

Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 1 of 207

ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 22 SUBPART H, PART 24 SUBPART E AND INDUSTRY CANADA RSS-132 and RSS-133 REQUIREMENT

OF

Product Name: Juno T41/5

Brand Name: Trimble

Marketing Name: RH42G

JUNO/T41/5-BWCR; JUNO/T41/5-BWCRG; Model No.:

JUNO/T41/5-BWCS; JUNO/T41/5-BWCSG

JUNO/T41/5-BWCR: 2-4M GPS:

JUNO/T41/5-BWCRG: 1M GPS;

JUNO/T41/5-BWCS: **Model Difference:**

2-4M GPS & 1D/2D Image Scan function;

JUNO/T41/5-BWCSG:

1M GPS &1D/2D Image Scan function

FCC ID: **S9E-JNOBWCS**

5817A-JNOBWCS IC:

Report No.: EH/2013/40048

Issue Date: Jun. 05, 2013

FCC Rule Part: 2,22H & 24E

IC Rule Part: RSS 132, Issue 3 and RSS 133, Issue 6

Trimble Navigation Limited Prepared for:

345 SW Avery Avenue, Corvallis, OR 97333

SGS Taiwan Ltd.

Electronics & Communication Laboratory Prepared by:

No.134, Wu Kung Road, New Taipei Indus-

trial 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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 2 of 207

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

JUNO/T41/5-BWCR; JUNO/T41/5-BWCRG; Model No.:

JUNO/T41/5-BWCS; JUNO/T41/5-BWCSG

JUNO/T41/5-BWCR: 2-4M GPS;

JUNO/T41/5-BWCRG: 1M GPS; **Model Difference:**

JUNO/T41/5-BWCS: 2-4M GPS & 1D/2D Image Scan function;

JUNO/T41/5-BWCSG: 1M GPS &1D/2D Image Scan function

FCC ID: S9E-JNOBWCS

IC: 5817A-JNOBWCS File Number: EH/2013/40048

Date of test: Apr. 11, 2013 ~ May 29, 2013

Date of EUT Received: Apr. 11, 2013

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, Issue 3 of RSS-Gen and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits of FCC Rule PART 22 subpart H, PART 24 subpart E and IC standards Issue 3 of RSS-132, Issue 6 of RSS-133.

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

Test By:	Marcus Iseng	Date:	Jun. 05, 2013	
Prepared By:	Marcus Tseng / Engineer Judy Han	Date:	Jun. 05, 2013	
Approved By:	Judy Hsu / Clerk Jim Chang	Date: 	Jun. 05, 2013	

Jim Chang / Supervisor

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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 3 of 207

Version

Version No.	Date	Description
00	Jun. 05, 2013	Initial creation of 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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 4 of 207

Table of Contents

1.	GEN	NERAL PRODUCT INFORMATION	6
	1.1.	Related Submittal(s) / Grant (s)	9
	1.2.	Test Methodology	9
	1.3.	Test Facility	9
	1.4.	Special Accessories	9
	1.5.	Equipment Modifications	9
2.	SYS	TEM TEST CONFIGURATION	
	2.1.	EUT Configuration	10
	2.2.	EUT Exercise	10
	2.3.	Test Procedure	10
	2.4.	Measurement Equipment Used:	11
	2.5.	Configuration of Tested System	
3.		IMARY OF TEST RESULTS	
4.		CRIPTION OF TEST MODESSUREMENT UNCERTAINTY	
5. 6.		POWER OUTPUT MEASUREMENT	
•	6.1	Standard Applicable:	
	6.2	Test Set-up:	19
	6.3	Measurement Procedure:	19
	6.4	Measurement Equipment Used:	19
	6.5	Measurement Result:	20
7.	ERP	, EIRP MEASUREMENT	29
	7.1.	Standard Applicable:	29
	7.2.	Test SET-UP (Block Diagram of Configuration):	29
	7.3.	Measurement Procedure:	31
	7.4.	Measurement Equipment Used:	32
	7.5.	Measurement Result: (Peak) –using option of peak measurement	33
	9.5.1	Measurement Result: (Average) – using option of RMS measurement	45
8.	OCO	CUPIED BANDWIDTH MEASUREMENT	57
	8.1.	Standard Applicable:	57
	8.2.	Test Set-up:	57
	8.3.	Measurement Procedure:	57
	8.4.	Measurement Equipment Used:	57
	8.5.	Measurement Result:	
9.	OUT	T OF BAND EMISSION AT ANTENNA TERMINALS	
	9.1.	Standard Applicable:	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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 5 of 207

	9.2.	Test SET-UP:	81
	9.3.	Measurement Procedure:	82
	9.4.	Measurement Equipment Used:	82
	9.5.	Measurement Result:	82
10.	FIEL	D STRENGTH OF SPURIOUS RADIATION MEASUREMENT	131
	10.1.	Standard Applicable:	131
	10.2.	EUT Setup (Block Diagram of Configuration):	133
	10.3.	Measurement Procedure:	134
	10.4.	Measurement Equipment Used:	134
	10.5.	Measurement Result:	134
11.	FRE	QUENCY STABILITY V.S. TEMPERATURE MEASUREMENT	183
	11.1.	Standard Applicable:	183
	11.2.	Test Set-up:	183
	11.3.	Measurement Procedure:	183
	11.4.	Measurement Equipment Used:	183
	11.5.	Measurement Result:	184
12.	FRE	QUENCY STABILITY V.S. VOLTAGE MEASUREMENT	186
	12.1.	Standard Applicable:	186
	12.2.	Test Set-up:	186
	12.3.	Measurement Procedure:	186
	12.4.	Measurement Equipment Used:	186
	12.5.	Measurement Result:	187
13.	PEA	K TO AVERAGE RATIO	189
	13.1.	Standard Applicable:	189
	13.2.	Test SET-UP (Block Diagram of Configuration):	189
	13.3.	Measurement Procedure:	189
	13.4.	Measurement Equipment Used:	189
	13.5.	Measurement Result:	189

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 6 of 207

1. GENERAL PRODUCT INFORMATION

General:

General.			
Product Name:	Juno T41/5		
Brand Name:	Trimble		
Marketing Name:	RH42G		
Model No.:		BWCR; JUNO/T41/5-BWCRG; BWCS; JUNO/T41/5-BWCSG	
Model difference:	JUNO/T41/5-BWCR: 2-4M GPS; JUNO/T41/5-BWCRG: 1M GPS; JUNO/T41/5-BWCS: 2-4M GPS & 1D/2D Image Scan function; JUNO/T41/5-BWCSG: 1M GPS &1D/2D Image Scan function		
Hardware Version:	2.0		
Software Version:	2.1		
USB Cable	Model: A9136939, Supplier: Sinbon		
	3.7Vdc from re	echargeable battery or 100-240V by AC/DC power adapter	
Power Supply:	Battery: Model: S11GD103A Supplier: LICO		
	Adapter:	Model: PSA10F-050Q Supplier: PHIHONG TECHNOLOGY CO., LTD.	

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 www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 7 of 207

GSM/GPRS and WCDMA:

	Operating Frequency	Rated Power		
	GSM/GPRS 850, Class 12	824.2 MHz- 848.8 MHz	33 dBm	
Cellular Phone	EDGE 850, Class 12	824.2 MHz- 848.8 MHz	33 dBm	
Standards	GSM/GPRS 1900, Class 12	1850.2MHz – 1909.8MHz	30 dBm	
Frequency Range and Power:	EDGE 1900, Class 12	1850.2MHz – 1909.8MHz	30 dBm	
	WCDMA/HSUPA/HSDPA /HSPA+ Band II	1852.4MHz – 1907.6MHz	24 dBm	
	WCDMA/HSUPA/HSDPA /HSPA+ Band V	826.4MHz - 846.6MHz	24 dBm	
Type of Emission	GSM 850: 246KGXW, GSM 1900: 247KGXW GPRS 850: 247KGXW, GPRS 1900: 246KGXW EDGE 850: 247KG7W, EDGE 1900: 254KG7W WCDMA Band II: 4M17F9W, WCDMA Band V: 4M16F9W HSUPA Band II: 4M17F9W, HSUPA Band V: 4M12F9W HSDPA Band II: 4M25F9W, HSDPA Band V: 4M16F9W			
IMEI:	359998040812283			

This test report applies for 850 /1900 GSM / GPRS / EDGE, WCDMA / HSDPA / HSUPA / HSPA+ Band II/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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 8 of 207

Final Amplifier Voltage and Current Information:

Test Mode	DC voltage (V)	DC current (mA)
GSM 850	3.7	420
GSM 1900	3.7	370
GPRS 850	3.7	270
GPRS 1900	3.7	230
EDGE 850	3.7	180
EDGE 1900	3.7	180
WCDMA B2	3.7	680
WCDMA B5	3.7	790
HSUPA B2	3.7	720
HSUPA B5	3.7	830
HSDPA B2	3.7	710
HSDPA B5	3.7	830

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 9 of 207

1.1. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: S9E-JNOBWCS filing to comply with Section Part 22 subpart H, Part 24 subpart E of the FCC CFR 47 Rules and IC: **5817A-JNOBWCS** filing to comply with Issue 3 of RSS-132, Issue 6 of RSS-133.

1.2. Test Methodology

Both conducted and radiated testing were performed according to the procedures document of TIA/EIA 603C and FCC CFR 47.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055, 2.1057, issue 3 of RSS-132 and issue 6 of RSS-133...

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

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

KDB971168 D01 Power Meas license Digital System v01 as the supplemental guideline to conduct the measurement, including Peak to Power Average Ratio, Average Power over the fundamental signal BW (EIRP/ERP) and Signal Bandwidth...

1.3. Test Facility

The measurement facilities used to collect the 3m Radiated Emission and AC power line conducted data are located on the address of SGS Taiwan Ltd. Electronics & Communication Laboratory No. 134, Wu Kung Rd., Wuku Industrial Zone, Taipei Country, Taiwan which are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4: 2003. FCC Registration Number are: 990257, Canada Registration Number: 4620A-4

The 10 m Open Area Test Sites located on the address of SGS Taiwan Ltd. Electronics & Communication Laboratory No. 29, Pau-Tou-Tsuo Valley Chia-Pau Tsuen, Linkou Hsiang, Taipei county, which is constructed and calibrated to meet the CISPR 22/EN 55022 requirements. SGS Site No. 1(3 &10 meters) and FCC Registration Number: 94644.

All equipment is calibrated externally and traceable to SI (International System of Unit).

1.4. Special Accessories

Not available for this EUT intended for grant.

1.5. Equipment Modifications

Not available for this EUT intended for grant.

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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 10 of 207

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

he 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 and RSS-Gen Issue 3, 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 of ANSI C63.4:2009.

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 www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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 www.tw.sas.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 11 of 207

2.4. Measurement Equipment Used:

Conducted Emission (measured at antenna port) Test Site						
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.	
TYPE		NUMBER	NUMBER	CAL.		
Power Sensor	Anritsu	ML2495A	1005007	02/08/2012	02/07/2014	
Power Meter	Anritsu	MA2411B	917032	02/08/2012	02/07/2014	
Spectrum Analyzer	Agilent	E4446A	MY51100003	04/15/2013	04/14/2014	
Spectrum Analyzer	Agilent	E4440A	US41160416	03/17/2012	03/16/2014	
Radio Communication Analyzer	R & S	CMU200	102189	08/12/2012	08/11/2014	
Radio Communication Analyzer	Anritsu	MT8820C	6200995019	10/17/2012	10/16/2013	
Temperature Chamber	TERCHY	MHG-120LF	911009	04/16/2012	04/15/2014	
DC Block	Mini-Circuits	BLK-18-S+	1	02/28/2013	02/27/2014	
Attenuator	Mini-Circuit	BW-S10W2+	002	02/28/2013	02/27/2014	
Splitter	Agilent	11636B	N/A	02/28/2013	02/27/2014	
DC Power Supply	Agilent	E3640A	MY40005907	07/15/2011	07/14/2013	

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 www.sgs.com/terms_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.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 12 of 207

ERP, EI	RP MEASUREM	ENT EQUIPN	MENT List 966	Chamber	
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.
TYPE		NUMBER	NUMBER	CAL.	
Spectrum Analyzer	Agilent	E4446A	MY51100003	04/15/2013	04/14/2014
EXA Spectrum Analyzer	Agilent	N9010A	MY50420195	02/06/2013	02/07/2014
Spectrum Analyzer	R&S	FSV-30	101398	10/18/2011	10/17/2013
Bilog Antenna	SCHWAZBECK	VULB9168	378	01/10/2012	01/09/2014
Bilog Antenna	SCHWAZBECK	VULB9160	3158	11/24/2011	11/23/2013
Dipole Antenna	SCHWAZBECK	VHAP	908/909	07/17/2010	07/16/2013
Dipole Antenna	SCHWAZBECK	UHAP	891/892	07/17/2010	07/16/2013
Horn antenna	ETS.LINDGREN	3117	123995	05/31/2013	05/30/2014
Horn antenna	ETS.LINDGREN	3117	123991	01/21/2013	01/20/2015
Horn Antenna	Schwarzbeck	BBHA9170	184	01/17/2012	01/17/2014
Horn Antenna	Schwarzbeck	BBHA9170	185	07/11/2011	07/10/2013
RF amplifier	Miteq	AMF-6F-2600 400-40-8P	971576	01/29/2013	01/28/2014
Signal Generator	R&S	SMR40	100210	02/02/2012	02/01/2014
Signal Generator	Agilent	E4438C	MY45093613	07/15/2011	07/14/2013
Pre-Amplifier	Agilent	8447D	1937A02834	01/04/2013	01/03/2014
Pre-Amplifier	EMC Instruments Corp.	EMC0126530	980038	01/04/2013	01/03/2014
Attenuator	Mini-Circuit	BW-S10W2+	004	02/28/2013	02/27/2014
Radio Communication Analyzer	R & S	CMU200	102189	08/12/2012	08/11/2014
Radio Communication	Anritsu	MT8820C	6200995019	10/17/2012	10/16/2013
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	01/04/2013	01/03/2014
Low Loss Cable	HUBER+SUHNER	966_Rx	3m	01/04/2013	01/03/2014
Filter 800-1000	Micro-Tronics	EWT	M2	02/28/2013	02/28/2014
Filter 1800-2000	Micro-Tronics	EWT	M2	02/28/2013	02/28/2014
Filter 1700-1800	Micro-Tronics	BRC15751	001	02/28/2013	02/28/2014
1GHz High Pass Filter	Micro-Tronics	HPM50108	32	02/28/2013	02/28/2014
2GHz High Pass Filter	Micro-Tronics	HPM50110	36	02/28/2013	02/28/2014

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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 13 of 207

2.5. Configuration of Tested System

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



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

EUT

Remote Side

CMU200

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.	Power Meter	Anritsu	ML2495A	1005007	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 www.sgs.com/terms_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.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 14 of 207

3. SUMMARY OF TEST RESULTS

FCC Rules	IC Rules	Description Of Test	Result
\$2.1046(a) \$22.913(a)(2) \$24.232(c)	N/A	RF Power Output	Compliant
\$2.1046(a) \$22.913(a)(2) \$24.232(c)	§4.8 (RSS-Gen Issue 3) §5.4 (RSS-132) §6.4 (RSS-133)	ERP/ EIRP measurement	Compliant
§2.1049(h)	§4.6.1 (RSS-Gen Issue 3) §2.3 (RSS-133)	99% Occupied Bandwidth	Compliant
\$2.1051 \$22.917(a) \$24.238(a)	§4.9 (RSS-Gen Issue 3) §5.5 (RSS-132) §6.5 (RSS-133)	Out of Band Emissions at Antenna Terminals and Band Edge	Compliant
\$2.1053 \$22.917(a) \$24.238(a)	§4.9 (RSS-Gen Issue 3) §5.5 (RSS-132) §6.5 (RSS-133)	Field Strength of Spurious Radiation	Compliant
§24.232(d)	\$6.4 (RSS-133) \$5.4 (RSS-132)	Peak to Average Ratio	Compliant
\$2.1055(a)(1) \$22.355 \$24.235	§4.7 (RSS-Gen Issue 3) §4.3 (RSS-132) §6.3 (RSS-133)	Frequency Stability vs. Temperature	Compliant
\$2.1055(d)(2) \$22.355 \$24.235	§4.7 (RSS-Gen Issue 3) §5.3 (RSS-132) §6.3 (RSS-133)	Frequency Stability vs. Voltage	Compliant
N/A	§4.10 (RSS-Gen Issue 3) §5.6 (RSS-132) §6.5 (RSS-133)	Receiver Spurious Emissions	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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 15 of 207

Max ERP/EIRP measurement result:

	dBm		W
GSM 850 Band	27.11	ERP	0.514
GSM 1900 Band	31.70	EIRP	1.479
GPRS 850 Band	27.11	ERP	0.514
GPRS 1900 Band	32.18	EIRP	1.652
EDGE 850 Band	25.36	ERP	0.344
EDGE 1900 Band	31.73	EIRP	1.489
WCDMA Band II	30.07	EIRP	1.016
WCDMA Band V	23.20	ERP	0.209
HSUPA Band II	30.51	EIRP	1.125
HSUPA Band V	24.33	ERP	0.271
HSDPA Band II	30.58	EIRP	1.143
HSDPA Band V	24.31	ERP	0.270

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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 16 of 207

4. DESCRIPTION OF TEST MODES

The EUT has been tested under operating condition.

EUT was staying in continuous transmitting mode. Channel Low, Mid and High for each type band with rated data rate were chosen for full testing.

The list of channel selected to conduct the measurements

GSM/GPRS/EDGE 850:

Channel Low: AFRCN 128 at 824.2MHz, Channel Mid: AFRCN 190 at 836.6MHz, Channel High: AFRCN 251 at 848.8MHz.

GSM/GPRS/EDGE 1900:

Channel Low: AFRCN 512 at 1850.2MHz, Channel Mid: AFRCN 661 at 1880.0MHz, Channel High AFRCN 810 at 1909.8MHz

WCDMA/HSPA BII:

Channel Low: UAFRCN 9262 at 1852.4MHz, Channel Mid: UAFRCN 9400 at 1880.0MHz, Channel High: UAFRCN 9538 at 1907.6MHz.

WCDMA/HSPA BV:

Channel Low: UAFRCN 4132 at 826.4MHz, Channel Mid: UAFRCN 4183 at 836.6MHz, Channel High: UAFRCN 4233 at 846.6MHz.

The field strength of spurious radiation emission was measured as EUT stand-up position(H mode)and lie down position (E1, E2 mode) for GSM/GPRS/EDGE and WCDMA/HSPA Band II / V. The worst-case of H position for GSM/GPRS 850/ 1900; WCDMA/HSPA Band II/ Band V were reported.

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_endocuments.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.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 17 of 207

MEASUREMENT UNCERTAINTY

Test Items	Uncertainty
RF Power Output	+/- 1.42 dB
ERP/ EIRP measurement	Vertical Polarization = +/- 4.74dB Horizontal Polarization =+/- 4.62dB
99% Occupied Bandwidth	+/- 123.36 Hz
Out of Band Emissions at Antenna Terminals and Band Edge	+/- 1.55 dB
Peak to Average Ratio	+/- 1.55 dB
Frequency Stability vs. Temperature	+/- 123.36 Hz
Frequency Stability vs. Voltage	+/- 123.36 Hz
Temperature	+/- 0.8 °C
Humidity	+/- 4.7 %
DC / AC Power Source	DC= +/- 1%, AC=+/- 0.2%

Radiated Spurious Emission:

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

	30MHz - 167MHz: +/- 4.22dB		
Measurement uncertainty	167MHz -500MHz: +/- 3.44dB		
(Polarization : Horizontal)	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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 18 of 207

6. RF POWER OUTPUT MEASUREMENT

6.1 Standard Applicable:

According to FCC §2.1046.

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

FCC 24.232(c) Peak Power Measurement limited to 2W

FCC 24.232(c) Equipment must employ means to limit the power to the minimum necessary for successful communication.

3GPP Power limitation for HSDPA and HSUPA

Maximum Output Powers for HSDPA

Sub-test in table	Power	Class 3	Power Class 4		
C.10.1.4	Power (dBm)	Tol (dB)	Power (dBm)	Tol (dB)	
1	+24	+1.7/-3.7	+21	+2.7/-2.7	
2	+24	+1.7/-3.7	+21	+2.7/-2.7	
3	+23.5	+2.2/-3.7	+20.5	+3.2/-2.7	
4	+23.5	+2.2/-3.7	+20.5	+3.2/-2.7	

Maximum Output Powers for HSUPA

Sub-test in table	Power	Class 3	Power Class 4		
C.11.1.3	Power (dBm)	Tol (dB)	Power (dBm)	Tol (dB)	
1	+24	+1.7/-6.7	+21	+2.7/-5.7	
2	+22	+3.7/-5.2	+19	+4.7/-4.2	
3	+23	+2.7/-5.2	+20	+3.7/-4.2	
4	+22	+3.7/-5.2	+19	+4.7/-4.2	
5	+24	+1.7/-6.7	+21	+2.7/-5.7	

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 www.sgs.com/terms_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.

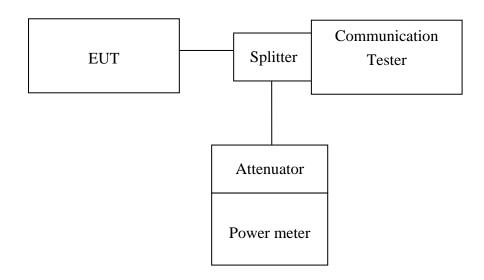
SGS Talwan Ltd. No.134.Wu Kung Road. New Taipei Industrial Park. Wuku District. New Taipei City. Taiwan 24803/新北市五股區新北產業園區五工路 134 號



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 19 of 207

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 attenua tor 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

Necessary Communication complying with 24.232 (c) and 27.5(d)(4) Set CMU200 (base-station simulator) MS Signal with packet data submenu; SLOT Configuration Set appropriate level to verify if or not power on mobile station's link with simulator still exists.

6.4 Measurement Equipment Used:

Refer to section 2.4 in this 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

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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 20 of 207

6.5 Measurement Result:

6.5.1 RF Conducted Output Power

6.5.1.1. GSM/GPRS/EDGE (GMSK; 8-PSK)

Result:

EUT Mode	Frequency (MHz)	СН	Peak Power (dBm)	Average Burst Power (dBm)
	824.2	128	33.10	32.80
GSM 850	836.6	190	33.20	32.90
	848.8	251	33.20	32.90

EUT Mode	Frequency (MHz)	СН	Peak Power (dBm)	Average Burst Power (dBm)
	1850.2	512	29.30	29.20
GSM 1900	1880.0	661	28.70	28.40
	1909.8	810	28.10	27.80

EUT Mode	Frequency (MHz)	СН	Peak Power (4DN 1UP) Class 8 (dBm)	Average Burst Power (4DN 1UP) Class 8 (dBm)	Peak Power (4DN 2UP) Class 10 (dBm)	Average Burst Power (4DN 2UP) Class 10 (dBm)
	824.2	128	33.10	32.80	30.00	29.80
GPRS 850	836.6	190	33.20	32.90	29.90	29.80
	848.8	251	33.20	32.90	29.90	29.70

EUT Mode	Frequency (MHz)	СН	Peak Power (4DN 3UP) Class 11 (dBm)	Average Burst Power (4DN 3UP) Class 11 (dBm)	Peak Power (4DN 4UP) Class 12 (dBm)	Average Burst Power (4DN 4UP) Class 12 (dBm)
	824.2	128	28.00	27.90	26.80	26.60
GPRS 850	836.6	190	28.00	27.90	26.80	26.60
	848.8	251	28.00	27.90	26.60	26.50

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 www.sgs.com/terms_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.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 21 of 207

EUT Mode	Frequency (MHz)	СН	Peak Power (4DN 1UP) Class 8 (dBm)	Average Burst Power (4DN 1UP) Class 8 (dBm)	Peak Power (4DN 2UP) Class 10 (dBm)	Average Burst Power (4DN 2UP) Class 10 (dBm)
	1850.2	512	29.30	29.20	25.80	25.70
GPRS 1900	1880.0	661	28.70	28.40	25.00	24.80
	1909.8	810	28.10	27.80	24.50	24.30

EUT Mode	Frequency (MHz)	СН	Peak Power (4DN 3UP) Class 11 (dBm)	Average Burst Power (4DN 3UP) Class 11 (dBm)	Peak Power (4DN 4UP) Class 12 (dBm)	Average Burst Power (4DN 4UP) Class 12 (dBm)
GPRS 1900	1850.2	512	23.70	23.50	22.30	22.00
	1880.0	661	22.80	22.70	21.30	21.20
	1909.8	810	22.20	22.10	20.90	20.80

EUT Mode	Frequency (MHz)	СН	Peak Power (4DN 1UP) Class 8 (dBm)	Average Burst Power (4DN 1UP) Class 8 (dBm)	Peak Power (4DN 2UP) Class 10 (dBm)	Average Burst Power (4DN 2UP) Class 10 (dBm)
	824.2	128	30.10	27.00	27.20	24.00
EDGE 850	836.6	190	30.20	27.00	27.20	23.90
	848.8	251	30.20	27.00	27.10	23.90

EUT Mode	Frequency (MHz)	СН	Peak Power (4DN 3UP) Class 11 (dBm)	Average Burst Power (4DN 3UP) Class 11 (dBm)	Peak Power (4DN 4UP) Class 12 (dBm)	Average Burst Power (4DN 4UP) Class 12 (dBm)
	824.2	128	25.30	22.10	24.50	21.00
EDGE 850	836.6	190	25.30	22.00	24.20	20.90
	848.8	251	25.20	22.00	24.30	20.90

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 www.sgs.com/terms_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.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 22 of 207

EUT Mode	Frequency (MHz)	СН	Peak Power (4DN 1UP) Class 8 (dBm)	Average Burst Power (4DN 1UP) Class 8 (dBm)	Peak Power (4DN 2UP) Class 10 (dBm)	Average Burst Power (4DN 2UP) Class 10 (dBm)
	1850.2	512	27.80	24.60	24.50	21.50
EDGE 1900	1880.0	661	27.00	23.80	23.80	20.70
	1909.8	810	26.40	23.20	23.20	20.00

EUT Mode	Frequency (MHz)	СН	Peak Power (4DN 3UP) Class 11 (dBm)	Average Burst Power (4DN 3UP) Class 11 (dBm)	Peak Power (4DN 4UP) Class 12 (dBm)	Average Burst Power (4DN 4UP) Class 12 (dBm)
	1850.2	512	23.20	19.90	22.00	18.70
EDGE 1900	1880.0	661	22.30	19.00	21.00	17.60
	1909.8	810	22.10	18.50	20.50	17.10

Cable loss offset Low Band: 14.03dB Cable loss offset High Band: 14.49dB

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 23 of 207

WCDMA mode 6.5.1.2

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 Mode	Frequency (MHz)	СН	Peak Power (dBm)	Average Power (dBm)
	1852.4	9262	25.46	23.10
WCDMA Band II	1880.0	9400	26.42	23.02
Duna 11	1907.6	9538	25.93	22.65

EUT Mode	Frequency (MHz)	СН	Peak Power (dBm)	Average Power (dBm)
	826.40	4132	27.69	23.94
WCDMA Band V	836.60	4183	27.68	23.98
Build	846.60	4233	27.47	23.88

EUT Mode	Frequency	СН	Peak Power	Average Power
EO1 Mode	(MHz)	CII	(dBm)	(dBm)
	1852.40	9262	26.63	22.81
HSUPA Band II	1880.00	9400	26.43	22.73
	1907.60	9538	26.00	22.08

EUT Mode	Frequency (MHz)	СН	Peak Power (dBm)	Average Power (dBm)
	826.40	4132	27.54	23.73
HSUPA Band V	836.60	4183	27.79	23.80
Duna V	846.60	4233	27.70	23.69

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 24 of 207

EUT Mode	Frequency (MHz)	СН	Peak Power (dBm)	Average Power (dBm)
	1852.40	9262	26.27	22.61
HSDPA Band II	1880.00	9400	26.28	22.60
Duna 11	1907.60	9538	25.97	22.12

EUT Mode	Frequency (MHz)	СН	Peak Power (dBm)	Average Power (dBm)
	826.40	4132	27.48	23.71
HSDPA Band V	836.60	4183	27.92	23.83
Build	846.60	4233	27.55	23.70

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

Cable loss offset Low Band: 14.03dB Cable loss offset High Band: 14.49dB

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 25 of 207

6.5.1.3. HSDPA Release 6 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	$oldsymbol{eta_c}$	$eta_{ m d}$	$eta_{ m d} \ (SF)$	β_c/β_d	β _{HS} (Note1, Note 2)	CM (dB) (<i>Note 3</i>)	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	RMS	S Power (d Channel	lBm)	Power Class 3	Comments
	2 32.0	9262	9400	9538	Limitation (dBm)	
	1	22.85	22.64	22.24	20.3dBm – 25.7dBm	Pass
HCDDA (D2)	2	22.56	22.61	22.23	20.3dBm – 25.7dBm	Pass
HSDPA(B2)	3	22.37	22.19	21.71	19.8dBm – 25.7dBm	Pass
	4	22.44	22.20	21.83	19.8dBm – 25.7dBm	Pass

Mode	Sub-test	RMS Power (dBm) Channel		Bm)	Power Class 3	Comments
		4132	4172	4233	Limitation (dBm)	
	1	23.87	24.02	24.09	20.3dBm – 25.7dBm	Pass
HCDDA (D5)	2	24.01	24.05	23.84	20.3dBm – 25.7dBm	Pass
HSDPA(B5)	3	23.41	23.54	23.60	19.8dBm – 25.7dBm	Pass
	4	23.46	23.58	23.66	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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 26 of 207

6.5.1.4.: HSPA (HSDPA & HSUPA) Release 6 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	β _c	$\beta_{\rm d}$	β _d (SF)	β_{c}/β_{d}	β_{HS}	eta_{ec}	$eta_{ m ed}$	β _{ed} (SF)	β _{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 _{ed} 1: 47/15 β _{ed} 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.

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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 27 of 207

Results:

Mode	Sub-test	Avg.	Power (di	Bm)	Power Class 3 Limita-	Comments	
		9262	9400	9538	tion (dBm)		
	1	22.60	22.73	22.32	18.8dBm – 25.7dBm	Pass	
	2	20.65	20.80	20.36	16.8dBm – 25.7dBm	Pass	
HSUPA(B2)	3	21.66	21.75	21.40	17.8dBm – 25.7dBm	Pass	
	4	20.78	20.85	20.40	16.8dBm – 25.7dBm	Pass	
	5	22.49	22.59	22.23	18.8dBm – 25.7dBm	Pass	

Mode	Sub-test	Avg.	Power (d. Channel	Bm)	Power Class 3 Limita-	Comments
		4132	4183	4233	tion (dBm)	
	1	24.04	24.09	23.89	18.8dBm – 25.7dBm	Pass
	2	22.10	22.17	21.93	16.8dBm – 25.7dBm	Pass
HSUPA(B5)	3	23.08	23.15	22.97	17.8dBm – 25.7dBm	Pass
	4	22.15	22.23	22.01	16.8dBm – 25.7dBm	Pass
	5	23.90	23.92	23.78	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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 28 of 207

6.5.2. Minimum Communications Power Measurement

PCS 1900 band

PCL	0	1	2	3	4	5	6	7	8
Output power (dBm)	27.3	25.2	23.3	21.1	19.3	17.4	15.4	13.3	12.3
PCL	9	10	11	12	13	14	15		
Output power (dBm)	10.2	8.4	6.3	4.5	2.3	0.3	-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 / 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 15 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. 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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 29 of 207

ERP, EIRP MEASUREMENT

7.1. Standard Applicable:

According to FCC §2.1046

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

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

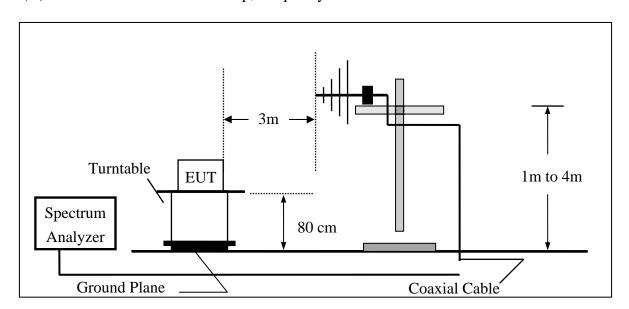
According to IC RSS-133 §6.4

The peak e.i.r.p. for transmitters operating in the band 1850-1910 MHz shall not exceed the limits 2W which given in SRSP-510.

According to issue 3 of RSS 132, section 5.4. The transmitter output power shall not exceed the limits 11.5W given in SRSP-503.

