

Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 1 of 65

ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 15 SUBPART C REQUIREMENT

OF

Product Name: Mobile Internet Device

Brand Name: DELL

Model Name: M01M

Model Difference: N/A

FCC ID: VRSM01M001

Report No.: EH/2009/80059

Issue Date: Dec. 29, 2009

FCC Rule Part: §15.247, Cat: DSS

Prepared for: Qisda Corporation

157 Shan-Ying Road, Gueishan

Prepared by: SGS Taiwan Ltd.

Electronics & Communication Laboratory No. 134, Wu Kung Rd., Wuku Industrial

Note: This report shall not be reproduced except in full,

Zone, Taipei County, Taiwan





0513

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. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,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 (www.sgs.com/terms and conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/attentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan / 台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 2 of 65

VERIFICATION OF COMPLIANCE

Applicant: Qisda Corporation Qisda Corporation

157 Shan-Ying Road, Gueishan

Equipment Under Test: Mobile Internet Device

Brand Name: DELL
Model No.: M01M

Model Difference: N/A

FCC ID: VRSM01M001 **File Number:** EH/2009/80059

Date of test: Aug. 28, 2009 ~ Dec. 27, 2009

Date of EUT Received: Aug. 28, 2009

We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4:2003 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 Rules Part 15.247.

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

Test By:	Bondi Jin	Date:	Dec. 29, 2009	
	Bondi Liu / Engineer			
Prepared By:	Alex Hsieh	Date:	Dec. 29, 2009	
Approved By:	Alex Hsieh / Sr. Engineer Vincent Su / Manager	Date:	Dec. 29, 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. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,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 (www.sgs.com/terms.and.conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms.e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/terms.ecom/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 3 of 65

Version

Version No.	Date	Description
00	Dec. 29, 2009	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. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此聚告結果僅對測試之樣品負責,同時此樣品僅保留仍天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms_and_conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms_e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgsonsite.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd.

No.134, Wu kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 4 of 65

Table of Contents

1.		ERAL INFORMATION	
	1.1.	Related Submittal(s) / Grant (s)	
	1.2.	Test Methodology	9
	1.3.	Test Facility	9
	1.4.	Special Accessories	9
	1.5.	Equipment Modifications.	9
2.	SYST	TEM TEST CONFIGURATION	10
	2.1.	EUT Configuration	10
	2.2.	EUT Exercise	10
	2.3.	Test Procedure	10
	2.4.	Configuration of Tested System	11
3.	SUM	MARY OF TEST RESULTS	12
4.	DES	CRIPTION OF TEST MODES	12
5.	CON	DUCTED EMISSION TEST	13
	5.1.	Standard Applicable	13
	5.2.	EUT Setup	13
	5.3.	Measurement Procedure	13
	5.4.	Measurement Equipment Used:	14
	5.5.	Measurement Result.	14
6.	PEA:	K OUTPUT POWER MEASUREMENT	17
	6.1.	Standard Applicable	17
	6.2.	Measurement Equipment Used	17
	6.3.	.Test Set-up:	17
	6.4.	Measurement Procedure:	18
	6.5.	Measurement Result.	18
7.	20dB	BAND WIDTH	23
	7.1.	Standard Applicable	23
	7.2.	Measurement Equipment Used	23
	7.3.	Test Set-up	23
	7.4.	Measurement Procedure:	23
	7.5.	Measurement Result:	24
8.	100K	Hz BANDWIDTH OF BAND EDGES MEASUREMENT	29
	8 1	Standard Applicable	20

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此聚告結果僅對測試之樣品負責,同時此樣品僅保留仍天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms_and_conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms_e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgsonsite.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd.

No.134, Wu kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 5 of 65

	8.2.	Measurement Equipment Used	29
	8.3.	Test SET-UP:	30
	8.4.	Measurement Procedure	31
	8.5.	Field Strength Calculation	31
	8.6.	Measurement Result	31
9.	SPUR	RIOUS RADIATED EMISSION TEST	40
	9.1.	Standard Applicable	40
	9.2.	Measurement Equipment Used:	40
	9.3.	Test SET-UP:	40
	9.4.	Measurement Procedure:	40
	9.5.	Field Strength Calculation	41
	9.6.	Measurement Result:	41
10.	FRE(QUENCY SEPARATION	54
	10.1.	Standard Applicable	54
	10.2.	Measurement Equipment Used:	54
	10.3.	Test Set-up:	54
	10.4.	Measurement Procedure:	54
	10.5.	Measurement Result:	54
11.	NUM	BER OF HOPPING FREQUENCY	56
	11.1.	Standard Applicable	
	11.2.	Measurement Equipment Used:	56
	11.3.	Test Set-up:	56
	11.4.	Measurement Procedure:	56
	11.5.	Measurement Result:	56
12.	TIME	E OF OCCUPANCY (DWELL TIME)	58
	12.1.	Standard Applicable	
	12.2.	Measurement Equipment Used:	58
	12.3.	Test Set-up:	58
	12.4.	Measurement Procedure:	58
	12.5.	Measurement Result	59
13.	ANTI	ENNA REQUIREMENT	65
	13.1.		
	13.2.	Antenna Connected Construction	65
AP	PEND:	IX 1 PHOTOGRAPHS OF SET UP	66
		IX 2 PHOTOGRAPHS OF FUT	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此聚告結果僅對測試之樣品負責,同時此樣品僅保留仍天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms_and_conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms_e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgsonsite.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd.

No.134, Wu kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 6 of 65

1. GENERAL INFORMATION

General:

Product Name:	Mobile Internet Device		
Brand Name:	DELL		
Model Name:	M01M		
Model Difference:	N/A		
30pin data cable	Part No.: TY.	5K190.001,Supplier:PCH	
Mini USB data cable	Part No.: TY.5K190.003,Supplier:PCH		
DC cable	Part No.: TY.5K190.002,Supplier:PCH		
Homedock	Part No.: 6K.0QF08.001,Supplier: Qisda		
Earphone	Part No.: TY.2C190.001,Supplier:PCH		
	3.7 Vdc re-chargeable battery or 5V dc by AC/DC power adapt		
Power Supply	Adapter:	Part No.: 79GTM, Supplier : DELL	
	Battery:	Model No.: N/A, Supplier: DELL	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此聚告結果僅對測試之樣品負責,同時此樣品僅保留仍天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms_and_conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms_e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgsonsite.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd.

No.134, Wu kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 7 of 65

GSM/WCDMA:

	Operating Frequency	Rated Power		
	GSM/GPRS/EDGE 850, Class 12	824.2 MHz- 848.8MHz	33 dBm	
	GSM/GPRS/EDGE 900, Class 12	880.0MHz – 914.8MHz	33 dBm	
Cellular Phone Standards	GSM/GPRS/EDGE 1800, Class 12	1710.2MHz-1784.8MHz	30 dBm	
Frequency Range and Power:	GSM/GPRS/EDGE 1900, Class 12	1850.2MHz – 1909.8MHz	30 dBm	
	WCDMA/HSUPA/HSDPA Band I	1920MHz – 1980MHz	24 dBm	
	WCDMA/HSUPA/HSDPA Band II	1852.4 – 1907.6 MHz	24 dBm	
	WCDMA/HSUPA/HSDPA Band V	826.4 - 846.6 MHz	24 dBm	
	WCDMA/HSUPA/HSDPA Band VIII	815MHz – 880MHz	24dBm	
Hardware Version:	N/A			
Software Version:	N/A			
Type of Emission	GPRS 850: 245KGXW, GPRS 1900 :248KGXW EDGE 850: 242KG7W, EDGE 1900:246KG7W WCDMA Band II: 4M18F9W, WCDMA Band V: 4M17F9W HSUPA Band II: 4M18F9W, HSUPA Band V: 4M17F9W,			
IMEI:	01195400			

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此聚告結果僅對測試之樣品負責,同時此樣品僅保留仍天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms_and_conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms_e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgsonsite.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd.

No.134, Wu kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 8 of 65

W	[A]	N

Frequency Range & Channel number:	802.11 b/g: 2412 – 2462 MHz	
Rated Power:	802.11 b: 17.68 dBm (EIRP) 802.11 g: 18.63 dBm (EIRP)	
Modulation type:	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM	
Transmission Rate:	802.11 b: 1/2/5.5/11 Mbps; 802.11 g: 6/9/12/18/24/36/48/54 Mbps	
Antenna Designation:	Monopole Antenna with 1.21dBi peak gain	
Type of Emission	15M6G1D	

The EUT is compliance with IEEE 802.11 b/g Standard.

Bluetooth:

Bluetooth Version:	 V1.1 (GFSK) V1.2 (GFSK) V2.0 (GFSK) V2.0 + EDR (GFSK + π/4DQPSK + 8DPSK) V2.1 + EDR (GFSK + π/4DQPSK + 8DPSK) 		
Channel number:	79 channels		
Modulation type:	$GFSK + \pi/4DQPSK + 8DPSK$		
Transmit Power:	6.71 dBm (Peak)		
Frequency Range:	2.402GHz – 2.480GHz		
Dwell Time:	<= 0.4s		
Operating Mode:	Point-to-Point		
Antenna Designation:	Monopole Antenna with 1.21dBi peak gain		
Type of Emission	1M31F7D		

GPS:

Receiver Frequency	L1 Band, 1575.42MHz
Frequency Conversion oscillator	3.6864MHz and 32.768kHz

The EUT is compliance with Bluetooth 2.0 + EDR Standard.

This report applies for Bluetooth

.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,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 (www.sgs.com/terms and conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms and conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions.htm) and Terms and Conditions for Electronic Documents (<a href="https://www.sgs.com/terms a

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 9 of 65

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

This submittal(s) (test report) is intended for FCC ID: **VRSM01M001** filing to comply with Section 15.247 of the FCC Part 15, Subpart C Rules. The composite system (digital device) is compliance with Subpart B is authorized under a Doc procedure.

1.2. Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4: 2003. Radiated testing was performed at an antenna to EUT distance 3 meters.

Tested in accordance with FCC Public Notice DA 00-705

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 and 236194, Canada Registration Number: 4620A-1

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.

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. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明。此報告結果僅對測試之樣品負責,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 (www.sgs.com/terms and conditions. htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms and conditions. htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms edocument.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.sgs.cem/cem/authentication. Any holder of this document document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 10 of 65

2. SYSTEM TEST CONFIGURATION

2.1. EUT Configuration

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

2.2. EUT Exercise

The EUT (Transmitter) was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements.

