW-S10W2+	002	01/02/2015	01/01/2016
Splitter	Agilent	11636B	N/A	01/02/2015	01/01/2016
DC Power Supply	Agilent	E3640A	MY52410006	11/10/2014	11/09/2015

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卽天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 164 of 189

### 12.5. Measurement Result

## **Tabular Results:**

Frequency	СН	Peak-to-Average Ratio (dB)	
(MHz)	CH	GPRS	EDGE
824.20	128	10.48	11.95
836.60	190	9.97	11.40
848.80	251	10.87	10.30

Frequency	СН	Peak-to-Average Ratio (dB)	
(MHz)	Ch	GPRS	EDGE
1850.20	512	10.28	12.15
1880.00	661	10.42	12.50
1909.80	810	11.13	12.60

Frequency	СН	Peak-to-Average Ratio (dB)		
(MHz)	Cn	WCDMA II	HSDPA II	HSUPA II
1850.20	9262	3.14	3.92	3.98
1880.00	9400	3.16	3.94	3.69
1909.80	9538	3.18	3.80	3.18

Frequency (MHz)	СН	Peak-to-Average Ratio (dB)		
	CII	WCDMA V	HSDPA V	HSUPA V
826.40	4132	3.33	3.68	3.79
836.60	4183	3.74	5.21	4.90
846.60	4233	3.22	4.37	4.02

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate is unleastful and difference may be prosequed to the full lest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No.134,WuKungRoad,NewTaipeilndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 165 of 189

Frequency (MHz)	CH	Peak-to-Average Ratio (dB)	
	СН	CDMA EVDO BC0 BC0	
1850.20	9262	3.93	3.89
1880.00	9400	3.47	3.47
1909.80	9538	3.58	3.56

Frequency	CH	Peak-to-Average Ratio (dB)	
(MHz)	СН	CDMA EVDO BC1 BC1	
826.40	4132	3.48	3.45
836.60	4183	3.80	3.87
846.60	4233	3.35	3.28

Frequency (MHz)	CH	Peak-to-Average Ratio (dB)	
	СН	CDMA BC10	EVDO BC10
817.9	476	3.73	3.80
820.5	580	3.84	3.89
823.1	684	3.89	3.89

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有说明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*No.134,WuKungRoad,NewTaipeilndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號
\*\*No.134,WuKungRoad,NewTaipeilndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 166 of 189

### **Measurement Results:**

### **GPRS 850 Channel Low**



### **GPRS 850 Channel Mid**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for so days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留句天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format document, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format document, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions for electronic format document, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format document, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions for Electronic Document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention o Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

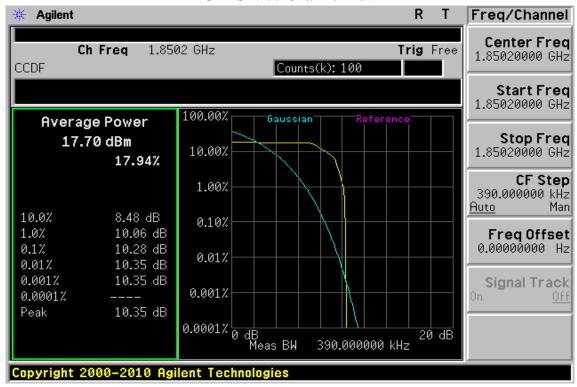
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 167 of 189

## **GPRS 850 Channel High**



#### **GPRS 1900 Channel Low**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results snown in this test report refer only to the sample(s) tested and such sample(s) are retained for so days only. 

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm.

Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of the stream of the st Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

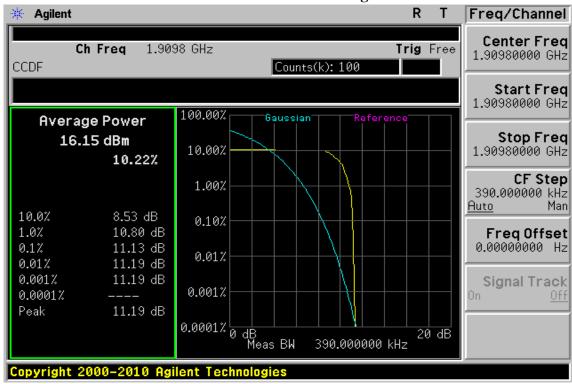
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 168 of 189

#### **GPRS 1900 Channel Mid**



# **GPRS 1900 Channel High**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results snown in this test report refer only to the sample(s) tested and such sample(s) are retained for so days only. 

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm.

Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of the stream of the st Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

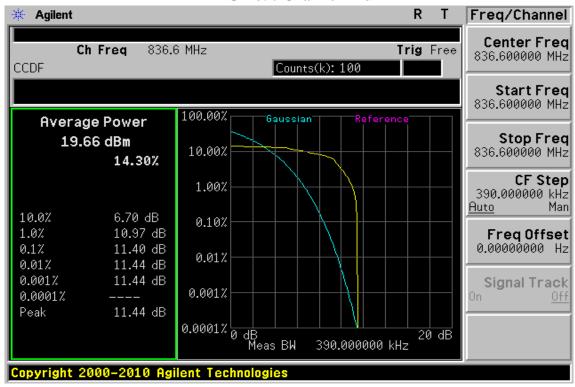
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 169 of 189

### **EDGE 850 Channel Low**



#### **EDGE 850 Channel Mid**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

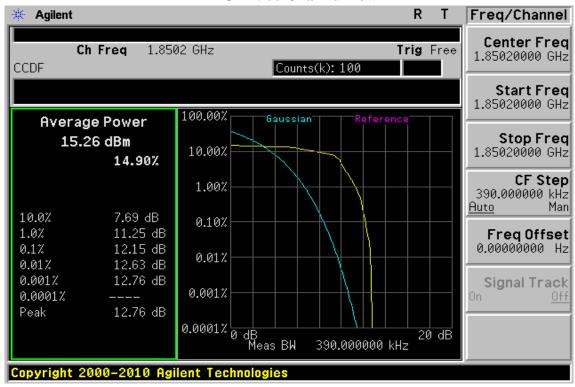
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 170 of 189

## **EDGE 850 Channel High**



#### **EDGE 1900 Channel Low**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for elec-

tronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 171 of 189

#### **EDGE 1900 Channel Mid**



## **EDGE 1900 Channel High**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

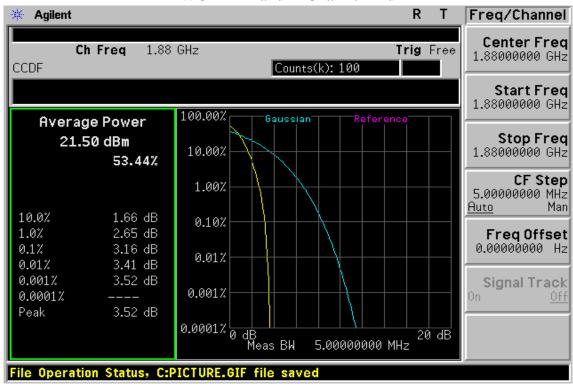
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 172 of 189

#### WCDMA Band II Channel Low



#### **WCDMA Band II Channel Mid**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

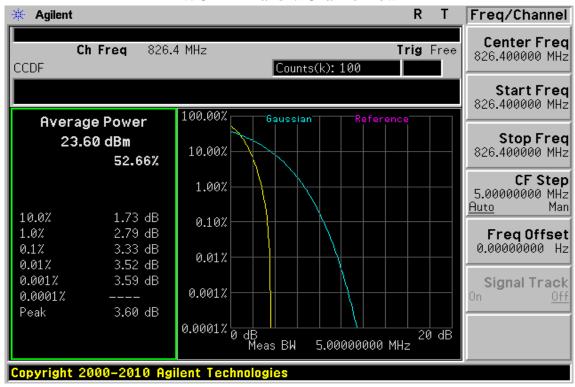
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 173 of 189

## WCDMA Band II Channel High



#### **WCDMA Band V Channel Low**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 174 of 189

#### **WCDMA Band V Channel Mid**



## **WCDMA Band V Channel High**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

f (886-2) 2298-0488

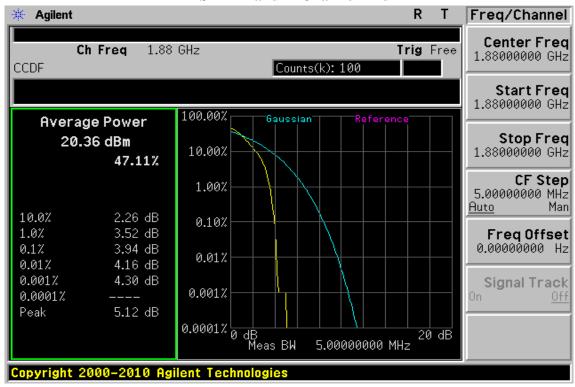
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 175 of 189

### **HSDPA Band II Channel Low**



#### **HSDPA Band II Channel Mid**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

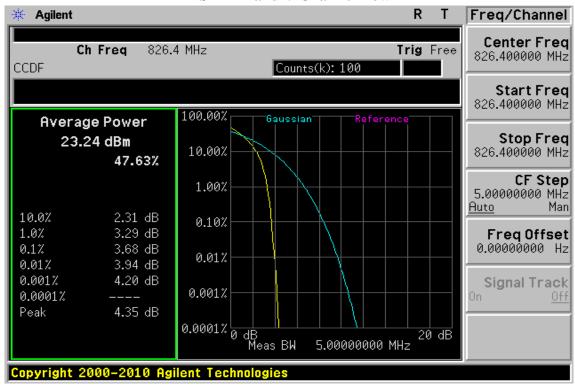
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 176 of 189