7.2. Test SET-UP (Block Diagram of Configuration):

(A) Radiated Emission 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 www.sgs.com/terms_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.

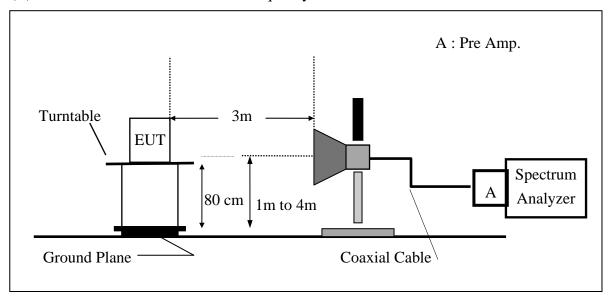
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd. t (886-2) 2299-3279



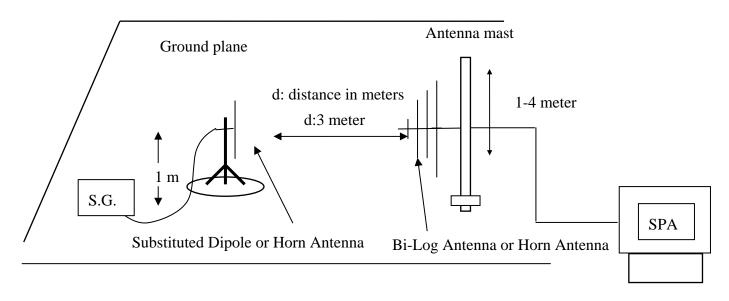
Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 30 of 207

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



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 www.sgs.com/terms_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.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 31 of 207

7.3. Measurement Procedure:

The EUT was placed on an 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.

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.

ERP in frequency band 824.2 –848.80MHz were measured using a substitution method. The EUT was replaced by dipole antenna connected, the S.G. output was recorded and ERP was calculated as follows:

EIRP in frequency band 1850.2 –1909.8MHz were measured using a substitution method. The EUT was replaced by a horn antenna connected, the S.G. output was recorded and EIRP was calculated as follows:

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

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

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.

Or,

2. KDB 971168 D01 Power Meas License Digital Systems v01 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 = $601*10^{-3} = 6$ s.

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 32 of 207

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.

7.4. Measurement Equipment Used:

Refer to section 2.4 in this 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. 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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 33 of 207

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

	I	EUT		Measurement							
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit		
		MHz		V/H	dBm	dBd	dB	dBm	dBm		
		0242	100	V	25.45	3.96	-2.80	26.61	38.45		
		824.2	128	Н	22.80	3.96	-2.80	23.96	38.45		
		836.6	100	V	25.60	4.00	-2.82	26.78	38.45		
	Н		190	Н	23.70	4.00	-2.82	24.88	38.45		
		848.8	251	V	25.93	4.03	-2.84	27.11	38.45		
		848.8	251	Н	23.80	4.03	-2.84	24.99	38.45		
	E.	824.2 12 836.6 19	100	V	23.49	3.96	-2.80	24.65	38.45		
			128	Н	23.55	3.96	-2.80	24.71	38.45		
GG) 4050			190	V	23.66	4.00	-2.82	24.84	38.45		
GSM850	E1			Н	23.81	4.00	-2.82	24.98	38.45		
		0.40.0	251	V	22.87	4.03	-2.84	24.05	38.45		
		848.8	251	Н	23.10	4.03	-2.84	24.28	38.45		
		0010	100	V	20.62	3.96	-2.80	21.79	38.45		
		824.2	128	Н	25.08	3.96	-2.80	26.24	38.45		
	F-0	0266	100	V	20.88	4.00	-2.82	22.05	38.45		
	E2	836.6	190	Н	24.82	4.00	-2.82	25.99	38.45		
		0.40.0	2.54	V	20.04	4.03	-2.84	21.23	38.45		
		848.8	251	Н	24.23	4.03	-2.84	25.42	38.45		

Remark:

(1) The RBW, VBW of SPA for measurement 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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 34 of 207

	I	EUT		Measurement							
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit		
		MHz		V/H	dBm	dBi	dB	dBm	dBm		
		1050.2	512	V	31.82	4.17	-4.29	31.70	33.00		
		1850.2		Н	26.39	4.51	-4.29	26.61	33.00		
	**	1880.0	661	V	31.01	4.17	-4.29	30.89	33.00		
	Н			Н	23.89	4.51	-4.29	24.11	33.00		
		1909.8	810	V	27.84	4.17	-4.29	27.73	33.00		
				Н	24.86	4.51	-4.29	25.08	33.00		
	F.1	1850.2 1880.0	512	V	31.79	4.13	-4.33	31.60	33.00		
				Н	25.80	4.44	-4.33	25.90	33.00		
GSM 1900			661	V	30.80	4.13	-4.33	30.60	33.00		
GSWI 1700	E1			Н	24.40	4.44	-4.33	24.51	33.00		
		1909.8	810	V	30.45	4.13	-4.33	30.25	33.00		
		1707.0	010	Н	26.28	4.44	-4.33	26.39	33.00		
		1050.2	710	V	30.37	4.10	-4.37	30.10	33.00		
		1850.2	512	Н	25.83	4.36	-4.37	25.82	33.00		
	F2	1880.0	661	V	30.04	4.09	-4.37	29.77	33.00		
	E2		001	Н	22.72	4.36	-4.37	22.72	33.00		
		1000 8	810	V	28.69	4.09	-4.37	28.41	33.00		
		1909.8		Н	27.15	4.36	-4.37	27.14	33.00		

Remark:

(1) The RBW, VBW of SPA for measurement RBW=300K, 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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 35 of 207

	I	EUT		Measurement							
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit		
		MHz		V/H	dBm	dBd	dB	dBm	dBm		
		824.20	128	V	25.46	3.96	-2.8	26.63	38.45		
		824.20		Н	22.78	3.96	-2.8	23.95	38.45		
	Н	836.60	190	V	25.58	4.00	-2.82	26.76	38.45		
	п			Н	23.71	4.00	-2.82	24.89	38.45		
		848.80	251	V	25.93	4.03	-2.84	27.11	38.45		
				Н	23.85	4.03	-2.84	25.03	38.45		
	E1	824.20 836.60	128	V	23.67	3.96	-2.80	24.84	38.45		
				Н	23.69	3.96	-2.80	24.85	38.45		
GPRS 850			190	V	23.68	4.00	-2.82	24.85	38.45		
GI K5 650	LI			Н	23.87	4.00	-2.82	25.05	38.45		
		848.80	251	V	23.76	4.03	-2.84	24.94	38.45		
		040.00	251	Н	24.14	4.03	-2.84	25.33	38.45		
		824.20	128	V	20.61	3.96	-2.80	21.77	38.45		
		024.20	120	Н	25.08	3.96	-2.80	26.24	38.45		
	E2	836.60	190	V	20.90	4.00	-2.82	22.07	38.45		
	154		190	Н	24.88	4.00	-2.82	26.05	38.45		
		848.80	251	V	20.04	4.03	-2.84	21.23	38.45		
		040.00	251	Н	24.48	4.03	-2.84	25.66	38.45		

Remark:

(1) The RBW, VBW of SPA for measurement 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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 36 of 207

	I	EUT		Measurement							
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit		
		MHz		V/H	dBm	dBi	dB	dBm	dBm		
		1850.20	512	V	32.3	4.17	-4.29	32.18	33.00		
				Н	26.76	4.51	-4.29	26.98	33.00		
	Н	1880.00	661	V	30.98	4.17	-4.29	30.86	33.00		
	п			Н	23.82	4.51	-4.29	24.04	33.00		
		1909.80	810	V	28.01	4.17	-4.29	27.89	33.00		
				Н	24.86	4.51	-4.29	25.08	33.00		
		1850.20 1880.00	512	V	31.59	4.13	-4.33	31.39	33.00		
	E1			Н	25.94	4.44	-4.33	26.05	33.00		
GPRS 1900			661	V	30.82	4.13	-4.33	30.62	33.00		
OI K5 1700	LI			Н	24.57	4.44	-4.33	24.68	33.00		
		1909.80	810	V	30.15	4.13	-4.33	29.95	33.00		
		1707.00	010	Н	26.29	4.44	-4.33	26.40	33.00		
		1850.20	512	V	30.34	4.09	-4.37	30.07	33.00		
		1030.20	312	Н	26.04	4.36	-4.37	26.04	33.00		
	E2	1880.00	661	V	30.04	4.09	-4.37	29.77	33.00		
	LL		001	Н	22.78	4.36	-4.37	22.78	33.00		
		1909.80	810	V	29.06	4.09	-4.37	28.79	33.00		
		1909.80		Н	27.13	4.36	-4.37	27.13	33.00		

Remark:

(1) The RBW, VBW of SPA for measurement 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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 37 of 207

]	EUT			N	Ieasureme	ent		
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
		MHz		V/H	dBm	dBd	dB	dBm	dBm
		824.20	128	V	23.51	3.96	-2.80	24.67	38.45
		824.20	128	Н	19.50	3.96	-2.80	20.67	38.45
	Н	836.60	190	V	23.64	4.00	-2.82	24.81	38.45
	п	830.00	190	Н	20.68	4.00	-2.82	21.85	38.45
		848.80	251	V	24.17	4.03	-2.84	25.36	38.45
		848.80	231	Н	20.87	4.03	-2.84	22.06	38.45
		824.20	128	V	20.14	3.96	-2.80	21.30	38.45
			120	Н	21.50	3.96	-2.80	22.66	38.45
EDGE 850	E1	836.60	190	V	19.97	4.00	-2.82	21.14	38.45
EDGE 630	Li	830.00	190	Н	21.71	4.00	-2.82	22.88	38.45
		848.80	251	V	20.38	4.03	-2.84	21.57	38.45
		040.00	231	Н	20.76	4.03	-2.84	21.95	38.45
	E2 836.60	128	V	17.01	3.96	-2.80	18.17	38.45	
		024.20	120	Н	23.00	3.96	-2.80	24.16	38.45
		836.60	190	V	17.31	4.00	-2.82	18.49	38.45
		030.00	190	Н	22.59	4.00	-2.82	23.77	38.45
		848.80	251	V	16.94	4.03	-2.84	18.12	38.45
		040.00	231	Н	21.94	4.03	-2.84	23.13	38.45

Remark:

(1) The RBW, VBW of SPA for measurement 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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 38 of 207

]	EUT			N	Ieasureme	ent		
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
		MHz		V/H	dBm	dBi	dB	dBm	dBm
		1850.20	512	V	31.85	4.17	-4.29	31.73	33.00
		1830.20	312	Н	25.87	4.51	-4.29	26.09	33.00
	Н	1880.00	661	V	30.21	4.17	-4.29	30.09	33.00
	п	1880.00	001	Н	22.56	4.51	-4.29	22.78	33.00
		1909.80	810	V	27.16	4.17	-4.29	27.04	33.00
	1909.80	810	Н	23.65	4.51	-4.29	23.87	33.00	
	1850.20	512	V	29.31	4.13	-4.33	29.11	33.00	
		1850.20	312	Н	24.73	4.44	-4.33	24.83	33.00
EDGE 1900	E1	1880.00	661	V	29.90	4.13	-4.33	29.71	33.00
EDGE 1900	EI	1880.00	001	Н	23.14	4.44	-4.33	23.24	33.00
		1909.80	810	V	29.21	4.13	-4.33	29.01	33.00
		1909.80	810	Н	25.15	4.44	-4.33	25.26	33.00
	E2 1880.00	1950 20	512	V	27.28	4.09	-4.37	27.01	33.00
		312	Н	24.07	4.36	-4.37	24.07	33.00	
		1000.00	661	V	29.22	4.09	-4.37	28.94	33.00
		1880.00	661	Н	21.53	4.36	-4.37	21.53	33.00
		1000.00	010	V	28.09	4.09	-4.37	27.82	33.00
		1909.80	810	Н	26.18	4.36	-4.37	26.18	33.00

Remark:

(1) The RBW, VBW of SPA for measurement 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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 39 of 207

		EUT			N	Aeasurem	ent		
Operation Band	Pol.	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	30.19	4.17	-4.30	30.07	33.00
		1632.4	9202	Н	23.68	4.51	-4.30	23.89	33.00
	Н	1880.0	9400	V	27.78	4.17	-4.30	27.65	33.00
	11	1880.0	9400	Н	21.20	4.51	-4.30	21.41	33.00
		1907.6	9538	V	25.61	4.17	-4.30	25.48	33.00
	1907.6	1907.0	9336	Н	22.67	4.51	-4.30	22.89	33.00
		1852.4	9262	V	27.66	4.13	-4.33	27.46	33.00
		1032.4	7202	Н	23.18	4.44	-4.33	23.29	33.00
WCDMA	E1	1880.0	9400	V	29.20	4.13	-4.33	29.00	33.00
Band II	EI	1000.0	9400	Н	21.03	4.44	-4.33	21.13	33.00
		1907.6	9538	V	27.00	4.13	-4.33	26.81	33.00
		1507.0	7556	Н	23.24	4.44	-4.33	23.35	33.00
		1852.4	9262	V	26.40	4.10	-4.36	26.14	33.00
		1032.4	7202	Н	22.47	4.37	-4.36	22.48	33.00
	E2 1880.0	9400	V	26.16	4.10	-4.36	25.90	33.00	
		<i>3</i> 400	Н	19.09	4.37	-4.37	19.10	33.00	
		1907.6	9538	V	24.74	4.10	-4.36	24.47	33.00
		1507.0	7330	Н	23.84	4.37	-4.36	23.85	33.00

Remark:

(1) The RBW, VBW of SPA for measurement 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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 40 of 207

]	EUT			N	Ieasureme	ent		
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
		MHz		V/H	dBm	dBd	dB	dBm	dBm
		826.40	4132	V	15.92	3.97	-2.80	17.09	38.45
		820.40	4132	Н	20.30	3.97	-2.80	21.46	38.45
	Н	836.60	4183	V	15.42	4.00	-2.82	16.60	38.45
	11	830.00	4103	Н	20.21	4.00	-2.82	21.38	38.45
		846.60	4233	V	13.60	4.02	-2.84	14.79	38.45
		840.00	4233	Н	19.49	4.02	-2.84	20.67	38.45
		826.40	4132	V	21.75	3.97	-2.80	22.92	38.45
			4132	Н	17.15	3.97	-2.80	18.31	38.45
WCDMA	E1	836.60	4183	V	22.03	4.00	-2.82	23.20	38.45
Band V	EI	830.00	4103	Н	18.58	4.00	-2.82	19.75	38.45
		846.60	4233	V	21.66	4.02	-2.84	22.84	38.45
		040.00	4233	Н	17.96	4.02	-2.84	19.15	38.45
		926.40	4132	V	17.38	3.97	-2.80	18.54	38.45
	E2 836.60	020.40	7132	Н	19.22	3.97	-2.80	20.39	38.45
		836.60	4183	V	17.73	4.00	-2.82	18.91	38.45
		630.00	+103	Н	20.09	4.00	-2.82	21.26	38.45
		846.60	4233	V	17.38	4.02	-2.84	18.56	38.45
		040.00	4233	Н	19.86	4.02	-2.84	21.05	38.45

Remark:

(1) The RBW, VBW of SPA for measurement 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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 41 of 207

]	EUT			N	Ieasurem	ent		
Operation Band	Pol.	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	30.64	4.17	-4.30	30.51	33.00
		1632.4	9202	Н	24.76	4.51	-4.30	24.97	33.00
	Н	1880.0	9400	V	28.38	4.17	-4.30	28.26	33.00
	П	1880.0	9400	Н	22.00	4.51	-4.30	22.21	33.00
		1907.6	9538	V	25.30	4.17	-4.29	25.17	33.00
		1907.0	7336	Н	23.75	4.51	-4.30	23.96	33.00
		1852.4	9262 -	V	28.61	4.13	-4.33	28.42	33.00
			9202	Н	24.70	4.44	-4.33	24.80	33.00
HSUPA	E1	1880.0	9400	V	28.62	4.13	-4.33	28.42	33.00
Band II	LI	1880.0	9400	Н	22.47	4.44	-4.33	22.58	33.00
		1907.6	9538	V	28.14	4.13	-4.33	27.94	33.00
		1907.0	9336	Н	24.59	4.44	-4.33	24.69	33.00
		1852.4	9262	V	25.93	4.10	-4.36	25.66	33.00
		1032.4	7202	Н	23.43	4.37	-4.36	23.43	33.00
	F2	1880.0	9400	V	27.03	4.10	-4.36	26.76	33.00
	E2 1880	1000.0	3400	Н	19.99	4.37	-4.36	20.00	33.00
		1907.6	9538	V	26.60	4.10	-4.36	26.33	33.00
		1907.0	7336	Н	24.88	4.37	-4.36	24.89	33.00

Remark:

(1) The RBW, VBW of SPA for measurement 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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 42 of 207

]	EUT			N	Ieasurem	ent		
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
		MHz		V/H	dBm	dBd	dB	dBm	dBm
		826.40	4132	V	22.00	3.97	-2.80	23.16	38.45
		820.40	4132	Н	18.11	3.97	-2.80	19.28	38.45
	Н	836.60	4183	V	23.15	4.00	-2.82	24.33	38.45
	П	830.00	4103	Н	19.95	4.00	-2.82	21.13	38.45
		846.60	4233	V	22.46	4.02	-2.84	23.65	38.45
		840.00	4233	Н	18.82	4.02	-2.84	20.00	38.45
		826.40	4132	V	18.49	3.97	-2.80	19.66	38.45
			4132	Н	20.46	3.97	-2.80	21.62	38.45
HSUPA	E1	836.60	4183	V	19.02	4.00	-2.82	20.20	38.45
Band V	LI	830.00	4103	Н	21.4	4.00	-2.82	22.57	38.45
		846.60	4233	V	18.22	4.02	-2.84	19.40	38.45
		840.00	4233	Н	20.78	4.02	-2.84	21.96	38.45
		826.40	4132	V	16.62	3.97	-2.80	17.78	38.45
		020.40	7132	Н	20.75	3.97	-2.80	21.92	38.45
	F2	836.60	4183	V	16.93	4.00	-2.82	18.11	38.45
	E2 836.60	+103	Н	21.48	4.00	-2.82	22.66	38.45	
		846.60	4233	V	14.73	4.02	-2.84	15.91	38.45
		040.00	+433	Н	20.52	4.02	-2.84	21.71	38.45

Remark:

(1) The RBW, VBW of SPA for measurement 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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 43 of 207

	I	EUT			N	Ieasureme	ent		
Operation Band	Pol.	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	30.70	4.17	-4.30	30.58	33.00
		1832.4	9202	Н	24.75	4.51	-4.30	24.96	33.00
	Н	1880.0	9400	V	28.28	4.17	-4.30	28.15	33.00
	11	1880.0	9400	Н	22.03	4.51	-4.30	22.24	33.00
		1907.6	9538	V	25.78	4.17	-4.30	25.66	33.00
			7550	Н	23.83	4.51	-4.30	24.04	33.00
			9262	V	28.28	4.13	-4.33	28.09	33.00
			7202	Н	24.55	4.44	-4.33	24.66	33.00
HSDPA	E1	1880.0	9400	V	28.81	4.13	-4.33	28.61	33.00
Band II	LI	1000.0	7400	Н	22.34	4.44	-4.33	22.45	33.00
		1907.6	9538	V	28.87	4.13	-4.33	28.67	33.00
		1707.0	7550	Н	24.47	4.44	-4.33	24.58	33.00
		1852.4	9262	V	25.94	4.10	-4.36	25.67	33.00
			7202	Н	23.25	4.37	-4.36	23.26	33.00
	F2		9400	V	27.07	4.10	-4.36	26.81	33.00
	E2 1880.0 9	7400	Н	19.87	4.37	-4.36	19.87	33.00	
		1907.6 9538	9538	V	26.99	4.10	-4.36	26.72	33.00
		1707.0	7550	Н	24.77	4.37	-4.36	24.78	33.00

Remark:

(1) The RBW, VBW of SPA for measurement 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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 44 of 207

	I	EUT			N		ent		
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
		MHz		V/H	dBm	dBd	dB	dBm	dBm
		826.40	4132	V	17.04	3.97	-2.80	18.21	38.45
		820.40	4132	Н	21.20	3.97	-2.80	22.36	38.45
	Н	836.60	4183	V	17.09	4.00	-2.82	18.27	38.45
	11	830.00	4103	Н	21.71	3.99	-2.82	22.88	38.45
		846.60	4233	V	15.06	4.02	-2.84	16.24	38.45
		040.00	7233	Н	20.55	4.02	-2.84	21.73	38.45
		826.40	4132	V	22.21	3.97	-2.80	23.37	38.45
		020.10	1132	Н	17.95	3.97	-2.80	19.12	38.45
HSDPA	1 14 1	836.60	4183	V	23.14	4.00	-2.82	24.31	38.45
Band V	LI	030.00	4103	Н	20.02	3.99	-2.82	21.20	38.45
		846.60	4233	V	22.52	4.02	-2.84	23.71	38.45
		040.00	4233	Н	18.85	4.02	-2.84	20.04	38.45
		826.40	4132	V	18.49	3.97	-2.80	19.66	38.45
		826.40 4132 — 836.60 4183 — 846.60 4233 —	Н	20.36	3.97	-2.80	21.52	38.45	
	E2		V	19.02	4.00	-2.82	20.20	38.45	
	LL		Н	21.32	4.00	-2.82	22.50	38.45	
			V	18.46	4.02	-2.84	19.64	38.45	
		040.00	7233	Н	20.85	4.02	-2.84	22.03	38.45

Remark:

(1) The RBW, VBW of SPA for measurement 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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 45 of 207

9.5.1 Measurement Result: (Average) – using option of RMS measurement

	I	EUT			N	Ieasureme	ent		
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
		MHz		V/H	dBm	dBd	dB	dBm	dBm
		824.20	128	V	17.48	3.96	-2.80	18.64	40.60
		824.20	128	Н	14.80	3.96	-2.80	15.96	40.60
	Н	836.60	190	V	17.11	4.00	-2.82	18.29	40.60
	п	830.00	190	Н	15.42	4.00	-2.82	16.59	40.60
		848.80	251	V	17.84	4.03	-2.84	19.03	40.60
		646.80	231	Н	15.21	4.03	-2.84	16.40	40.60
		824.20	128	V	15.14	3.96	-2.80	16.30	40.60
		824.20	128	Н	15.68	3.96	-2.80	16.85	40.60
GSM 850	E1	836.60	190	V	15.46	4.00	-2.82	16.64	40.60
GSM 850	EI	830.00	190	Н	15.67	4.00	-2.82	16.85	40.60
		848.80	251	V	16.18	4.03	-2.84	17.37	40.60
		848.80	251	Н	16.11	4.03	-2.84	17.30	40.60
		824.20	128	V	11.68	3.96	-2.80	12.85	40.60
		824.20	128	Н	17.09	3.96	-2.80	18.25	40.60
	EQ	926.60	100	V	12.33	4.00	-2.82	13.50	40.60
	E2	836.60	190	Н	16.17	4.00	-2.82	17.35	40.60
		040 00	251	V	11.41	4.03	-2.84	12.60	40.60
		848.80	251	Н	15.05	4.03	-2.84	16.24	40.60

Remark:

(1) The RBW, VBW of SPA for frequency RBW=6 kHz, VBW=20 kHz

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 www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 46 of 207

	I	EUT			N	Ieasuremo	ent		
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
		MHz		V/H	dBm	dBi	dB	dBm	dBm
		1850.20	512	V	25.36	4.17	-4.29	25.24	33.00
		1850.20	512	Н	18.02	4.51	-4.29	18.24	33.00
	Н	1880.00	661	V	22.31	4.17	-4.29	22.19	33.00
	п	1880.00	001	Н	15.87	4.51	-4.29	16.08	33.00
			810	V	20.00	4.17	-4.29	19.88	33.00
			810	Н	16.45	4.51	-4.29	16.67	33.00
		1850.20	512	V	23.75	4.13	-4.33	23.55	33.00
			312	Н	17.13	4.44	-4.33	17.24	33.00
GSM 1900	E1	1880.00	661	V	23.40	4.13	-4.33	23.20	33.00
GSWI 1900	EI	1880.00	001	Н	15.20	4.44	-4.33	15.30	33.00
		1909.80	810	V	22.05	4.13	-4.33	21.85	33.00
		1909.80	610	Н	18.07	4.44	-4.33	18.18	33.00
		1950 20	512	V	22.70	4.09	-4.37	22.43	33.00
	E2 1880.00	1030.20	J12	Н	17.92	4.36	-4.37	17.92	33.00
		661	V	21.82	4.09	-4.37	21.55	33.00	
		1880.00	001	Н	14.29	4.36	-4.37	14.29	33.00
		1909.80	810	V	19.93	4.09	-4.37	19.66	33.00
		1909.00	010	Н	18.16	4.36	-4.37	18.16	33.00

Remark:

(1) The RBW, VBW of SPA for frequency RBW=6 kHz, VBW=20 kHz

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 47 of 207

]	EUT			N	Ieasurem	ent		
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
		MHz		V/H	dBm	dBd	dB	dBm	dBm
		824.20	128	V	16.78	3.96	-2.80	17.94	40.60
		824.20	120	Н	14.12	3.96	-2.80	15.28	40.60
	Н	836.60	190	V	17.40	4.00	-2.82	18.57	40.60
	11	830.00	190	Н	15.11	4.00	-2.82	16.28	40.60
		848.80	251	V	17.54	4.03	-2.84	18.72	40.60
		040.00	231	Н	15.64	4.03	-2.84	16.82	40.60
		824.20	128	V	14.24	3.96	-2.80	15.40	40.60
		824.20	120	Н	16.20	3.96	-2.80	17.36	40.60
GPRS 850	E1	E1 836.60	190	V	15.04	4.00	-2.82	16.22	40.60
GI KS 650	Li	830.00	190	Н	15.54	4.00	-2.82	16.71	40.60
		848.80	251	V	15.37	4.03	-2.84	16.56	40.60
		040.00	231	Н	16.65	4.03	-2.84	17.84	40.60
		824.20	128	V	11.76	3.96	-2.80	12.92	40.60
		024.20	120	Н	17.03	3.96	-2.80	18.19	40.60
E2	926.60	190	V	13.25	4.00	-2.82	14.43	40.60	
	E2	836.60	170	Н	16.43	4.00	-2.82	17.61	40.60
		848.80	251	V	12.34	4.03	-2.84	13.53	40.60
		040.00	231	Н	15.70	4.03	-2.84	16.88	40.60

Remark:

(1) The RBW, VBW of SPA for frequency RBW=6 kHz, VBW=20 kHz

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 www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 48 of 207

]	EUT			N	Ieasureme	ent		
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
		MHz		V/H	dBm	dBi	dB	dBm	dBm
		1850.20	512	V	24.52	4.17	-4.29	24.41	33.00
		1830.20	312	Н	18.45	4.51	-4.29	18.67	33.00
	Н	1880.00	661	V	22.58	4.17	-4.29	22.46	33.00
	11	1880.00	001	Н	15.75	4.51	-4.29	15.97	33.00
		1909.80	810	V	19.26	4.17	-4.29	19.14	33.00
	1909.80	810	Н	16.59	4.51	-4.29	16.81	33.00	
	1850.20	512	V	23.03	4.13	-4.33	22.83	33.00	
		1850.20	312	Н	17.06	4.44	-4.33	17.17	33.00
GPRS 1900	E1	1880.00	661	V	21.83	4.13	-4.33	21.64	33.00
GI KS 1900	EI	1880.00	001	Н	16.48	4.44	-4.33	16.59	33.00
		1909.80	810	V	21.73	4.13	-4.33	21.53	33.00
		1707.80	010	Н	17.92	4.44	-4.33	18.03	33.00
	E2 1880.00	1850.20	512	V	22.06	4.09	-4.37	21.79	33.00
		1050.20	J12	Н	17.35	4.36	-4.37	17.34	33.00
		1880.00	661	V	21.61	4.09	-4.37	21.33	33.00
		1000.00	001	Н	14.25	4.36	-4.37	14.25	33.00
		1909.80	810	V	20.60	4.09	-4.37	20.32	33.00
		1707.00	010	Н	18.87	4.36	-4.37	18.87	33.00

Remark:

The RBW, VBW of SPA for frequency RBW=6 kHz, VBW=20 kHz (1)

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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.sas.com

SGS Taiwan Ltd.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 49 of 207

]	EUT		Measurement					
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
		MHz		V/H	dBm	dBd	dB	dBm	dBm
		824.20	128	V	12.72	3.96	-2.80	13.89	40.60
		824.20	120	Н	7.88	3.96	-2.80	9.04	40.60
	Н	836.60	190	V	11.91	4.00	-2.82	13.09	40.60
	П	830.00	190	Н	9.87	4.00	-2.82	11.04	40.60
		848.80	251	V	12.93	4.03	-2.84	14.12	40.60
			231	Н	11.08	4.03	-2.84	12.26	40.60
		824.20	128	V	8.84	3.96	-2.80	10.00	40.60
		824.20	120	Н	10.02	3.96	-2.80	11.18	40.60
EDGE 850	E1	836.60	190	V	9.21	4.00	-2.82	10.39	40.60
EDGE 630	EI	830.00	190	Н	9.86	4.00	-2.82	11.04	40.60
		848.80	251	V	8.78	4.03	-2.84	9.97	40.60
		848.80	231	Н	9.49	4.03	-2.84	10.68	40.60
		024.20	128	V	5.97	3.96	-2.80	7.13	40.60
	E2 836.60	024.20	120	Н	11.83	3.96	-2.80	12.99	40.60
		025.50	100	V	5.66	4.00	-2.82	6.84	40.60
		830.00	190	Н	11.93	4.00	-2.82	13.10	40.60
		251	V	5.26	4.03	-2.84	6.45	40.60	
		848.80	251	Н	10.26	4.03	-2.84	11.45	40.60

Remark:

The RBW, VBW of SPA for frequency RBW=6 kHz, VBW=20 kHz (1)

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 50 of 207

	1	EUT		Measurement						
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit	
		MHz		V/H	dBm	dBi	dB	dBm	dBm	
		1850.20	512	V	20.93	4.17	-4.29	20.81	33.00	
		1030.20	312	Н	14.39	4.51	-4.29	14.61	33.00	
	Н	1880.00	661	V	19.61	4.17	-4.29	19.49	33.00	
	11	1880.00	001	Н	11.15	4.51	-4.29	11.36	33.00	
		1909.80	810	V	15.83	4.17	-4.29	15.71	33.00	
			010	Н	12.51	4.51	-4.29	12.73	33.00	
		1850.20	512	V	17.90	4.13	-4.33	17.71	33.00	
		1030.20	012	Н	13.21	4.44	-4.33	13.32	33.00	
EDGE 1900	E1	1880.00	661	V	19.07	4.13	-4.33	18.88	33.00	
LDGL 1700	LI	1000.00	001	Н	12.79	4.44	-4.33	12.89	33.00	
		1909.80	810	V	18.02	4.13	-4.33	17.82	33.00	
		1707.00	010	Н	13.92	4.44	-4.33	14.03	33.00	
		1850.20	512	V	16.53	4.09	-4.37	16.25	33.00	
	E2 1880.00	1630.20	312	Н	12.55	4.36	-4.37	12.54	33.00	
		1880.00	661	V	17.80	4.09	-4.37	17.53	33.00	
		1000.00	001	Н	9.89	4.36	-4.37	9.89	33.00	
		1909.80	810	V	17.39	4.09	-4.37	17.12	33.00	
		1707.00	010	Н	14.99	4.36	-4.37	14.98	33.00	

Remark:

(1) The RBW, VBW of SPA for frequency RBW=6 kHz, VBW=20 kHz

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 51 of 207

	J	EUT			N	Ieasuremo	ent		
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit
		MHz		V/H	dBm	dBi	dB	dBm	dBm
		1852.40	9262	V	26.54	4.17	-4.30	26.42	33.00
		1632.40	9202	Н	20.16	4.51	-4.30	20.37	33.00
	Н	1880.00	9400	V	23.67	4.17	-4.30	23.55	33.00
	11	1880.00	1907.60 9538	Н	17.63	4.51	-4.30	17.84	33.00
		1007.60		V	21.56	4.17	-4.30	21.43	33.00
		1907.60	9336	Н	19.11	4.51	-4.30	19.32	33.00
		1852.40	9262	V	23.95	4.13	-4.33	23.75	33.00
		1632.40	9202	Н	19.63	4.44	-4.33	19.74	33.00
WCDMA	E1	1880.00	9400	V	23.83	4.13	-4.33	23.64	33.00
Band II	EI	1880.00	9400	Н	17.35	4.44	-4.33	17.46	33.00
		1907.60	9538	V	23.16	4.13	-4.33	22.97	33.00
		1907.00	9336	Н	19.51	4.44	-4.33	19.61	33.00
		1852.40	9262	V	21.95	4.10	-4.36	21.68	33.00
			9202	Н	19.00	4.37	-4.36	19.01	33.00
	E2		9400	V	22.54	4.10	-4.36	22.28	33.00
	E2 1880.00	9400	Н	15.61	4.37	-4.36	15.62	33.00	
		1007.60	9538	V	21.31	4.10	-4.36	21.04	33.00
		1907.60	9338	Н	20.55	4.37	-4.36	20.55	33.00

