

Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 1 of 248

ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 15 SUBPART C REQUIREMENT

OF

Product Name: PDA Phone

Brand Name: Sony

Type No.: PM-0731-BV

Model Difference: N/A

FCC ID: PY7PM-0731

Report No.: EH/2014/10015

Issue Date: Mar. 21, 2014

FCC Rule Part: §15.247, Cat: DTS

Sony Mobile Communications AB Prepared for:

Nya Vattentornet 22188 Lund/Sweden

SGS Taiwan Ltd.

Electronics & Communication Laboratory

Prepared by: No.134, Wu Kung Road, New Taipei Industrial

Park, Wuku District, New Taipei City, Taiwan

24803





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

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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

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

SGS Taiwan Ltd.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 2 of 248

VERIFICATION OF COMPLIANCE

Applicant: Sony Mobile Communications AB

Nya Vattentornet 22188 Lund/Sweden

PDA Phone **Product Name:**

Brand Name: Sony

PM-0731-BV **Type No.:**

Model Difference: N/A

FCC ID: PY7PM-0731

File Number: EH/2014/10015

Date of test: Jan. 27, 2014 ~ Mar. 21, 2014

Date of EUT Received: Jan. 27, 2014

We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. Electronics & Communication Laboratory The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4:2009 & ANSI 63.10:2009 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:	Marcus Iseng	Date	Mar. 21, 2014
Prepared By:	Marcus Tseng/Engineer Julia Chang	Date	Mar. 21, 2014
Approved By:	Julia Chang / Clerk Jim Chang / Supervisor	Date	Mar. 21, 2014

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 3 of 248

Revision History

Report Number	Revision	Description	Issue Date
EH/2014/10015	Rev.00	Initial creation of document	Mar. 21, 2014

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 4 of 248

Table of Contents

1	GEN	ERAL INFORMATION	6
	1.1	Product description	6
	1.2	Related Submittal(s) / Grant (s)	13
	1.3	Test Methodology	13
	1.4	Test Facility	13
	1.5	Special Accessories	13
	1.6	Equipment Modifications	13
2	SYS	TEM TEST CONFIGURATION	14
	2.1	EUT Configuration	14
	2.2	EUT Exercise	14
	2.3	Test Procedure	14
	2.4	Configuration of Tested System	
3	SUM	IMARY OF TEST RESULTS	17
4	DES	CRIPTION OF TEST MODES	18
5	MEA	ASUREMENT UNCERTAINTY	19
6	CON	NDUCTED EMISSION TEST	20
	6.1	Standard Applicable:	20
	6.2	Measurement Equipment Used:	20
	6.3	EUT Setup:	20
	6.4	Test SET-UP (Block Diagram of Configuration)	21
	6.5	Measurement Procedure:	21
	6.6	Measurement Result:	21
7	PEA	K OUTPUT POWER MEASUREMENT	26
	7.1	Standard Applicable:	26
	7.2	Measurement Equipment Used:	27
	7.3	Test Set-up:	28
	7.4	Measurement Procedure:	28
	7.5	Measurement Result:	33
8	6dB	BANDWIDTH	37
	8.1	Standard Applicable:	
	8.2	Measurement Equipment Used:	
	8.3	Test Set-up:	
	8.4	Measurement Procedure:	38
	8.5	Measurement Result:	



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 5 of 248

9	BAN	D EDGES MEASUREMENT	49
	9.1	Standard Applicable:	49
	9.2	Measurement Equipment Used:	49
	9.3	Test SET-UP:	50
	9.4	Measurement Procedure:	51
	9.5	Field Strength Calculation:	52
	9.6	Measurement Result:	52
10	SPUE	RIOUS EMISSION TEST	69
	10.1	Standard Applicable	69
	10.2	Measurement Equipment Used:	69
	10.3	Test SET-UP:	69
	10.4	Measurement Procedure:	70
	10.5	Field Strength Calculation	70
	10.6	Measurement Result:	70
11	PEAL	X POWER SPECTRAL DENSITY	144
	11.1	Standard Applicable:	
	11.2	Measurement Equipment Used:	144
	11.3	Test Set-up:	144
	11.4	Measurement Procedure (following the measurement procedure 10.2 of KDB558074):	144
	11.5	Measurement Result:	145
12	ANT	ENNA REQUIREMENT	156
	12.1	Standard Applicable:	
	12.2	Antenna Connected Construction:	156
MF	EASTIR	EEMENT PLOT OF RADIATED SPURIOUS EMISSION	157

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

SGS Taiwan Ltd.