2.3. Test Procedure

2.3.1 Conducted Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. According to the requirements in Section 7 and 13 of ANSI C63.4: 2003. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and Average detector mode.

2.3.2 Radiated Emissions

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 and Subclause 8.3.1.2 of ANSI C63.4: 2003.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,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 Sex; com/terms and conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/terms.com/authentication. Any holder of this document advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279 f (8



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 11 of 65

2.4. Configuration of Tested System

Fig. 2-1 AC Power line and Radiated Emission Configuration

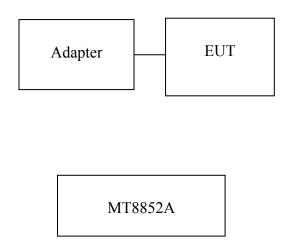


Table 2-1 Equipment Used in Tested System

Item	Equipment	Mfr/Brand	Model/ Type No.	Series No.	Data Cable	Power Cord
1	Bluetooth Test Set	Anritsu	MT8852B	N/A		

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,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 (www.sgs.com/terms and conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms and conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions.htm) and Terms and Conditions for Electronic Documents (<a href="https://www.sgs.com/terms a

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2009/80059 **Issue Date: Dec. 29, 2009**

Page: 12 of 65

3. SUMMARY OF TEST RESULTS

FCC Rules	Description Of Test	Result
§15.207(a)	Conducted Emission	Compliant
§15.247(b)(1)	Peak Output Power	Compliant
§15.247(a)	20dB Bandwidth	No Limit
§15.247I	100 KHz Bandwidth Of	Compliant
	Frequency Band Edges	
§15.209(a) (f)	Spurious Emission	Compliant
§15.247(a)(1)	Frequency Separation	Compliant
§15.247(a)(1)(iii)	Number of hopping frequency	Compliant
§15.247(a)(1)(iii)	Time of Occupancy	Compliant
§15.203, §15.247(b)(4)(i)	Antenna Requirement	Compliant

4. DESCRIPTION OF TEST MODES

The EUT has been tested under operating condition.

Test program used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

Channel Low, Mid and High with highest rated data rate were chosen for full testing.

The field strength of spurious radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for Bluetooth Transmitter for channel Low, Mid and High the worst case H position was 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. This test report cannot be reproduced, Onless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) the sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) the sample(s) tested and such sample(s) are retained for 90 days only. This test report retained for 90 days only 10 ment is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents SGS Taiwan Ltd.

No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan / 台北縣五股工業區五工路 134 號



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 13 of 65

5. CONDUCTED EMISSION TEST

5.1. Standard Applicable

According to §15.207. frequency within 150KHz to 30MHz shall not exceed the limit table as below.

Frequency range	Limits dB(uV)			
MHz	Quasi-peak	Average		
0.15 to 0.50	66 to 56	56 to 46		
0.50 to 5	56	46		
5 to 30	60	50		

Note

5.2. EUT Setup

- 1. The conducted emission tests were performed in the test site, using the setup in accordance with the ANSI C63.4: 2003.
- 2. The EUT was plug-in the AC/DC Power adapter. The host system was placed on the center of the back edge on the test table. The peripherals was placed on the side of the host PC system. The rear of the EUT and peripherals were placed flushed with the rear of the tabletop.
- 3. The spacing between the peripherals was 10 centimeters.
- 4. External I/O cables were draped along the edge of the test table and bundle when necessary.
- 5. The host system was connected with 120Vac/60Hz power source.

5.3. Measurement Procedure

- 1. The EUT was placed on a table which is 0.8m above ground plane.
- 2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 3. Repeat above procedures until all frequency measured were complete.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,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 (www.sgs.com/terms and Conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.onsite.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

^{1.} The lower limit shall apply at the transition frequencies

^{2.} The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 14 of 65

5.4. Measurement Equipment Used:

Conducted Emission Test Site						
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.	
TYPE		NUMBER	NUMBER	CAL.		
EMI Test Receiver	R&S	ESCS30	828985/004	09/16/2009	09/15/2010	
LISN	Rolf-Heine	NNB-2/16Z	99012	02/02/2009	02/01/2010	
LISN	FCC	FCC-LISN-50/250-25-2-01	04034	02/02/2009	02/01/2010	
Coaxial Cables	N/A	WK CE Cable	N/A	10/30/2009	10/29/2010	

5.5. Measurement Result

The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range. Significant peaks are then marked as shown on the following data page, and these signals are then quasi-peaked.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, Onless otherwise stated in results shown in this test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此雖告結果僅對測試之樣品負責,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 (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. SGS Taiwan Ltd.

No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 15 of 65

Humidity:

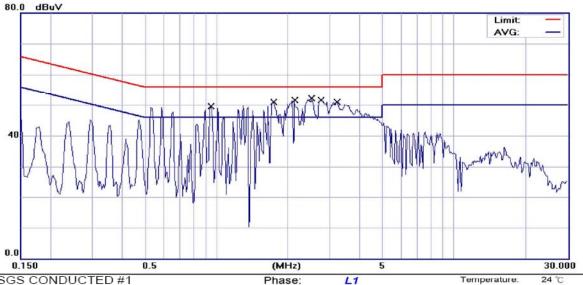
Air Pressure:

56 %

hpa

AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode:	Bluetooth Mode			Test Date:	Dec. 27, 2009
Temperature:	23 °C	Humidity:	59 %	Test By:	Bondi



Power:

Distance:

AC 120V/60Hz

Site SGS CONDUCTED #1

Limit: CISPR22/11/EN55022 Class B

EUT: Mobile Internet Device

M/N: M01M

Note: EDR BT Link mode

No.	Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.9479	48.66	0.09	48.75	56.00	-7.25	QP	
2		0.9479	36.77	0.09	36.86	46.00	-9.14	AVG	
3		1.7174	49.22	0.12	49.34	56.00	-6.66	QP	
4		1.7174	36.16	0.12	36.28	46.00	-9.72	AVG	
5	*	2.1342	49.57	0.13	49.70	56.00	-6.30	QP	
6		2.1342	34.33	0.13	34.46	46.00	-11.54	AVG	
7		2.5291	42.15	0.14	42.29	56.00	-13.71	QP	
8		2.5291	25.37	0.14	25.51	46.00	-20.49	AVG	
9		2.7613	48.18	0.14	48.32	56.00	-7.68	QP	
10		2.7613	29.10	0.14	29.24	46.00	-16.76	AVG	
11		3.1992	46.85	0.14	46.99	56.00	-9.01	QP	
12		3.1992	31.03	0.14	31.17	46.00	-14.83	AVG	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, Onless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) the sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) the sample(s) tested and such sample(s) are retained for 90 days only. This test report retained for 90 days only 10 ment is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 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/2009/80059 Issue Date: Dec. 29, 2009

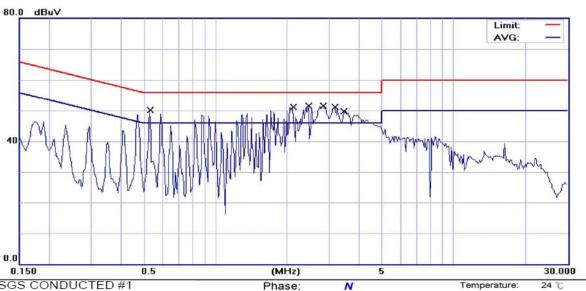
Page: 16 of 65

Humidity:

Air Pressure:

56 %

hpa



Power:

Distance:

AC 120V/60Hz

Site SGS CONDUCTED #1

Limit: CISPR22/11/EN55022 Class B

EUT: Mobile Internet Device

M/N: M01M

Note: EDR BT Link mode

No.	Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.5289	49.62	0.10	49.72	56.00	-6.28	QP	
2	*	0.5289	43.17	0.10	43.27	46.00	-2.73	AVG	
3		2.1134	48.29	0.15	48.44	56.00	-7.56	QP	
4		2.1134	37.27	0.15	37.42	46.00	-8.58	AVG	
5		2.4651	48.61	0.15	48.76	56.00	-7.24	QP	
6		2.4651	35.34	0.15	35.49	46.00	-10.51	AVG	
7		2.8208	48.47	0.16	48.63	56.00	-7.37	QP	
8		2.8208	36.56	0.16	36.72	46.00	-9.28	AVG	
9		3.1715	47.89	0.16	48.05	56.00	-7.95	QP	
10		3.1715	35.81	0.16	35.97	46.00	-10.03	AVG	
11		3.4572	47.53	0.16	47.69	56.00	-8.31	QP	
12		3.4572	33.68	0.16	33.84	46.00	-12.16	AVG	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,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 (www.sgs.com/terms and conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms and conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions.htm) and Terms and Conditions for Electronic Documents (<a href="https://www.sgs.com/terms a

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 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/2009/80059 Issue Date: Dec. 29, 2009

Page: 17 of 65

6. PEAK OUTPUT POWER MEASUREMENT

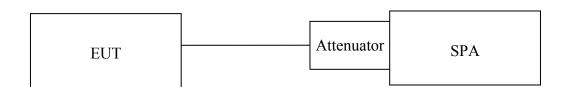
6.1. Standard Applicable

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 hopping channels, and all frequency hopping systems in the 5725-5850MHz band: 1Watt. For all other frequency hopping systems in the 2400-2483.5MHz band: 0.125 Watts.

6.2. Measurement Equipment Used

	Conducted Emission Test Site						
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.		
TYPE		NUMBER	NUMBER	CAL.			
Spectrum Analyzer	Agilent	E4446A	MY43360126	04/19/2008	04/18/2010		
Spectrum Analyzer	Agilent	E4440A	MY45304525	01/23/2008	01/22/2010		
DC Block	Agilent	BLK-18	155452	07/05/2009	07/04/2010		
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	N/A	01/05/2009	01/04/2010		
Attenuator	Mini-Circuit	BW-S6W5	001	07/05/2009	07/04/2010		
Attenuator	Mini-Circuit	BW-S10W5	001	07/05/2009	07/04/2010		
Attenuator	Mini-Circuit	BW-S20W5	001	07/05/2009	07/04/2010		
Splitter	Agilent	11636B	N/A	07/05/2009	07/04/2010		

6.3. .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. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,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 (www.sgs.com/terms and conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

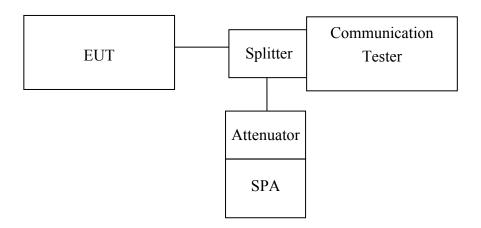
台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 18 of 65



6.4. Measurement Procedure:

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the power meter or spectrum. (Max peak function, RBW, VBW = 1MHz)
- 3. Record the max. reading.
- 4. Repeat above procedures until all frequency measured were complete.