Remark:

(1) The RBW, VBW of SPA for frequency RBW= 1MHz, VBW= 3MHz

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 www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 52 of 207

	J	EUT		Measurement						
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit	
		MHz		V/H	dBm	dBd	dB	dBm	dBm	
		826.40	4132	V	17.88	3.97	-2.80	19.05	40.60	
		820.40	4132	Н	13.50	3.97	-2.80	14.67	40.60	
	Н	836.60	4183	V	18.08	4.00	-2.82	19.26	40.60	
	11	830.00	4103	Н	14.59	4.00	-2.82	15.77	40.60	
		846.60	4233	V	18.12	4.02	-2.84	19.30	40.60	
		840.00	4233	Н	14.48	4.02	-2.84	15.67	40.60	
		826.40 4	4132	V	13.28	3.97	-2.80	14.44	40.60	
		020.40	7132	Н	16.16	3.97	-2.80	17.33	40.60	
WCDMA	E1	836.60	4183	V	12.52	3.99	-2.82	13.70	40.60	
Band V	Li	030.00	4103	Н	16.28	4.00	-2.82	17.45	40.60	
		846.60	4233	V	13.50	4.02	-2.84	14.68	40.60	
		040.00	7233	Н	16.38	4.02	-2.84	17.56	40.60	
		826.40	4132	V	12.08	3.97	-2.80	13.24	40.60	
		020.70	7132	Н	16.58	3.97	-2.80	17.74	40.60	
	E2	E2 836.60 4183	4183	V	11.34	4.00	-2.82	12.51	40.60	
	E2 830.00 4	7103	Н	16.22	4.00	-2.82	17.40	40.60		
		846.60	846.60 4233	V	10.18	4.02	-2.84	11.36	40.60	
		040.00	+433	Н	15.90	4.02	-2.84	17.08	40.60	

Remark:

(1) The RBW, VBW of SPA for frequency RBW= 1MHz, VBW= 3MHz

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 53 of 207

	J	EUT			N	Ieasuremo	ent		
Operation Band	Pol.	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	26.09	4.17	-4.30	25.96	33.00
		1632.4	9202	Н	19.95	4.51	-4.30	20.16	33.00
	Н	1880.0	9400	V	23.68	4.17	-4.30	23.56	33.00
	11	1880.0	9400	Н	17.09	4.51	-4.30	17.30	33.00
		1907.6	9538	V	20.82	4.17	-4.30	20.70	33.00
		1907.0 93	9336	Н	18.82	4.51	-4.30	19.03	33.00
		1852.4 9	9262	V	23.42	4.13	-4.33	23.22	33.00
		1032.4	7202	Н	19.33	4.44	-4.33	19.44	33.00
HSUPA	E1	1880.0	9400	V	23.44	4.13	-4.33	23.24	33.00
Band II	Li	1000.0	7400	Н	16.77	4.44	-4.33	16.88	33.00
		1907.6	9538	V	22.28	4.13	-4.33	22.08	33.00
		1507.0	7336	Н	19.45	4.44	-4.33	19.55	33.00
		1852.4	1952 4 0262	V	21.29	4.10	-4.36	21.02	33.00
		E2 1880.0 9400	7202	Н	18.82	4.37	-4.36	18.82	33.00
	F2		V	22.26	4.10	-4.36	22.00	33.00	
	L'2		7400	Н	15.13	4.37	-4.36	15.13	33.00
		1907.6	1907.6 9538	V	22.03	4.10	-4.36	21.76	33.00
		1907.0	7550	Н	19.97	4.37	-4.36	19.98	33.00

Remark:

The RBW, VBW of SPA for frequency RBW= 1MHz, VBW= 3MHz (1)

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 54 of 207

	I	EUT			N	Ieasuremo	ent		
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
		MHz		V/H	dBm	dBd	dB	dBm	dBm
		826.40	4132	V	17.18	3.97	-2.80	18.35	40.60
		820.40	4132	Н	13.13	3.97	-2.80	14.30	40.60
	Н	836.60	836.60 4183	V	17.59	4.00	-2.82	18.76	40.60
	11	830.00	4103	Н	14.23	4.00	-2.82	15.41	40.60
		846.60	846.60 4233		17.85	4.02	-2.84	19.03	40.60
		840.00	4233	Н	14.05	4.02	-2.84	15.23	40.60
		826.40	4132	V	12.96	3.97	-2.80	14.13	40.60
		020.40	7132	Н	15.27	3.97	-2.80	16.43	40.60
HSUPA	E1	836.60	4183	V	13.43	4.00	-2.82	14.61	40.60
Band V	EI	830.00	4103	Н	15.97	4.00	-2.82	17.15	40.60
		846.60	4233	V	13.52	4.02	-2.84	14.70	40.60
		840.00	4233	Н	16.02	4.02	-2.84	17.20	40.60
		926.40	4132	V	11.74	3.97	-2.80	12.90	40.60
			4132	Н	16.27	3.97	-2.80	17.44	40.60
	E2		4183	V	10.77	4.00	-2.82	11.94	40.60
	E2 830.00	4103	Н	15.97	4.00	-2.82	17.14	40.60	
		846.60	4233	V	9.80	4.02	-2.84	10.98	40.60
		040.00	4233	Н	15.79	4.02	-2.84	16.97	40.60

Remark:

(1) The RBW, VBW of SPA for frequency RBW= 1MHz, VBW= 3MHz

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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 55 of 207

]	EUT		Measurement						
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	EIRP	Limit	
		MHz		V/H	dBm	dBi	dB	dBm	dBm	
		1852.40	9262	V	26.51	4.17	-4.3	26.38	33.00	
		1832.40	1032.40 7202	Н	20.06	4.51	-4.3	20.27	33.00	
	Н	1880.00	9400	V	23.88	4.17	-4.3	23.76	33.00	
	П	1880.00	9400	Н	17.58	4.51	-4.3	17.79	33.00	
		1907.60	9538	V	20.88	4.17	-4.3	20.76	33.00	
		1907.00		Н	19.01	4.51	-4.3	19.22	33.00	
		1852.40	9262	V	23.52	4.13	-4.33	23.32	33.00	
		1832.40	9202	Н	19.5	4.44	-4.33	19.61	33.00	
HSDPA	E1	1880.00	9400	V	23.64	4.13	-4.33	23.45	33.00	
Band II	El	1880.00	9400	Н	17.36	4.44	-4.33	17.47	33.00	
		1907.60	9538	V	22.81	4.13	-4.33	22.61	33.00	
		1907.00	9336	Н	18.81	4.44	-4.33	18.92	33.00	
		1852.40	1052.40	V	21.54	4.10	-4.37	21.27	33.00	
		1052.40	9262	Н	18.86	4.37	-4.36	18.87	33.00	
	E2	E2 1880.00	9400	V	22.43	4.10	-4.36	22.17	33.00	
	E2 1880.00	9400	Н	15.37	4.37	-4.36	15.37	33.00		
		1907.60	1007.60	V	22.02	4.10	-4.36	21.75	33.00	
		1907.00	9538	Н	20.35	4.37	-4.36	20.35	33.00	

Remark:

(1) The RBW, VBW of SPA for frequency RBW= 1MHz, VBW= 3MHz

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 56 of 207

	I	EUT			N	Ieasuremo	ent		
Operation Band	Pol.	Fundamental Frequency	СН	Antenna Pol.	S.G. Output	Antenna Gain	Cable Loss	ERP	Limit
		MHz		V/H	dBm	dBd	dB	dBm	dBm
		826.40	4132	V	17.40	3.97	-2.80	18.56	40.60
		820.40	4132	Н	13.25	3.97	-2.80	14.41	40.60
	Н	836.60	4183	V	17.77	4.00	-2.82	18.94	40.60
	11	830.00	4103	Н	14.47	4.00	-2.82	15.65	40.60
		846.60	4233	V	17.93	4.02	-2.84	19.12	40.60
		840.00 4.	4233	Н	13.98	4.02	-2.84	15.17	40.60
		826.40	4132	V	13.18	3.97	-2.80	14.35	40.60
		020.40	7132	Н	15.55	3.97	-2.80	16.71	40.60
HSDPA	E1	836.60	4183	V	13.18	4.00	-2.82	14.35	40.60
Band V	LI	030.00	4103	Н	16.14	4.00	-2.82	17.32	40.60
		846.60	4233	V	13.26	4.02	-2.84	14.44	40.60
		040.00	7233	Н	16.00	4.02	-2.84	17.18	40.60
		826.40	4132	V	11.87	3.97	-2.80	13.03	40.60
			7132	Н	16.39	3.97	-2.80	17.55	40.60
	E2		V	11.20	3.99	-2.82	12.37	40.60	
	LL		7103	Н	16.23	4.00	-2.82	17.41	40.60
		846.60	846.60 4233	V	9.81	4.02	-2.84	10.99	40.60
		040.00	+433	Н	15.64	4.02	-2.84	16.83	40.60

Remark:

(1) The RBW, VBW of SPA for frequency RBW= 1MHz, VBW= 3MHz

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 57 of 207

8. OCCUPIED BANDWIDTH MEASUREMENT

8.1. Standard Applicable:

According to §FCC 2.1049 (99%)

According to IC RSS-Gen Issue 3 §4.6.1 (99%)

According to IC RSS-133 §2.3 (20dB)

8.2. Test Set-up:

Refer to section 6.2 in this report

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, -20dBc display line was placed on the screen (or 20dB 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 20dB BW is arrow-mark

8.4. Measurement Equipment Used:

Refer to section 2.4 in this report

8.5. Measurement Result:

Refer to next pages.

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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 58 of 207

99% Bandwidth

EUT Mode	Frequency (MHz)	СН	99% Bandwidth (KHz)
	824.20	128	244.8068
GSM 850	836.60	190	244.9044
	848.80	251	245.7806

EUT Mode	Frequency (MHz)	СН	99% Bandwidth (KHz)
GGN 1000	1850.20	512	245.4877
GSM 1900	1880.00	661	244.8029
	1909.80	810	246.7690

EUT Mode	Frequency (MHz)	СН	99% Bandwidth (KHz)
	824.20	128	243.6748
GPRS 850	836.60	190	247.2213
	848.80	251	244.4142

EUT Mode	Frequency (MHz)	СН	99% Bandwidth (KHz)
	1850.20	512	244.8718
GPRS 1900	1880.00	661	246.2244
	1909.80	810	245.9819

EUT Mode	Frequency (MHz)	СН	99% Bandwidth (KHz)
EDGE 850	824.20	128	246.5653
	836.60	190	245.7986
	848.80	251	247.4877

EUT Mode	Frequency (MHz)	СН	99% Bandwidth (KHz)
EDGE 1900	1850.20	512	253.7828
	1880.00	661	247.1255
	1909.80	810	251.3360

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 59 of 207

EUT Mode	Frequency (MHz)	СН	99% Bandwidth (MHz)
WCDMA Band II	1852.40	9262	4.0846
	1880.00	9400	4.1733
	1907.60	9538	4.1411

EUT Mode	Frequency (MHz)	СН	99% Bandwidth (MHz)
	826.40	4132	4.1605
WCDMA Band V	836.60	4183	4.1369
	846.60	4233	4.1107

EUT Mode	Frequency (MHz)	СН	99% Bandwidth (MHz)
	1852.40	9262	4.1691
HSUPA II	1880.00	9400	4.1044
	1907.60	9538	4.1441

EUT Mode	Frequency (MHz)	СН	99% Bandwidth (MHz)
	826.40	4132	4.1237
HSUPA V	836.60	4183	4.1018
	846.60	4233	4.0840

EUT Mode	Frequency (MHz)	СН	99% Bandwidth (MHz)
HSDPA Band II	1852.40	9262	4.2450
	1880.00	9400	4.1635
	1907.60	9538	4.0825

EUT Mode	Frequency (MHz)	СН	99% Bandwidth (MHz)
HSDPA Band V	826.40	4132	4.1568
	836.60	4183	4.1349
	846.60	4233	4.1024

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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 60 of 207

20dB Bandwidth

EUT Mode	Frequency (MHz)	СН	20dB Bandwidth (MHz)
GSM 850	824.20	128	0.283
	836.60	190	0.289
	848.80	251	0.283

EUT Mode	Frequency (MHz)	СН	20dB Bandwidth (MHz)
GSM 1900	1850.20	512	0.291
	1880.00	661	0.287
	1909.80	810	0.290

EUT Mode	Frequency (MHz)	СН	20dB Bandwidth (MHz)
	824.20	128	0.287
GPRS 850	836.60	190	0.288
	848.80	251	0.285

EUT Mode	Frequency (MHz)	СН	20dB Bandwidth (MHz)
GPRS 1900	1850.20	512	0.285
	1880.00	661	0.285
	1909.80	810	0.288

EUT Mode	Frequency (MHz)	СН	20dB Bandwidth (MHz)
EDGE 850	824.20	128	0.281
	836.60	190	0.286
	848.80	251	0.283

EUT Mode	Frequency (MHz)	СН	20dB Bandwidth (MHz)
EDGE 1900	1850.20	512	0.292
	1880.00	661	0.290
	1909.80	810	0.285

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 www.sgs.com/terms_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.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 61 of 207

EUT Mode	Frequency (MHz)	СН	20dB Bandwidth (MHz)
WCDMA II	1852.40	9262	4.497
	1880.00	9400	4.447
	1907.60	9538	4.305

EUT Mode	Frequency (MHz)	СН	20dB Bandwidth (MHz)
WCDMA V	826.40	4132	4.466
	836.00	4183	4.431
	846.60	4233	4.389

EUT Mode	Frequency (MHz)	СН	20dB Bandwidth (MHz)
HSUPA II	1852.40	9262	4.454
	1880.00	9400	4.428
	1907.60	9538	4.416

EUT Mode	Frequency (MHz)	СН	20dB Bandwidth (MHz)
HSUPA V	826.40	4132	4.374
	836.60	4183	4.411
	846.60	4233	4.392

EUT Mode	Frequency (MHz)	СН	20dB Bandwidth (MHz)
HSDPA II	1852.40	9262	4.485
	1880.00	9400	4.451
	1907.60	9538	4.408

EUT Mode	Frequency (MHz)	СН	20dB Bandwidth (MHz)
HSDPA V	826.40	4132	4.468
	836.60	4183	4.442
	846.60	4233	4.377

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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 62 of 207

99% & 20dB Bandwidth Test Data

Figure 8-1: GSM 850 Channel Low

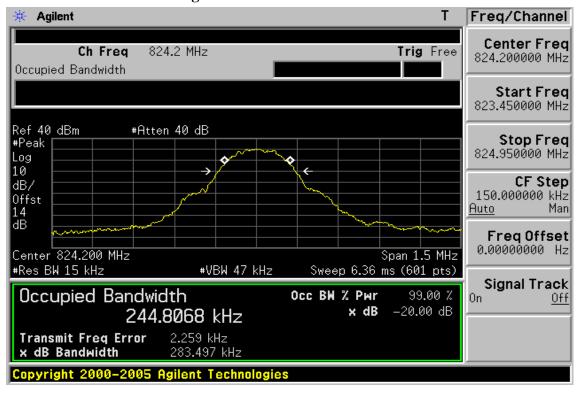
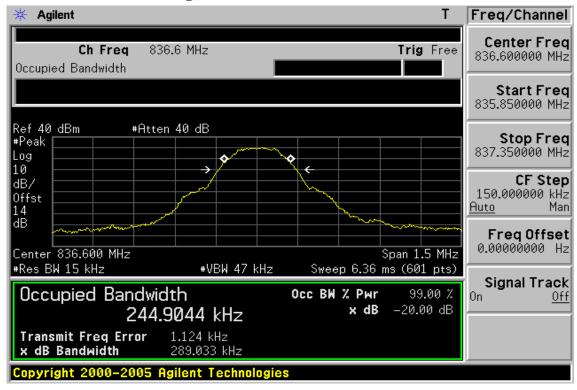


Figure 8-2: GSM 850 Channel Mid



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

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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 63 of 207

Figure 8-3: GSM 850 Channel High

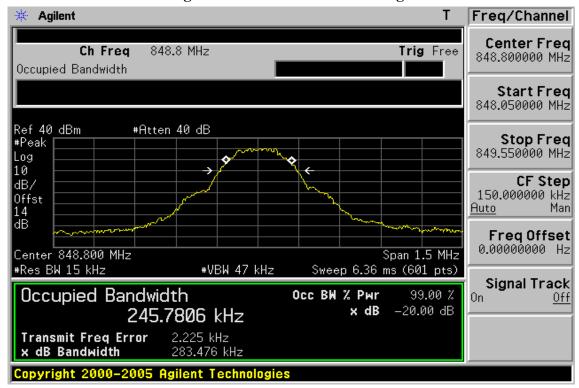
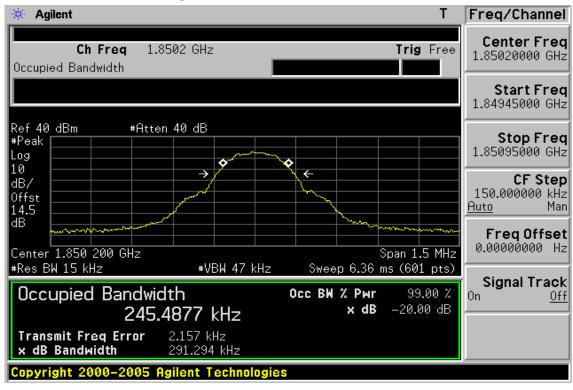


Figure 8-4: GSM 1900 Channel Low



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 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 www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 64 of 207

Figure 8-5: GSM 1900 Channel Mid

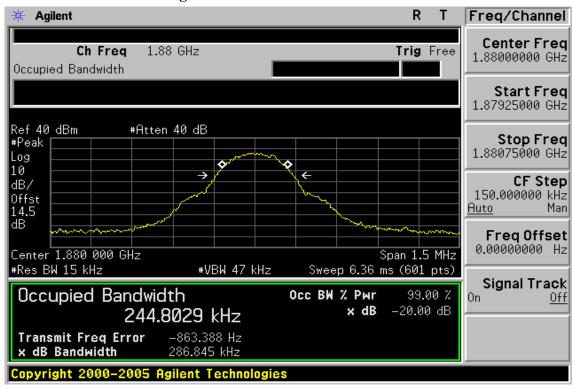
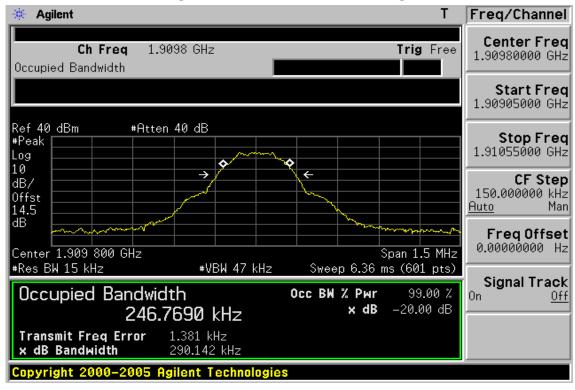


Figure 8-6: GSM 1900 Channel High



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 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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 65 of 207

Figure 8-7: GPRS 850 Channel Low

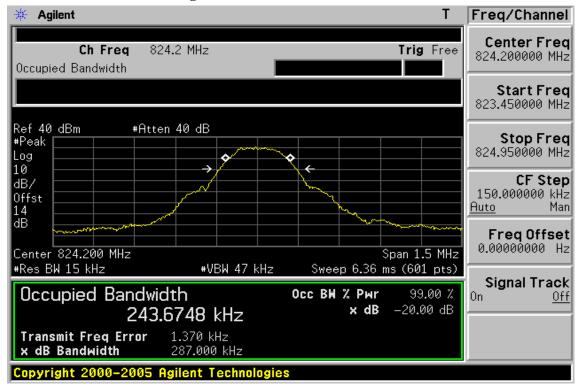
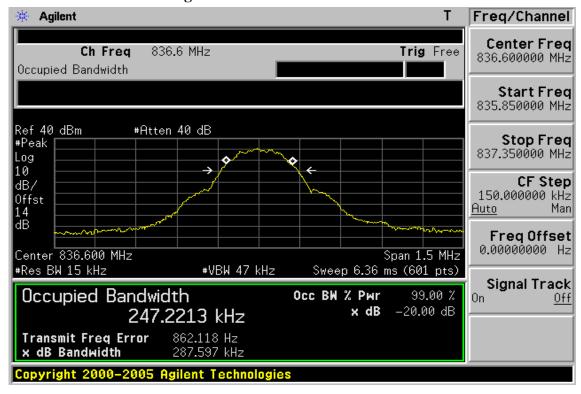


Figure 8-8: GPRS 850 Channel Mid



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.

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 www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 66 of 207

Figure 8-9: GPRS 850 Channel High

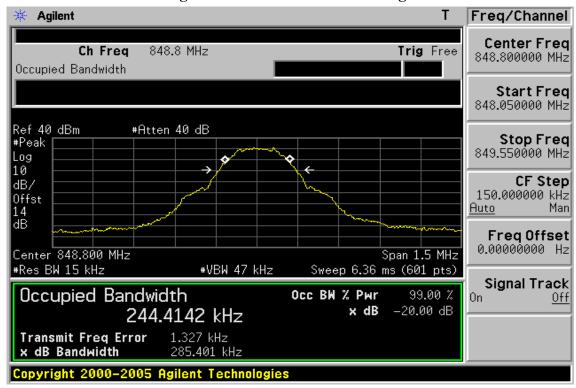
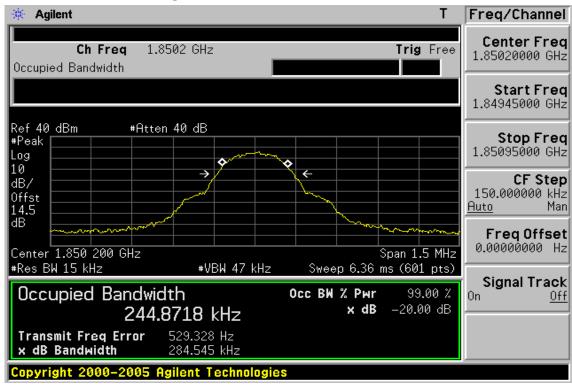


Figure 8-10: GPRS 1900 Channel Low



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 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 www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 67 of 207

Figure 8-11: GPRS 1900 Channel Mid

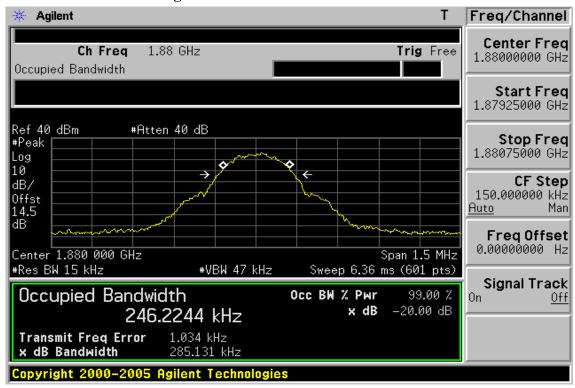
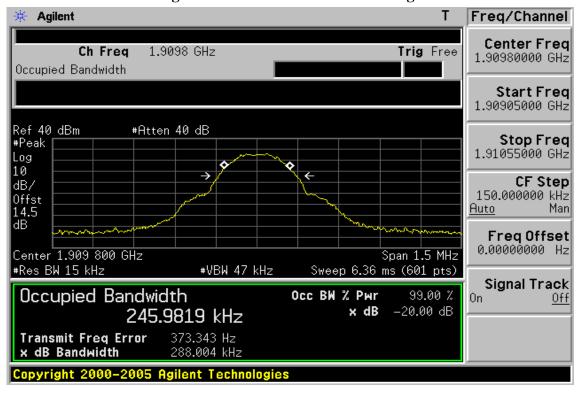


Figure 8-12: GPRS 1900 Channel High



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 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 www.sgs.com/terms_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.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 68 of 207

Figure 8-13: EDGE 850 Channel Low

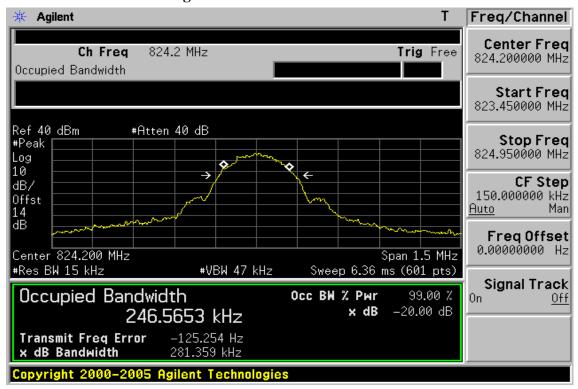
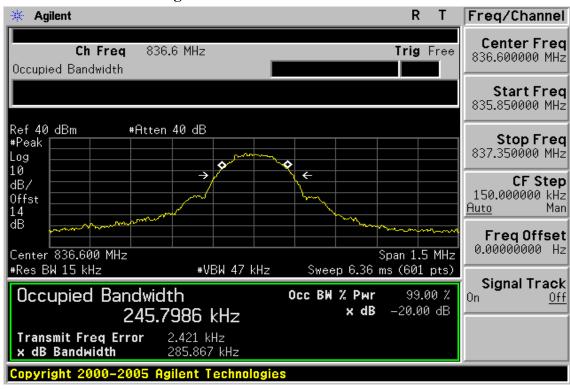


Figure 8-14: EDGE 850 Channel Mid



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 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 www.sgs.com/terms_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.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 69 of 207

Figure 8-15: EDGE 850 Channel High

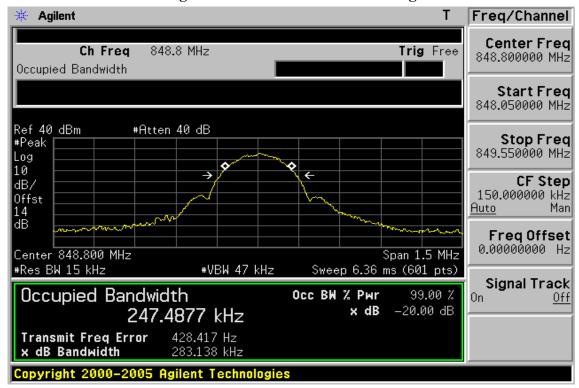
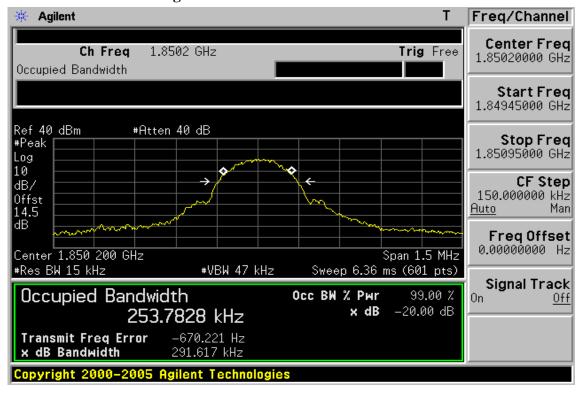


Figure 8-16: EDGE 1900 Channel Low



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.

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 www.sgs.com/terms_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.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 70 of 207

Figure 8-17: EDGE 1900 Channel Mid

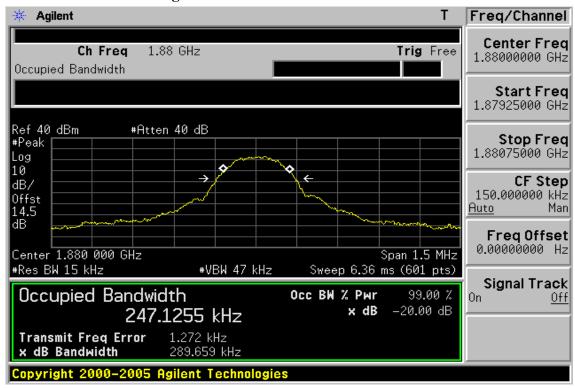
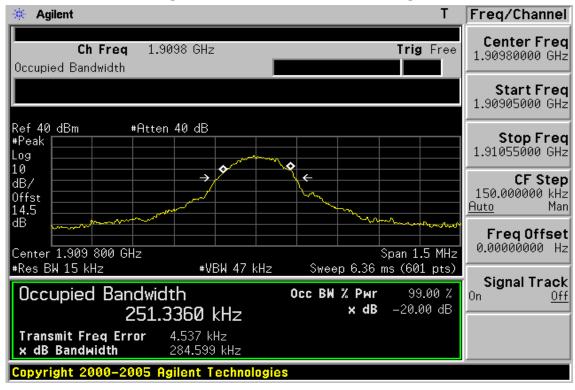


Figure 8-18: EDGE 1900 Channel High



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.

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 www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 71 of 207

Figure 8-19: WCDMA Band II Channel Low

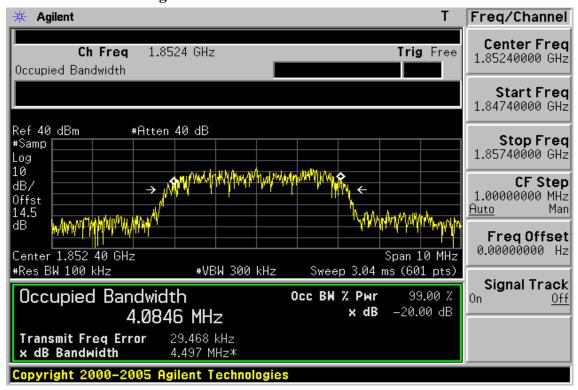
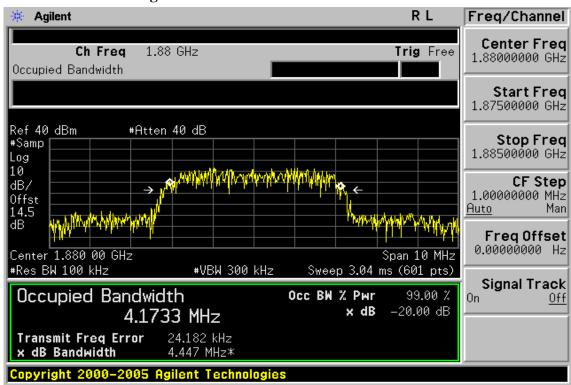


Figure 8-20: WCDMA Band II Channel Mid



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.

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 www.sgs.com/terms_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,Wu Kung Road, New T 台灣檢驗科技股份有限公司 t (886-2) 2299-3279



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 72 of 207

Figure 8-21: WCDMA Band II Channel High

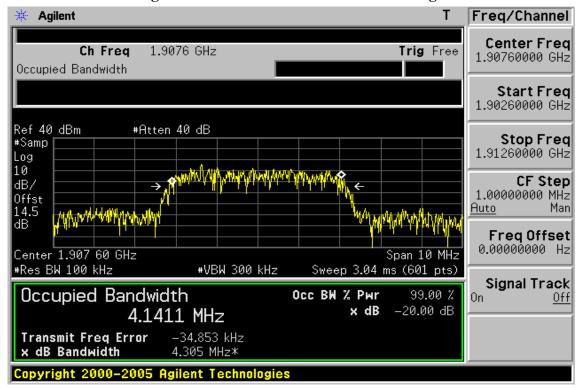
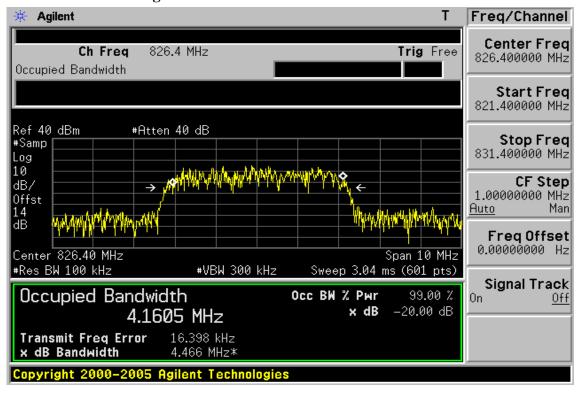


Figure 8-22: WCDMA Band V Channel Low



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 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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 73 of 207

Figure 8-23: WCDMA Band V Channel Mid

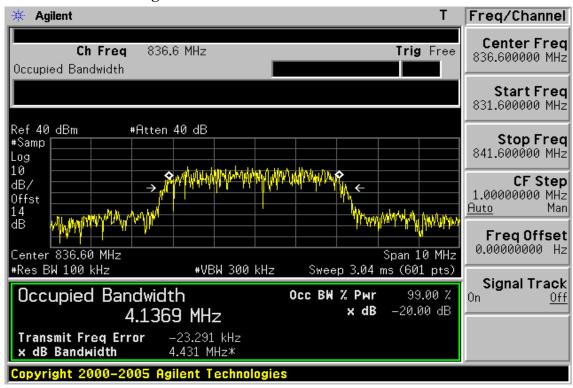
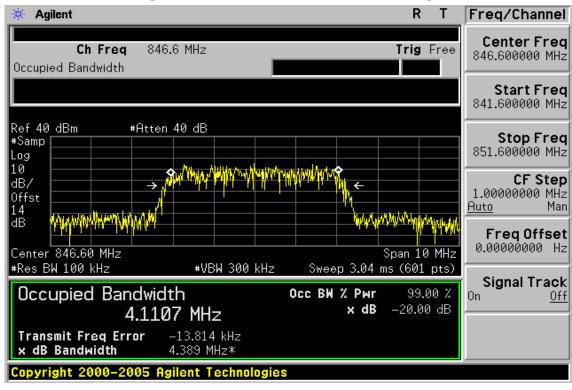


Figure 8-24: WCDMA Band V Channel High



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.