## **HSDPA Band II Channel High**



#### **HSDPA Band V Channel Low**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

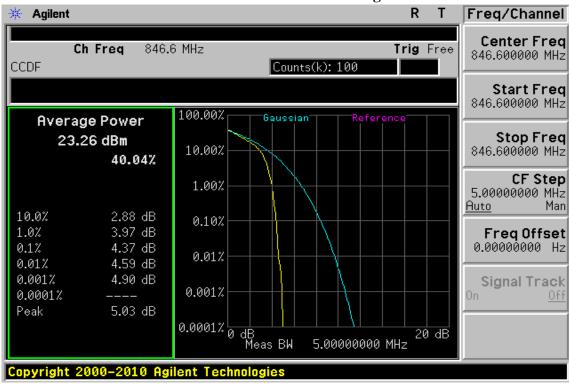
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 177 of 189

### **HSDPA Band V Channel Mid**



## **HSDPA Band V Channel High**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

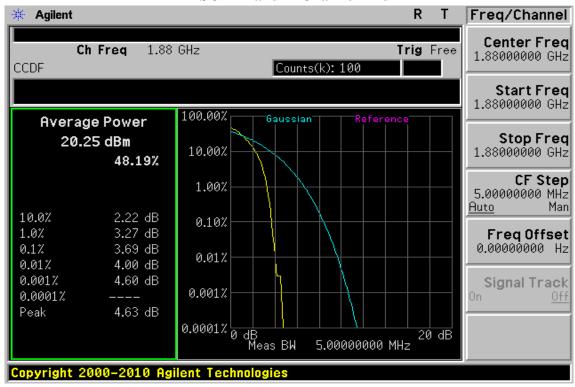
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 178 of 189

### **HSUPA Band II Channel Low**



#### **HSUPA Band II Channel Mid**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

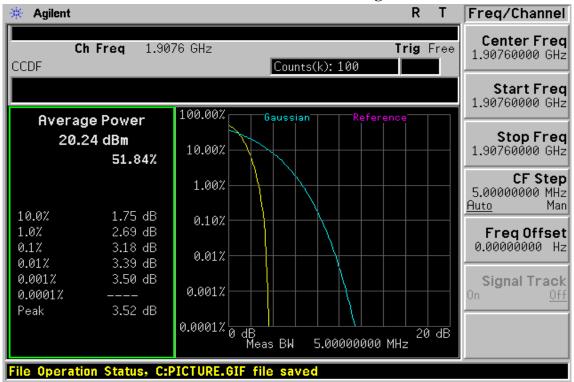
台灣檢驗科技股份有限公司

f (886-2) 2298-0488

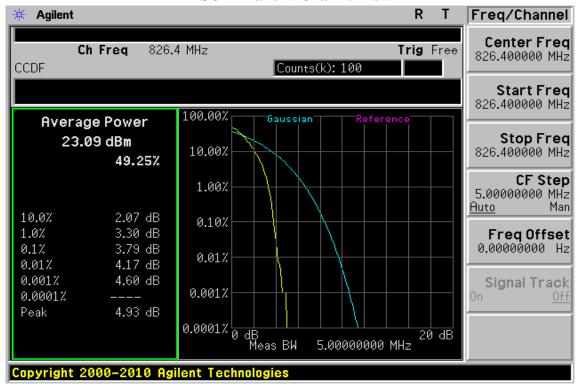
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 179 of 189

## **HSUPA Band II Channel High**



#### **HSUPA Band V Channel Low**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 180 of 189

### **HSUPA Band V Channel Mid**



## **HSUPA Band V Channel High**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

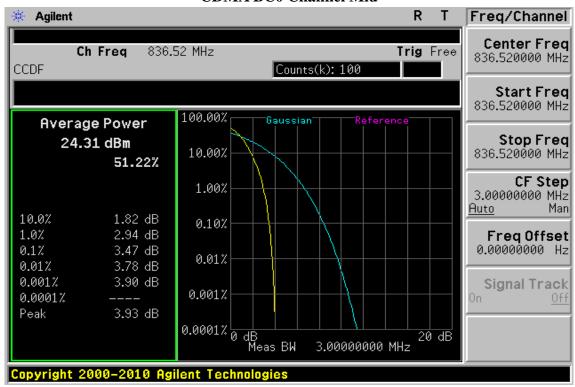
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 181 of 189