6.5. Measurement Result

BDR mode:

Frequency (MHz)	Reading Power (dBm)	Cable Loss	Output Power (dBm)	Output Power (W)	Limit (W)
2402.00	4.20	0.00	4.20	0.00263	1
2441.00	4.50	0.00	4.50	0.00282	1
2480.00	4.08	0.00	4.08	0.00256	1

EDR mode:

Frequency (MHz)	Reading Power (dBm)	Cable Loss	Output Power (dBm)	Output Power (W)	Limit (W)
2402.00	6.31	0.00	6.31	0.00428	1
2441.00	6.71	0.00	6.71	0.00469	1
2480.00	5.67	0.00	5.67	0.00369	1

NOTE: offset:6.5dB

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留の天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

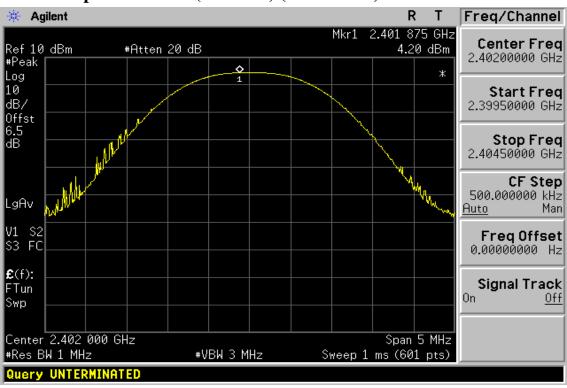
SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號



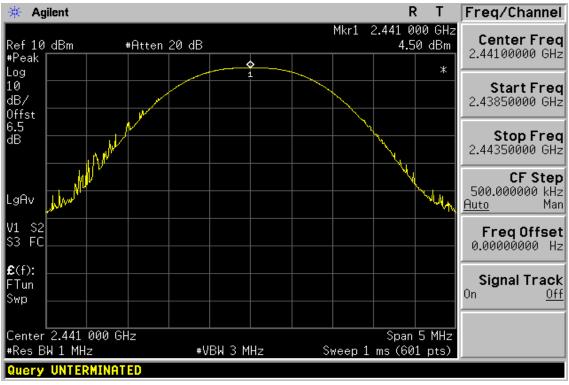
Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 19 of 65

Peak Power Output Data Plot (CH Low) (BDR mode)



Peak Power Output Data Plot (CH Mid) (BDR mode)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明。此報告結果僅對測試之樣品負責,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 (www.sgs.com/terms.and.conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms.e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/terms.ecom/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

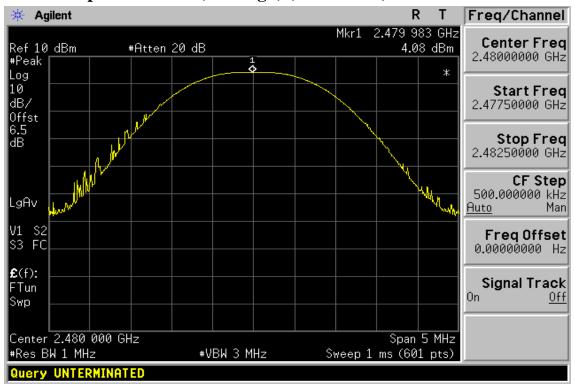
t (886-2) 2299-3279



Report No.: EH/2009/80059 **Issue Date: Dec. 29, 2009**

Page: 20 of 65

Peak Power Output Data Plot (CH High) (BDR mode)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, Onless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) the sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) the sample(s) tested and such sample(s) are retained for 90 days only. This test report retained for 90 days only 10 ment is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. SGS Taiwan Ltd.

No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

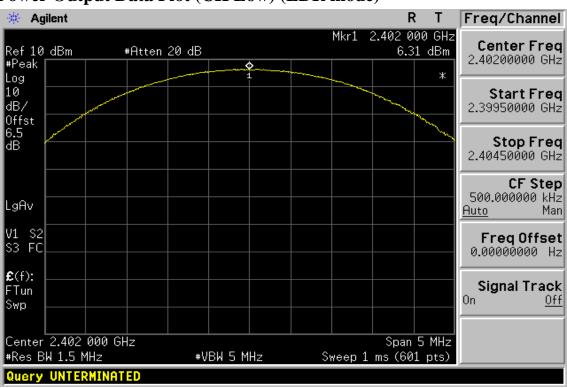
t (886-2) 2299-3279



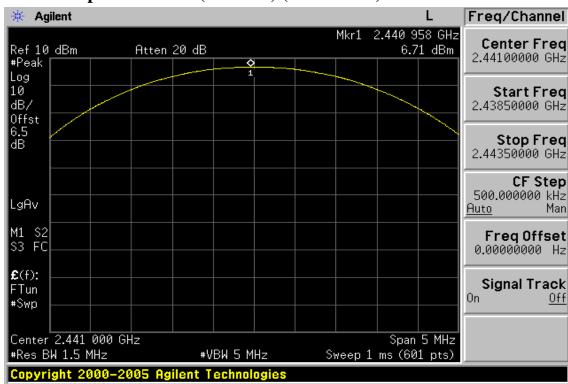
Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 21 of 65

Peak Power Output Data Plot (CH Low) (EDR mode)



Peak Power Output Data Plot (CH Mid) (EDR mode)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明。此報告結果僅對測試之樣品負責,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 (www.sgs.com/terms and conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms and Conditions of Electronic Documents (www.sgs.com/terms and conditions htm) and Terms and Conditions for Electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/site.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

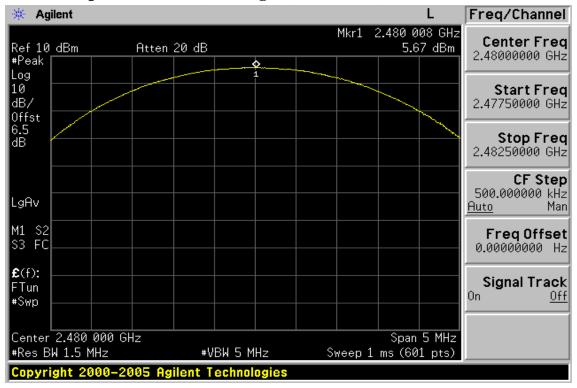
t (886-2) 2299-3279



Report No.: EH/2009/80059 **Issue Date: Dec. 29, 2009**

Page: 22 of 65

Peak Power Output Data Plot (CH High) (EDR mode)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, Onless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) the sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) the sample(s) tested and such sample(s) are retained for 90 days only. This test report retained for 90 days only 10 ment is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. SGS Taiwan Ltd.

No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號



Report No.: EH/2009/80059 **Issue Date: Dec. 29, 2009**

Page: 23 of 65

7. 20dB BAND WIDTH

7.1. Standard Applicable

For frequency hopping systems operating in the 2400MHz-2483.5 MHz no limit for 20dB bandwidth.

7.2. Measurement Equipment Used

Refer to section 6.2 for details.

7.3. Test Set-up

Refer to section 6.3 for details.

7.4. Measurement Procedure:

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 3. Set the spectrum analyzer as RBW=10KHz (1 % of Bandwidth.), Span= 3MHz, Sweep=auto
- 4. Mark the peak frequency and –20dB (upper and lower) frequency.
- 5. Repeat above procedures until all frequency measured were complete.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, Onless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) the sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) the sample(s) tested and such sample(s) are retained for 90 days only. This test report retained for 90 days only 10 ment is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents SGS Taiwan Ltd.

No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan / 台北縣五股工業區五工路 134 號

www.tw.sgs.com



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 24 of 65

7.5. Measurement Result:

BDR mode:

СН	Bandwidth
	(kHz)
Lower	920.579
Mid	921.088
Higher	887.911

EDR mode:

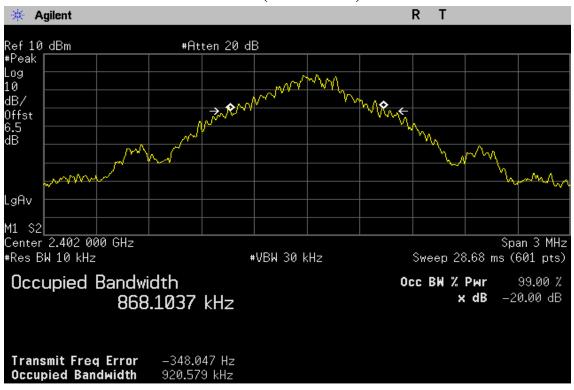
СН	Bandwidth	2/3 Bandwidth
	(MHz)	(MHz)
Lower	1.307	0.871
Mid	1.277	0.851
Higher	1.28	0.853



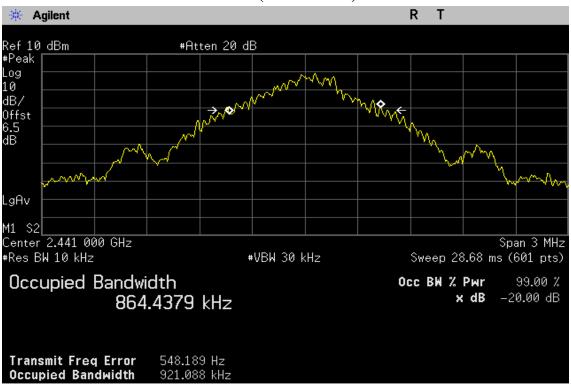
Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 25 of 65

20dB Band Width Test Data CH-Low (BDR mode)



20dB Band Width Test Data CH-Mid (BDR mode)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,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 (www.sgs.com/terms and conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms end conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms end conditions and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