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 www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 74 of 207

Figure 8-25: HSUPA Band II Channel Low

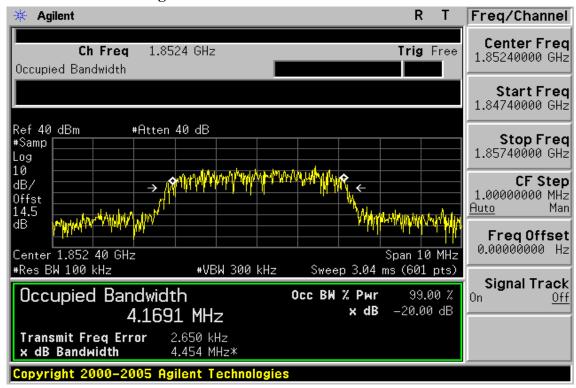
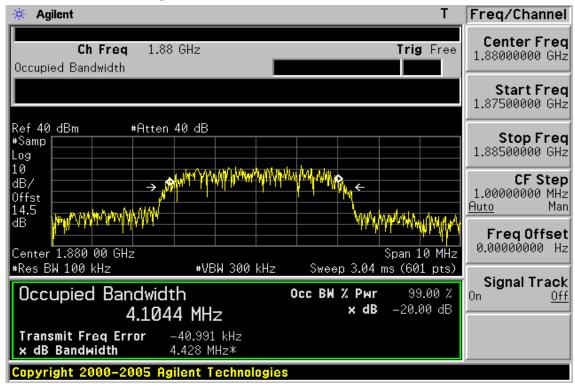


Figure 8-26: HSUPA Band II Channel Mid



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.

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 75 of 207

Figure 8-27: HSUPA Band II Channel High

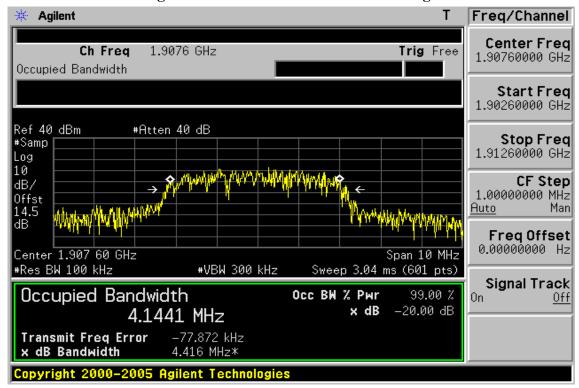
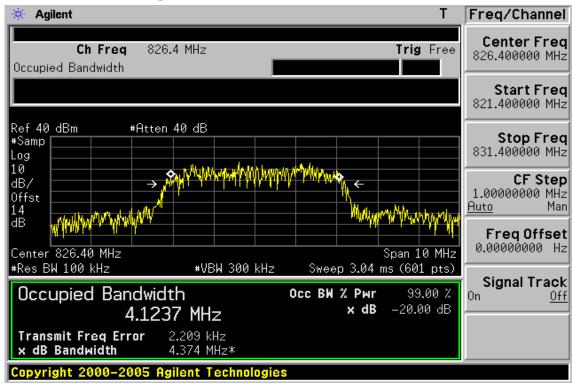


Figure 8-28: HSUPA Band V Channel Low



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.

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 76 of 207

Figure 8-29: HSUPA Band V Channel Mid

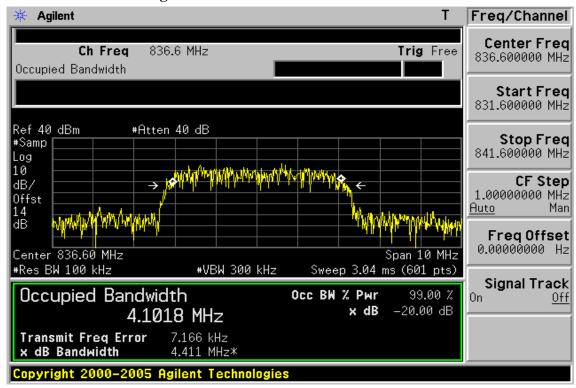
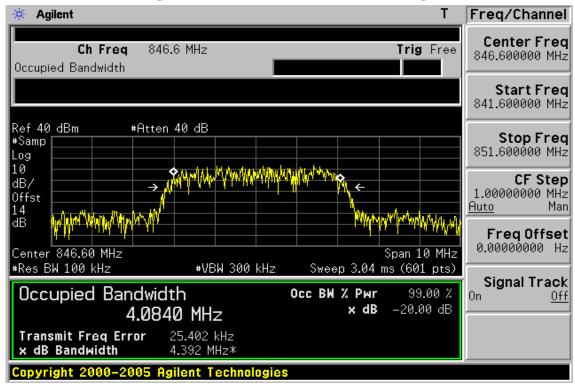


Figure 8-30: HSUPA Band V Channel High



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 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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 77 of 207

Figure 8-31: HSDPA Band II Channel Low

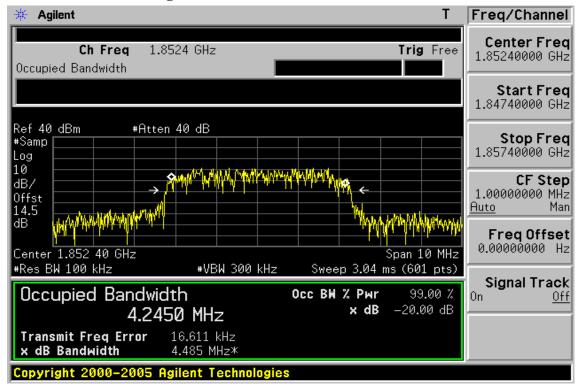
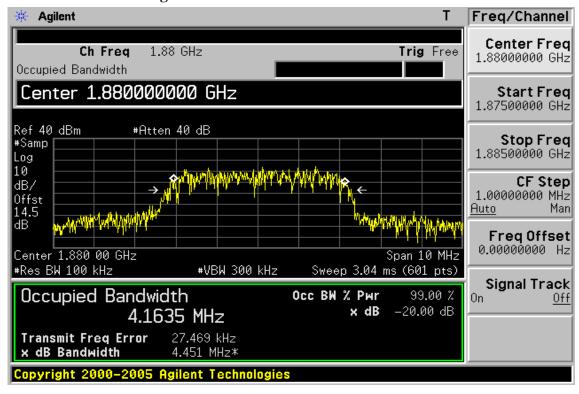


Figure 8-32: HSDPA Band II Channel Mid



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 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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.sas.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 78 of 207

Figure 8-33: HSDPA Band II Channel High

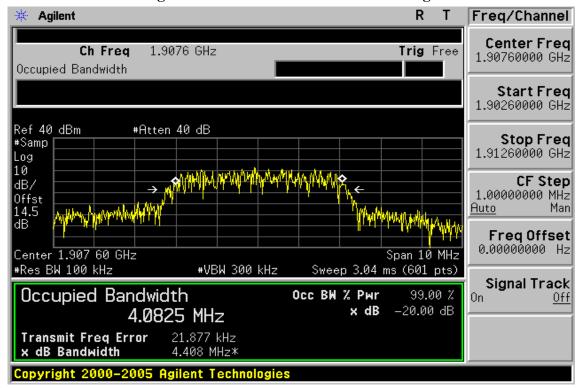
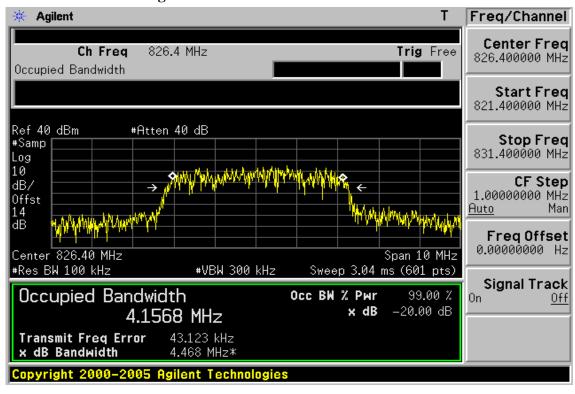


Figure 8-34: HSDPA Band V Channel Low



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

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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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 f (886-2) 2298-0488



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 79 of 207

Figure 8-35: HSDPA Band V Channel Mid

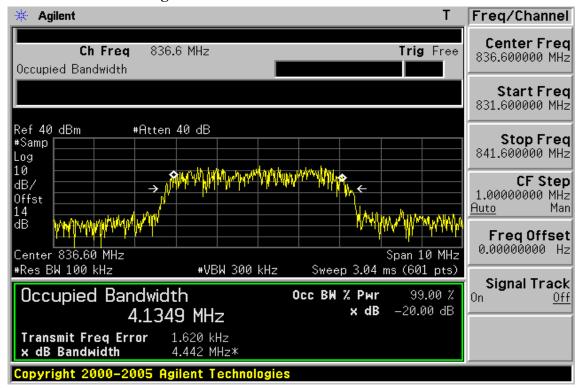
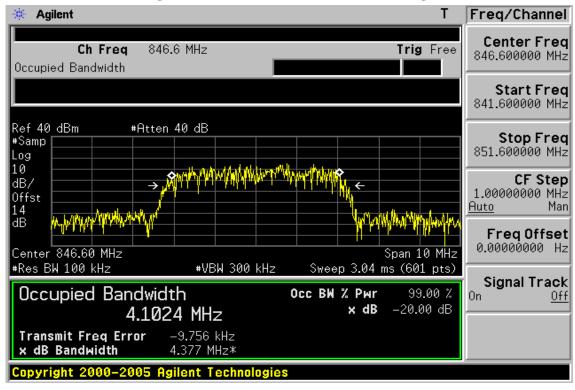


Figure 8-36: HSDPA Band V Channel High



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 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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.sas.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 80 of 207

OUT OF BAND EMISSION AT ANTENNA TERMINALS

9.1. Standard Applicable:

According to FCC §2.1051.

FCC §22.917(a), §24.238(a), 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)

According to RSS-132 §5.5

Mobile and base station equipment shall comply with the limits in (i) and (ii) below.

- (i) In the first 1.0 MHz band immediately outside and adjacent to each of the sub-bands specified in Section 5.1, the power of emissions per any 1% of the occupied bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log 10$ p (watts).
- (ii) After the first 1.0 MHz immediately outside and adjacent to each of the sub-bands, the power of emissions in any 100 kHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log 10$ p (watts). If the measurement is performed using 1% of the occupied bandwidth, power integration over 100 kHz is required.

According to RSS-133 §6.5

6.5.1 Out-of-Block Emissions

Equipment shall comply with the limits in (i) and (ii) below.

- (i) In the 1.0 MHz bands immediately outside and adjacent to the equipment's operating frequency block, the emission power per any 1% of the emission bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log 10$ p(watts).
- (ii) After the first 1.0 MHz, the emission power in any 1 MHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least 43 + 10 log10 p(watts). If the measurement is performed using 1% of the emission bandwidth, power integration over 1.0 MHz is required.

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 www.sgs.com/terms_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.

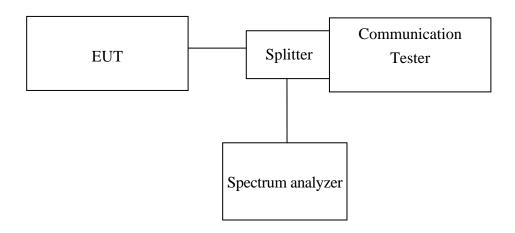


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

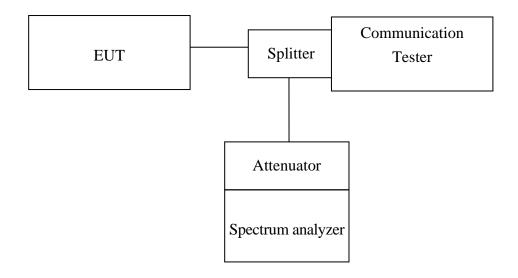
Page: 81 of 207

9.2. Test SET-UP:

Out of band emission



Band Edge



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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.sas.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 82 of 207

9.3. Measurement Procedure:

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.

For the out of band: Set the RBW, VBW = 1MHz, Start=30MHz, Stop= 10 th harmonic. Limit = -13dBm

Band Edge Requirements: In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions. Limit, -13dBm.

Conducted Emission:

- 1 · To connect Antenna Port of EUT to Spectrum.
- Set RBW = 1MHz & VBW = 1MHz on Spectrum.
- 3 · Sweep the frequency to determine spurious emission as seen on spectrum from span of 30 to 1G, 1G to 2.5G, 2.5G to 7.5G, 7.5G to 10G, 10G to 15G and 15G to 20GHz
- 4 Via Software, combine 6 spans of frequency range into one plot

9.4. Measurement Equipment Used:

Refer to section 2.4 in this report

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

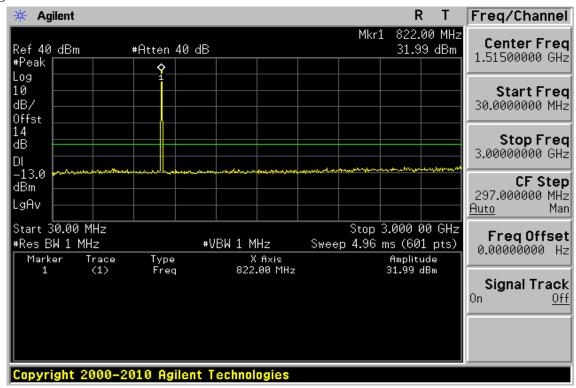
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. 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.

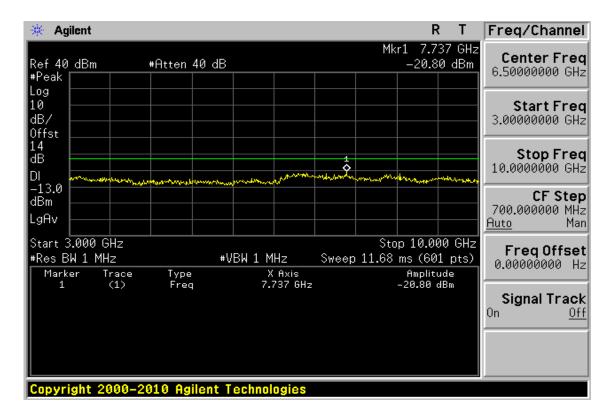


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 83 of 207

Figure 9-1: Out of Band emission at antenna terminals – GSM 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.

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。

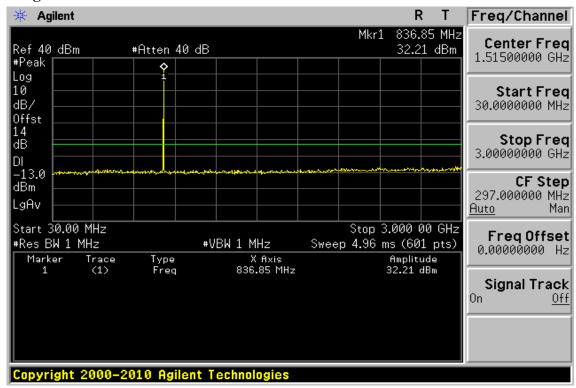
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. 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.

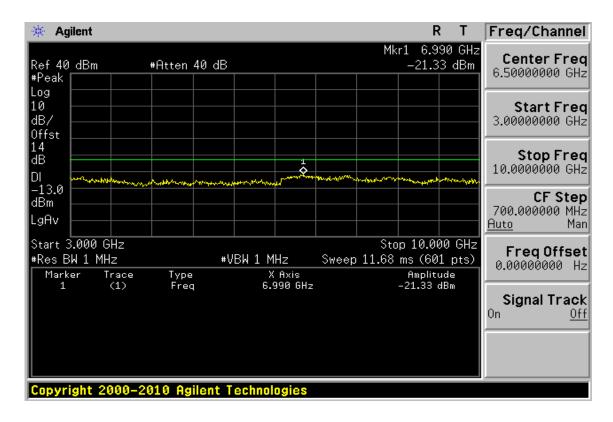


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 84 of 207

Figure 9-2: Out of Band emission at antenna terminals –GSM 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

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 www.sgs.com/terms_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.

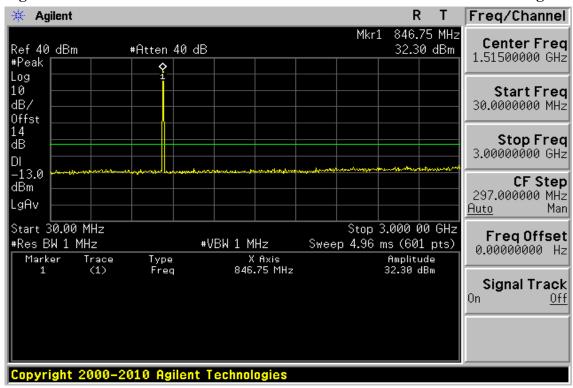
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd. www.tw.sas.com

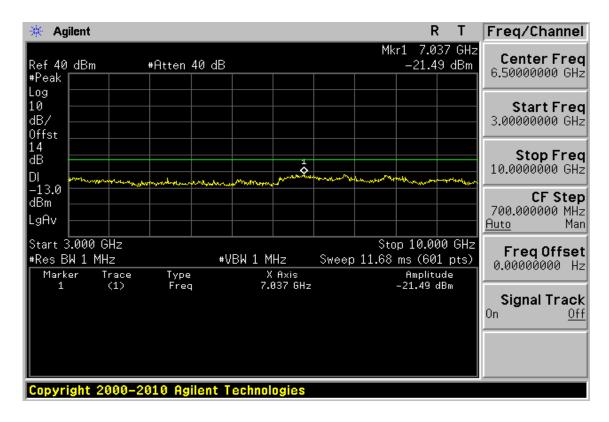


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 85 of 207

Figure 9-3: Out of Band emission at antenna terminals –GSM 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 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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 t (886-2) 2299-3279



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 86 of 207

Figure 9-4: Band edge emission at antenna terminals –GSM 850 Channel Lowest

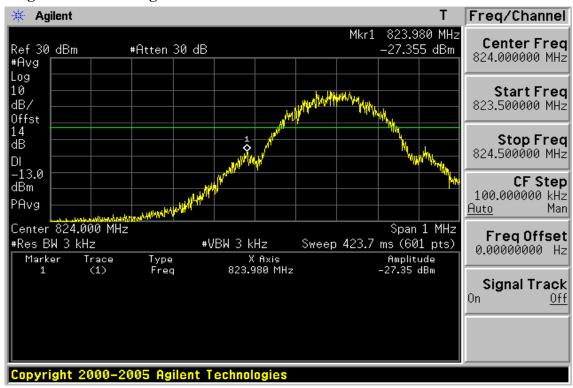


Figure 9-5: Band edge emission at antenna terminals –GSM 850 Channel Highest



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

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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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

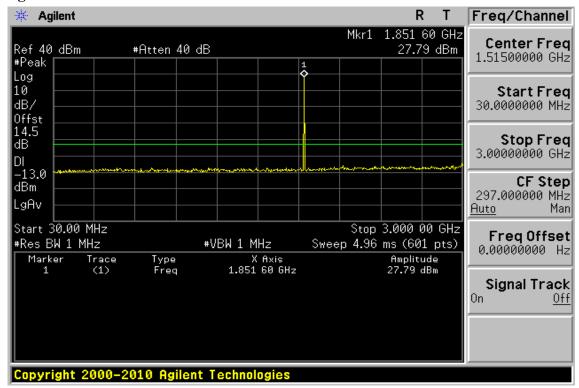
f (886-2) 2298-0488 www.tw.sas.com

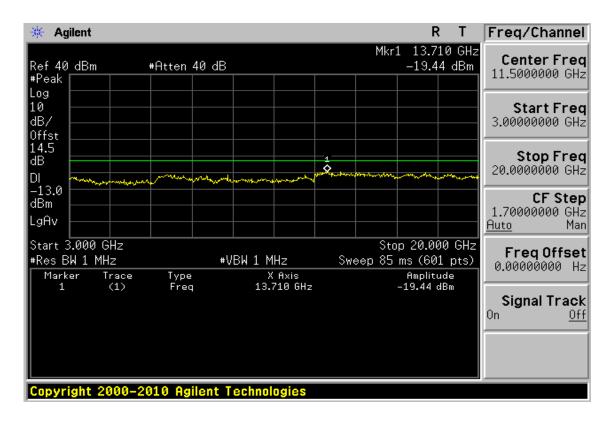


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 87 of 207

Figure 9-6: Out of Band emission at antenna terminals – GSM 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

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。

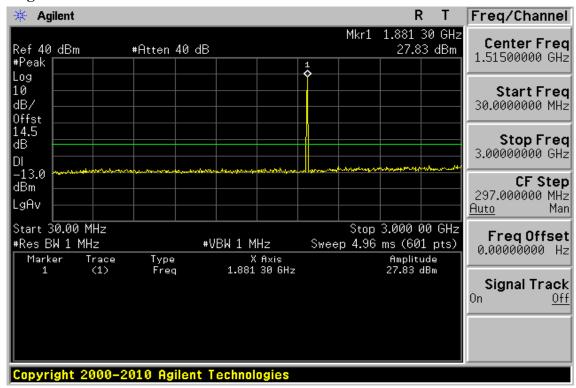
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. 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.

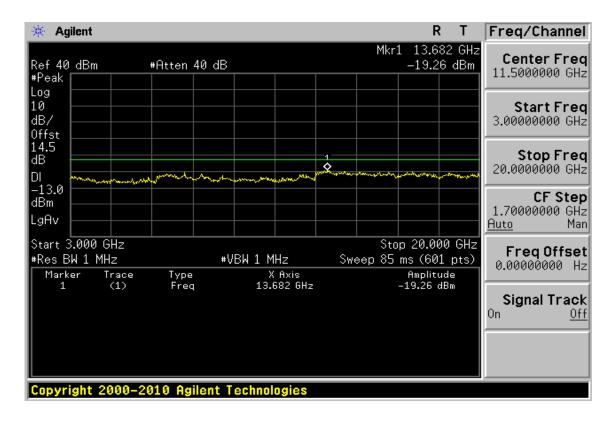


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 88 of 207

Figure 9-7: Out of Band emission at antenna terminals – GSM 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

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 www.sgs.com/terms_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.

f (886-2) 2298-0488

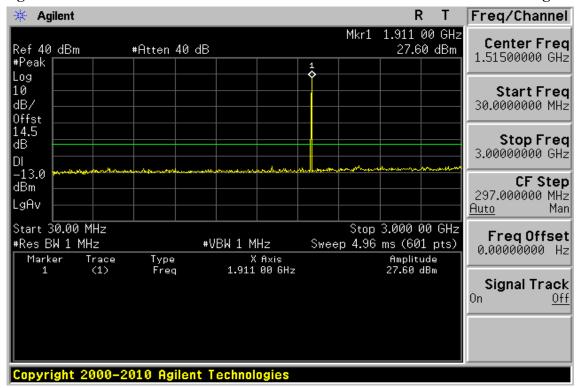
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

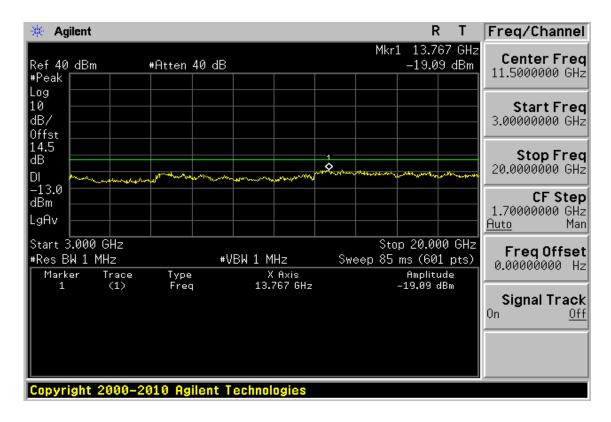


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 89 of 207

Figure 9-8: Out of Band emission at antenna terminals –GSM 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

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 www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 90 of 207

Figure 9-9: Band edge emission at antenna terminals –GSM 1900 Channel Lowest

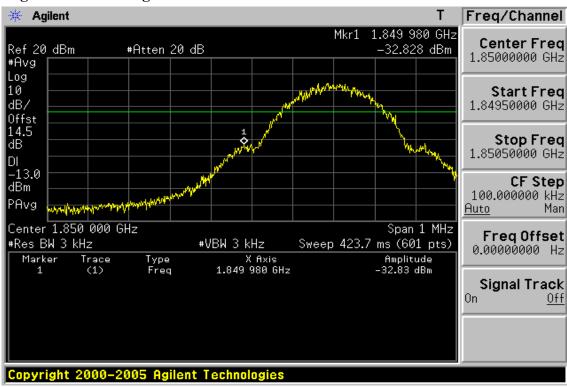
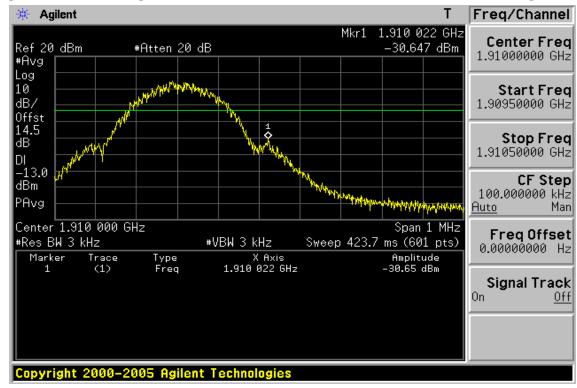


Figure 9-10: Band edge emission at antenna terminals –GSM 1900 Channel Highest



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

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 www.sgs.com/terms_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.

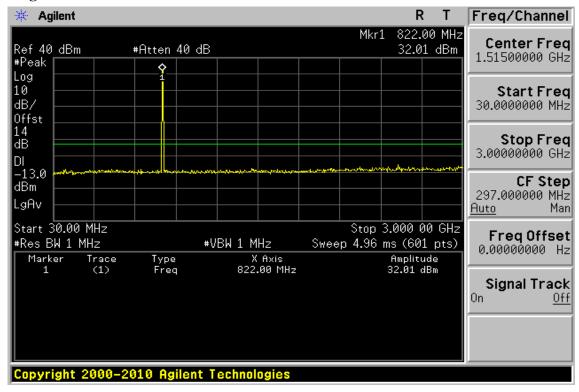
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd. www.tw.sas.com

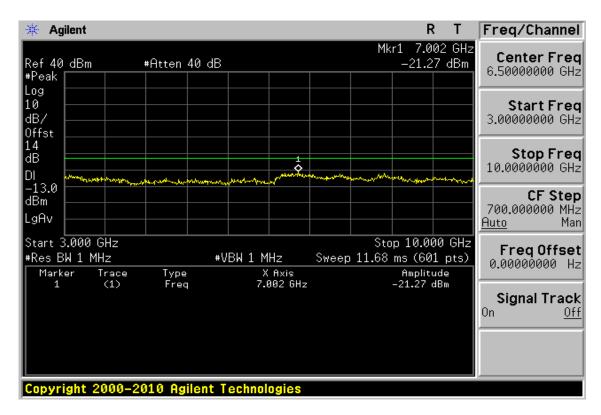


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 91 of 207

Figure 9-11: 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

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 www.sgs.com/terms_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.

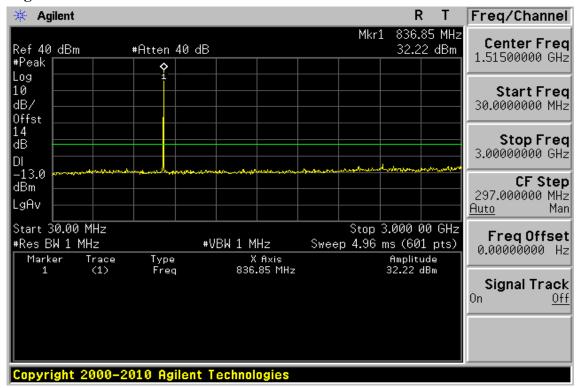
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 t (886-2) 2299-3279 www.tw.sas.com

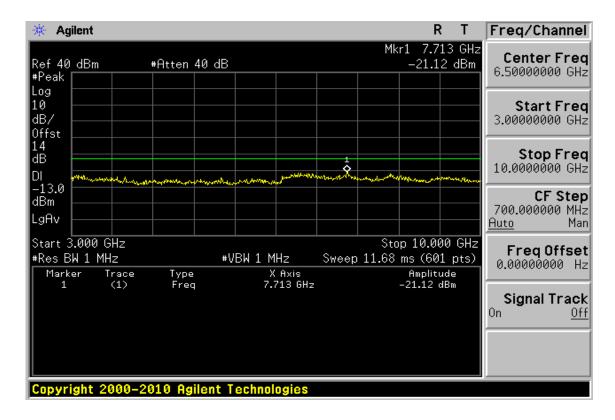


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 92 of 207

Figure 9-12: 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.

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。

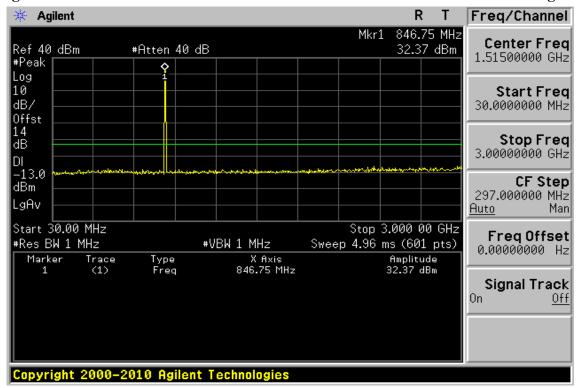
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. 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.