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 6 of 248

GENERAL INFORMATION

Product description

General:

Product Name:	PDA Phone			
Brand Name:	Sony			
Type No.:	PM-0731-	BV		
Model Difference:	N/A			
Data Cable (USB):	Type No.:	o.: EC450, Supplier: K-one AI-0700, Length: 100 cm		
		o.: EC801, Supplier: Sony AI-0401, Length: 100 cm		
Simple Hands-Free (SHF-White):	Model No. Type No.:	: MH410c, Supplier: Foster Electric AG-1100		
Simple Hands-Free (SHF-Black):		Model No.: MH410c, Supplier: Foster Electric Type No.: CCA-0004017		
Car Charger:	Model No.: AN400, Supplier: Salcomp Type No.: CAA-0003013			
Hi-Fi Wireless Headset:	Model No.: MW600, Supplier: BALDA Type No.: DDA-0002029.B coupling with Simple Hands Free (Model No.: MH755, Supplier: BALDA Type No.: AG-0502)			
Hardware Version:	A			
Software Version:	18.1.A.0.9			
	3.8Vdc			
	Battery:	Model No.: LIS1546ERPC, Supplier: Sony Type No.: N/A		
Power Supply:	Adapter:	1.Model No.: EP800, Supplier: Salcomp Type No.: CAA-0002016-US		
		2.Model No.: EP880, Supplier: Salcomp Type No.: AC-0400-US		

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

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

台灣檢驗科技股份有限公司

f (886-2) 2298-0488

www.tw.sqs.com



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 7 of 248

Bluetooth_BR+EDR:

Bluetooth Version:	V3.0+HS
Channel number:	79 channels
Modulation type:	Frequency Hopping Spread Spectrum
Transmit Power:	10.04dBm
Frequency Range:	2.402GHz – 2.480GHz
Dwell Time:	<= 0.4s
Antenna Designation:	PIFA Antenna, Gain: -1.34dBi

Bluetooth Low Energy:

Frequency Range:	2402 – 2480MHz
Bluetooth Version:	V4.0 Dual mode
Channel number:	40 channels
Modulation type:	GFSK
Transmit Power:	1.85dBm (Peak)
Antenna Designation:	PIFA Antenna, Gain: -1.34dBi

NFC:

Operating Frequency:	13.56MHz
Transmit Power:	< 123dBuV/m at 3m.
Number of Channels:	1
Antenna Type:	Loop Antenna
Modulation Type:	ASK, BPSK

Antenna Plus:

Operation Frequency:	2402 – 2480MHz
Transmit Power	101.78dBuV/m at 3m.
Channel number:	79
Modulation Type:	GFSK
Antenna Designation:	PIFA Antenna, Gain: -1.34dBi

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

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

SCSCT always Liv

**INCLUDED AND ALW With unported New Trigologic Part With Unior Part Multiput Part Multiput Part With Unior Part With Unior Part



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 8 of 248

GSM / WCDMA/ LTE:

	Operating Frequency		Rated Power
	GSM/GPRS 850, Class 33	824.2 MHz– 848.8 MHz	33dBm
	EDGE 850, Class 33	824.2 MHz– 848.8 MHz	27dBm
	GSM/GPRS 1900, Class 33	1850.2MHz – 1909.8MHz	30dBm
	EDGE 1900, Class 33	1850.2MHz – 1909.8MHz	26dBm
	WCDMA/HSUPA/HSDPA /HSPA+ Band II	1852.4MHz – 1907.6MHz	24dBm
	WCDMA/HSUPA/HSDPA /HSPA+ Band IV	1712.4MHz - 1752.6MHz	24dBm
	WCDMA/HSUPA/HSDPA /HSPA+ Band V	826.4MHz - 846.6MHz	24dBm
Cellular Phone	1.4MHz BW LTE-Band 4	1710.7MHz- 1754.3MHz	23dBm
Standards Frequency	3MHz BW LTE-Band 4	1711.5MHz – 1753.5MHz	23dBm
Range and Power	5MHz BW LTE-Band 4	1712.5MHz – 1752.5MHz	23dBm
	10MHz BW LTE-Band 4	1715MHz – 1750MHz	23dBm
	15MHz BW LTE-Band 4	1717.5MHz – 1747.5MHz	23dBm
	20MHz BW LTE-Band 4	1720MHz – 1745MHz	23dBm
	5MHz BW LTE-Band 7	2502.5MHz – 2567.5MHz	23dBm
	10MHz BW LTE-Band 7	2505.0MHz – 2565.0MHz	23dBm
	15MHz BW LTE-Band 7	2507.5MHz – 2562.5MHz	23dBm
	20MHz BW LTE-Band 7	2510.0MHz – 2560MHz	23dBm
	5MHz BW LTE-Band 17	706.5MHz – 713.5MHz	23dBm
	10MHz BW LTE-Band 17	709.0MHz –711.0MHz	23dBm

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

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

SCSCT always Liv

**INCLUDED AND ALW With unported New Trigologic Part With Unior Part Multiput Part Multiput Part With Unior Part With Unior Part



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 9 of 248

	T 222 - 222				
	GSM 850: 250KGXW, GSM 1900: 249KGXW				
	GPRS 850: 256KGXW, GPRS 1900: 248KGXW				
	EDGE 850: 253KG7W, EDGE 1900: 248KG7W				
	WCDMA Band II: 4M22F9W, WCDMA Band IV: 4M28F9W,				
	WCDMA Band V: 4M20F9W				
	HSDPA Band II: 4M17F9W, HSDPA Band IV: 4M23F9W,				
	HSDPA Band V: 4M12F9W				
	HSUPA Band II: 4M23F9W, HSUPA Band IV: 4M24F9W,				
	HSUPA Band V: 4M25F9W				
	1.4MHz BW LTE-Band 4 QPSK:1M10D7W				
	1.4MHz BW LTE-Band 4 16QAM: 1M10D7W				
	3MHz BW LTE-Band 4 QPSK: 2M71D7W				
	3MHz BW LTE-Band 4 16QAM: 2M71D7W				
	5MHz BW LTE-Band 4 QPSK: 4M50D7W				
	5MHz BW LTE-Band 4 16QAM: 4M50D7W				
	10MHz BW LTE-Band 4 QPSK: 8M98D7W				
Type of Emission:	10MHz BW LTE-Band 4 16QAM: 8M98D7W				
Jr	15MHz BW LTE-Band 4 QPSK: 13M45D7W				
	15MHz BW LTE-Band 4 16QAM: 13M48D7W				
	20MHz BW LTE-Band 4 QPSK: 17M91D7W				
	20MHz BW LTE-Band 4 16QAM: 7M94D7W				
	5MHz BW LTE-Band 7 QPSK: 4M51D7W				
	5MHz BW LTE-Band 7 16QAM: 4M51D7W				
	10MHz BW LTE-Band 7 QPSK: 9M01D7W				
	10MHz BW LTE-Band 7 16QAM: 8M99D7W				
	15MHz BW LTE-Band 7 QPSK: 13M46D7W				
	15MHz BW LTE-Band 7 16QAM: 13M46D7W				
	20MHz BW LTE-Band 7 QPSK: 17M92D7W				
	20MHz BW LTE-Band 7 16QAM: 17M93D7W				
	5MHz BW LTE-Band 17 QPSK: 4M151D7W				
	5MHz BW LTE-Band 17 QFSK. 4M151D7W 5MHz BW LTE-Band 17 16QAM: 4M51D7W				
	10MHz BW LTE-Band 17 QPSK: 8M97D7W				
	10MHz BW LTE-Band 17 16QAM: 8M94D7W				
IMEI:	004402452036837(2G&3G); 004402452038445(4G)				
1					