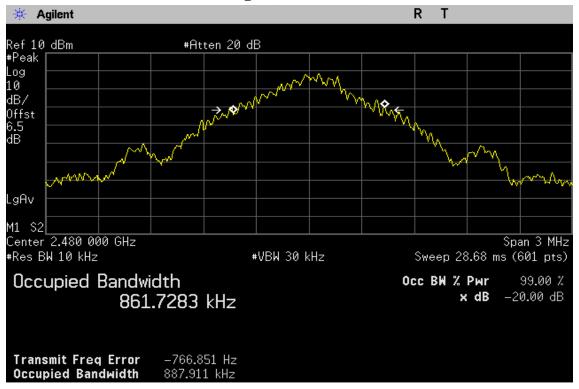
t (886-2) 2299-3279



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 26 of 65

20dB Band Width Test Data CH-High (BDR mode)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,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 (www.sgs.com/terms and conditions. It and Terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/terms com/terms and conditions for Electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/terms is com/terms in the intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

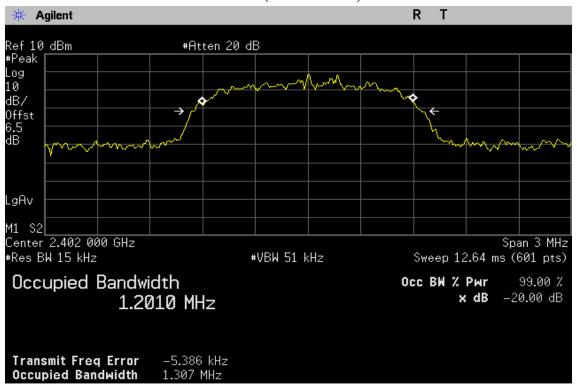
t (886-2) 2299-327



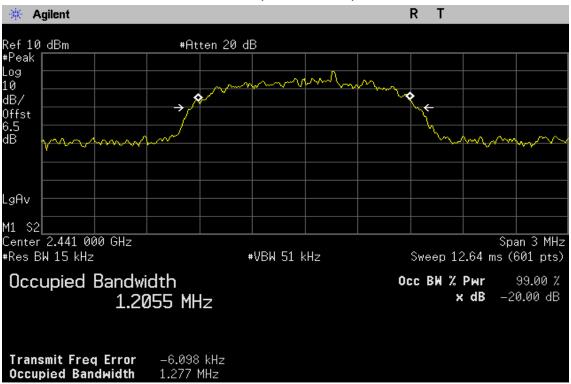
Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 27 of 65

20dB Band Width Test Data CH-Low (EDR mode)



20dB Band Width Test Data CH-Mid (EDR mode)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,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 (www.sgs.com/terms and conditions. In and Terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/terms e-document.htm). Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

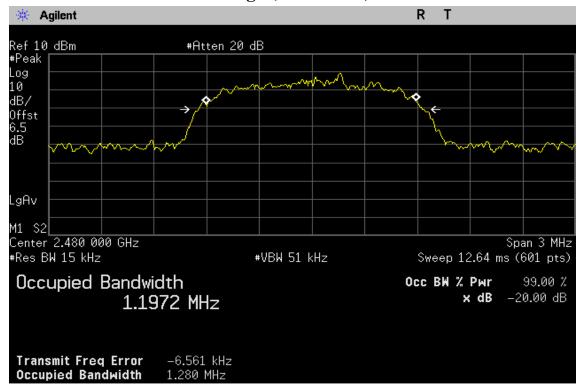
t (886-2) 2299-3279



Report No.: EH/2009/80059 **Issue Date: Dec. 29, 2009**

Page: 28 of 65

20dB Band Width Test Data CH-High (EDR mode)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, onless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained of 90 days only. This test report raining be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,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 (www.sgs.com/terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/authentication. Any holder of this document ment is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. SGS Taiwan Ltd.

No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司



Report No.: EH/2009/80059 **Issue Date: Dec. 29, 2009**

Page: 29 of 65

100KHz BANDWIDTH OF BAND EDGES MEASUREMENT

8.1. Standard Applicable

According to §15.247(c), in any 100 KHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100KHz bandwidth within the band that contains the highest level of the desired power, In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in15.209(a).

8.2. Measurement Equipment Used

8.2.1. Conducted Emission at antenna port:

Refer to section 6.2 for details.

8.2.2. Radiated emission:

	90	66 Chamber			
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.
TYPE		NUMBER	NUMBER	CAL.	
Spectrum Analyzer	R&S	FSP 40	100034	02/12/2009	02/11/2010
Loop antenna	MESSTEC	FLA30	03/10086	07/08/2009	07/07/2011
Bilog Antenna	SCHWAZBECK	VULB9160	9160-3136	11/19/2009	11/18/2010
Horn antenna	SCHWAZBECK	BBHA 9120D	9120D-673	05/09/2008	05/08/2010
Pre-Amplifier	Agilent	8447D	1937A02834	11/28/2009	11/27/2010
Pre-Amplifier	Agilent	8449B	3008A01973	01/05/2009	01/04/2010
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	SUCOFLEX 104PEA-10M	10m	01/05/2009	01/04/2010
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA-3M	3m	01/05/2009	01/04/2010
3m Site	SGS	966 chamber	N/A	11/08/2009	11/09/2010

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, Onless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) the sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) the sample(s) tested and such sample(s) are retained for 90 days only. This test report retained for 90 days only 10 ment is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents SGS Taiwan Ltd.

No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan / 台北縣五股工業區五工路 134 號



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 30 of 65

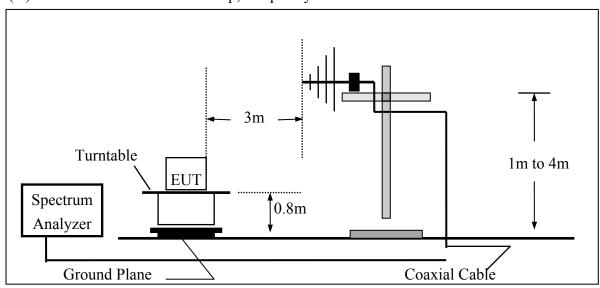
8.3. Test SET-UP:

8.3.1. Conducted Emission at antenna port:

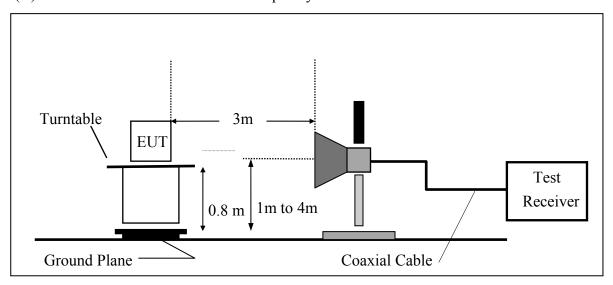
Refer to section 6.3 for details.

8.3.2. Radiated emission:

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



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



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Seg..com/terms and conditions. The and Terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/terms.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan/台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2009/80059 **Issue Date: Dec. 29, 2009**

Page: 31 of 65

8.4. Measurement Procedure

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 3. Set center frequency of spectrum analyzer = operating frequency.
- 4. Set the spectrum analyzer as RBW, VBW=100KHz, Span=25MHz, Sweep = auto
- 5. Mark Peak, 2.390GHz and 2.4835GHz and record the max. level.
- 6. Repeat above procedures until all frequency measured were complete.
- 7. Radiated Emission refer to section 9.

8.5. Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor(if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where	FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
	RA = Reading Amplitude	AG = Amplifier Gain
	AF = Antenna Factor	

8.6. Measurement Result

Note: Refer to next page spectrum analyzer data chart and 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. This test report cannot be reproduced, Onless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) the sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) the sample(s) tested and such sample(s) are retained for 90 days only. This test report retained for 90 days only 10 ment is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents SGS Taiwan Ltd.

No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan / 台北縣五股工業區五工路 134 號

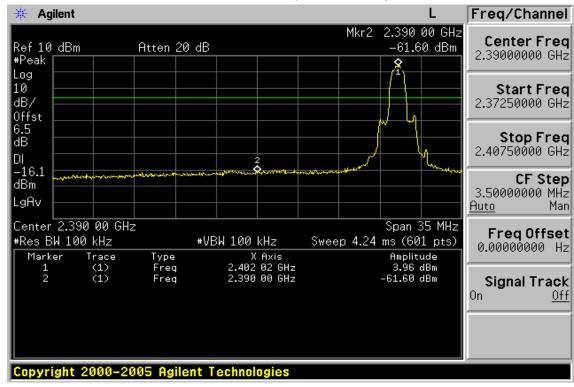
台灣檢驗科技股份有限公司

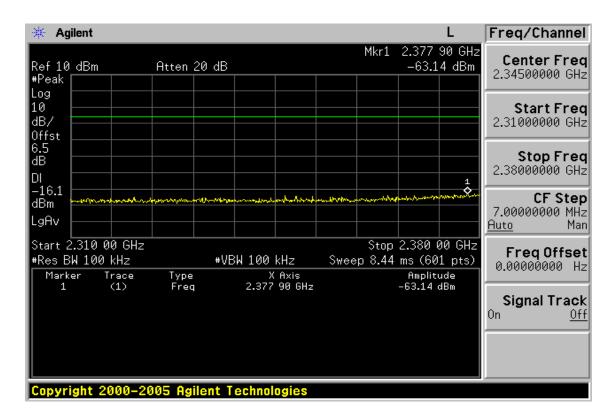


Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 32 of 65

Conducted Emission: Test Data CH-Low (EDR mode)





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯乏。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

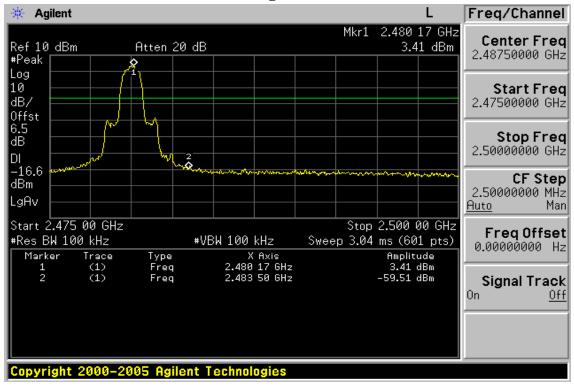
台灣檢驗科技股份有限公司 t (886-2) 2299-3279



Report No.: EH/2009/80059 **Issue Date: Dec. 29, 2009**

Page: 33 of 65

Conducted Emission: Test Data CH-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. This test report cannot be reproduced, Onless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) the sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) the sample(s) tested and such sample(s) are retained for 90 days only. This test report retained for 90 days only 10 ment is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. SGS Taiwan Ltd.