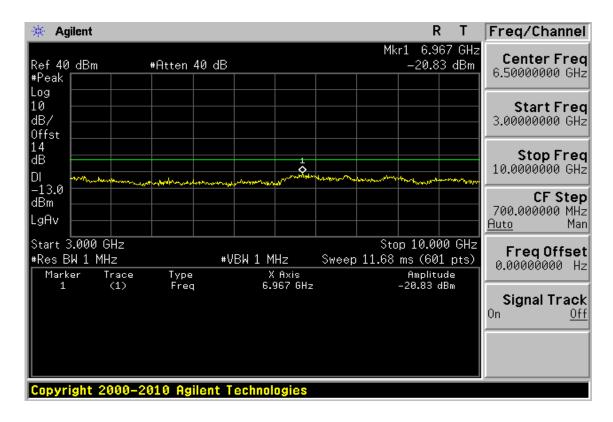


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 93 of 207

Figure 9-13: 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

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。

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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 94 of 207

Figure 9-14: Band edge emission at antenna terminals – GPRS 850 Channel Lowest

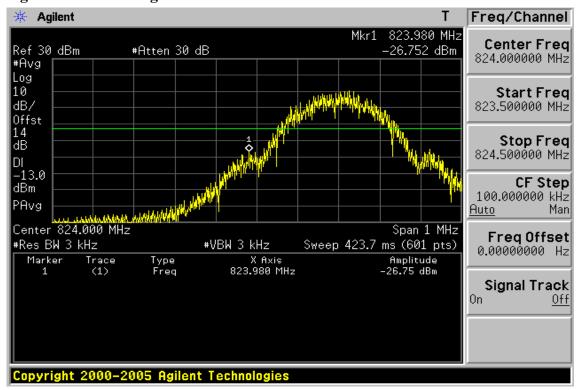
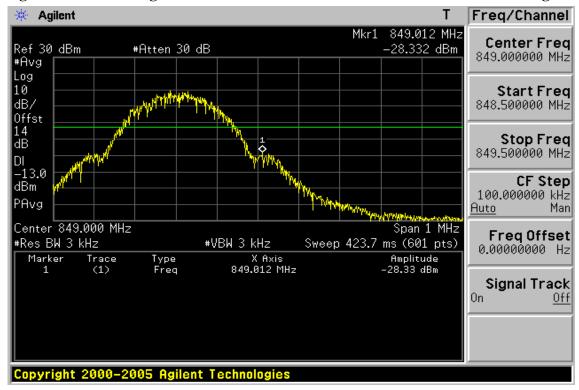


Figure 9-15: Band edge emission at antenna terminals – GPRS 850 Channel Highest



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 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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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

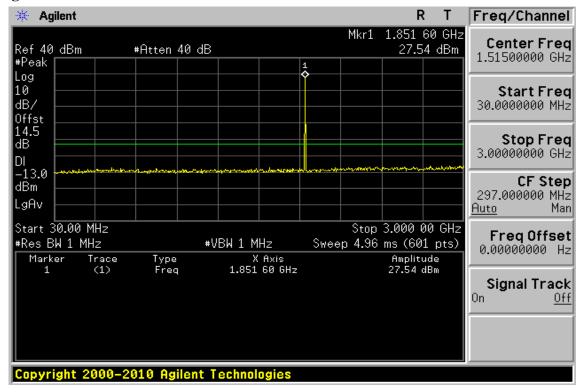
f (886-2) 2298-0488 www.tw.sas.com

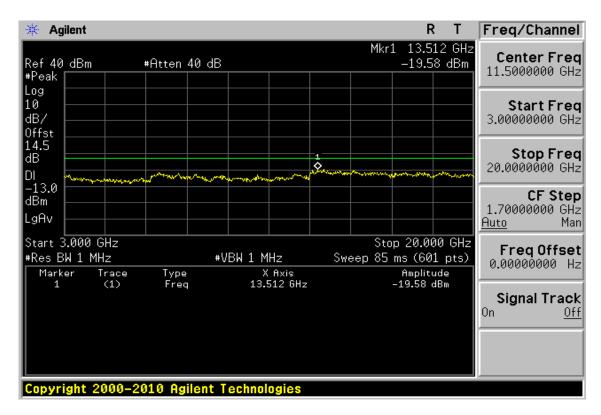


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 95 of 207

Figure 9-16: 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

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 www.sgs.com/terms_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.

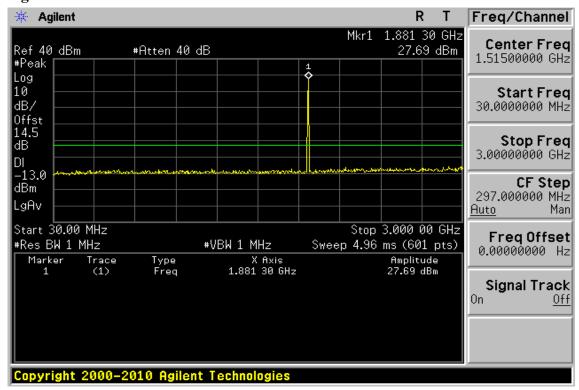
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 t (886-2) 2299-3279 www.tw.sas.com

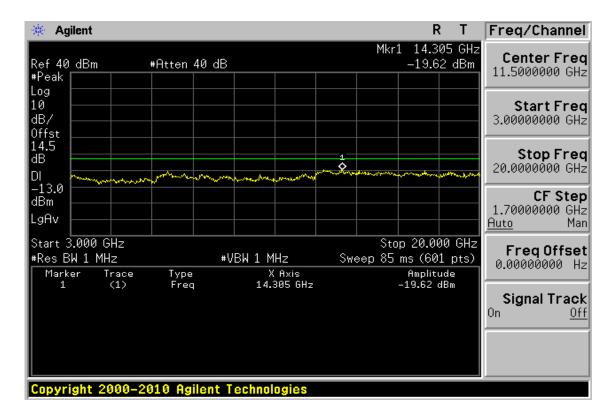


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 96 of 207

Figure 9-17: 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

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。

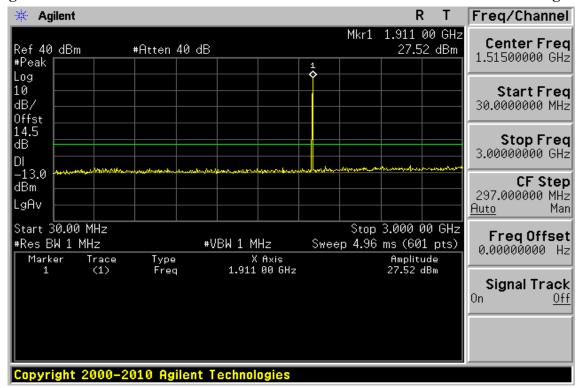
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. 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.

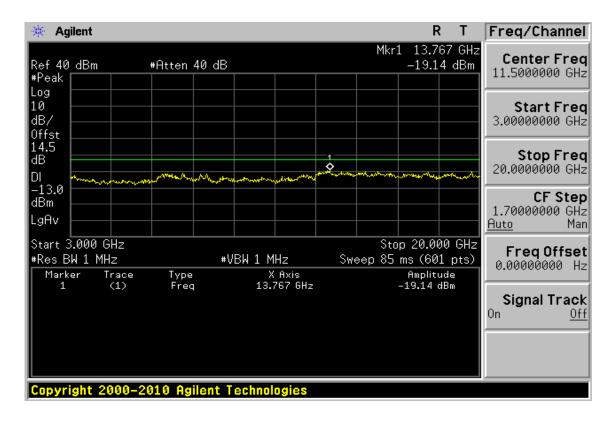


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 97 of 207

Figure 9-18: 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

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 www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.sgs.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 98 of 207

Figure 9-19: Band edge emission at antenna terminals – GPRS 1900 Channel Lowest

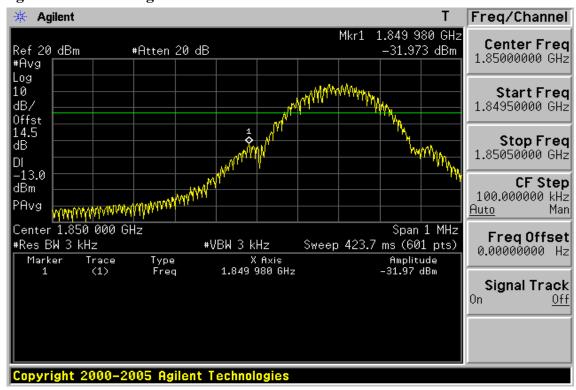
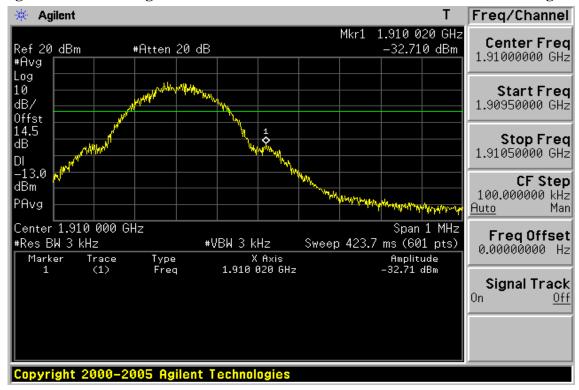


Figure 9-20: Band edge emission at antenna terminals – GPRS 1900 Channel Highest



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

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 www.sgs.com/terms_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.

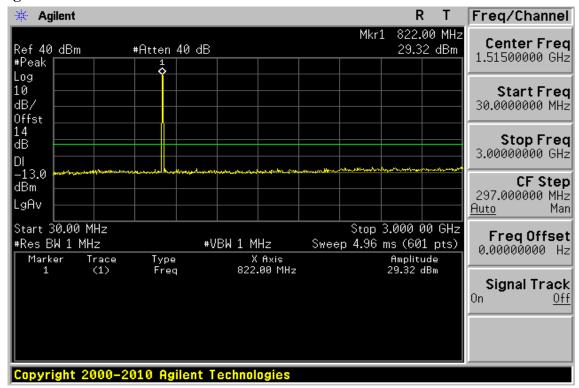
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd. t (886-2) 2299-3279 f (886-2) 2298-0488 www.tw.sas.com

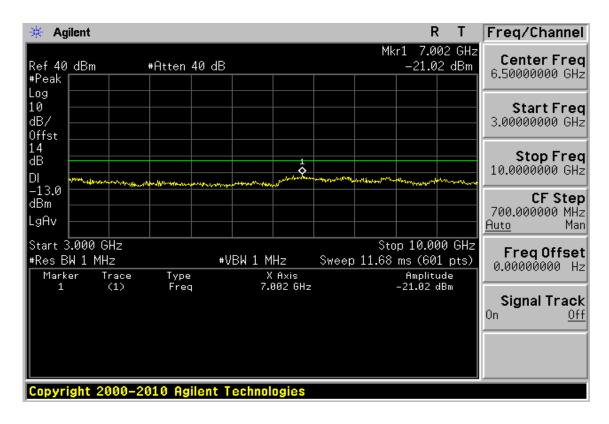


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 99 of 207

Figure 9-21: 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

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 www.sgs.com/terms_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.

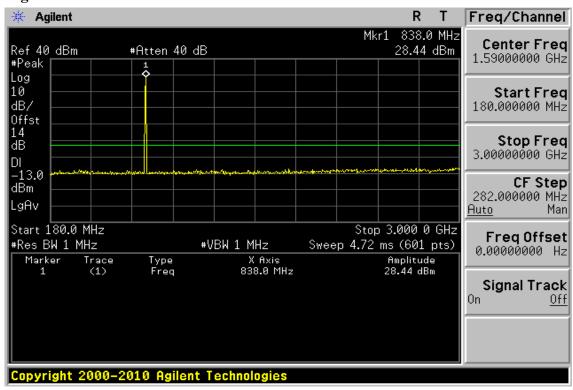
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd. t (886-2) 2299-3279

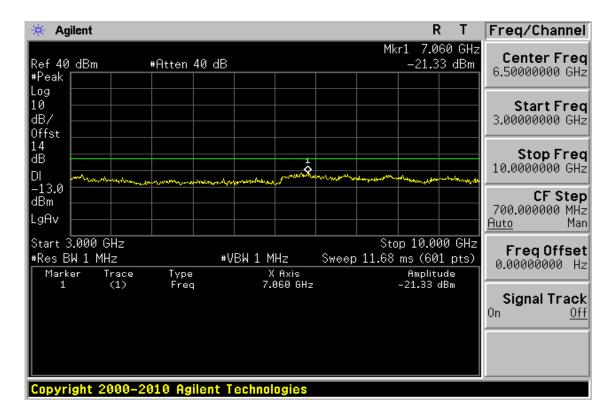


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 100 of 207

Figure 9-22: 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

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。

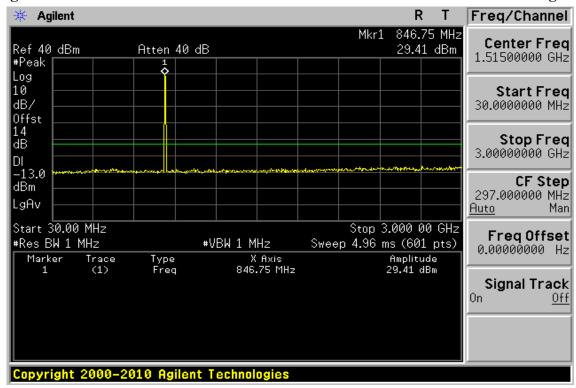
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. 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.

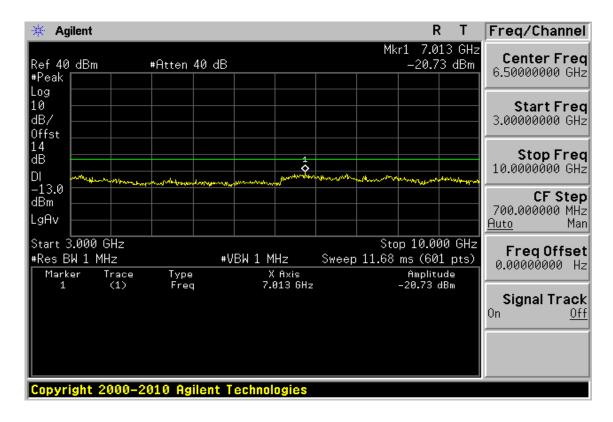


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 101 of 207

Figure 9-23: 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

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 www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

www.tw.sas.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 102 of 207

Figure 9-24: Band edge emission at antenna terminals – EDGE 850 Channel Lowest

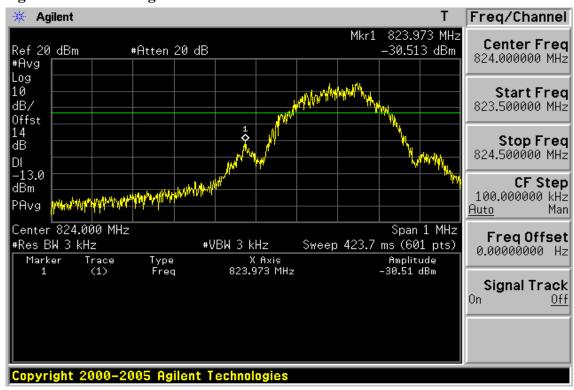
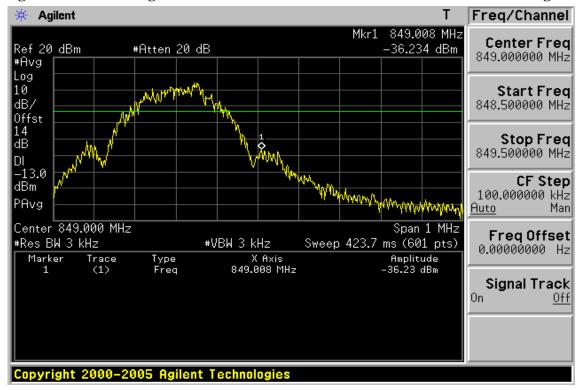


Figure 9-25: Band edge emission at antenna terminals – EDGE 850 Channel Highest



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. 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 www.sgs.com/terms_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.

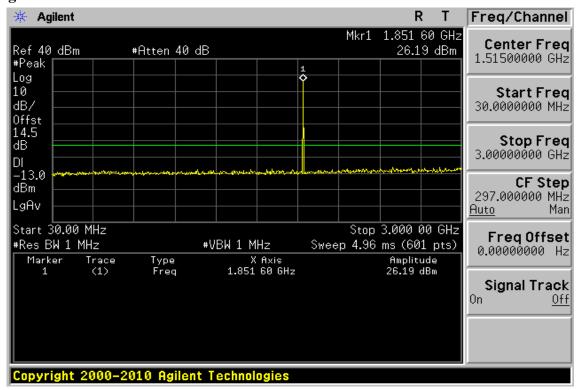
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 t (886-2) 2299-3279 f (886-2) 2298-0488 www.tw.sgs.com

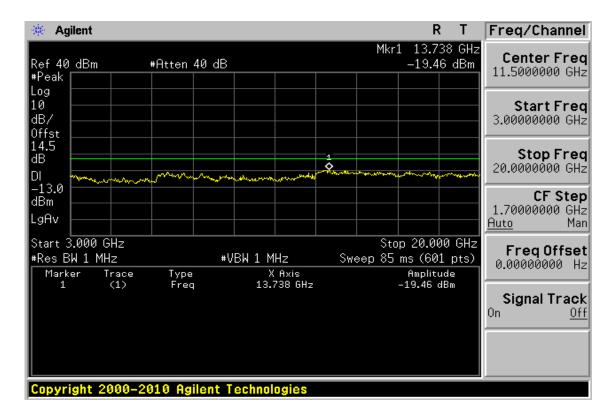


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 103 of 207

Figure 9-26: 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

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。

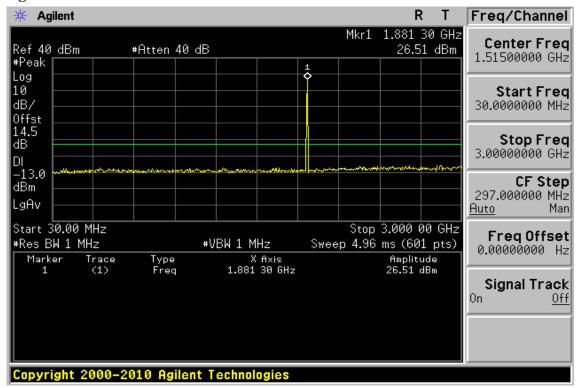
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. 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.

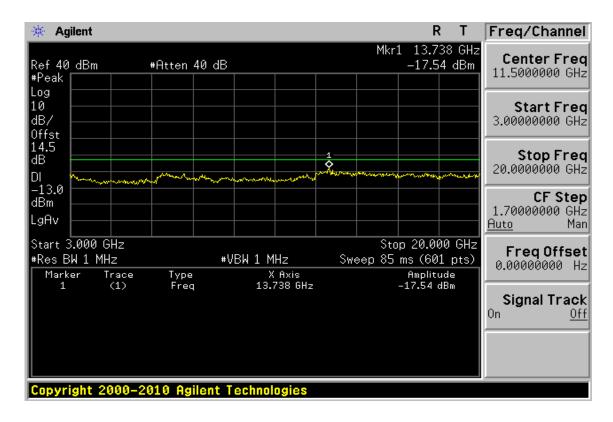


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 104 of 207

Figure 9-27: 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

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。

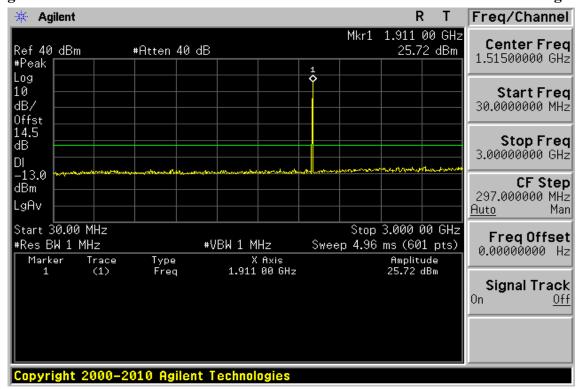
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. 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.

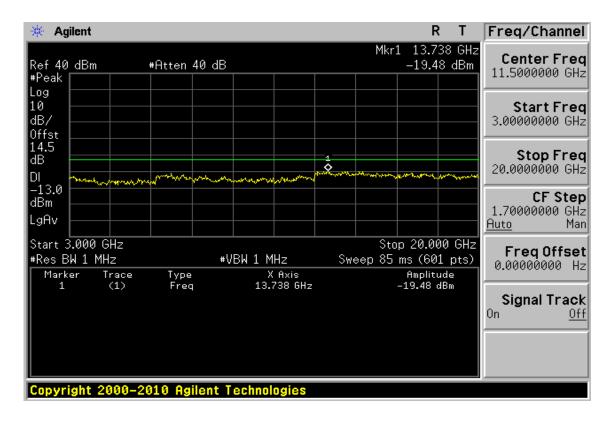


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 105 of 207

Figure 9-28: 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

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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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 f (886-2) 2298-0488

www.tw.sas.com



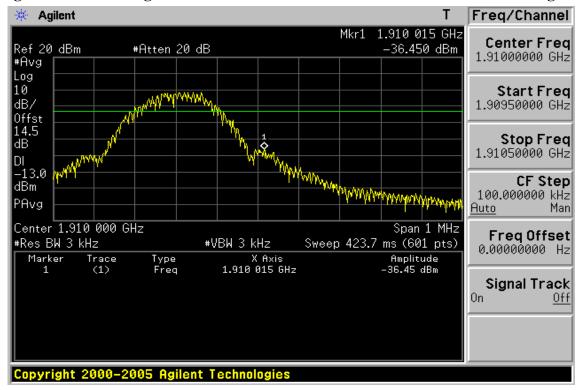
Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 106 of 207

Figure 9-29: Band edge emission at antenna terminals – EDGE 1900 Channel Lowest



Figure 9-30: 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. 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

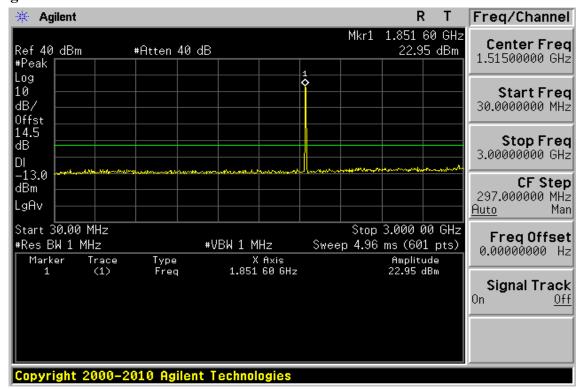
documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's 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.

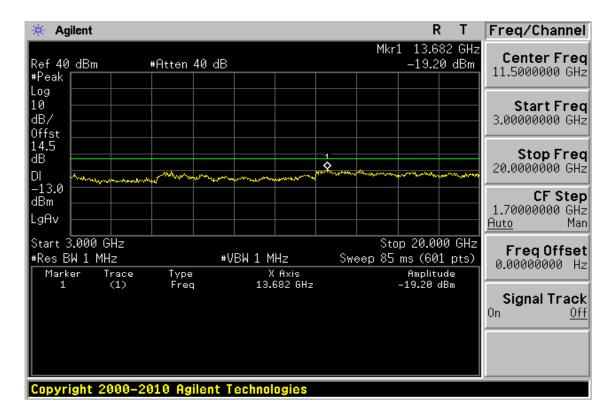


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 107 of 207

Figure 9-31: Out of Band emission at antenna terminals – WCDMA 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

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。

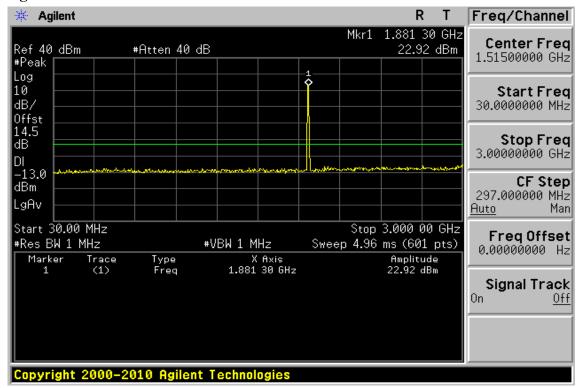
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. 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.

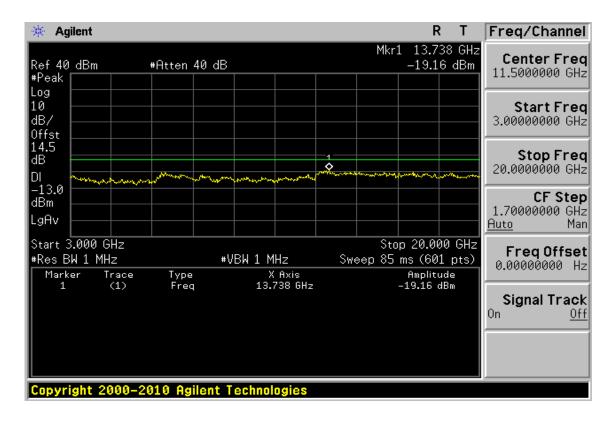


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 108 of 207

Figure 9-32: Out of Band emission at antenna terminals – 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

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 www.sgs.com/terms_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.

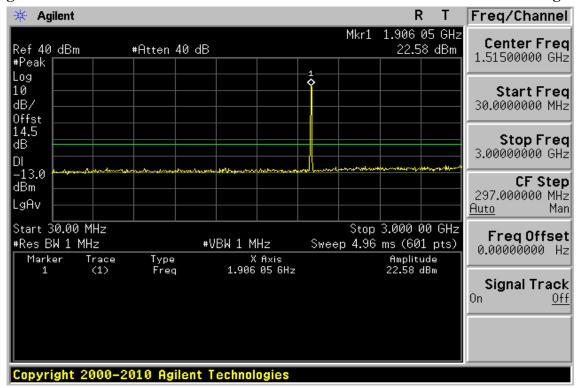
SGS Taiwan Ltd.

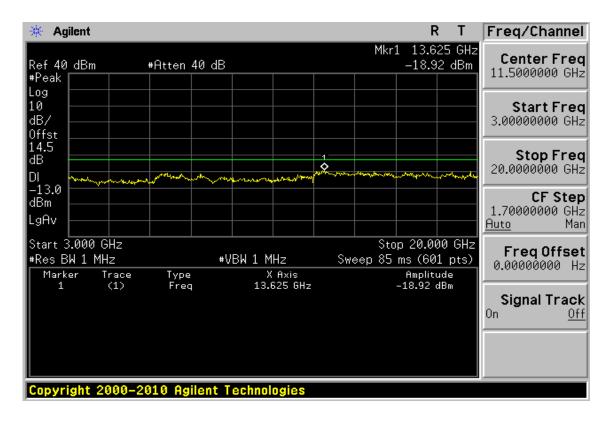


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 109 of 207

Figure 9-33: Out of Band emission at antenna terminals – WCDMA 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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 110 of 207

Figure 9-34: Band edge emission at antenna terminals – WCDMA II Channel Lowest



Figure 9-35: Band edge emission at antenna terminals – WCDMA 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 www.sgs.com/terms_and_conditions.htm and, for electronic format

documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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.

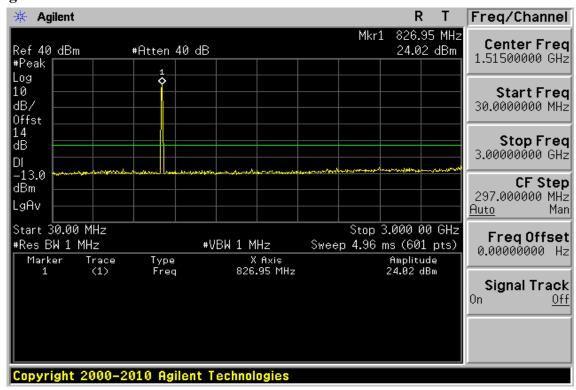
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 f (886-2) 2298-0488 www.tw.sas.com

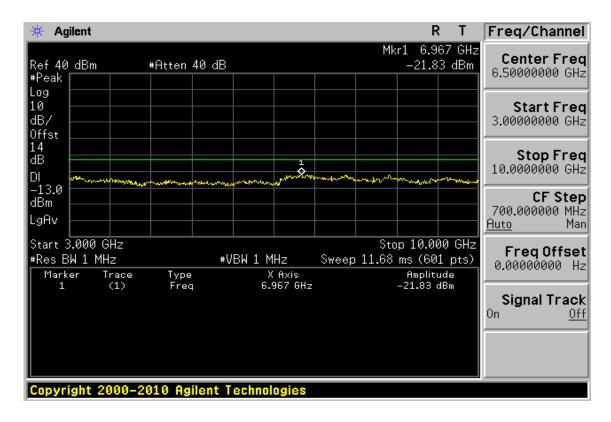


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 111 of 207

Figure 9-36: Out of Band emission at antenna terminals – WCDMA 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

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 www.sgs.com/terms_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.

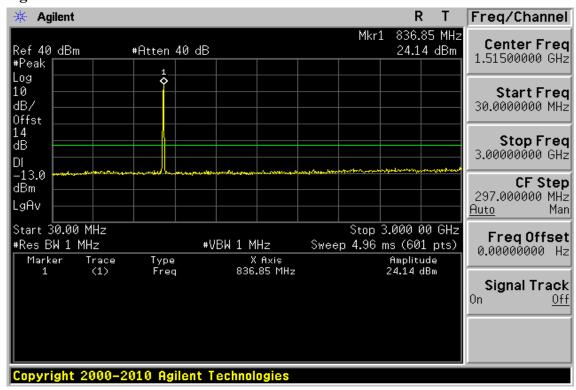
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd. t (886-2) 2299-3279 f (886-2) 2298-0488

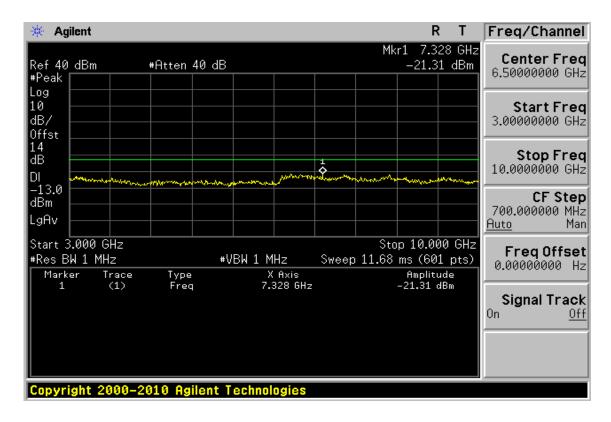


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 112 of 207

Figure 9-37: Out of Band emission at antenna terminals – WCDMA 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

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。

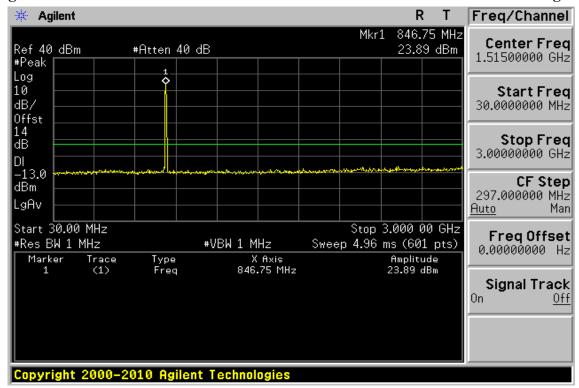
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. 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.

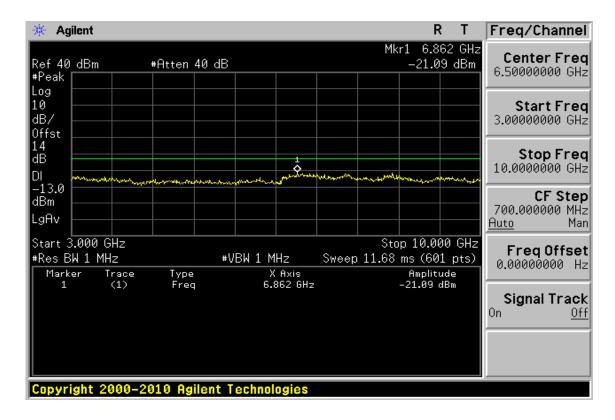


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 113 of 207

Figure 9-38: Out of Band emission at antenna terminals – WCDMA 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

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 114 of 207

Figure 9-39: Band edge emission at antenna terminals – WCDMA V Channel Lowest



Figure 9-40: Band edge emission at antenna terminals – WCDMA 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 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 www.sgs.com/terms_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.

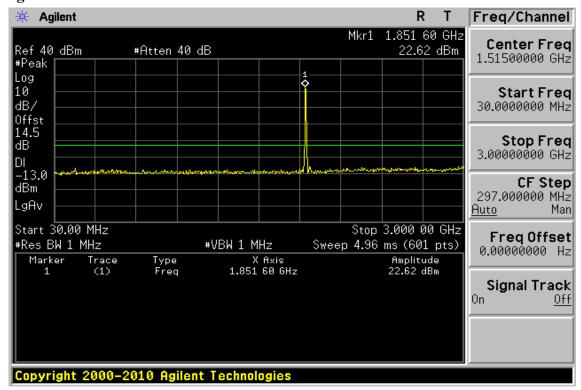
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 t (886-2) 2299-3279 f (886-2) 2298-0488

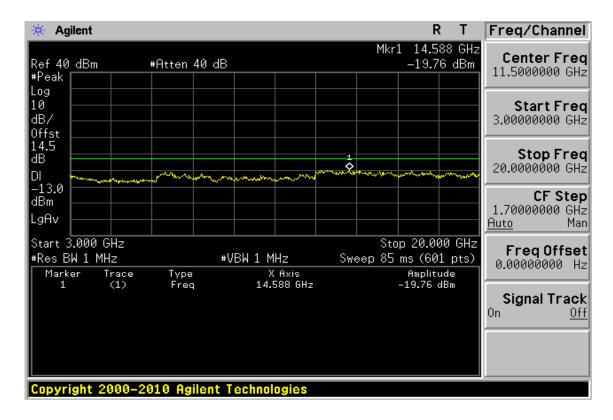


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 115 of 207

Figure 9-41: 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

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 www.sgs.com/terms_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.