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

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

SCSCT always Liv

**INCLUDED AND ALW With unported New Trigologic Part With Unior Part Multiput Part Multiput Part With Unior Part With Unior Part



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 10 of 248

WLAN 5GHz:

Wi-Fi	Frequency Range	Channels	Rated Power (Avg)	Modulation Technology
11a	5150~5250	4	13.96dBm	OFDM
	5250~5350	4	13.97dBm	
	5470~5725	8	13.99dBm	
11n	HT20 5150~5250	4	HT20: 11.49dBm	OFDM
	HT20 5250~5350	4	HT20: 11.49dBm	
	HT20 5470~5725	8	HT20: 11.83dBm	
11n	HT40 5150~5250	2	HT40: 11.41dBm	OFDM
	HT40 5250~5350	2	HT40: 10.45dBm	
	HT40 5470~5725 3 HT40: 10.48dBm			
Antenna Designation	PIFA Antenna, 5GHz Gain: -0.38dBi (5150MHz-5250MHz) 5GHz Gain: 0.10dBi (5250MHz-5350MHz) 5GHz Gain: 3.98dBi (5470MHz-5725MHz)			
Modulation type	64QAM, 16QAM, QPSK, BPSK for OFDM			
Transition Rate:	802.11 a: 6/9/12/18/24/36/48/54 Mbps 802.11 n_20MHz: 6.5 – 65.0Mbps 802.11 n_40MHz: 13.5 – 135.0Mbps			

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

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

SCSCT always Liv

**INCLUDED AND ALW With unported New Trigologic Part With Unior Part Multiput Part Multiput Part With Unior Part With Unior Part



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 11 of 248

WLAN 2.4GHz+5.7GHz:

Wi-Fi	Frequency Range	ange Channels Rated Power		Modulation Technology		
11b/g	2412-2462	11	b: 20.35dBm g: 21.91dBm	DSSS, OFDM		
11n	HT20 2412-2462	11	HT20: 20.55dBm	OFDM		
11a	5725-5850	5	a: 21.15dBm			
11n (5GHz)	HT20 5725-5850	5	HT20: 20.22dBm	OFDM		
11n (5GHz)	HT40 5725-5850	2	HT40: 19.50dBm			
Antenna Des	ignation:	PIFA Antenna, 2.4GHz Gain: -1.34dBi 5GHz Gain: 4.51dBi (5725MHz-5850MHz)				
Modulation t	ype:	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM				
Transition R	ate:	802.11 a: 6/9/12/18/24/36/48/54 Mbps 802.11 b: 1/2/5.5/11 Mbps 802.11 g: 6/9/12/18/24/36/48/54 Mbps 802.11 n_20MHz: 6.5 – 65.0Mbps 802.11 n_40MHz: 13.5 – 135.0Mbps				

The 2.4G max antenna gain is -1.34dBi which was choosing for Radiated Spurious Emission test.

The 5G max antenna gain is 4.51dBi which was choosing for Radiated Spurious Emission test.

The EUT is in compliance with FCC \$15.247 at which the frequency band of 2400~2483.5, and 5725~5850MHz has been tested.

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 12 of 248

IEEE 802.11n Spec:

MCS					NCBPS		NID.	NDBPS		Datarate(Mbps)			
Index	Nss	Modulation	R	NBPSC	NC.	BPS	ND	BPS	800	nsGI	400nsGI		
					20MHz	40MHz	20MHz	40MHz	20MHz	40MHz	20MHz	40MHz	
0	1	BPSK	1/2	1	52	108	26	54	6.5	13.5	7.200	15	
1	1	QPSK	1/2	2	104	216	52	108	13.0	27.0	14.400	30	
2	1	QPSK	3/4	2	104	216	78	162	19.5	40.5	21.700	45	
3	1	16-QAM	1/2	4	208	432	104	216	26.0	54.0	28.900	60	
4	1	16-QAM	3/4	4	208	432	156	324	39.0	81.0	43.300	90	
5	1	64-QAM	2/3	6	312	648	208	432	52.0	108.0	57.800	120	
6	1	64-QAM	3/4	6	312	648	234	486	58.5	121.5	65.000	135	
7	1	64-QAM	5/6	6	312	648	260	540	65.0	135.0	72.200	150	