No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 34 of 65

Radiated Emission: (EDR mode)

Operation Mode TX CH Low Test Date Oct. 25, 2009

Fundamental Frequency 2402 MHz Test By Bondi Temperature $25 \,^{\circ}\text{C}$ Pol Ver.

Humidity 65 %

	Peak	\mathbf{AV}		Actu	al FS	Peak	\mathbf{AV}		
Freq.	Reading	Reading	Ant./CL	Peak	\mathbf{AV}	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
2390.00	54.90		-1 0. 66	44.24		74.00	54.00	-9.76	Peak
Operation	Mode	TX C	H Low			Test	Date Oc	t. 25, 200	9
Fundamental Frequency		ncy 2402	MHz			Test By		ndi	
Temperature		25 ℃				Pol	Но	Hor.	
Humidity		65 %							

	Peak	\mathbf{AV}		Actu	al FS	Peak	\mathbf{AV}		
Freq.	Reading	Reading	Ant./CL	Peak	\mathbf{AV}	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
2390.00	56.30		-10.66	45.64		74.00	54.00	-8.36	Peak

Remark:

- (1) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (2) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column_o
- (3) Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200 ms.
- (4) Spectrum AV Setting: 1GHz-26GHz, RBW=1MHz, VBW=10Hz, Sweep time=200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Seg..com/terms and conditions. The and Terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/terms.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 35 of 65

Radiated Emission: (EDR mode)

Operation Mode TX CH High Test Date Oct. 25, 2009

Fundamental Frequency 2480 MHz Test By Bondi Temperature 25 °C Pol Ver.

Humidity 65 %

	Peak	\mathbf{AV}		Actu	al FS	Peak	\mathbf{AV}		
Freq.	Reading	Reading	Ant./CL	Peak	\mathbf{AV}	Limit	Limit	Margin	Re mark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
2483.50	47.92		-0.92	47.00		74.00	54.00	-7.00	Peak
Operation	Mode	TX C	H High			Test	Date Oc	t. 25, 200	9
Fundamen	tal Frequer	ncy 2480	MHz			Test ?	By Bo	ndi	
Temperature		25 ℃				Pol	Но	r.	
Humidity		65 %							

	Peak	\mathbf{AV}		Actu	al FS	Peak	\mathbf{AV}		
Freq.	Reading	Reading	Ant./CL	Peak	\mathbf{AV}	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
2483.50	56.74	50.31	-0.92	55.82	4939	74.00	54.00	-4.61	AV

Remark:

- (1) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (2) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column_o
- (3) Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200 ms.
- (4) Spectrum AV Setting: 1GHz-26GHz, RBW=1MHz, VBW=10Hz, Sweep time=200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Seg..com/terms and conditions. The and Terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/terms.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

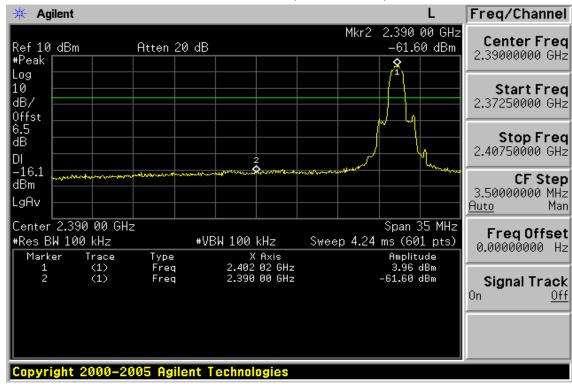
SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

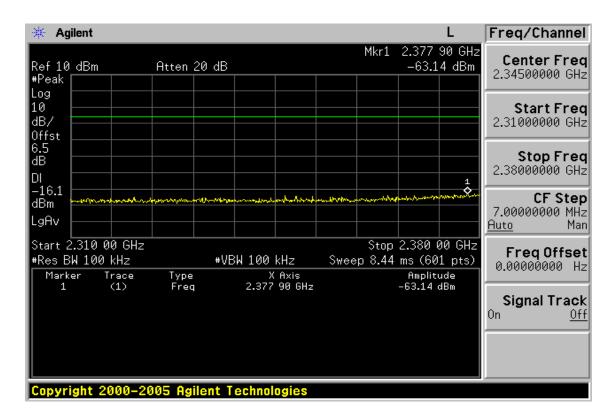


Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 36 of 65

Conducted Emission: Test Data CH-Low (EDR mode)





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留の天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

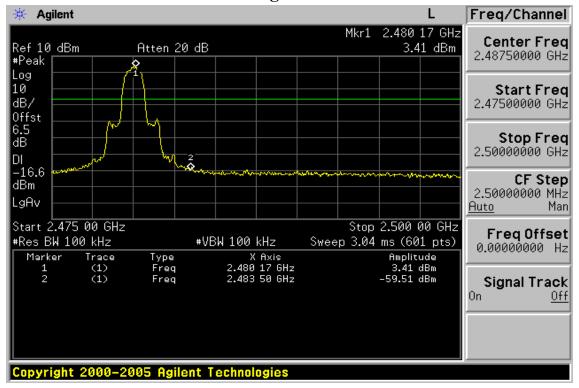
t (886-2) 2299-3279



Report No.: EH/2009/80059 **Issue Date: Dec. 29, 2009**

Page: 37 of 65

Conducted Emission: Test Data CH-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. This test report cannot be reproduced, Onless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) the sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) the sample(s) tested and such sample(s) are retained for 90 days only. This test report retained for 90 days only 10 ment is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. SGS Taiwan Ltd.

No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2009/80059 **Issue Date: Dec. 29, 2009**

Page: 38 of 65

Radiated Emission: (EDR mode)

TX CH Low Operation Mode Test Date Oct. 25, 2009

Fundamental Frequency 2402 MHz Test By Bondi Temperature 25 °C Pol Ver.

Humidity 65 %

	Peak	\mathbf{AV}		Actu	al FS	Peak	\mathbf{AV}		
Freq.	Reading	Reading	Ant./CL	Peak	\mathbf{AV}	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
2390.00	54.90		-1 0. 66	44.24		74.00	54.00	-9.76	Peak
Operation	Mode	TX C	H Low			Test	Date Oc	t. 25, 200	9
Fundamen	tal Frequer	ncy 2402	MHz			Test	By Bo	ndi	
Temperatu	re	25 ℃				Pol	Но	r.	
Humidity		65 %							

	Peak	\mathbf{AV}		Actu	al FS	Peak	\mathbf{AV}		
Freq.	Reading	Reading	Ant./CL	Peak	\mathbf{AV}	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
2390.00	56.30		-10.66	45.64		74.00	54.00	-8.36	Peak

Remark:

- (1) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (2) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column_o
- (3) Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200 ms.
- (4) Spectrum AV Setting: 1GHz-26GHz, RBW=1MHz, VBW=10Hz, Sweep time=200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, Onless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) the sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) the sample(s) tested and such sample(s) are retained for 90 days only. This test report retained for 90 days only 10 ment is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 39 of 65

Radiated Emission: (EDR mode)

Operation Mode TX CH High Test Date Oct. 25, 2009

Fundamental Frequency 2480 MHz Test By Bondi Temperature 25 °C Pol Ver.

Humidity 65 %

	Peak	\mathbf{AV}		Actu	al FS	Peak	\mathbf{AV}		
Freq.	Reading	Reading	Ant./CL	Peak	\mathbf{AV}	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
2483.50	47.92		-0.92	47.00		74.00	54.00	-7.00	Peak
Operation Fundament	tal Frequer	ncy 2480				Test I	By Bo		9
Temperatu	re	25 ℃				Pol	Но	r.	
Humidity		65 %							

	Peak	\mathbf{AV}		Actu	al FS	Peak	\mathbf{AV}		
Freq.	Reading	Reading	Ant./CL	Peak	\mathbf{AV}	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
2483.50	56.74	50.31	-0.92	55.82	49.39	74.00	54.00	-4.61	Peak

Remark:

- (1) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (2) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column_o
- (3) Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200 ms.
- (4) Spectrum AV Setting: 1GHz-26GHz, RBW=1MHz, VBW=10Hz, Sweep time=200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯乏。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan / 台北縣五股工業區五工路 134 號



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 40 of 65

9. SPURIOUS RADIATED EMISSION TEST

9.1. Standard Applicable

According to §15.247(c), all other emissions outside these bands shall not exceed the general radiated emission limits specified in §15.209(a). And according to §15.33(a)(1), for an intentional radiator operates below 10GHz, the frequency range of measurements: to the tenth harmonic of the highest fundamental frequency or to 40GHz, whichever is lower.

9.2. Measurement Equipment Used:

9.2.1. Conducted Emission at antenna port:

Refer to section 6.2 for details.

9.2.2. Radiated emission:

Refer to section 7.2 for details.

9.3. Test **SET-UP**:

9.3.1. Conducted Emission at antenna port:

Refer to section 6.3 for details.

9.3.2. Radiated emission:

Refer to section 7.3 for details.

9.4. Measurement Procedure:

- 1. The EUT was placed on a turn table which is 0.8m above ground plane.
- 2. The turn table shall rotate 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emissions.
- 4. When 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.
- 5. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 6. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 7. Repeat above procedures until all frequency measured were complete.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,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 (www.sgs.com/terms and conditions.htm and Terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/terms com/authentication. Any holder of this document documents is document for an original formation contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.



Report No.: EH/2009/80059 **Issue Date: Dec. 29, 2009**

Page: 41 of 65

9.5. Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor(if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where	FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
	RA = Reading Amplitude	AG = Amplifier Gain
	AF = Antenna Factor	

9.6. Measurement Result:

Note: Refer to next page spectrum analyzer data chart and 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. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留%天。本報告未經本公司書面許可,不可部份複製 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms and Conditions of Electronic Documents (www.sgs.com/terms and Conditions for Electronic Documents (www.sgs.com/terms and Conditions of Electronic Documents (ment is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents SGS Taiwan Ltd.