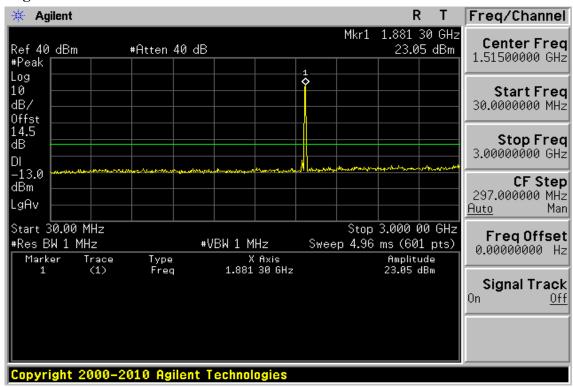
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd. t (886-2) 2299-3279 f (886-2) 2298-0488

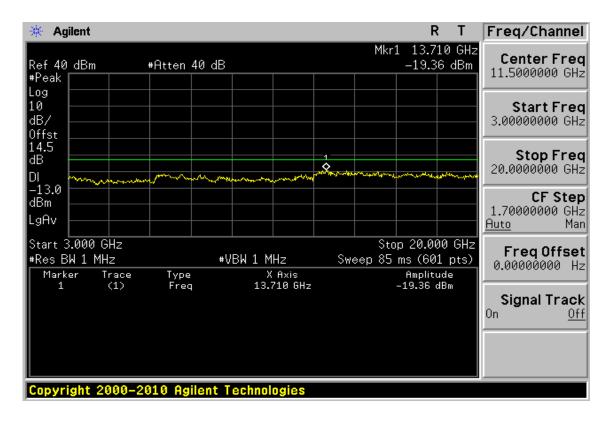


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 116 of 207

Figure 9-42: 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

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 www.sgs.com/terms_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.

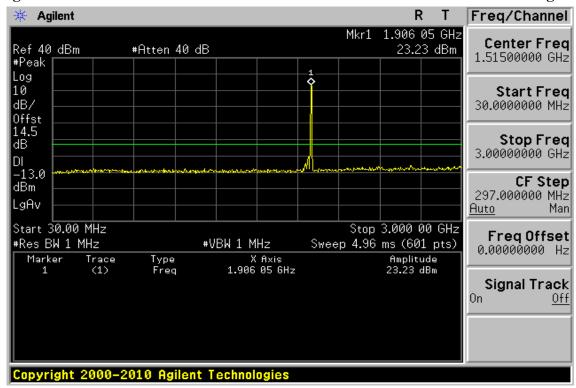
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 t (886-2) 2299-3279 www.tw.sas.com

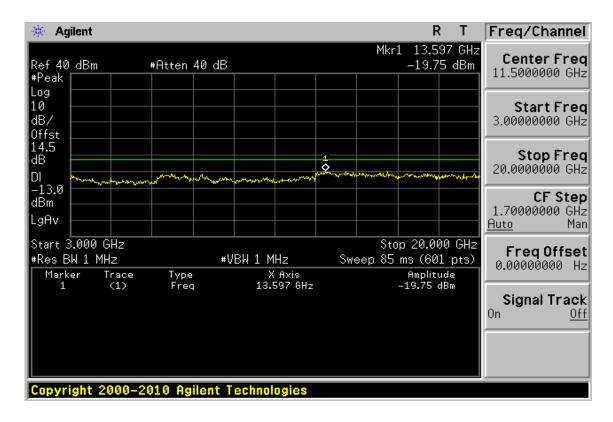


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 117 of 207

Figure 9-43: 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

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 118 of 207

Figure 9-44: Band edge emission at antenna terminals – HSUPA II Channel Lowest

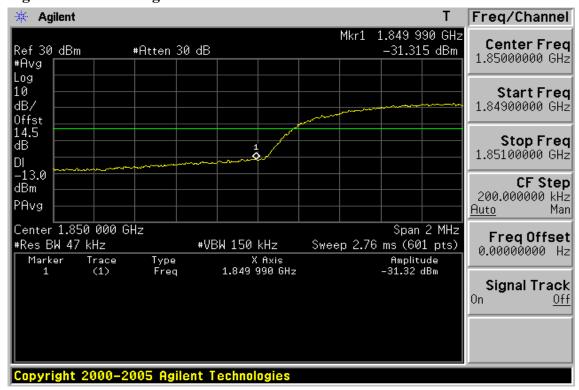
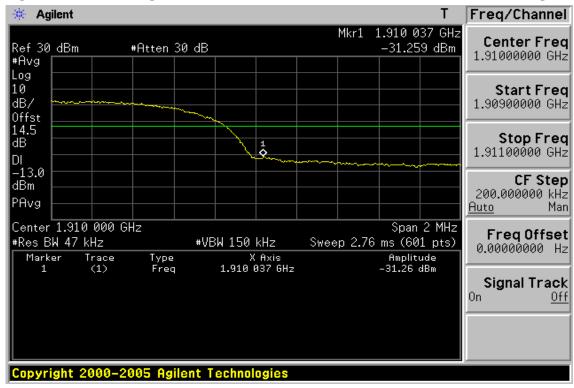


Figure 9-45: Band edge emission at antenna terminals – HSUPA II Channel Highest



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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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 f (886-2) 2298-0488

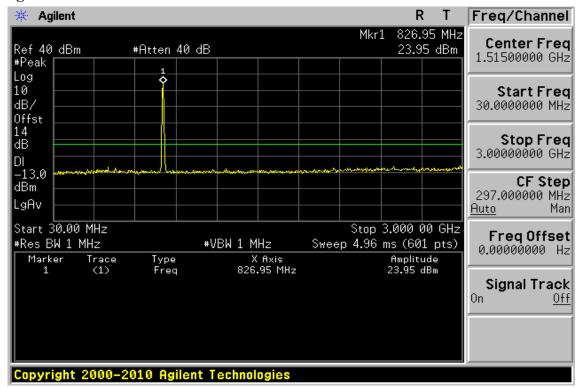
www.tw.sas.com

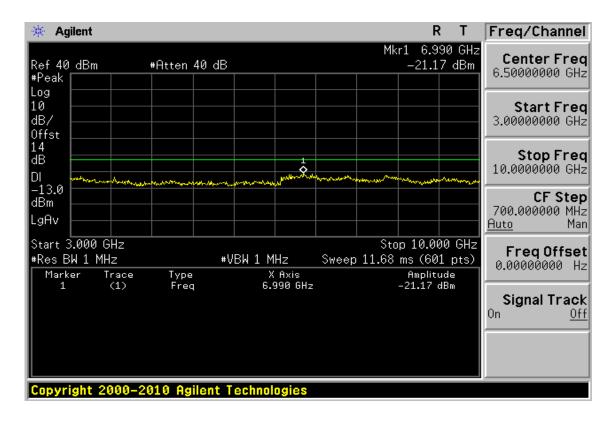


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 119 of 207

Figure 9-46: 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

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 www.sgs.com/terms_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.

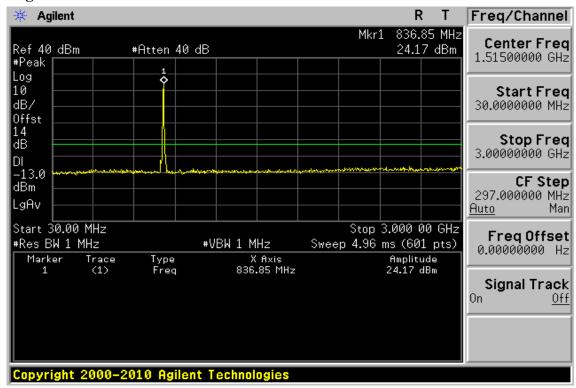
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 f (886-2) 2298-0488

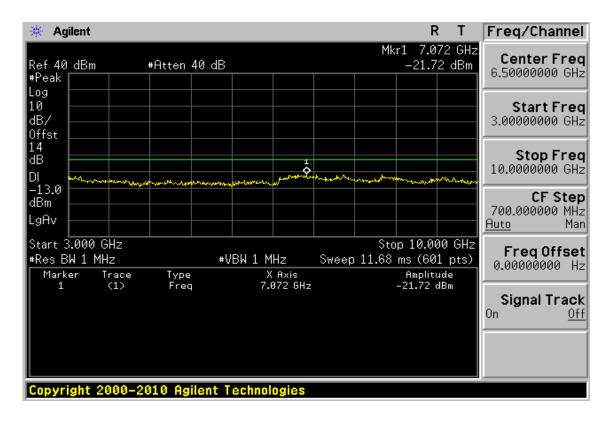


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 120 of 207

Figure 9-47: 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

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。

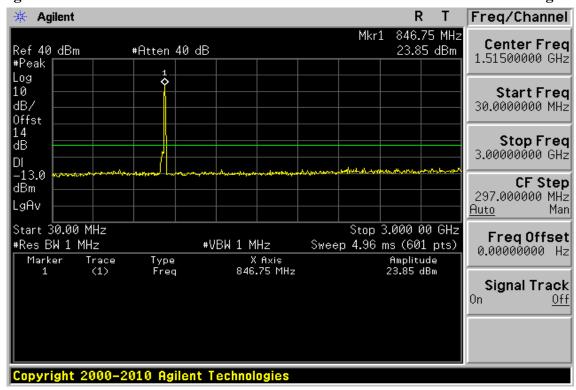
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. 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.

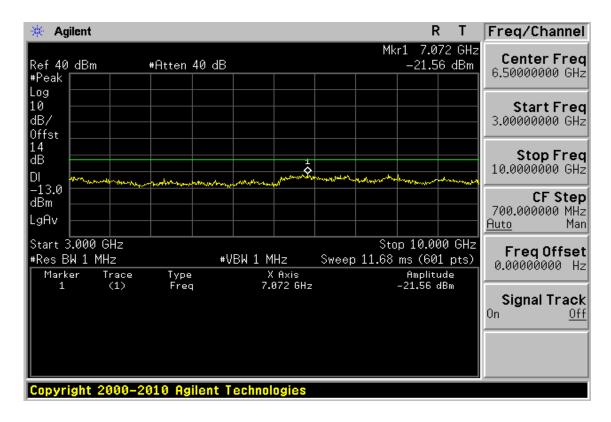


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 121 of 207

Figure 9-48: 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

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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 t (886-2) 2299-3279



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 122 of 207

Figure 9-49: Band edge emission at antenna terminals – HSUPA V Channel Lowest



Figure 9-50: 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

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。

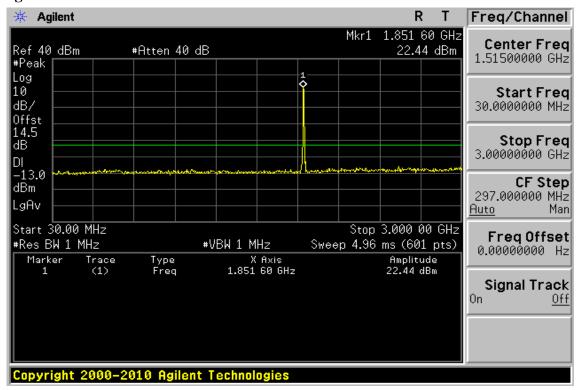
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. 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.

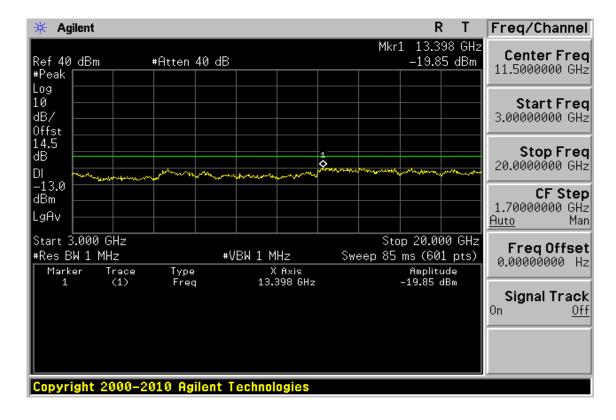


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 123 of 207

Figure 9-51: Out of Band emission at antenna terminals – HSDPA 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.

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。

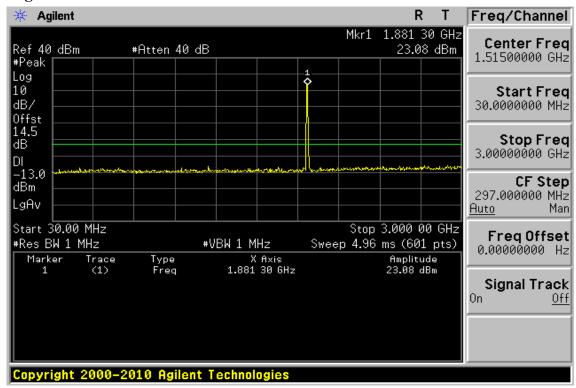
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. 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.

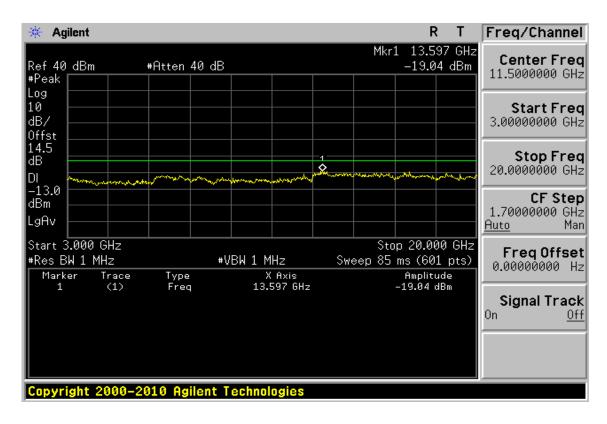


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 124 of 207

Figure 9-52: Out of Band emission at antenna terminals – HSDPA 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

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。

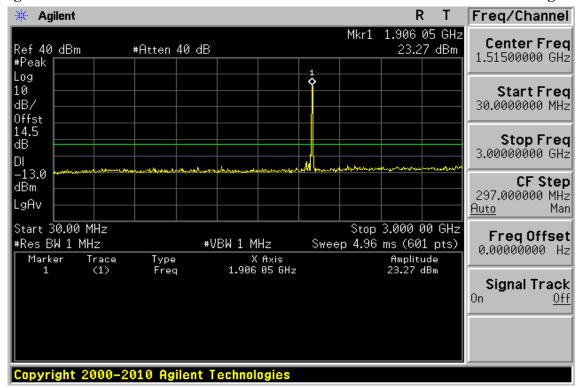
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. 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.

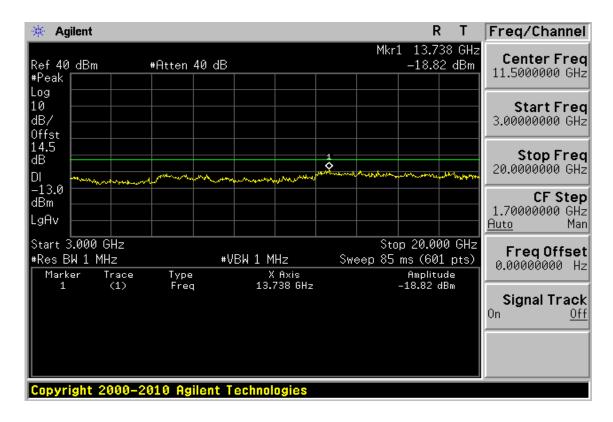


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 125 of 207

Figure 9-53: Out of Band emission at antenna terminals – HSDPA 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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 126 of 207

Figure 9-54: Band edge emission at antenna terminals – HSDPA II Channel Lowest

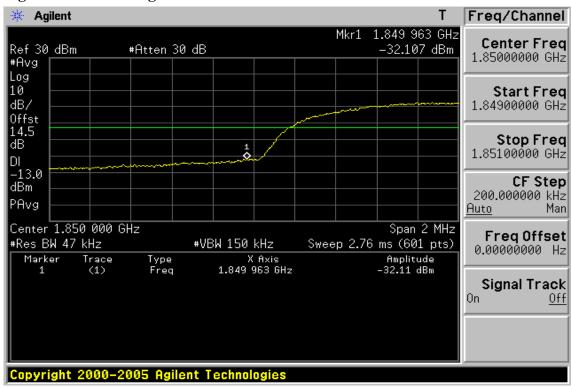
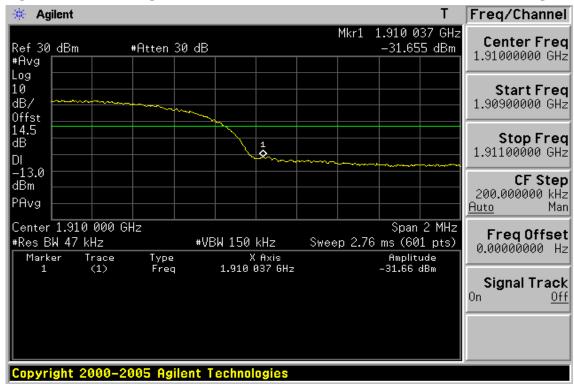


Figure 9-55: Band edge emission at antenna terminals – HSDPA II Channel Highest



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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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.

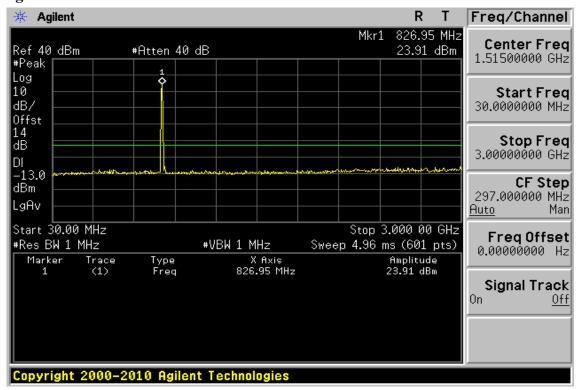
SGS Taiwan Ltd. No.134,Wu 台灣檢驗科技股份有限公司 t (886-2) 22

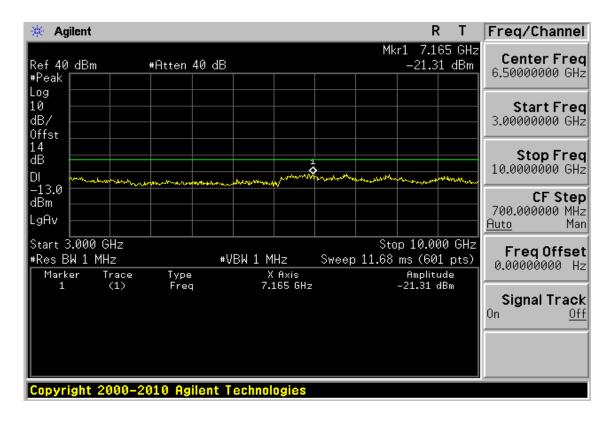


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 127 of 207

Figure 9-56: Out of Band emission at antenna terminals – HSDPA 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

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 www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

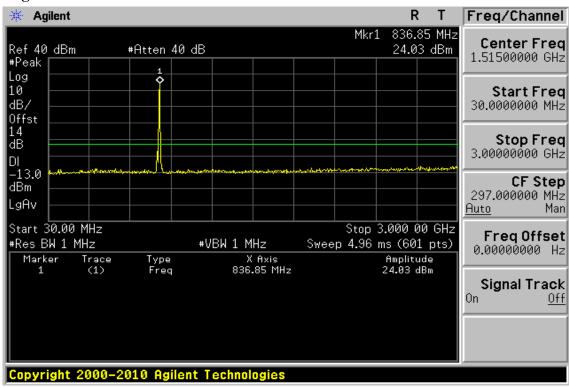
www.tw.sas.com

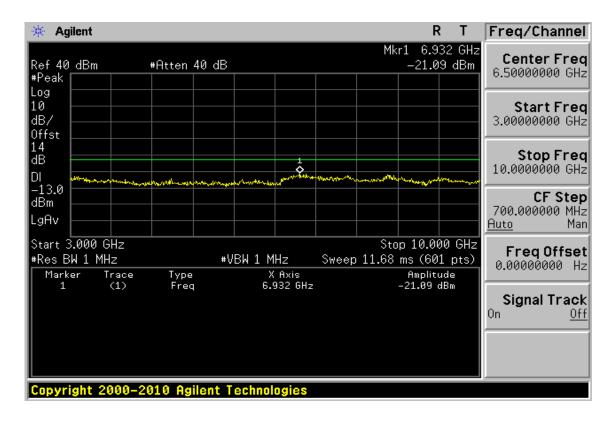


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 128 of 207

Figure 9-57: Out of Band emission at antenna terminals – 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

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 www.sgs.com/terms_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.

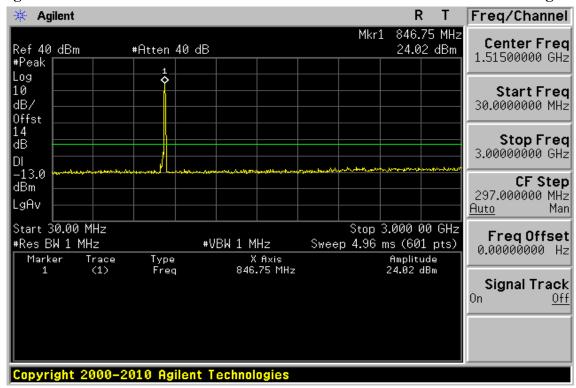
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 t (886-2) 2299-3279 www.tw.sas.com

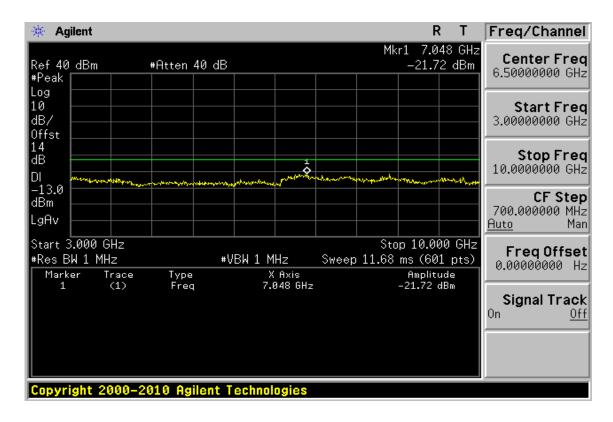


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 129 of 207

Figure 9-58: Out of Band emission at antenna terminals – HSDPA 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

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 130 of 207

Figure 9-59: Band edge emission at antenna terminals – HSDPA V Channel Lowest

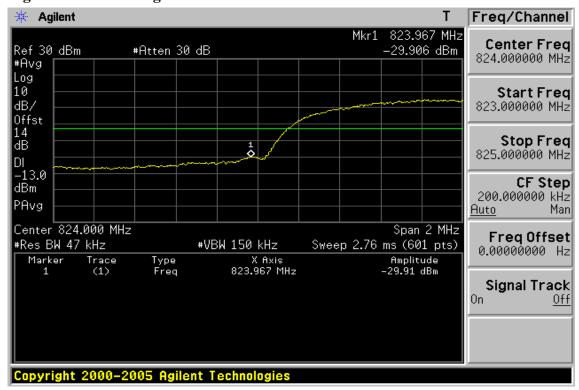


Figure 9-60: Band edge emission at antenna terminals – HSDPA V Channel Highest



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.

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 131 of 207

10. FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

10.1. Standard Applicable:

According to FCC §2.1053

FCC §22.917(a), §24.238(a), 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)

According to RSS-132 §5.5

Mobile and base station equipment shall comply with the limits in (i) and (ii) below.

- (i) In the first 1.0 MHz band immediately outside and adjacent to each of the sub-bands specified in Section 5.1, the power of emissions per any 1% of the occupied bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log 10 p$ (watts).
- (ii) After the first 1.0 MHz immediately outside and adjacent to each of the sub-bands, the power of emissions in any 100 kHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least 43 + 10 log10 p (watts). If the measurement is performed using 1% of the occupied bandwidth, power integration over 100 kHz is required.

According to RSS-133 §6.5

6.5.1 Out-of-Block Emissions

Equipment shall comply with the limits in (i) and (ii) below.

- (i) In the 1.0 MHz bands immediately outside and adjacent to the equipment's operating frequency block, the emission power per any 1% of the emission bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log 10$ p(watts).
- (ii) After the first 1.0 MHz, the emission power in any 1 MHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least 43 + 10 log 10 p(watts). If the measurement is performed using 1% of the emission bandwidth, power integration over 1.0 MHz is required.

6.5.2 Out-of-Sub-band Emissions

Outside the sub-bands 1850-1910 MHz and 1930-1990 MHz, the attenuation shall be equal to or greater than the out-of-block emission limits in Section 6.5.1.

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 www.sgs.com/terms_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.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 132 of 207

Receiver Spurious Emissions

Receiver spurious emissions shall comply with the limits specified in RSS-Gen. Spurious emissions from receivers shall not exceed the radiated limits shown in the table below:

Radiated Limits of Receiver Spurious Emissions

	The of the order of Special Sp
Frequency (MHz)	Field Strength (microvolts/m at 3 metres)*
30-88	100
88-216	150
216-960	200
Above 960	500

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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 f (886-2) 2298-0488

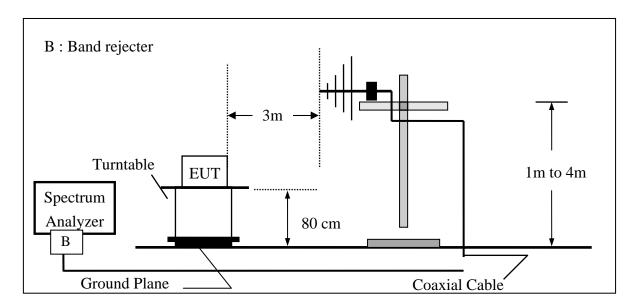


Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 133 of 207

10.2. EUT Setup (Block Diagram of Configuration):

Radiated Emission 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 www.sgs.com/terms_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

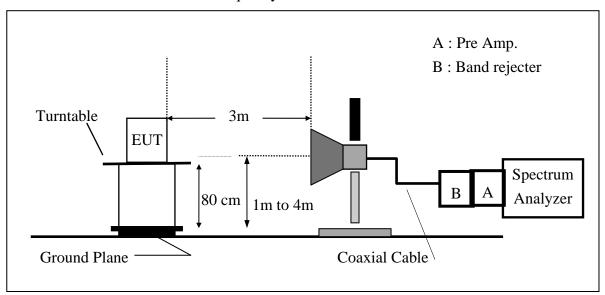
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 f (886-2) 2298-0488 www.tw.sas.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 134 of 207

Radiated Emission Test Set-UP Frequency Over 1 GHz



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 frequency (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)

10.4. Measurement Equipment Used:

Refer to section 2.4 in this report

10.5. Measurement Result:

Refer to attach tabular data sheets.

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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 135 of 207

Radiated Spurious Emission Measurement Result: GPRS 850 Mode

Operation Band :GPRS 850

ARFCN :CH 128 Test Date :2013-04-21

Fundamental Frequency Temp./Humi. :24.1deg C / 68 RH :824.2 MHz

Operation Mode :TX LOW Engineer :Allen

EUT Pol. :H Plan :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
99.84	S	-81.03	-78.99	-0.99	-1.05	-13.00	-68.03
114.39	S	-80.92	-78.60	-1.20	-1.11	-13.00	-67.92
419.94	S	-81.83	-84.47	4.62	-1.99	-13.00	-68.83
623.64	S	-77.25	-78.89	4.07	-2.42	-13.00	-64.25
709.00	S	-77.37	-78.83	4.04	-2.57	-13.00	-64.37
915.61	S	-74.48	-75.14	3.64	-2.98	-13.00	-61.48
1648.40	Н	-39.15	-37.49	2.39	-4.05	-13.00	-26.15
2472.60	Н	-42.10	-40.20	3.14	-5.03	-13.00	-29.10
3288.00	Н						
4121.00	Н						
4945.20	Н						
5769.40	Н						
6593.60	Н						
7417.80	Н						
8242.00	Н						

ERP(dBm) = SG Level(dBm) + Antenna Gain(dBd) + 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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

:2013-04-21

Page: 136 of 207

Operation Band :GPRS 850 **ARFCN** :CH 128

Fundamental Frequency :824.2 MHz Temp./Humi. :24.1deg_C / 68 RH

Test Date

Operation Mode :TX LOW Engineer :Allen

EUT Pol. :H Plan :HORIZONTAL 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
138.64	S	-87.10	-84.64	-1.26	-1.20	-13.00	-74.10
218.18	S	-86.93	-90.31	4.85	-1.47	-13.00	-73.93
291.90	S	-76.52	-79.40	4.57	-1.69	-13.00	-63.52
515.00	S	-79.82	-82.30	4.68	-2.19	-13.00	-66.82
743.92	S	-78.37	-79.33	3.60	-2.64	-13.00	-65.37
908.82	S	-76.13	-76.82	3.65	-2.96	-13.00	-63.13
1648.40	Н	-36.98	-35.61	2.68	-4.05	-13.00	-23.98
2472.60	Н	-44.86	-43.35	3.52	-5.03	-13.00	-31.86
3288.00	Н						
4121.00	Н						
4945.20	Н						
5769.40	Н						
6593.60	Н						
7417.80	Н						
8242.00	Н						

ERP(dBm) = SG Level(dBm) + Antenna Gain(dBd) + Cable Loss(dB)

"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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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 f (886-2) 2298-0488

www.tw.sas.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

:2013-04-21

Page: 137 of 207

Operation Band :GPRS 850 **ARFCN** :CH 190

Fundamental Frequency :836.6 MHz Temp./Humi. :24.1deg_C / 68 RH

Test Date

Operation Mode :TX MID Engineer :Allen

EUT Pol. :H Plan :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
99.84	S	-82.32	-80.28	-0.99	-1.05	-13.00	-69.32
114.39	S	-79.81	-77.49	-1.20	-1.11	-13.00	-66.81
277.35	S	-83.24	-86.05	4.46	-1.65	-13.00	-70.24
419.94	S	-81.57	-84.20	4.62	-1.99	-13.00	-68.57
618.79	S	-77.98	-79.63	4.06	-2.41	-13.00	-64.98
916.58	S	-74.01	-74.68	3.64	-2.98	-13.00	-61.01
1673.20	Н	-41.74	-39.99	2.33	-4.08	-13.00	-28.74
2509.80	Н	-50.02	-48.14	3.19	-5.07	-13.00	-37.02
3346.40	Н						
4183.00	H						
5019.60	Н						
5856.20	Н						
6692.80	Н						
7529.40	Н						
8366.00	Н						

ERP(dBm) = SG Level(dBm) + Antenna Gain(dBd) + Cable Loss(dB)

"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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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 f (886-2) 2298-0488 www.tw.sas.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 138 of 207

Operation Band :GPRS 850 **ARFCN** :CH 190

Test Date :2013-04-21 Fundamental Frequency :836.6 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :TX MID Engineer :Allen

EUT Pol. :H Plan :HORIZONTAL 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
131.85	S	-87.07	-85.06	-0.83	-1.18	-13.00	-74.07
395.69	S	-77.86	-80.68	4.75	-1.93	-13.00	-64.86
515.97	S	-80.96	-83.44	4.67	-2.19	-13.00	-67.96
617.82	S	-80.55	-82.20	4.06	-2.41	-13.00	-67.55
766.23	S	-78.72	-79.68	3.65	-2.69	-13.00	-65.72
904.94	S	-75.67	-76.37	3.65	-2.95	-13.00	-62.67
1673.20	Н	-38.49	-37.07	2.66	-4.08	-13.00	-25.49
2509.80	Н	-48.07	-46.56	3.56	-5.07	-13.00	-35.07
3346.40	Н						
4183.00	Н						
5019.60	Н						
5856.20	Н						
6692.80	H						
7529.40	Н						
8366.00	Н						

ERP(dBm) = SG Level(dBm) + Antenna Gain(dBd) + Cable Loss(dB)

"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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.sas.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 139 of 207

Operation Band :GPRS 850 **ARFCN** :CH 251

Test Date :2013-04-21 Fundamental Frequency :848.8 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :TX HIGH Engineer :Allen

EUT Pol. :H Plan :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
114.39	S	-79.87	-77.55	-1.20	-1.11	-13.00	-66.87
344.28	S	-83.18	-86.11	4.75	-1.82	-13.00	-70.18
519.85	S	-78.56	-81.02	4.66	-2.20	-13.00	-65.56
604.24	S	-77.25	-78.90	4.04	-2.38	-13.00	-64.25
796.30	S	-76.45	-77.57	3.87	-2.75	-13.00	-63.45
906.88	S	-73.91	-74.60	3.65	-2.96	-13.00	-60.91
1697.60	Н	-42.31	-40.47	2.28	-4.12	-13.00	-29.31
2546.40	Н	-49.70	-47.89	3.30	-5.11	-13.00	-36.70
3395.20	Н						
4244.00	Н						
5092.80	Н						
5941.60	Н						
6790.40	Н						
7639.20	Н						
8488.00	Н						