Symbol	Explanation			
NSS	Number of spatial streams			
R	Code rate			
NBPSC	Number of coded bite per single carrier			
NCBPS	Number of coded bite per symbol			
NDBPS	Number of data bite per symbol			
GI	Guard interval			

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

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

SCSCT always Liv

**INCLUDED AND ALW With unported New Trigologic Part With Unior Part Multiput Part Multiput Part With Unior Part With Unior Part

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

台灣檢驗科技股份有限公司

f (886-2) 2298-0488

www.tw.sgs.com



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 13 of 248

Related Submittal(s) / Grant (s) 1.2

This submittal(s) (test report) is intended for FCC ID: PY7PM-0731 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 the certification procedure.

Test Methodology 1.3

Both conducted and radiated testing was performed according to the procedures in ANSI C63.4:2009 and ANSI 63.10:2009. Radiated testing was performed at an antenna to EUT distance 3 meters.

Tested in accordance with Apr 2013 KDB558074 D01 V03 for compliance to FCC 47CFR 15.247 requirements.

Test Facility 1.4

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 Road, Wuku Industrial Zone, Taipei County, Taiwan which are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2009. & ANSI C63.10:2009. FCC Registration Number: 990257. Canada Registration Number: 4620A-4.

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

1.5 **Special Accessories**

There are no special accessories used while test was conducted.

Equipment Modifications 1.6

There was no modification incorporated into the EUT.

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

tronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sqs.com



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 14 of 248

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**

An engineering test mode (software/firmware) that applicant provided was utilized to manipulate the EUT into transmit, selection of the test channel, and modulation scheme.

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 general criterion in Section 7.1 of ANSI C63.4:2009 & 6.2 ANSI 63.10:2009.Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz, and the measurement procedure 7.3 in ANSI 63.4:2009 & 6.2.2, and 6.2.3 in ANSI 63.10:2009 is followed to carry out the test. The CISPR Quasi-Peak and Average detector mode is employed according to §15.107

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 of ANSI C63.4:2009, & Section 6.3, 6.4, 6.5, and 6.6 of ANSI 63.10:2009.

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

Manage of the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for elec-

tronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 15 of 248

Configuration of Tested System

Fig. 2-1 Radiated Emission



Fig. 2-2 Conducted (Antenna Port) Configuration



Table 2-1 Equipment Used in Tested System

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Data Cable	Power Cord
1.	WLAN Test Software	QRCT	2.4.83.0	N/A	N/A	N/A
2.	Notebook	DELL	E5400	3704625136	N/A	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.

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 16 of 248

Fig. 2-3 AC Power Line Conducted Emission

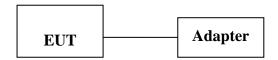


Table 2-2 Equipment Used in Tested System

Iter	n Equipment	Mfr/Brand	Model/Type No.	Series No.	Data Cable	Power Cord
1.	WLAN Test Software	QRCT	2.4.83.0	N/A	N/A	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.

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 17 of 248

SUMMARY OF TEST RESULTS

FCC Rules	Description Of Test	Result
§15.207(a)	AC Power Line Conducted Emission	Compliant
§15.247(b) (3)	Peak Output Power	Compliant
§15.247(a)(2)	6dB Bandwidth	Compliant
§15.247(d)	100 KHz Bandwidth Of Frequency Band Edges	Compliant
§15.247(d)	Spurious Emission	Compliant
§15.247(e)	Peak Power Density	Compliant
§15.203	Antenna Requirement	Compliant

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



Report No.: EH/2014/10015 Issue Date: Mar. 21, 2014

Page: 18 of 248

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.

802.11 b mode: Channel low (2412MHz) • mid (2437MHz) and high (2462MHz) with 1Mbps lowest data rate are chosen for full testing.

802.11 g mode: Channel low (2412MHz) • mid (2437MHz) and high (2462MHz) with 6Mbps lowest data rate are chosen for full testing.