#### **CDMA BC0 Channel Low**



### **CDMA BC0 Channel Mid**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for so days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留句天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format document, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format document, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions for electronic format document, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format document, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions for Electronic Document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention only and the wide and the subject to the company's findings at the time of its intervention o Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 182 of 189

## **CDMA BC0 Channel High**



#### **CDMA BC1 Channel Low**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

f (886-2) 2298-0488

Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 183 of 189

### **CDMA BC1 Channel Mid**



# **CDMA BC1 Channel High**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

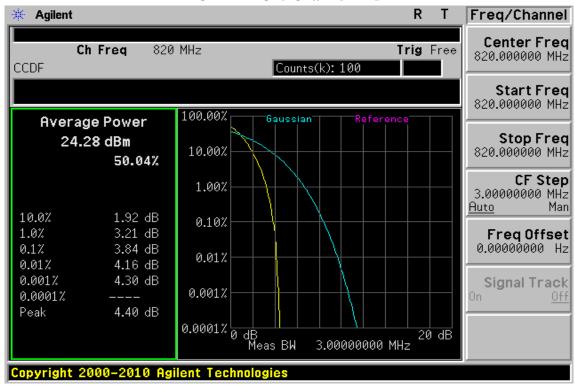
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 184 of 189

#### **CDMA BC10 Channel Low**



#### **CDMA BC10 Channel Mid**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 185 of 189

## **CDMA BC10 Channel High**



#### **EVDO BC0 Channel Low**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

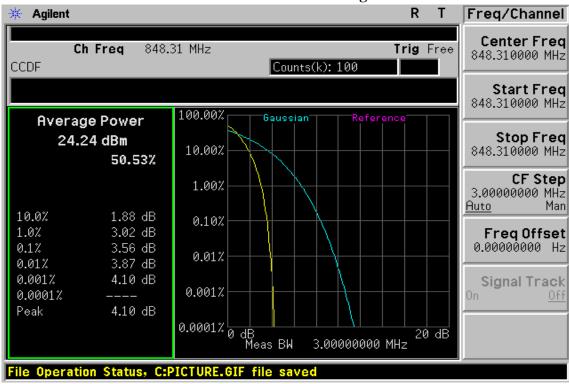
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 186 of 189

#### **EVDO BC0 Channel Mid**



## **EVDO BC0 Channel High**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Unless otherwise stated the results snown in this test report refer only to the sample(s) tested and such sample(s) are retained for so days only. 

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm.

Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of the stream of the st Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

f (886-2) 2298-0488

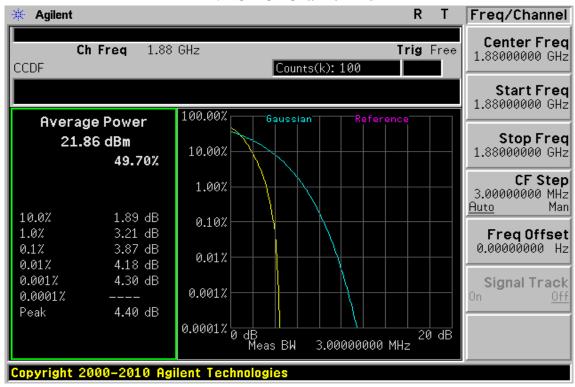
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 187 of 189

#### **EVDO BC1 Channel Low**



#### **EVDO BC1 Channel Mid**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

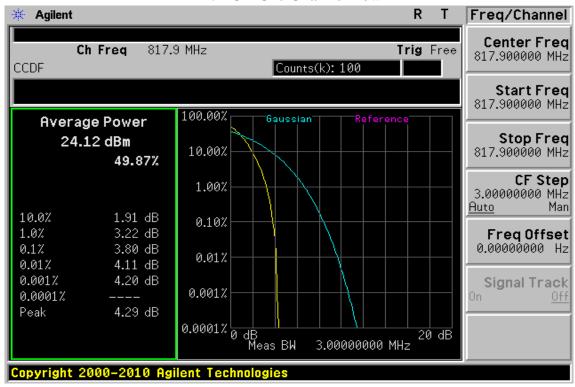
Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 188 of 189

## **EVDO BC1 Channel High**



#### **EVDO BC10 Channel Low**



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Offices Office Windows States the Company in this act report in this campact, which is a state of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms\_and\_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Report No.: ER/2015/60004 Issue Date: Jun. 26, 2015

Page: 189 of 189

#### **EVDO BC10 Channel Mid**



## **EVDO BC10 Channel High**



~ End of Report ~

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results snown in this test report refer only to the sample(s) tested and such sample(s) are retained for so days only. 

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm.

Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of the stream of the st Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488