No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan / 台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

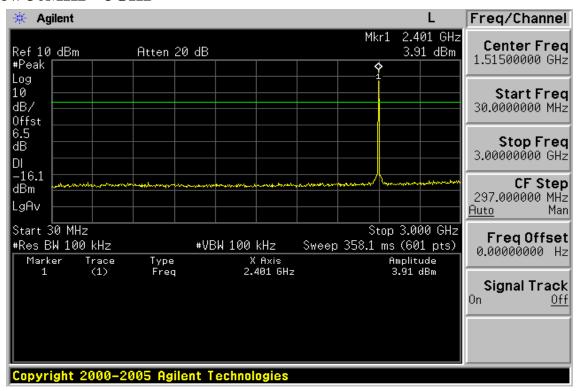
t (886-2) 2299-3279



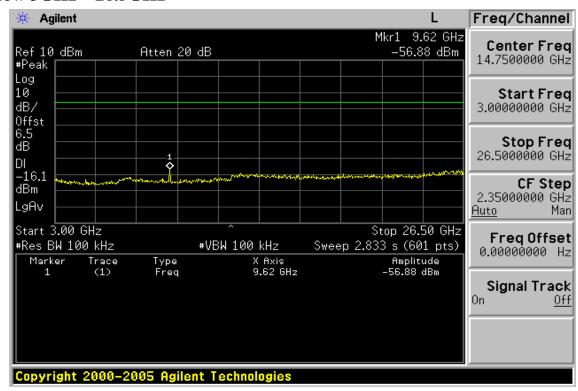
Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 42 of 65

Conducted Spurious Emission Measurement Result (EDR mode worst case) Ch Low 30MHz – 3GHz



Ch Low 3GHz – 26.5GHz



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明。此報告結果僅對測試之樣品負責,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 (www.sgs.com/terms.and.conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms.e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.onsite.com/authentication. Any holder of this document doswised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

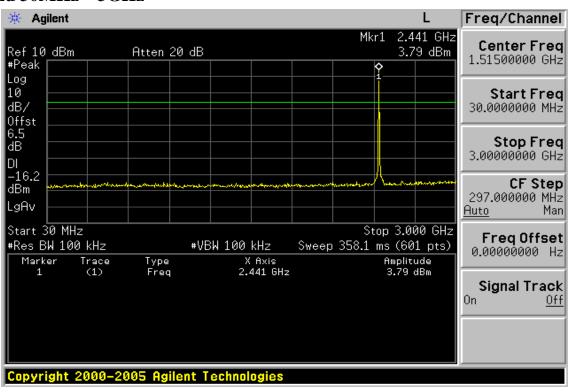
t (886-2) 2299-3279



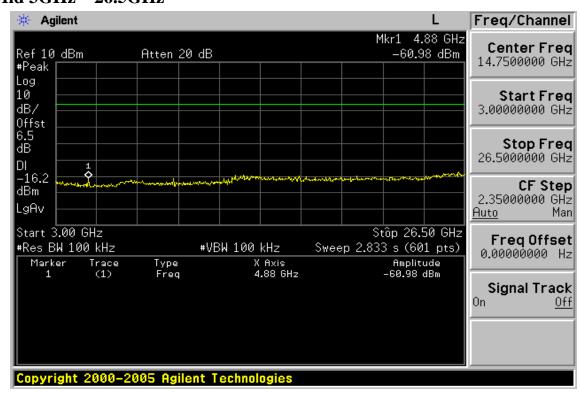
Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 43 of 65

Ch Mid 30MHz - 3GHz



Ch Mid 3GHz - 26.5GHz



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯乏。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

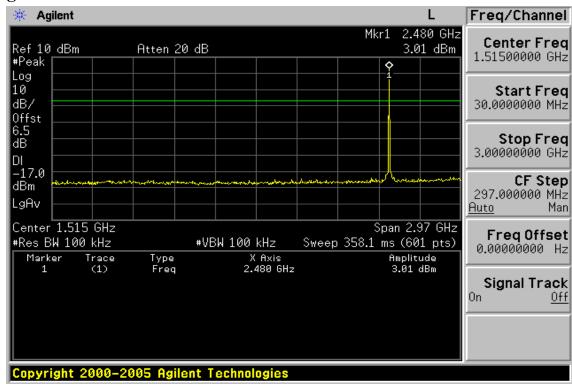
限公司 t (886-2) 2299-3279



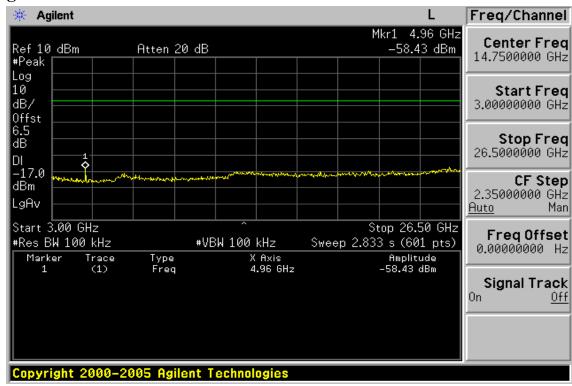
Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 44 of 65

Ch High 30MHz – 3GHz



Ch High 3GHz - 26.5GHz



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯乏。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



Report No.: EH/2009/80059 **Issue Date: Dec. 29, 2009**

Page: 45 of 65

Radiated Spurious Emission Measurement Result (below 1GHz) (EDR mode worst case)

Operation Mode TX CH Low Test Date Oct. 25, 2009 Fundamental Frequency 2402MHz Test By Bondi Temperature Pol Ver./Hor.

25 °C Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
58.13	V	Peak	55.51	-27.05	28.46	40.00	-11.54
104.69	V	Peak	59.64	-29.95	29.69	43.50	-13.81
158.04	V	Peak	46.68	-27.13	19.55	43.50	-23.95
252.13	V	Peak	51.20	-27.93	23.27	46.00	-22.73
347.19	V	Peak	44.64	-25.47	19.17	46.00	-26.83
455.83	V	Peak	44.63	-23.60	21.03	46.00	-24.97
94.90	Н	Peak	55.54	-30.81	24.73	43.50	-18.77
150.28	Н	Peak	45.78	-26.58	30.74	43.50	-12.76
281.30	Н	Peak	46.26	-27.08	19.18	46.00	-26.82
353.98	Н	Peak	44.70	-25.33	19.37	46.00	-26.63
455.83	Н	Peak	46.30	-23.60	31.28	46.00	-14.72
555.74 Remark:	Н	Peak	46.19	-21.74	24.45	46.00	-21.55

- 1 Measuring frequencies from 30 MHz to the 1GHz •
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, Onless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) the sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) the sample(s) tested and such sample(s) are retained for 90 days only. This test report retained for 90 days only 10 ment is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號 t (886-2) 2299-3279



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 46 of 65

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode TX CH Mid Test Date Oct. 25, 2009
Fundamental Frequency 2441MHz Test By Bondi
Temperature 25 °C Pol Ver./Hor.

Temperature 25 °C Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
58.13	V	Peak	55.83	-27.05	28.78	40.00	-11.22
104.69	V	Peak	58.96	-29.95	29.01	43.50	-14.49
240.49	V	Peak	51.35	-28.33	23.02	46.00	-22.98
347.19	V	Peak	46.08	-25.47	31.13	46.00	-14.87
444.19	V	Peak	45.58	-23.76	21.82	46.00	-24.18
601.33	V	Peak	44.35	-20.77	31.32	46.00	-14.68
104.69	Н	Peak	56.86	-29.95	26.91	43.50	-16.59
150.28	Н	Peak	45.97	-26.58	19.39	43.50	-24.11
281.23	Н	Peak	46.26	-27.08	19.18	46.00	-26.82
353.98	Н	Peak	44.70	-25.33	19.37	46.00	-26.63
455.83	Н	Peak	46.30	-23.60	22.70	46.00	-23.30
555.74 Remark:	Н	Peak	46.19	-21.74	24.45	46.00	-21.55

- 1 Measuring frequencies from 30 MHz to the 1GHz •
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯乏。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 47 of 65

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode TX CH High Test Date Oct. 25, 2009

Fundamental Frequency 2480MHz Test By Bondi
Temperature 25 °C Pol Ver./Hor.

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
58.13	V	Peak	55.43	-27.05	28.38	40.00	-11.62
104.69	V	Peak	58.71	-29.95	28.76	43.50	-14.74
158.04	V	Peak	46.65	-27.13	19.52	43.50	-23.98
240.49	V	Peak	51.21	-28.33	22.88	46.00	-23.12
347.19	V	Peak	46.71	-25.47	21.24	46.00	-24.76
458.74	V	Peak	44.89	-23.56	21.33	46.00	-24.67
104.69	Н	Peak	59.11	-29.95	29.16	43.50	-14.34
158.04	Н	Peak	46.95	-27.13	19.82	43.50	-23.68
266.68	Н	Peak	46.11	-27.56	18.55	46.00	-27.45
352.04	Н	Peak	46.71	-25.37	21.34	46.00	-24.66
460.68	Н	Peak	46.78	-23.53	23.25	46.00	-22.75
552.83	Н	Peak	44.57	-21.80	22.77	46.00	-23.23
Remark:							

- 1 Measuring frequencies from 30 MHz to the 1GHz •
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留の天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 48 of 65

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode TX CH Low Test Date Oct. 25, 2009

Fundamental Frequency 2402 MHz Test By Bondi Temperature 25 °C Pol Ver.

Humidity 65 %

		Peak	\mathbf{AV}		Actu	al FS	Peak	\mathbf{AV}	
	Freq.	Reading	Reading	Ant./CL	Peak	\mathbf{AV}	Limit	Limit	Margin
_	(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)
	4718.0	45.16		-6.04	39.12		74.00	54.00	-14.88
	4804.0						74.00	54.00	
	7206.0						74.00	54.00	
	9608.0						74.00	54.00	
	12010.0						74.00	54.00	
	14412.0						74.00	54.00	
	16814.0						74.00	54.00	
	19216.0						74.00	54.00	
	21618.0						74.00	54.00	
	24020.0						74.00	54.00	

Remark:

- (1) Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- (2) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (3) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (4) Spectrum Peak Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms
- (5) Spectrum AV Setting: 1GHz-26GHz, RBW=1MHz, VBW=10Hz, Sweep time=200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Seg..com/terms and conditions. The and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/terms.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 49 of 65

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode TX CH Low Test Date Oct. 25, 2009

Fundamental Frequency 2402 MHz Test By Bondi Temperature 25 °C Pol Hor.

Humidity 65 %

	Peak	\mathbf{AV}		Actu	al FS	Peak	\mathbf{AV}	
Freq.	Reading	Reading	Ant./CL	Peak	\mathbf{AV}	Limit	Limit	Margin
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)
4763.5	44.39		-5.97	38.42		74.00	54.00	-15.58
4804.0						74.00	54.00	
7206.0						74.00	54.00	
9608.0						74.00	54.00	
12010.0						74.00	54.00	
14412.0						74.00	54.00	
16814.0						74.00	54.00	
19216.0						74.00	54.00	
21618.0						74.00	54.00	
24020.0						74.00	54.00	

Remark:

- (1) Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- (2) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (3) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (4) Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200 ms.
- (5) Spectrum AV Setting: 1GHz-26GHz, RBW=1MHz, VBW=10Hz, Sweep time=200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Seg..com/terms and conditions. The and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/terms.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 50 of 65

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode TX CH Mid Test Date Oct. 25, 2009

Fundamental Frequency 2441 MHz Test By Bondi Temperature 25 °C Pol Ver.