802.11 n_20MHz mode: Channel low (2412MHz) · mid (2437MHz) and high (2462MHz) with 6.5Mbps lowest data rate are chosen for full testing.

802.11 a mode: Channel low (5745MHz) · mid (5785MHz) and high (5825MHz) with 6Mbps lowest data rate are chosen for full testing.

802.11 n (5GHz) _20MHz: Lowest (5745MHz), Mid (5785MHz) and high (5825MHz) with 6.5 Mbps lowest data rate are chosen for full testing.

802.11 n (5GHz) _40MHz: Lowest (5755MHz) and high (5795MHz) with 13.5 Mbps lowest data rate are chosen for full testing.

The worst case is determined by the output power that generates the highest emission. As examined in the section of output power measurement, the section 7.5, the lowest data rate at a/b/g/n_HT20/n_HT40 resulted the highest level of fundamental emission, and therefore, the lowest data rate is chosen as the worst-case to conduct the remaining of other mandatory test cases.

The field strength of radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for 802.11a/b/g/n WLAN 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.

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

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

SGS Taiwan Ltd. No.134 WukungRoad NewTaipeilndustrialPark WukuDistrict NewTaipeiCity.Taiwan24803/新·t. 市 五 股 區 新·t. 產 業 图 區 五 工 路 134 號

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 19 of 248

MEASUREMENT UNCERTAINTY

Test Items	Uncertainty		
AC Power Line Conducted Emission	+/- 2.586 dB		
Peak Output Power	+/- 1.55dB (for Spectrum) +/- 1.42 dB (for Power Meter)		
6dB Bandwidth	+/- 123.36 Hz		
100 KHz Bandwidth Of Frequency Band Edges	+/- 1.55 dB		
Peak Power Density	+/- 1.55 dB		
Temperature	+/- 0.8 °C		
Humidity	+/- 4.7 %		
DC / AC Power Source	DC= +/- 1%, AC=+/- 0.2%		

Radiated Spurious Emission:

	30MHz - 180MHz: +/- 3.37dB				
Massayanantayasantainty	180MHz -417MHz: +/- 3.19dB				
Measurement uncertainty (Polarization : Vertical)	0.417GHz-1GHz: +/- 3.19dB				
(1 ofurization : Vertical)	1GHz - 18GHz: +/- 4.04dB				
	18GHz - 40GHz: +/- 4.04dB				
	30MHz - 167MHz: +/- 4.22dB				
Measurement uncertainty	167MHz -500MHz: +/- 3.44dB				
(Polarization : Horizontal)	0.5GHz-1GHz: +/- 3.39dB				
	1GHz - 18GHz: +/- 4.08dB				
	18GHz - 40GHz: +/- 4.08dB				

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 20 of 248

CONDUCTED EMISSION TEST

6.1 Standard Applicable:

According to §15.207, frequency range 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

6.2 **Measurement Equipment Used:**

Conducted Emission Test Site								
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.			
TYPE		NUMBER	NUMBER	CAL.				
EMI Test Receiver	R&S	ESCI7	100760	05/27/2013	05/26/2014			
LISN	Rolf-Heine	NNB-2/16Z	99012	03/23/2013	03/22/2014			
LISN	FCC	FCC-LISN-50/250-25-2-01	04034	03/23/2013	03/22/2014			
Coaxial Cables	N/A	WK CE Cable	N/A	11/26/2013	11/25/2014			

6.3 EUT Setup:

- 1. The conducted emission tests were performed in the test site, using the setup in accordance with the ANSI C63.4:2009 & ANSI 63.10:2009.
- 2. The AC/DC Power adaptor of EUT was plug-in LISN. The EUT was placed flushed with the rear of the table.
- 3. The LISN was connected with 120Vac/60Hz power source.

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

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

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

SGS Taiwan Ltd.