ERP(dBm) = SG Level(dBm) + Antenna Gain(dBd) + Cable Loss(dB)

"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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.sas.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

:2013-04-21

Page: 140 of 207

Operation Band :GPRS 850 **ARFCN** :CH 251

Fundamental Frequency :848.8 MHz Temp./Humi. :24.1deg_C / 68 RH

Test Date

Operation Mode :TX HIGH Engineer :Allen

EUT Pol. :H Plan :HORIZONTAL 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
232.73	S	-82.91	-85.95	4.56	-1.51	-13.00	-69.91
296.75	S	-83.86	-86.79	4.63	-1.70	-13.00	-70.86
393.75	S	-72.21	-75.02	4.74	-1.93	-13.00	-59.21
624.61	S	-80.98	-82.63	4.08	-2.43	-13.00	-67.98
714.82	S	-77.97	-79.35	3.96	-2.58	-13.00	-64.97
960.23	S	-75.99	-76.61	3.71	-3.08	-13.00	-62.99
1697.60	Н	-39.29	-37.83	2.65	-4.12	-13.00	-26.29
2546.40	Н	-48.21	-46.76	3.65	-5.11	-13.00	-35.21
3395.20	Н						
4244.00	Н						
5092.80	Н						
5941.60	Н						
6790.40	Н						
7639.20	Н						
8488.00	Н						

ERP(dBm) = SG Level(dBm) + Antenna Gain(dBd) + Cable Loss(dB)

"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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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 f (886-2) 2298-0488



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 141 of 207

Radiated Spurious Emission Measurement Result: GPRS 1900 Mode

Operation Band :GPRS 1900

ARFCN :CH 512 Test Date :2013-04-21

Fundamental Frequency Temp./Humi. :24.1deg C / 68 RH :1850.2 MHz

Operation Mode :TX LOW Engineer :Allen

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

Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
114.39	S	-78.38	-78.21	0.95	-1.11	-13.00	-65.38
343.31	S	-79.75	-84.83	6.90	-1.82	-13.00	-66.75
490.75	S	-79.27	-83.95	6.82	-2.14	-13.00	-66.27
681.84	S	-75.80	-79.56	6.29	-2.53	-13.00	-62.80
816.67	S	-74.63	-77.93	6.09	-2.79	-13.00	-61.63
930.16	S	-72.32	-75.10	5.79	-3.01	-13.00	-59.32
3700.40	Н	-52.44	-53.61	7.40	-6.23	-13.00	-39.44
5550.60	Н						
7400.80	Н						
9251.00	Н						
11101.20	Н						
12951.40	Н						
14801.60	Н						
16651.80	Н						
18502.00	Н						

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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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 f (886-2) 2298-0488

www.tw.sas.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 142 of 207

Operation Band :GPRS 1900 ARFCN :CH 512

Test Date :2013-04-21 Fundamental Frequency :1850.2 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :TX LOW Engineer :Allen

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

Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
131.85	S	-83.47	-83.61	1.32	-1.18	-13.00	-70.47
299.66	S	-77.99	-83.10	6.82	-1.71	-13.00	-64.99
480.08	S	-78.89	-83.53	6.77	-2.12	-13.00	-65.89
594.54	S	-75.91	-79.78	6.24	-2.36	-13.00	-62.91
858.38	S	-73.58	-76.84	6.11	-2.86	-13.00	-60.58
947.62	S	-71.95	-74.68	5.78	-3.05	-13.00	-58.95
3700.40	Н	-52.77	-53.45	6.91	-6.23	-13.00	-39.77
5550.60	Н						
7400.80	Н						
9251.00	Н						
11101.20	Н						
12951.40	Н						
14801.60	Н						
16651.80	Н						
18502.00	Н						

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

"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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

:2013-04-21

Page: 143 of 207

Operation Band :GPRS 1900 **ARFCN** :CH 661

Fundamental Frequency :1880.0 MHz Temp./Humi. :24.1deg_C / 68 RH

Test Date

Operation Mode :TX MID Engineer :Allen

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

Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
99.84	S	-79.23	-79.33	1.16	-1.05	-13.00	-66.23
162.89	S	-80.95	-81.67	2.00	-1.28	-13.00	-67.95
376.29	S	-80.33	-85.21	6.77	-1.89	-13.00	-67.33
547.98	S	-77.43	-81.90	6.74	-2.26	-13.00	-64.43
712.88	S	-75.65	-79.21	6.14	-2.58	-13.00	-62.65
911.73	S	-72.80	-75.62	5.80	-2.97	-13.00	-59.80
3760.00	Н	-51.71	-52.81	7.42	-6.32	-13.00	-38.71
5640.00	Н						
7520.00	Н						
9400.00	Н						
11280.00	Н						
13160.00	Н						
15040.00	Н						
16920.00	Н						
18800.00	Н						

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

"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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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 f (886-2) 2298-0488

www.tw.sas.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 144 of 207

Operation Band :GPRS 1900 **ARFCN** :CH 661

Test Date :2013-04-21 Fundamental Frequency :1880.0 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :TX MID Engineer :Allen

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

Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
161.92	S	-82.46	-83.04	1.86	-1.28	-13.00	-69.46
299.66	S	-78.55	-83.66	6.82	-1.71	-13.00	-65.55
419.94	S	-78.78	-83.56	6.77	-1.99	-13.00	-65.78
551.86	S	-75.68	-80.12	6.71	-2.26	-13.00	-62.68
688.63	S	-74.99	-78.74	6.29	-2.54	-13.00	-61.99
858.38	S	-74.60	-77.86	6.11	-2.86	-13.00	-61.60
3760.00	Н	-54.42	-54.95	6.85	-6.32	-13.00	-41.42
5640.00	Н						
7520.00	Н						
9400.00	Н						
11280.00	Н						
13160.00	Н						
15040.00	Н						
16920.00	Н						
18800.00	Н						

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

"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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.: EH/2013/40048 Issue Date: Jun. 05, 2013

:2013-04-21

Page: 145 of 207

Operation Band :GPRS 1900 **ARFCN** :CH 810

Fundamental Frequency :1909.8 MHz Temp./Humi. :24.1deg_C / 68 RH

Test Date

Operation Mode :TX HIGH Engineer :Allen

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

Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
114.39	S	-78.83	-78.66	0.95	-1.11	-13.00	-65.83
286.08	S	-80.40	-85.38	6.65	-1.67	-13.00	-67.40
531.49	S	-77.26	-81.81	6.78	-2.23	-13.00	-64.26
617.82	S	-74.97	-78.77	6.21	-2.41	-13.00	-61.97
725.49	S	-75.34	-78.71	5.98	-2.60	-13.00	-62.34
913.67	S	-72.49	-75.31	5.79	-2.97	-13.00	-59.49
3819.60	Н	-53.77	-54.90	7.51	-6.39	-13.00	-40.77
5729.40	Н						
7639.20	Н						
9549.00	Н						
11458.80	Н						
13368.60	Н						
15278.40	Н						
17188.20	Н						
19098.00	Н						

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

"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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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 f (886-2) 2298-0488



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 146 of 207

Operation Band :GPRS 1900 **ARFCN** :CH 810

Test Date :2013-04-21 Fundamental Frequency :1909.8 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :TX HIGH Engineer :Allen

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

Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
242.43	S	-81.22	-86.26	6.58	-1.54	-13.00	-68.22
299.66	S	-77.35	-82.46	6.82	-1.71	-13.00	-64.35
419.94	S	-78.70	-83.48	6.77	-1.99	-13.00	-65.70
633.34	S	-75.63	-79.42	6.24	-2.45	-13.00	-62.63
754.59	S	-74.65	-77.70	5.71	-2.67	-13.00	-61.65
936.95	S	-71.18	-73.93	5.79	-3.03	-13.00	-58.18
3819.60	Н	-55.13	-55.79	7.05	-6.39	-13.00	-42.13
5729.40	Н						
7639.20	Н						
9549.00	Н						
11458.80	Н						
13368.60	Н						
15278.40	Н						
17188.20	Н						
19098.00	Н						

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

"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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 147 of 207

Radiated Spurious Emission Measurement Result: HSDPA II Mode

Operation Band :HSDPA B2

ARFCN :CH 9262 Test Date :2013-04-21

Fundamental Frequency Temp./Humi. :24.1deg C / 68 RH :1852.4 MHz

Operation Mode :TX LOW Engineer :Allen

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

Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
99.84	S	-79.67	-79.78	1.16	-1.05	-13.00	-66.67
114.39	S	-77.97	-77.80	0.95	-1.11	-13.00	-64.97
424.79	S	-80.22	-84.96	6.73	-2.00	-13.00	-67.22
602.30	S	-75.41	-79.22	6.18	-2.38	-13.00	-62.41
875.84	S	-72.31	-75.41	5.98	-2.88	-13.00	-59.31
987.39	S	-71.29	-74.25	6.06	-3.10	-13.00	-58.29
3704.80	Н	-52.04	-53.21	7.40	-6.24	-13.00	-39.04
5557.20	Н						
7409.60	Н						
9262.00	Н						
11114.40	Н						
12966.80	Н						
14819.20	Н						
16671.60	Н						
18524.00	Н						

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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.: EH/2013/40048 Issue Date: Jun. 05, 2013

:2013-04-21

Page: 148 of 207

Operation Band :HSDPA B2 **ARFCN** :CH 9262

Fundamental Frequency :1852.4 MHz Temp./Humi. :24.1deg_C / 68 RH

Test Date

Operation Mode :TX LOW Engineer :Allen

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

Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
201.69	S	-82.57	-88.04	6.89	-1.42	-13.00	-69.57
299.66	S	-79.43	-84.54	6.82	-1.71	-13.00	-66.43
419.94	S	-78.08	-82.86	6.77	-1.99	-13.00	-65.08
678.93	S	-75.14	-78.90	6.29	-2.53	-13.00	-62.14
847.71	S	-74.04	-77.37	6.17	-2.84	-13.00	-61.04
975.75	S	-71.70	-74.58	5.97	-3.09	-13.00	-58.70
3704.80	Н	-53.93	-54.60	6.90	-6.24	-13.00	-40.93
5557.20	Н						
7409.60	Н						
9262.00	Н						
11114.40	Н						
12966.80	Н						
14819.20	Н						
16671.60	Н						
18524.00	Н						

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

"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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 149 of 207

Operation Band :HSDPA B2 **ARFCN** :CH 9400

Test Date :2013-04-21 Fundamental Frequency :1880.0 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :TX MID Engineer :Allen

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

Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
110.51	S	-78.36	-78.32	1.06	-1.10	-13.00	-65.36
432.55	S	-79.48	-84.16	6.70	-2.02	-13.00	-66.48
590.66	S	-76.11	-80.03	6.28	-2.35	-13.00	-63.11
690.57	S	-75.78	-79.53	6.29	-2.54	-13.00	-62.78
875.84	S	-72.82	-75.92	5.98	-2.88	-13.00	-59.82
946.65	S	-72.09	-74.82	5.78	-3.05	-13.00	-59.09
3760.00	Н	-53.06	-54.16	7.42	-6.32	-13.00	-40.06
5640.00	Н						
7520.00	Н						
9400.00	Н						
11280.00	Н						
13160.00	Н						
15040.00	Н						
16920.00	Н						
18800.00	Н						

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

"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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

:2013-04-21

Page: 150 of 207

Operation Band :HSDPA B2 **ARFCN** :CH 9400

Fundamental Frequency :1880.0 MHz Temp./Humi. :24.1deg_C / 68 RH

Test Date

Operation Mode :TX MID Engineer :Allen

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

Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
195.87	S	-82.38	-87.42	6.44	-1.40	-13.00	-69.38
299.66	S	-78.97	-84.08	6.82	-1.71	-13.00	-65.97
419.94	S	-78.44	-83.22	6.77	-1.99	-13.00	-65.44
612.97	S	-75.34	-79.14	6.20	-2.40	-13.00	-62.34
785.63	S	-67.12	-70.34	5.95	-2.73	-13.00	-54.12
941.80	S	-72.18	-74.93	5.78	-3.04	-13.00	-59.18
3760.00	Н	-53.93	-54.45	6.85	-6.32	-13.00	-40.93
5640.00	Н						
7520.00	Н						
9400.00	Н						
11280.00	Н						
13160.00	Н						
15040.00	Н						
16920.00	Н						
18800.00	Н						

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

"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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 151 of 207

Operation Band :HSDPA B2 **ARFCN** :CH 9538

Test Date :2013-04-21 Fundamental Frequency :1907.6 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :TX HIGH Engineer :Allen

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

Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
99.84	S	-79.85	-79.95	1.16	-1.05	-13.00	-66.85
114.39	S	-78.82	-78.65	0.95	-1.11	-13.00	-65.82
286.08	S	-81.02	-85.99	6.65	-1.67	-13.00	-68.02
600.36	S	-75.79	-79.60	6.18	-2.37	-13.00	-62.79
830.25	S	-73.96	-77.28	6.13	-2.81	-13.00	-60.96
875.84	S	-72.64	-75.74	5.98	-2.88	-13.00	-59.64
3815.20	Н	-50.70	-51.82	7.50	-6.38	-13.00	-37.70
5722.80	Н						
7630.40	Н						
9538.00	Н						
11445.60	Н						
13353.20	Н						
15260.80	Н						
17168.40	Н						
19076.00	Н						

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

"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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 152 of 207

Operation Band :HSDPA B2 **ARFCN** :CH 9538

Test Date :2013-04-21 Fundamental Frequency :1907.6 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :TX HIGH Engineer :Allen

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

Freq.	Note	EIRP	SG	Antenna	Cable	Limit	Margin
			Output Level	Gain	Loss		
MHz	F/H/E/S	dBm	dBm	dBi	dB	dBm	dB
160.95	S	-82.70	-83.15	1.72	-1.27	-13.00	-69.70
299.66	S	-78.91	-84.02	6.82	-1.71	-13.00	-65.91
510.15	S	-78.44	-83.09	6.84	-2.18	-13.00	-65.44
599.39	S	-75.85	-79.66	6.19	-2.37	-13.00	-62.85
818.61	S	-74.44	-77.74	6.10	-2.79	-13.00	-61.44
848.68	S	-73.68	-77.02	6.18	-2.84	-13.00	-60.68
3815.20	Н	-50.75	-51.40	7.03	-6.38	-13.00	-37.75
5722.80	Н						
7630.40	Н						
9538.00	Н						
11445.60	Н						
13353.20	Н						
15260.80	Н						
17168.40	Н						
19076.00	Н						

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

"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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 153 of 207

Radiated Spurious Emission Measurement Result: HSUPA V Mode

Operation Band :HSUPA B5

ARFCN :CH 4132 Test Date :2013-04-21

Fundamental Frequency Temp./Humi. :24.1deg C / 68 RH :826.4 MHz

Operation Mode :TX LOW Engineer :Allen

EUT Pol. :H Plan :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
114.39	S	-81.36	-79.05	-1.20	-1.11	-13.00	-68.36
250.19	S	-83.95	-86.94	4.55	-1.56	-13.00	-70.95
343.31	S	-82.57	-85.49	4.75	-1.82	-13.00	-69.57
612.97	S	-76.94	-78.59	4.05	-2.40	-13.00	-63.94
721.61	S	-76.82	-78.10	3.88	-2.59	-13.00	-63.82
950.53	S	-74.54	-75.12	3.63	-3.06	-13.00	-61.54
1652.80	Н	-54.93	-53.27	2.39	-4.05	-13.00	-41.93
2479.20	Н						
3305.60	Н						
4132.00	Н						
4958.40	Н						
5784.80	Н						
6611.20	Н						
7437.60	Н						
8264.00	Н						

ERP(dBm) = SG Level(dBm) + Antenna Gain(dBd) + 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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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 f (886-2) 2298-0488



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

:2013-04-21

Page: 154 of 207

Operation Band :HSUPA B5 ARFCN :CH 4132

Fundamental Frequency :826.4 MHz Temp./Humi. :24.1deg_C / 68 RH

Test Date

Operation Mode :TX LOW Engineer :Allen

EUT Pol. :H Plan 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
137.67	S	-86.63	-84.23	-1.20	-1.20	-13.00	-73.63
343.31	S	-83.68	-86.61	4.75	-1.82	-13.00	-70.68
504.33	S	-81.82	-84.36	4.71	-2.17	-13.00	-68.82
620.73	S	-79.88	-81.53	4.07	-2.42	-13.00	-66.88
697.36	S	-78.79	-80.38	4.15	-2.55	-13.00	-65.79
948.59	S	-75.86	-76.44	3.63	-3.05	-13.00	-62.86
1652.80	Н	-57.71	-56.33	2.67	-4.06	-13.00	-44.71
2479.20	Н						
3305.60	Н						
4132.00	Н						
4958.40	Н						
5784.80	Н						
6611.20	Н						
7437.60	Н						
8264.00	Н						

ERP(dBm) = SG Level(dBm) + Antenna Gain(dBd) + 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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 155 of 207

Operation Band :HSUPA B5 ARFCN :CH 4183

ARFCN :CH 4183 Test Date :2013-04-21 Fundamental Frequency :836.6 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :TX MID Engineer :Allen

EUT Pol. :H Plan 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
114.39	S	-81.00	-78.68	-1.20	-1.11	-13.00	-68.00
286.08	S	-82.14	-84.96	4.50	-1.67	-13.00	-69.14
524.70	S	-78.95	-81.39	4.65	-2.21	-13.00	-65.95
729.37	S	-76.47	-77.64	3.78	-2.61	-13.00	-63.47
773.99	S	-76.09	-77.10	3.71	-2.71	-13.00	-63.09
937.92	S	-73.85	-74.45	3.63	-3.03	-13.00	-60.85
1673.20	Н	-53.74	-52.01	2.35	-4.08	-13.00	-40.74
2509.80	Н						
3346.40	Н						
4183.00	Н						
5019.60	Н						
5856.20	Н						
6692.80	Н						
7529.40	Н						
8366.00	Н						

ERP(dBm) = SG Level(dBm) + Antenna Gain(dBd) + 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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

:2013-04-21

Page: 156 of 207

Operation Band :HSUPA B5 **ARFCN** :CH 4183

Fundamental Frequency :836.6 MHz Temp./Humi. :24.1deg_C / 68 RH

Test Date

Operation Mode :TX MID Engineer :Allen

EUT Pol. :H Plan :HORIZONTAL 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
139.61	S	-87.08	-84.56	-1.32	-1.21	-13.00	-74.08
400.54	S	-80.29	-83.13	4.78	-1.94	-13.00	-67.29
550.89	S	-80.78	-83.09	4.57	-2.26	-13.00	-67.78
724.52	S	-78.69	-79.93	3.84	-2.60	-13.00	-65.69
799.21	S	-77.51	-78.65	3.89	-2.76	-13.00	-64.51
920.46	S	-75.87	-76.53	3.64	-2.99	-13.00	-62.87
1673.20	Н	-56.22	-54.81	2.66	-4.08	-13.00	-43.22
2509.80	Н						
3346.40	Н						
4183.00	Н						
5019.60	Н						
5856.20	Н						
6692.80	Н						
7529.40	Н						
8366.00	Н						

ERP(dBm) = SG Level(dBm) + Antenna Gain(dBd) + Cable Loss(dB)

"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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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 f (886-2) 2298-0488 www.tw.sas.com

台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

:2013-04-21

Page: 157 of 207

Operation Band :HSUPA B5 **ARFCN** :CH 4233

Fundamental Frequency :846.6 MHz Temp./Humi. :24.1deg_C / 68 RH

Test Date

Operation Mode :TX HIGH Engineer :Allen

EUT Pol. :H Plan :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
114.39	S	-80.10	-77.78	-1.20	-1.11	-13.00	-67.10
321.00	S	-82.96	-85.82	4.63	-1.76	-13.00	-69.96
480.08	S	-80.71	-83.21	4.62	-2.12	-13.00	-67.71
612.97	S	-77.05	-78.70	4.05	-2.40	-13.00	-64.05
812.79	S	-75.90	-77.05	3.93	-2.78	-13.00	-62.90
927.25	S	-74.69	-75.32	3.64	-3.00	-13.00	-61.69
1693.20	Н	-56.36	-54.56	2.30	-4.10	-13.00	-43.36
2539.80	Н						
3386.40	Н						
4233.00	Н						
5079.60	Н						
5926.20	Н						
6772.80	Н						
7619.40	Н						
8466.00	Н						

ERP(dBm) = SG Level(dBm) + Antenna Gain(dBd) + Cable Loss(dB)

"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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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 f (886-2) 2298-0488 台灣檢驗科技股份有限公司 www.tw.sas.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

:2013-04-21

Page: 158 of 207

Operation Band :HSUPA B5 **ARFCN** :CH 4233

Fundamental Frequency :846.6 MHz Temp./Humi. :24.1deg_C / 68 RH

Test Date

Operation Mode :TX HIGH Engineer :Allen

EUT Pol. :H Plan :HORIZONTAL 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
129.91	S	-86.81	-84.92	-0.72	-1.17	-13.00	-73.81
314.21	S	-75.06	-77.95	4.64	-1.75	-13.00	-62.06
422.85	S	-82.53	-85.13	4.60	-1.99	-13.00	-69.53
520.82	S	-77.38	-79.84	4.66	-2.20	-13.00	-64.38
769.14	S	-76.89	-77.87	3.67	-2.70	-13.00	-63.89
897.18	S	-75.59	-76.32	3.67	-2.93	-13.00	-62.59
1693.20	Н	-55.41	-53.96	2.65	-4.10	-13.00	-42.41
2539.80	Н						
3386.40	Н						
4233.00	Н						
5079.60	Н						
5926.20	Н						
6772.80	Н						
7619.40	Н						
8466.00	Н						

ERP(dBm) = SG Level(dBm) + Antenna Gain(dBd) + Cable Loss(dB)

"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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 159 of 207

Radiated Spurious Emission Measurement Result: GPRS 850 Mode

Operation Band :GPRS 850 Test Date :2013-04-21

Fundamental Frequency :824.2 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX LOW Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
61.04	S	Peak	30.15	-14.78	15.37	40.00	-24.63
99.84	S	Peak	34.08	-16.84	17.24	43.50	-26.26
114.39	S	Peak	35.31	-15.22	20.09	43.50	-23.41
584.84	S	Peak	27.95	-7.88	20.07	46.00	-25.93
775.93	S	Peak	27.78	-4.52	23.26	46.00	-22.74
911.73	S	Peak	27.40	-2.58	24.82	46.00	-21.18
1648.40	Н	Peak	41.00	-1.68	39.32	74.00	-34.68
2472.60	Н						
3296.80	Н						
4121.00	Н						
4945.20	Н						
5769.40	Н						
6593.60	Н						
7417.80	Н						
8242.00	Н						

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 www.sgs.com/terms_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.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 160 of 207

Operation Band :GPRS 850 Test Date :2013-04-21

Fundamental Frequency :824.2 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX LOW Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
157.07	S	Peak	26.81	-12.29	14.52	43.50	-28.98
299.66	S	Peak	29.76	-12.58	17.18	46.00	-28.82
419.94	S	Peak	28.70	-10.65	18.05	46.00	-27.95
682.81	S	Peak	28.20	-5.98	22.22	46.00	-23.78
775.93	S	Peak	27.84	-4.52	23.32	46.00	-22.68
941.80	S	Peak	26.79	-2.18	24.61	46.00	-21.39
1648.40	Н	Peak	39.57	-0.96	38.61	74.00	-35.39
2472.60	Н						
3296.80	Н						
4121.00	Н						
4945.20	Н						
5769.40	Н						
6593.60	Н						
7417.80	Н						
8242.00	Н						

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 www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 161 of 207

Operation Band :GPRS 850 Test Date :2013-04-21

Fundamental Frequency :836.6 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX MID Engineer :Allen

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

Actual FS($dB\mu V/m$) = SPA. Reading level($dB\mu V$) + Factor(dB)

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
31.94	S	Peak	31.08	-14.30	16.78	40.00	-23.22
114.39	S	Peak	35.76	-15.22	20.54	43.50	-22.96
507.24	S	Peak	27.67	-9.45	18.22	46.00	-27.78
605.21	S	Peak	28.19	-7.44	20.75	46.00	-25.25
865.17	S	Peak	27.52	-3.45	24.07	46.00	-21.93
951.50	S	Peak	26.73	-2.10	24.63	46.00	-21.37
1673.20	Н	Peak	40.43	-1.38	39.05	74.00	-34.95
2509.80	Н						
3346.40	Н						
4183.00	Н						
5019.60	Н						
5856.20	Н						
6692.80	Н						
7529.40	Н						
8366.00	Н						

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 www.sgs.com/terms_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

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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 6 灣檢驗科技股份有限公司
 (886-2) 2299-3279
 f (886-2) 2298-0488
 www.tw.sgs.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 162 of 207

Operation Band :GPRS 850 Test Date :2013-04-21

Fundamental Frequency :836.6 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX MID Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
150.28	S	Peak	27.14	-12.35	14.79	43.50	-28.71
268.62	S	Peak	36.01	-13.40	22.61	46.00	-23.39
314.21	S	Peak	31.20	-12.23	18.97	46.00	-27.03
516.94	S	Peak	28.61	-9.26	19.35	46.00	-26.65
641.10	S	Peak	28.57	-6.75	21.82	46.00	-24.18
916.58	S	Peak	27.84	-2.49	25.35	46.00	-20.65
1673.20	Н	Peak	39.15	-0.59	38.56	74.00	-35.44
2509.80	Н						
3346.40	Н						
4183.00	Н						
5019.60	Н						
5856.20	Н						
6692.80	Н						
7529.40	Н						
8366.00	Н						

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 163 of 207

Operation Band :GPRS 850 Test Date :2013-04-21

Fundamental Frequency :848.8 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX HIGH Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
61.04	S	Peak	31.85	-14.78	17.07	40.00	-22.93
99.84	S	Peak	33.30	-16.84	16.46	43.50	-27.04
114.39	S	Peak	36.07	-15.22	20.85	43.50	-22.65
590.66	S	Peak	27.80	-7.75	20.05	46.00	-25.95
724.52	S	Peak	28.19	-5.37	22.82	46.00	-23.18
916.58	S	Peak	27.08	-2.49	24.59	46.00	-21.41
1697.60	Н	Peak	38.42	-1.08	37.34	74.00	-36.66
2546.40	Н						
3395.20	Н						
4244.00	Н						
5092.80	Н						
5941.60	Н						
6790.40	Н						
7639.20	Н						
8488.00	Н						

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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 164 of 207

Operation Band :GPRS 850 Test Date :2013-04-21

Fundamental Frequency :24.1deg_C / 68 RH :848.8 MHz Temp./Humi.

Operation Mode :RX HIGH Engineer :Allen

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

Actual FS($dB\mu V/m$) = SPA. Reading level($dB\mu V$) + Factor(dB)

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
47.46	S	Peak	27.50	-13.85	13.65	40.00	-26.35
157.07	S	Peak	27.09	-12.29	14.80	43.50	-28.70
299.66	S	Peak	29.14	-12.58	16.56	46.00	-29.44
646.92	S	Peak	28.23	-6.65	21.58	46.00	-24.42
851.59	S	Peak	28.66	-3.67	24.99	46.00	-21.01
937.92	S	Peak	27.78	-2.21	25.57	46.00	-20.43
1697.60	Н	Peak	39.12	-0.23	38.89	74.00	-35.11
2546.40	Н						
3395.20	Н						
4244.00	Н						
5092.80	Н						
5941.60	Н						
6790.40	Н						
7639.20	Н						
8488.00	Н						

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 165 of 207

Radiated Spurious Emission Measurement Result: GPRS 1900 Mode

Operation Band Test Date :GPRS 1900 :2013-04-21

Fundamental Frequency :1850.2 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX LOW Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
31.94	S	Peak	32.73	-14.30	18.43	40.00	-21.57
114.39	S	Peak	34.90	-15.22	19.68	43.50	-23.82
159.01	S	Peak	27.33	-12.28	15.05	43.50	-28.45
582.90	S	Peak	27.78	-7.92	19.86	46.00	-26.14
774.96	S	Peak	28.17	-4.54	23.63	46.00	-22.37
916.58	S	Peak	27.46	-2.49	24.97	46.00	-21.03
3700.40	Н	Peak	37.64	5.18	42.82	74.00	-31.18
5550.60	Н						
7400.80	Н						
9251.00	Н						
11101.20	Н						
12951.40	Н						
14801.60	Н						
16651.80	Н						
18502.00	Н						

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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.sas.com

SGS Taiwan Ltd.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 166 of 207

Operation Band :GPRS 1900 Test Date :2013-04-21

Fundamental Frequency :1850.2 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX LOW Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
42.61	S	Peak	26.69	-13.63	13.06	40.00	-26.94
163.86	S	Peak	26.96	-12.61	14.35	43.50	-29.15
299.66	S	Peak	29.42	-12.58	16.84	46.00	-29.16
419.94	S	Peak	29.45	-10.65	18.80	46.00	-27.20
735.19	S	Peak	27.60	-5.22	22.38	46.00	-23.62
915.61	S	Peak	27.33	-2.51	24.82	46.00	-21.18
3700.40	Н	Peak	37.83	5.12	42.95	74.00	-31.05
5550.60	Н						
7400.80	Н						
9251.00	Н						
11101.20	Н						
12951.40	Н						
14801.60	Н						
16651.80	Н						
18502.00	Н						

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 167 of 207

Operation Band :GPRS 1900 Test Date :2013-04-21

Fundamental Frequency :1880.0 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX MID Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
61.04	S	Peak	32.16	-14.78	17.38	40.00	-22.62
114.39	S	Peak	34.86	-15.22	19.64	43.50	-23.86
459.71	S	Peak	27.96	-9.96	18.00	46.00	-28.00
610.06	S	Peak	27.64	-7.33	20.31	46.00	-25.69
907.85	S	Peak	27.90	-2.66	25.24	46.00	-20.76
961.20	S	Peak	27.41	-2.06	25.35	54.00	-28.65
3760.00	Н	Peak	37.75	5.53	43.28	74.00	-30.72
5640.00	Н						
7520.00	Н						
9400.00	Н						
11280.00	Н						
13160.00	Н						
15040.00	Н						
16920.00	Н						
18800.00	Н						

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 168 of 207

Operation Band :GPRS 1900 Test Date :2013-04-21

Fundamental Frequency :1880.0 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX MID Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
60.07	S	Peak	28.50	-14.59	13.91	40.00	-26.09
151.25	S	Peak	26.64	-12.34	14.30	43.50	-29.20
299.66	S	Peak	28.76	-12.58	16.18	46.00	-29.82
605.21	S	Peak	28.25	-7.44	20.81	46.00	-25.19
763.32	S	Peak	28.63	-4.74	23.89	46.00	-22.11
921.43	S	Peak	27.34	-2.39	24.95	46.00	-21.05
3760.00	Н	Peak	37.40	5.54	42.94	74.00	-31.06
5640.00	Н						
7520.00	Н						
9400.00	Н						
11280.00	Н						
13160.00	Н						
15040.00	Н						
16920.00	Н						
18800.00	Н						

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 www.sgs.com/terms_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.Wu Kung Road. New Taipei Industrial Park. Wuku District. New Taipei City. Taiwan 24803/新北市五股區新北產業園區五工路 134 號



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 169 of 207

Operation Band :GPRS 1900 Test Date :2013-04-21

Fundamental Frequency :1909.8 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX HIGH Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
61.04	S	Peak	29.97	-14.78	15.19	40.00	-24.81
114.39	S	Peak	34.45	-15.22	19.23	43.50	-24.27
343.31	S	Peak	28.33	-11.76	16.57	46.00	-29.43
665.35	S	Peak	28.34	-6.28	22.06	46.00	-23.94
762.35	S	Peak	28.16	-4.77	23.39	46.00	-22.61
943.74	S	Peak	26.76	-2.15	24.61	46.00	-21.39
3819.60	Н	Peak	37.83	5.34	43.17	74.00	-30.83
5729.40	Н						
7639.20	Н						
9549.00	Н						
11458.80	Н						
13368.60	Н						
15278.40	Н						
17188.20	Н						
19098.00	Н						

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_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 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.