Humidity 65 %

rgin
lB)
5.66
]

Remark:

- (1) Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- (2) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (3) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (4) Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200 ms.
- (5) Spectrum AV Setting: 1GHz-26GHz, RBW=1MHz, VBW=10Hz, Sweep time=200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Seg..com/terms and conditions. The and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/terms.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 51 of 65

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode TX CH Mid Test Date Oct. 25, 2009

Fundamental Frequency 2441 MHz Test By Bondi Temperature 25 °C Pol Hor.

Humidity 65 %

	Peak	\mathbf{AV}		Actu	al FS	Peak	\mathbf{AV}	
Freq.	Reading	Reading	Ant./CL	Peak	\mathbf{AV}	Limit	Limit	Margin
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)
4783.0	44.11		-5.92	38.19		74.00	54.00	-15.81
4882.0						74.00	54.00	
7323.0						74.00	54.00	
9764.0						74.00	54.00	
12205.0						74.00	54.00	
14646.0						74.00	54.00	
17087.0						74.00	54.00	
19528.0						74.00	54.00	
21969.0						74.00	54.00	
24410.0						74.00	54.00	

Remark:

- (1) Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- (2) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (3) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (4) Spectrum Peak Setting: 1GHz-26GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms
- (5) Spectrum AV Setting: 1GHz-26GHz, RBW=1MHz, VBW=10Hz, Sweep time=200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Seg..com/terms and conditions. The and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/terms.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 52 of 65

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode TX CH High Test Date Oct. 25, 2009

Fundamental Frequency 2480 MHz Test By Bondi Temperature 25 °C Pol Ver.

Humidity 65 %

	Peak	\mathbf{AV}		Actu	al FS	Peak	\mathbf{AV}	
Freq.	Reading	Reading	Ant./CL	Peak	\mathbf{AV}	Limit	Limit	Margin
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)
4796.0	44.12		-5.92	38.20		74.00	54.00	-15.80
4960.0						74.00	54.00	
7440.0						74.00	54.00	
9920.0						74.00	54.00	
12400.0						74.00	54.00	
14880.0						74.00	54.00	
17360.0						74.00	54.00	
19840.0						74.00	54.00	
22320.0						74.00	54.00	
24800.0						74.00	54.00	

Remark:

- (1) Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- (2) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (3) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (4) Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200 ms.
- (5) Spectrum AV Setting: 1GHz-26GHz, RBW=1MHz, VBW=10Hz, Sweep time=200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Seg..com/terms and conditions. The and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/terms.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 53 of 65

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode TX CH High Test Date Oct. 25, 2009

Fundamental Frequency 2480 MHz Test By Bondi Temperature 25 °C Pol Hor.

Humidity 65 %

	Peak	\mathbf{AV}		Actu	al FS	Peak	\mathbf{AV}	
Freq.	Reading	Reading	Ant./CL	Peak	\mathbf{AV}	Limit	Limit	Margin
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)
4620.5	44.20		-6.32	37.88		74.00	54.00	-16.12
4960.0						74.00	54.00	
7440.0						74.00	54.00	
9920.0						74.00	54.00	
12400.0						74.00	54.00	
14880.0						74.00	54.00	
17360.0						74.00	54.00	
19840.0						74.00	54.00	
22320.0						74.00	54.00	
24800.0						74.00	54.00	

Remark:

- (1) Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- (2) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (3) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (4) Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200 ms.
- (5) Spectrum AV Setting: 1GHz-26GHz, RBW=1MHz, VBW=10Hz, Sweep time=200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Seg..com/terms and conditions. The and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/terms.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.



Report No.: EH/2009/80059 **Issue Date: Dec. 29, 2009**

Page: 54 of 65

10. FREQUENCY SEPARATION

10.1. Standard Applicable

According to §15.247(a)(1), Frequency hopping systems shall have hopping channel carrier frequencies separated by minimum of 25KHz or the 2/3*20dB bandwidth of the hopping channel, whichever is greater.

10.2. Measurement Equipment Used:

Refer to section 6.2 for details.

10.3. Test Set-up:

Refer to section 6.3 for details.

10.4. Measurement Procedure:

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 3. Set center frequency of spectrum analyzer = middle of hopping channel.
- 4. Set the spectrum analyzer as RBW, VBW=100KHz, Adjust Span to 3.0 MHz, Sweep = auto.
- 5. Max hold. Mark 3 Peaks of hopping channel and record the 3 peaks frequency.

10.5. Measurement Result:

Channel separation (MHz)	Limit	Result	
1	>=25KHz or 2/3 times 20dB bandwidth	PASS	

Note: Refer to next page for plots.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留%天。本報告未經本公司書面許可,不可部份複製 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms and Conditions for Electronic Documents (www.sgs.com/terms and Conditions for Electronic Document (www.sgs.com/terms and Conditions for Electronic Documents (www.sgs.com/terms and Conditions for Elec ment is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents SGS Taiwan Ltd.

No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan / 台北縣五股工業區五工路 134 號

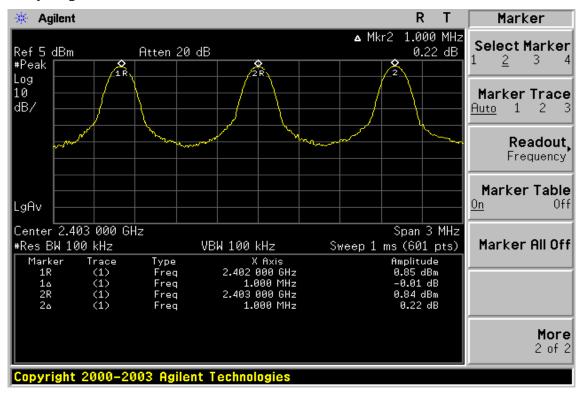
台灣檢驗科技股份有限公司



Report No.: EH/2009/80059 **Issue Date: Dec. 29, 2009**

Page: 55 of 65

Frequency Separation Test Data



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, Onless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) the sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) the sample(s) tested and such sample(s) are retained for 90 days only. This test report retained for 90 days only 10 ment is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. SGS Taiwan Ltd.

No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2009/80059 **Issue Date: Dec. 29, 2009**

Page: 56 of 65

11. NUMBER OF HOPPING FREQUENCY

11.1. Standard Applicable

According to §15.247(a)(1)(iii), Frequency hopping systems operating in the 2400MHz-2483.5 MHz bands shall use at least 15 hopping frequencies.

11.2. Measurement Equipment Used:

Refer to section 6.2 for details.

11.3. Test Set-up:

Refer to section 6.3 for details.

11.4. Measurement Procedure:

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 3. Set spectrum analyzer Start=2400MHz, Stop = 2483.5MHz, Sweep = auto.
- 4. Set the spectrum analyzer as RBW=430KHz, VBW=1MHz.
- 5. Max hold, view and count how many channel in the band.

11.5. Measurement Result:

Note: Refer to next page for plots.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, Onless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) the sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) the sample(s) tested and such sample(s) are retained for 90 days only. This test report retained for 90 days only 10 ment is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents SGS Taiwan Ltd.

No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan / 台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

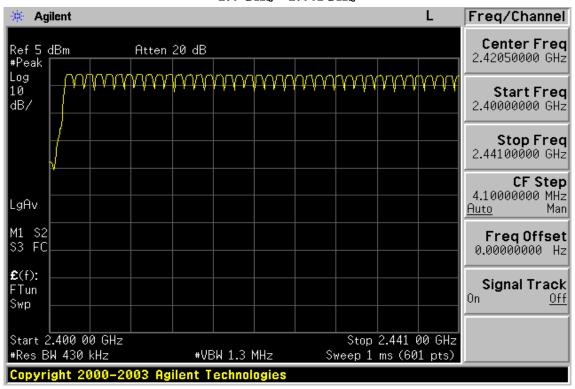


Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

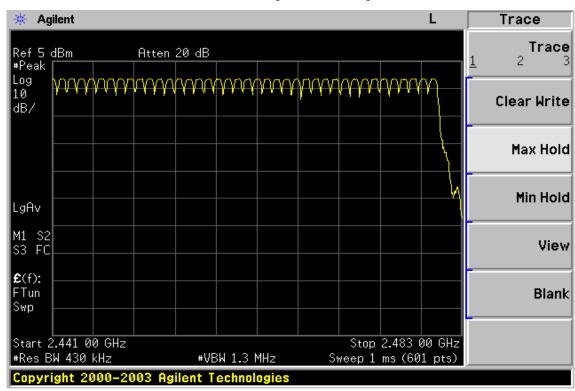
Page: 57 of 65

Channel Number

2.4 GHz - 2.441GHz



2.441 GHz - 2.4835GHz



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,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 (www.sgs.com/terms.and.conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms.e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/terms.ecom/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



Report No.: EH/2009/80059 **Issue Date: Dec. 29, 2009**

Page: 58 of 65

12. TIME OF OCCUPANCY (DWELL TIME)

12.1. Standard Applicable

According to §15.247(a)(1)(iii), Frequency hopping systems operating in the 2400MHz-2483.5 MHz. The average time of occupancy on any frequency shall not greater than 0.4 s within period of 0.4 seconds multiplied by the number of hopping channel employed.

12.2. Measurement Equipment Used:

Refer to section 6.2 for details.

12.3. Test Set-up:

Refer to section 6.3 for details.

12.4. Measurement Procedure:

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 3. Set center frequency of spectrum analyzer = operating frequency.
- 4. Set the spectrum analyzer as RBW, VBW=100KHz, Span = 0Hz, Adjust Sweep = 30s.
- 5. Repeat above procedures until all frequency measured were complete.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, Onless otherwise stated the results shown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report reter only to the sample(s) tested and such sample(s) the sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) tested and such sample(s) the sample(s) tested and such sample(s) are retained for 90 days only. This test report retained for 90 days only 10 ment is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents SGS Taiwan Ltd.

No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan / 台北縣五股工業區五工路 134 號



Report No.: EH/2009/80059 **Issue Date: Dec. 29, 2009**

Page: 59 of 65

12.5. Measurement Result

A period time = 0.4 (ms) * 79 = 31.6 (s)

CH Low: DH1 time slot = 0.417 (ms) * (1600/(2*79)) * 31.6 = 133.44 (ms)

DH3 time slot = 1.667 (ms) * (1600/(4*79)) * 31.6 = 266.72 (ms)

DH5 time slot = 2.925 (ms) * (1600/(6*79)) * 31.6 = 312.00 (ms)

DH1 time slot = 0.417 (ms) * (1600/(2*79)) * 31.6 = 133.44 (ms)CH Mid:

DH3 time slot = 1.667 (ms) * (1600/(4*79)) * 31.6 = 266.72 (ms)

DH5 time slot = 2.925 (ms) * (1600/(6*79)) * 31.6 = 312.00 (ms)

DH1 time slot = 0.417 (ms) * (1600/(2*79)) * 31.6 = 133.44 (ms)CH High:

DH3 time slot = 1.667 (ms) * (1600/(4*79)) * 31.6 = 266.72 (ms)

DH5 time slot = 2.925 (ms) * (1600/(6*79)) * 31.6 = 312.00 (ms)

Note: Refer to next page for plots.

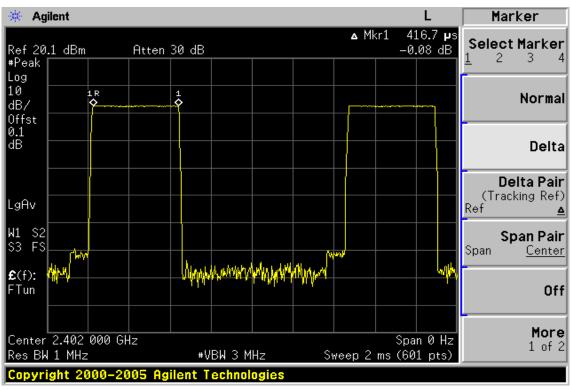
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留%天。本報告未經本公司書面許可,不可部份複製 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms and Terms and Conditions for Electronic Documents (www.sgs.com/terms and Terms and Conditions for Electronic Documents (www.sgs.com/terms and Terms and Conditions for Electronic Document (www.sgs.com/terms and Terms and Conditions for Electronic Document (www.sgs.com/terms and Terms and Conditions for Electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs ment is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents SGS Taiwan Ltd.



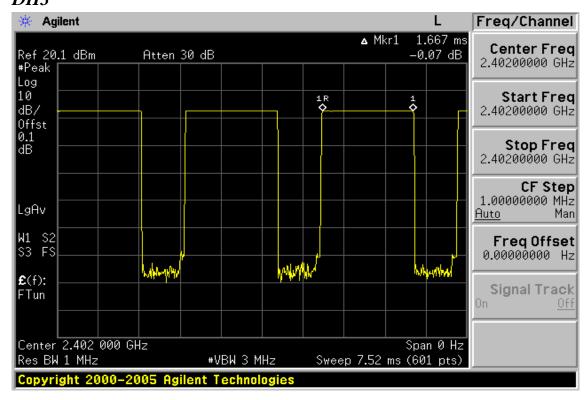
Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 60 of 65

CH-Low DH1



DH3



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留の天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

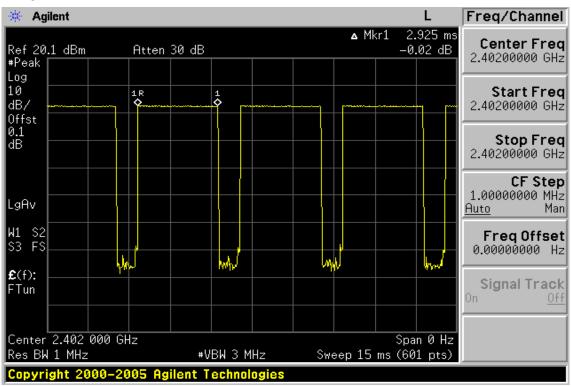
t (886-2) 2299-3279



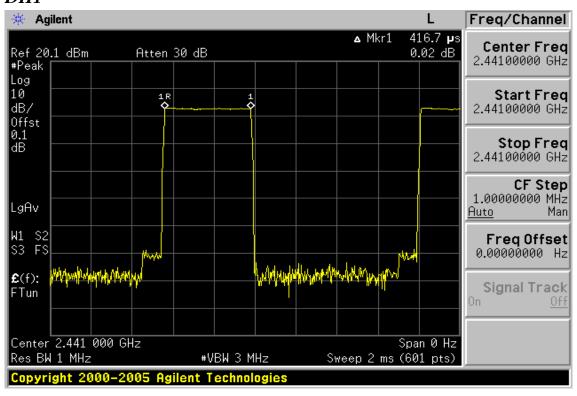
Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 61 of 65

DH5



CH-Mid DH1



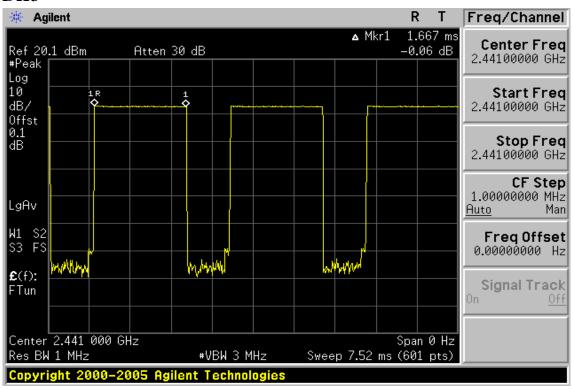
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留の天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.



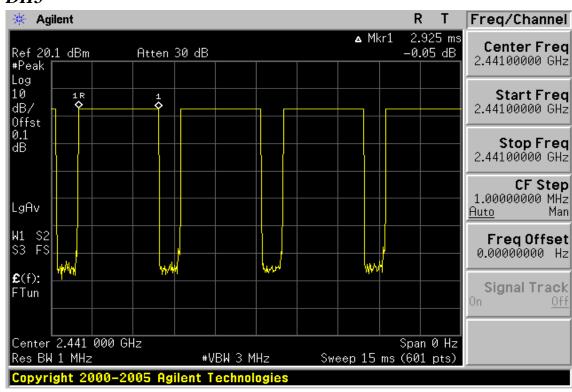
Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 62 of 65

DH3



DH5



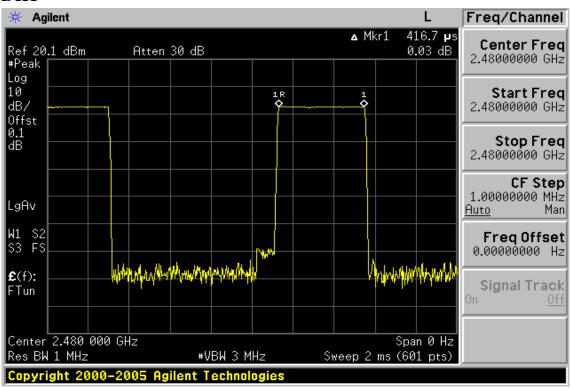
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留の天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.



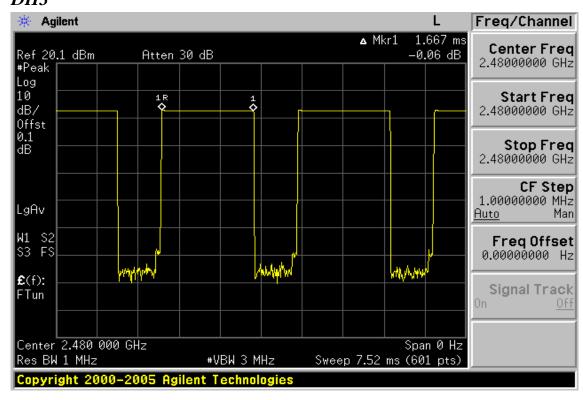
Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 63 of 65

CH-High DH1



DH3



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留の天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms and Conditions for Electronic Documents (www.sgs.com/terms e-document.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. Even if printed this electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/authentication. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

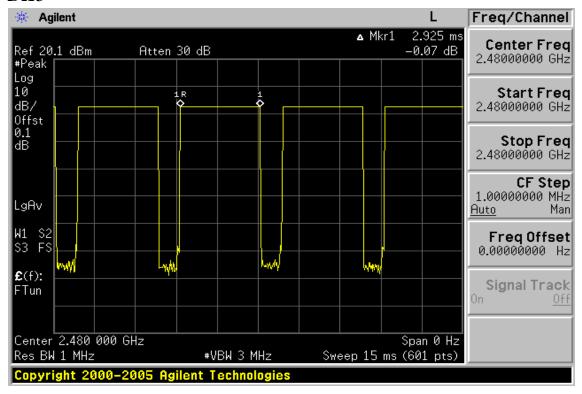
f (886-2) 2298-0488



Report No.: EH/2009/80059 Issue Date: Dec. 29, 2009

Page: 64 of 65

DH5



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,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 (www.sgs.com/terms and conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms and conditions.htm) and Terms and Conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.sgs.com/terms and conditions for Electronic Documents (www.s SGS Taiwan Ltd.



Report No.: EH/2009/80059 **Issue Date: Dec. 29, 2009**

Page: 65 of 65

13. ANTENNA REQUIREMENT

13.1. Standard Applicable

For intentional device, according to §15.203, an intentional radiator shall be designed to ensure that no antenna other than furnished by the responsible party shall be used with the device.

And according to §15.247(4)(1), system operating in the 2400-2483.5MHz bands that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum peak output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

13.2. Antenna Connected Construction

The directional gains of antenna used for transmitting is -3 dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Please see EUT photo for details.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留%天。本報告未經本公司書面許可,不可部份複製 This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/terms and Terms and Conditions for Electronic Documents (www.sgs.com/terms and Terms and Conditions for Electronic Documents (www.sgs.com/terms and Terms and Conditions for Electronic Document (www.sgs.com/terms and Terms and Conditions for Electronic Document (www.sgs.com/terms and Terms and Conditions for Electronic document is to be treated as an original within the meaning of UCP 600 article 20b. The authenticity of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs.com/authentication. Any holder of this document may be verified at www.sgs ment is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents SGS Taiwan Ltd.

t (886-2) 2299-3279

No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan / 台北縣五股工業區五工路 134 號

台灣檢驗科技股份有限公司