台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 170 of 207

Operation Band :GPRS 1900 Test Date :2013-04-21

Fundamental Frequency :1909.8 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX HIGH Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
43.58	S	Peak	27.67	-13.70	13.97	40.00	-26.03
153.19	S	Peak	26.87	-12.32	14.55	43.50	-28.95
299.66	S	Peak	28.89	-12.58	16.31	46.00	-29.69
419.94	S	Peak	28.76	-10.65	18.11	46.00	-27.89
763.32	S	Peak	28.01	-4.74	23.27	46.00	-22.73
900.09	S	Peak	27.48	-2.82	24.66	46.00	-21.34
3819.60	Н	Peak	36.83	5.40	42.23	74.00	-31.77
5729.40	Н						
7639.20	Н						
9549.00	Н						
11458.80	Н						
13368.60	Н						
15278.40	H						
17188.20	H						
19098.00	Н						

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 171 of 207

Radiated Spurious Emission Measurement Result: HSDPA II Mode

Operation Band :HSDPA B2 Test Date :2013-04-21

Fundamental Frequency :1852.4 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX LOW Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
31.94	S	Peak	30.16	-14.30	15.86	40.00	-24.14
114.39	S	Peak	34.66	-15.22	19.44	43.50	-24.06
152.22	S	Peak	26.95	-12.32	14.63	43.50	-28.87
621.70	S	Peak	28.46	-7.09	21.37	46.00	-24.63
810.85	S	Peak	27.19	-4.07	23.12	46.00	-22.88
952.47	S	Peak	27.74	-2.09	25.65	46.00	-20.35
3704.80	Н	Peak	37.41	5.22	42.63	74.00	-31.37
5557.20	Н						
7409.60	Н						
9262.00	Н						
11114.40	Н						
12966.80	Н						
14819.20	Н						
16671.60	Н						
18524.00	Н						

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 172 of 207

Operation Band :HSDPA B2 Test Date :2013-04-21

Fundamental Frequency :24.1deg_C / 68 RH :1852.4 MHz Temp./Humi.

:Allen Operation Mode :RX LOW Engineer

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

Actual FS($dB\mu V/m$) = SPA. Reading level($dB\mu V$) + Factor(dB)

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
40.67	S	Peak	26.71	-13.48	13.23	40.00	-26.77
160.95	S	Peak	27.13	-12.36	14.77	43.50	-28.73
336.52	S	Peak	29.20	-11.83	17.37	46.00	-28.63
565.44	S	Peak	28.39	-8.27	20.12	46.00	-25.88
759.44	S	Peak	27.67	-4.81	22.86	46.00	-23.14
863.23	S	Peak	27.74	-3.48	24.26	46.00	-21.74
3704.80	Н	Peak	37.03	5.17	42.20	74.00	-31.80
5557.20	Н						
7409.60	Н						
9262.00	Н						
11114.40	Н						
12966.80	Н						
14819.20	Н						
16671.60	Н						
18524.00	Н						

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 173 of 207

Operation Band :HSDPA B2 Test Date :2013-04-21

Fundamental Frequency :1880.0 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX MID Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
61.04	S	Peak	28.75	-14.78	13.97	40.00	-26.03
157.07	S	Peak	26.84	-12.29	14.55	43.50	-28.95
460.68	S	Peak	27.90	-9.96	17.94	46.00	-28.06
634.31	S	Peak	27.44	-6.87	20.57	46.00	-25.43
819.58	S	Peak	27.54	-3.98	23.56	46.00	-22.44
950.53	S	Peak	26.42	-2.10	24.32	46.00	-21.68
3760.00	Н	Peak	37.04	5.53	42.57	74.00	-31.43
5640.00	Н						
7520.00	Н						
9400.00	Н						
11280.00	Н						
13160.00	Н						
15040.00	Н						
16920.00	Н						
18800.00	Н						

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 174 of 207

Operation Band :HSDPA B2 Test Date :2013-04-21

Fundamental Frequency :1880.0 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX MID Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
42.61	S	Peak	26.91	-13.63	13.28	40.00	-26.72
158.04	S	Peak	27.58	-12.30	15.28	43.50	-28.22
419.94	S	Peak	28.79	-10.65	18.14	46.00	-27.86
625.58	S	Peak	28.37	-7.01	21.36	46.00	-24.64
818.61	S	Peak	27.97	-3.98	23.99	46.00	-22.01
935.01	S	Peak	27.48	-2.24	25.24	46.00	-20.76
3760.00	Н	Peak	36.86	5.54	42.40	74.00	-31.60
5640.00	Н						
7520.00	Н						
9400.00	Н						
11280.00	Н						
13160.00	Н						
15040.00	Н						
16920.00	Н						
18800.00	Н						

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 175 of 207

Operation Band :HSDPA B2 Test Date :2013-04-21

Fundamental Frequency :24.1deg_C / 68 RH :1907.6 MHz Temp./Humi.

Operation Mode :RX HIGH Engineer :Allen

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

Actual FS($dB\mu V/m$) = SPA. Reading level($dB\mu V$) + Factor(dB)

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
61.04	S	Peak	30.51	-14.78	15.73	40.00	-24.27
147.37	S	Peak	27.95	-12.53	15.42	43.50	-28.08
369.50	S	Peak	27.56	-11.44	16.12	46.00	-29.88
601.33	S	Peak	27.88	-7.52	20.36	46.00	-25.64
728.40	S	Peak	28.42	-5.31	23.11	46.00	-22.89
935.98	S	Peak	28.13	-2.23	25.90	46.00	-20.10
3815.20	Н	Peak	36.91	5.32	42.23	74.00	-31.77
5722.80	Н						
7630.40	Н						
9538.00	Н						
11445.60	Н						
13353.20	Н						
15260.80	Н						
17168.40	Н						
19076.00	Н						

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 www.sgs.com/terms_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.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 176 of 207

Operation Band :HSDPA B2 Test Date :2013-04-21

Fundamental Frequency :1907.6 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX HIGH Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
32.91	S	Peak	28.55	-14.24	14.31	40.00	-25.69
154.16	S	Peak	27.31	-12.30	15.01	43.50	-28.49
299.66	S	Peak	28.68	-12.58	16.10	46.00	-29.90
419.94	S	Peak	28.66	-10.65	18.01	46.00	-27.99
723.55	S	Peak	28.23	-5.38	22.85	46.00	-23.15
873.90	S	Peak	27.57	-3.31	24.26	46.00	-21.74
3815.20	Н	Peak	38.29	5.37	43.66	74.00	-30.34
5722.80	Н						
7630.40	Н						
9538.00	Н						
11445.60	Н						
13353.20	Н						
15260.80	Н						
17168.40	H						
19076.00	Н						

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 177 of 207

Radiated Spurious Emission Measurement Result: HSUPA V Mode

Operation Band Test Date :HSUPA B5 :2013-04-21

Fundamental Frequency :826.4 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX LOW Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
31.94	S	Peak	31.41	-14.30	17.11	40.00	-22.89
114.39	S	Peak	35.01	-15.22	19.79	43.50	-23.71
343.31	S	Peak	28.62	-11.76	16.86	46.00	-29.14
648.86	S	Peak	27.48	-6.62	20.86	46.00	-25.14
825.40	S	Peak	27.45	-3.92	23.53	46.00	-22.47
933.07	S	Peak	27.11	-2.26	24.85	46.00	-21.15
1652.80	Н	Peak	40.67	-1.62	39.05	74.00	-34.95
2479.20	Н						
3305.60	Н						
4132.00	Н						
4958.40	Н						
5784.80	Н						
6611.20	Н						
7437.60	Н						
8264.00	Н						

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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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 www.tw.sas.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 178 of 207

Operation Band :HSUPA B5 Test Date :2013-04-21

Fundamental Frequency :826.4 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX LOW Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
52.31	S	Peak	27.17	-14.06	13.11	40.00	-26.89
156.10	S	Peak	26.87	-12.30	14.57	43.50	-28.93
299.66	S	Peak	29.13	-12.58	16.55	46.00	-29.45
569.32	S	Peak	28.32	-8.20	20.12	46.00	-25.88
812.79	S	Peak	27.83	-4.04	23.79	46.00	-22.21
934.04	S	Peak	29.02	-2.25	26.77	46.00	-19.23
1652.80	Н	Peak	38.85	-0.89	37.96	74.00	-36.04
2479.20	Н						
3305.60	Н						
4132.00	Н						
4958.40	Н						
5784.80	Н						
6611.20	Н						
7437.60	Н						
8264.00	Н						

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 179 of 207

Operation Band :HSUPA B5 Test Date :2013-04-21

Fundamental Frequency :836.6 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX MID Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
61.04	S	Peak	30.28	-14.78	15.50	40.00	-24.50
114.39	S	Peak	34.85	-15.22	19.63	43.50	-23.87
542.16	S	Peak	27.96	-8.74	19.22	46.00	-26.78
644.01	S	Peak	28.02	-6.70	21.32	46.00	-24.68
770.11	S	Peak	28.19	-4.61	23.58	46.00	-22.42
951.50	S	Peak	27.69	-2.10	25.59	46.00	-20.41
1673.20	Н	Peak	39.12	-1.38	37.74	74.00	-36.26
2509.80	Н						
3346.40	Н						
4183.00	Н						
5019.60	Н						
5856.20	Н						
6692.80	Н						
7529.40	Н						
8366.00	Н						

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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 180 of 207

Operation Band :HSUPA B5 Test Date :2013-04-21

Fundamental Frequency :836.6 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX MID Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
38.73	S	Peak	26.86	-13.59	13.27	40.00	-26.73
150.28	S	Peak	27.05	-12.35	14.70	43.50	-28.80
299.66	S	Peak	28.58	-12.58	16.00	46.00	-30.00
419.94	S	Peak	29.83	-10.65	19.18	46.00	-26.82
809.88	S	Peak	27.94	-4.07	23.87	46.00	-22.13
944.71	S	Peak	26.58	-2.14	24.44	46.00	-21.56
1673.20	Н	Peak	38.63	-0.59	38.04	74.00	-35.96
2509.80	Н						
3346.40	Н						
4183.00	Н						
5019.60	Н						
5856.20	Н						
6692.80	Н						
7529.40	Н						
8366.00	Н						

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 181 of 207

Operation Band :HSUPA B5 Test Date :2013-04-21

Fundamental Frequency :846.6 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX HIGH Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
31.94	S	Peak	31.36	-14.30	17.06	40.00	-22.94
61.04	S	Peak	30.89	-14.78	16.11	40.00	-23.89
114.39	S	Peak	35.59	-15.22	20.37	43.50	-23.13
604.24	S	Peak	27.90	-7.47	20.43	46.00	-25.57
813.76	S	Peak	27.31	-4.04	23.27	46.00	-22.73
957.32	S	Peak	27.07	-2.07	25.00	46.00	-21.00
1693.20	Н	Peak	38.37	-1.14	37.23	74.00	-36.77
2539.80	Н						
3386.40	Н						
4233.00	Н						
5079.60	Н						
5926.20	Н						
6772.80	Н						
7619.40	Н						
8466.00	Н						

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 www.sgs.com/terms_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.Wu Kung Road. New Taipei Industrial Park. Wuku District. New Taipei City. Taiwan 24803/新北市五股區新北產業園區五工路 134 號

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 182 of 207

Operation Band :HSUPA B5 Test Date :2013-04-21

Fundamental Frequency :846.6 MHz Temp./Humi. :24.1deg_C / 68 RH

Operation Mode :RX HIGH Engineer :Allen

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

Actual $FS(dB\mu V/m) = SPA$. Reading level $(dB\mu V) + Factor(dB)$

 $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
59.10	S	Peak	28.27	-14.51	13.76	40.00	-26.24
160.95	S	Peak	27.06	-12.36	14.70	43.50	-28.80
299.66	S	Peak	29.85	-12.58	17.27	46.00	-28.73
596.48	S	Peak	28.00	-7.64	20.36	46.00	-25.64
815.70	S	Peak	26.79	-4.02	22.77	46.00	-23.23
935.01	S	Peak	26.84	-2.24	24.60	46.00	-21.40
1693.20	Н	Peak	38.66	-0.30	38.36	74.00	-35.64
2539.80	Н						
3386.40	Н						
4233.00	Н						
5079.60	Н						
5926.20	Н						
6772.80	Н						
7619.40	Н						
8466.00	Н						

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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 183 of 207

11. FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT

11.1. Standard Applicable:

According to FCC §2.1055(a) (1)

Frequency Tolerance: +/-2.5ppm for 850MHz band

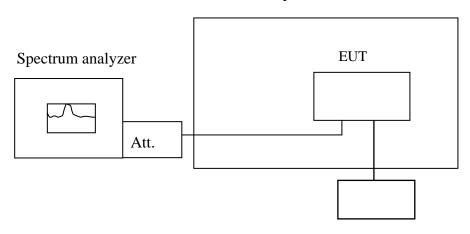
+/-2.5ppm for 1900MHz band

According to RSS-133 §6.3, RSS-132 §5.3

The carrier frequency shall not depart from the reference frequency in excess of ± 2.5 ppm for mobile stations

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 25oC operating frequency as reference frequency. Turn EUT off and set the chamber temperature to –30oC. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10oC increased per stage until the highest temperature of +50oC reached.

11.4. Measurement Equipment Used:

Refer to section 2.4 in this 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

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

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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 184 of 207

11.5. Measurement Result:

Reference Frequency: GPRS 850 Mid Channel 836.6 MHz							
	Limit: +/- 2.5 ppm = 2091 Hz						
Power Supply	Environment	Frequency	5 1. (11.)	Limit (II-)			
Vdc	Temperature (°C)	(MHz)	Delta (Hz)	Limit (Hz)			
3.7	50	836599995	0	2091			
3.7	40	836600006	11	2091			
3.7	30	836599995	0	2091			
3.7	20	836599995	0	2091			
3.7	10	836600000	5	2091			
3.7	0	836600006	11	2091			
3.7	-10	836599998	3	2091			
3.7	-20	836600002	7	2091			
3.7	-30	836599992	-3	2091			

Reference Frequency: GPRS 1900 Mid Channel 1880 MHz								
	Limit: +/- 2.5 ppm = 4700 Hz							
Power Supply	Environment	Frequency	Dolto (Uz)	Limit (Hz)				
Vdc	Temperature ($^{\circ}$ C)	(MHz)	Delta (Hz)	Limit (Hz)				
3.7	50	1879999989	-19	4700				
3.7	40	1880000003	-5	4700				
3.7	30	1880000007	-1	4700				
3.7	20	1880000008	0	4700				
3.7	10	1879999988	-20	4700				
3.7	0	1880000001	-7	4700				
3.7	-10	1879999998	-10	4700				
3.7	-20	1879999998	-10	4700				
3.7	-30	1880000001	-7	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 www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_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 Talwan Ltd.

No.134.Wu Kung Road. New Taipei Industrial Park. Wuku District. New Taipei City. Taiwan 24803/新北市五股區新北產業園區五工路 134 號.

d. No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 185 of 207

Reference Frequency: WCDMA II Mid Channel 1880 MHz							
	Limit: +/- 2.5 ppm = 4700 Hz						
Power Supply	Environment	Frequency	Dalta (II-)	I :m:i4 (II=)			
Vdc	Temperature (°C)	(MHz)	Delta (Hz)	Limit (Hz)			
3.7	50	1879999999	-6	4700			
3.7	40	1880000002	-3	4700			
3.7	30	1879999997	-8	4700			
3.7	20	1880000005	0	4700			
3.7	10	1880000006	1	4700			
3.7	0	1879999987	-18	4700			
3.7	-10	1879999991	-14	4700			
3.7	-20	1880000006	1	4700			
3.7	-30	1880000002	-3	4700			

Reference Frequency: WCDMA V Mid Channel 836.6 MHz						
Limit: +/- 2.5 ppm = 2091 Hz						
Power Supply	Environment	Frequency		Limit (Hz)		
Vdc	Temperature ($^{\circ}$ C)	(MHz)	Delta (Hz)	Limit (Hz)		
3.7	50	836599993	-5	2091		
3.7	40	836600002	4	2091		
3.7	30	836600005	7	2091		
3.7	20	836599998	0	2091		
3.7	10	836600002	4	2091		
3.7	0	836600008	10	2091		
3.7	-10	836600000	2	2091		
3.7	-20	836600007	9	2091		
3.7	-30	836599998	0	2091		

Note: The battery is rated 3.7V dc.

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 www.sgs.com/terms_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. 台灣檢驗科技股份有限公司

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 186 of 207

12. FREQUENCY STABILITY V.S. VOLTAGE MEASUREMENT

12.1. Standard Applicable:

According to FCC §2.1055(d) (2)

Frequency Tolerance: +/-2.5ppm for 850MHz band

+/-2.5ppm for 1900MHz band

According to RSS-133 §6.3, RSS-132 §5.3

The carrier frequency shall not depart from the reference frequency in excess of ± 2.5 ppm for mobile stations.

12.2. Test Set-up:

Refer to section 11.2 in this report

12.3. Measurement Procedure:

Set chamber temperature to 25°C. 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 specified extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.

12.4. Measurement Equipment Used:

Refer to section 2.4 in this 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 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 www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 t (886-2) 2299-3279 www.tw.sas.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 187 of 207

12.5. Measurement Result:

Reference Frequency: GPRS 850 Mid Channel 836.6 MHz							
	Limit: +/- 2.5 ppm = 2091 Hz						
Power Supply Environment Frequency							
Vdc	Temperature ($^{\circ}$ C)	(MHz)	Delta (Hz)	Limit (Hz)			
4.20	20	836.600003	8	2091			
3.70	20	836.599995	0	2091			
3.60	20	836.600003	8	2091			
3.00	20	926 600001	6	2091			
(Shutdown point)	20	836.600001	6	2091			

Reference Frequency: GPRS 1900 Mid Channel 1880 MHz						
Limit: +/- 2.5 ppm = 4700 Hz						
Power Supply	Environment	Frequency	Dolto (Hz)	Limit (Hg)		
Vdc	Temperature ($^{\circ}$ C)	(MHz)	Delta (Hz)	Limit (Hz)		
4.20	20	1880.000002	-6	4700		
3.70	20	1880.000008	0	4700		
3.60	20	1879.999988	-20	4700		
3.00	20	1880.000005	-3	4700		
(Shutdown point)						

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 www.sgs.com/terms_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 Talwan Ltd. No.134.Wu Kung Road. New Taipei Industrial Park. Wuku District. New Taipei City. Taiwan 24803/新北市五股區新北產業園區五工路 134 號



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 188 of 207

Reference Frequency: WCDMA II Mid Channel 1880 MHz							
	Limit: +/- 2.5 ppm = 4700 Hz						
Power Supply	Power Supply Environment Frequency						
Vdc	Temperature (°C)	(MHz)	Delta (Hz)	Limit (Hz)			
4.20	20	1879.999999	-6	4700			
3.70	20	1880.000005	0	4700			
3.60	20	1880.000002	-3	4700			
3.00	20	1880 000002	2	4700			
(Shutdown point)	20	1880.000002	-3	4700			

Reference Frequency: WCDMA V Mid Channel 836.6 MHz							
	Limit: +/- 2.5 ppm = 2091 Hz						
Power Supply	Environment	Frequency					
Vdc	Temperature ($^{\circ}$ C)	(MHz)	Delta (Hz)	Limit (Hz)			
4.20	20	836.599997	-1	2091.00			
3.70	20	836.599998	0	2091.00			
3.60	20	836.599992	-6	2091.00			
3.00	20	926 500007	1	2001.00			
(Shutdown point)	20	836.599997	-1	2091.00			

Note: The battery is rated 3.7V dc.

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 www.sgs.com/terms_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.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 189 of 207

13. PEAK TO AVERAGE RATIO

13.1. Standard Applicable:

According FCC 24.232(d) – The peak-to-average ration (PAR) of the transmission may not exceed 13dB.

According to issue 3 of RSS 132, section 5.4, issue 6 of RSS 133, section 6.4. Transmitter power is measured in terms of average value, the peak-to-average ratio of the power shall not exceed 13 dB.

13.2. Test SET-UP (Block Diagram of Configuration):

Refer to section 2.4 in this report

13.3. Measurement Procedure:

KDB 971168 D01 is employed as the following procedure is proper adjusted accordingly: Set resolution/measurement bandwidth \geq signal's occupied bandwidth; & internal =1ms Set the number of counts to a value that stabilizes the measured CCDF curve.

13.4. Measurement Equipment Used:

Refer to section 2.4 in this report

13.5. Measurement Result:

Refer to next page for plot.

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 www.sgs.com/terms_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.



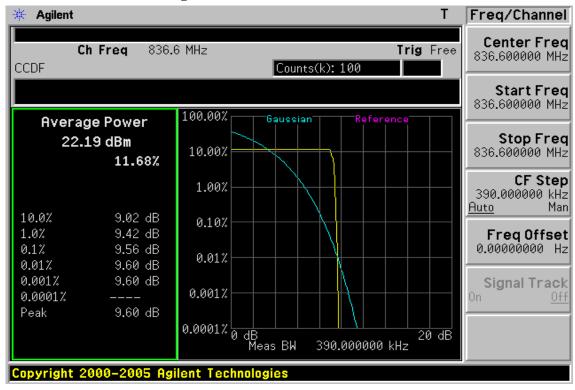
Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 190 of 207

Figure 13-1: GSM 850 Channel Low



Figure 13-2: GSM 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.

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 www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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



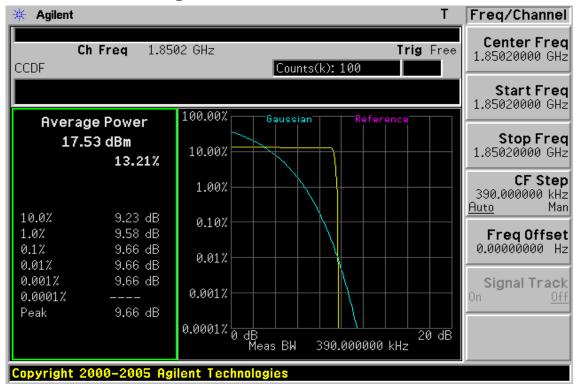
Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 191 of 207

Figure 13-3: GSM 850 Channel High



Figure 13-4: GSM 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

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 www.sgs.com/terms_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.



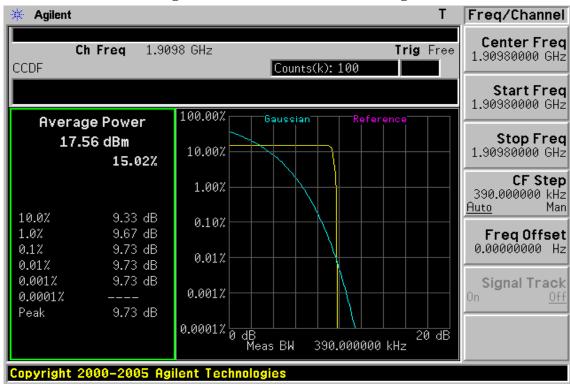
Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 192 of 207

Figure 13-5: GSM 1900 Channel Mid



Figure 13-6: GSM 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 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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 t (886-2) 2299-3279 www.tw.sas.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 193 of 207

Figure 13-7: GPRS 850 Channel Low

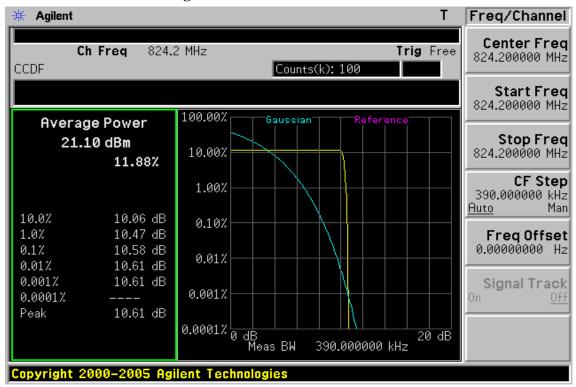


Figure 13-8: GPRS 850 Channel Mid



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.

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 www.sgs.com/terms_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, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 建股份有限公司 t (886-2) 2299-3279 f (886-2) 2298-0488 www.tw.sgs.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 194 of 207

Figure 13-9: GPRS 850 Channel High



Figure 13-10: 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 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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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 f (886-2) 2298-0488 www.tw.sas.com



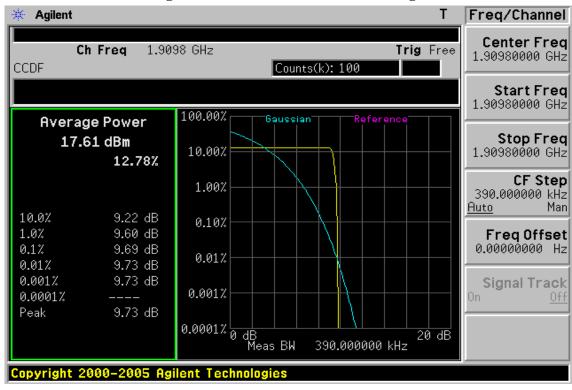
Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 195 of 207

Figure 13-11: GPRS 1900 Channel Mid



Figure 13-12: 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. 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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 196 of 207

Figure 13-13: EDGE 850 Channel Low



Figure 13-14: 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

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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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 www.tw.sas.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 197 of 207

Figure 13-15: EDGE 850 Channel High



Figure 13-16: 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

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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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



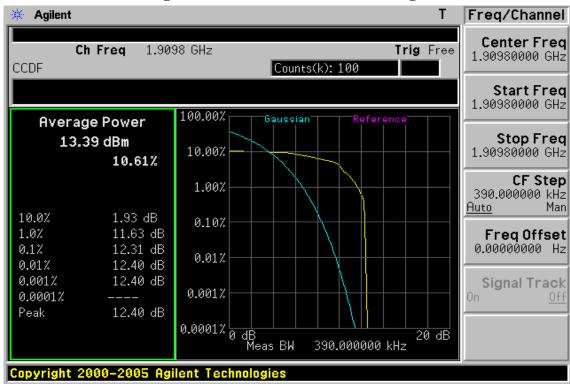
Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 198 of 207

Figure 13-17: EDGE 1900 Channel Mid



Figure 13-18: 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.

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 www.sgs.com/terms_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.



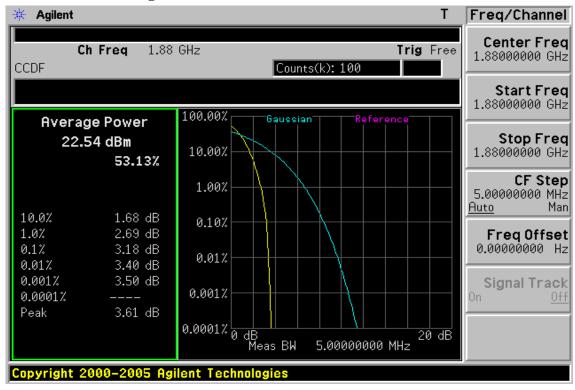
Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 199 of 207

Figure 13-19: WCDMA Band II Channel Low



Figure 13-20: 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 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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.sas.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 200 of 207

Figure 13-21: WCDMA Band II Channel High

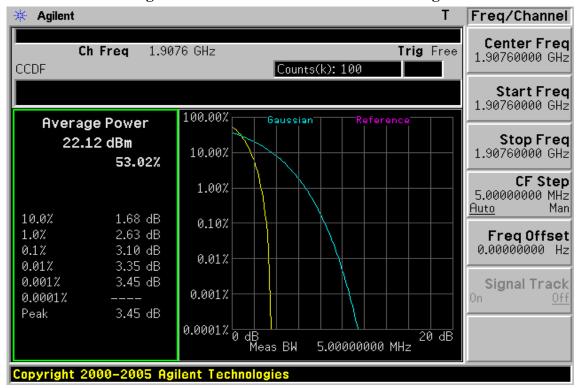
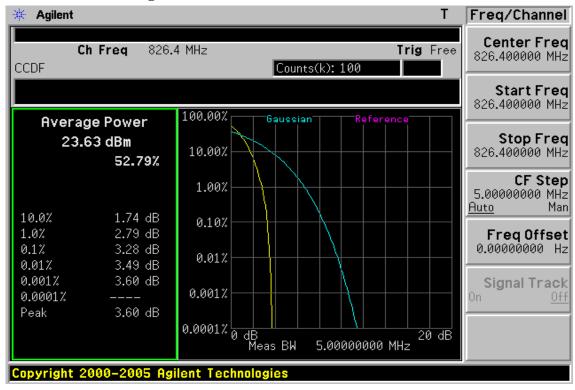


Figure 13-22: WCDMA Band V Channel Low



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 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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 201 of 207

Figure 13-23: WCDMA Band V Channel Mid



Figure 13-24: 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 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 www.sgs.com/terms_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.



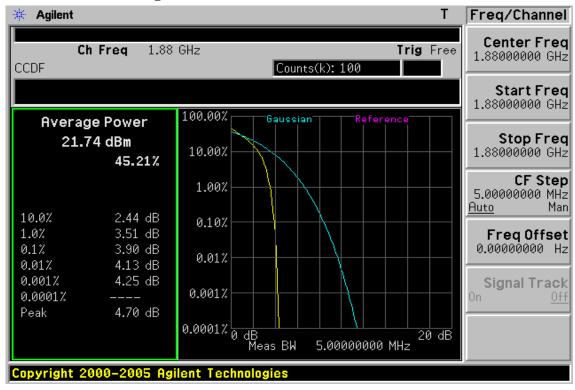
Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 202 of 207

Figure 13-25: HSUPA Band II Channel Low



Figure 13-26: 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

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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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 f (886-2) 2298-0488 www.tw.sas.com



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 203 of 207

Figure 13-27: HSUPA Band II Channel High

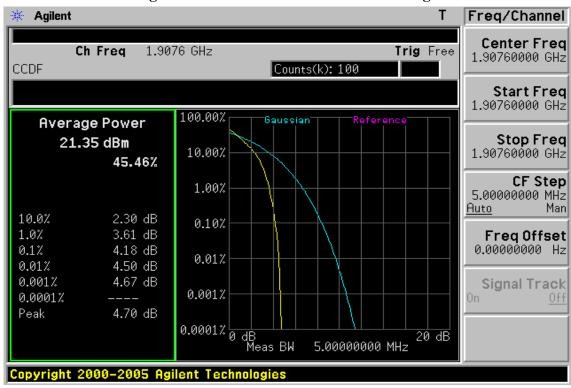


Figure 13-28: HSUPA Band V Channel Low



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 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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 204 of 207

Figure 13-29: HSUPA Band V Channel Mid

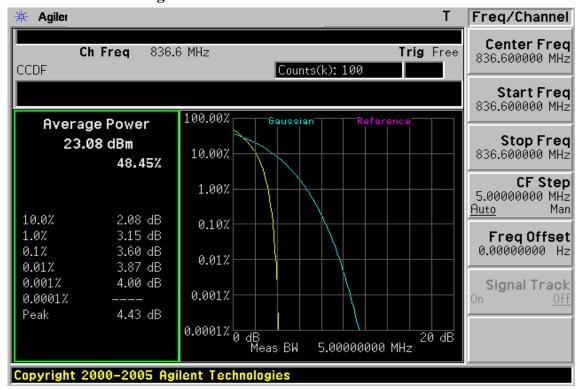


Figure 13-30: HSUPA Band V Channel High



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.

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 www.sgs.com/terms_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.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 205 of 207

Figure 13-31: HSDPA Band II Channel Low



Figure 13-32: 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

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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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.sas.com



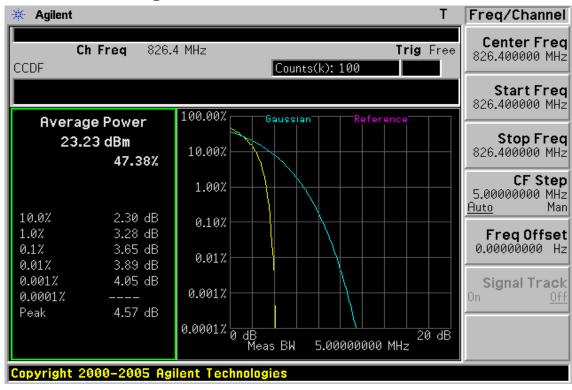
Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 206 of 207

Figure 13-33: HSDPA Band II Channel High



Figure 13-34: 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 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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



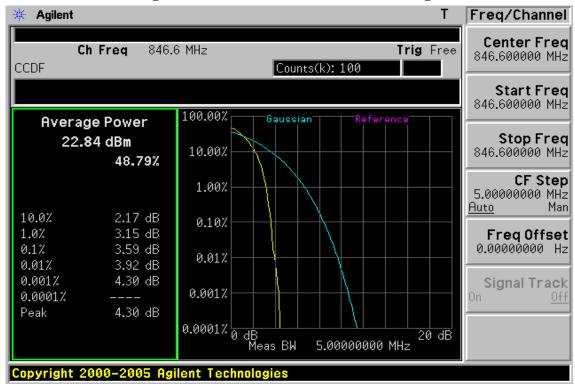
Report No.: EH/2013/40048 Issue Date: Jun. 05, 2013

Page: 207 of 207

Figure 13-35: HSDPA Band V Channel Mid



Figure 13-36: 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 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 www.sgs.com/terms_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,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/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 f (886-2) 2298-0488