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

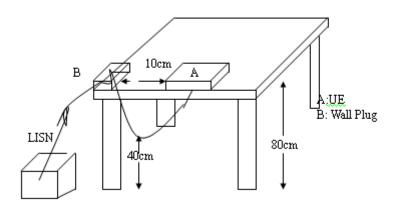
^{2.} The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 21 of 248

6.4 Test SET-UP (Block Diagram of Configuration)



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 phases of power being supplied by given UE are completed

6.6 **Measurement Result:**

Note: Refer to next page for measurement data and plots.

Note2: The * reveals the worst-case results that closet to the limit

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 22 of 248

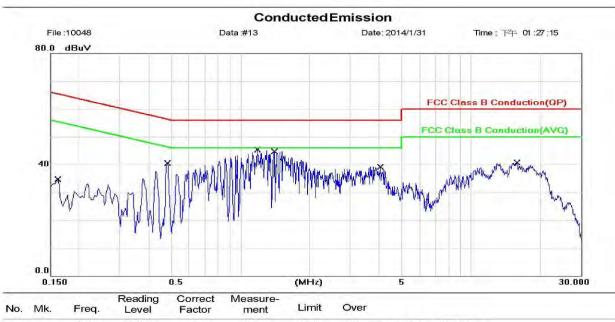
AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode:	Operation mode			Test Date:	Jan. 31, 2014
Temperature:	26 ℃	Humidity:	60 %	Test By:	Marcus
Model No.:	EP800	•			

Site ConductionRoom Phase: L1 Temperature: AC 120V/60Hz Humidity: Limit: FCC Class B Conduction(QP) Power:

Mode: Operation Mode

Note:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dВ	Detector	Comment
1		0.1620	30.50	0.16	30.66	65.36	-34.70	QP	
2		0.1620	17.80	0.16	17.96	55.36	-37.40	AVG	
3		0.4860	39.00	0.16	39.16	56.24	-17.08	QP	
4		0.4860	28.70	0.16	28.86	46.24	-17.38	AVG	
5	*	1.1900	39.60	0.17	39.77	56.00	-16.23	QP	
6		1.1900	28.10	0.17	28.27	46.00	-17.73	AVG	
7		1.4060	38.00	0.18	38.18	56.00	-17.82	QP	
8		1.4060	24.50	0.18	24.68	46.00	-21.32	AVG	
9		4.0500	32.60	0.24	32.84	56.00	-23.16	QP	
10		4.0500	21.00	0.24	21.24	46.00	-24.76	AVG	
11		15,8340	36.50	0.39	36.89	60.00	-23.11	QP	
12		15.8340	25.10	0.39	25.49	50.00	-24.51	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.

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sqs.com

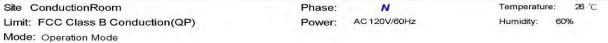


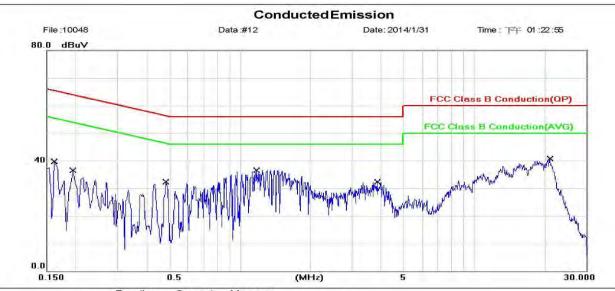
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 23 of 248

Site ConductionRoom

Note:





No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dВ	dBuV	dBuV	dB	Detector	Comment
1		0.1620	36.30	0.18	36.48	65.36	-28.88	QP	
2		0.1620	18.10	0.18	18.28	55.36	-37.08	AVG	
3		0.1940	31.60	0.19	31.79	63.86	-32.07	QP	
4		0.1940	16.00	0.19	16.19	53.86	-37.67	AVG	
5		0.4820	31.10	0.19	31.29	56.30	-25.01	QP	
6	*	0.4820	24.70	0.19	24.89	46.30	-21.41	AVG	
7		1.1780	30.70	0.21	30.91	56.00	-25.09	QP	
8		1.1780	18.40	0.21	18.61	46.00	-27.39	AVG	
9		3.8540	26.00	0.29	26.29	56.00	-29.71	QP	
10		3.8540	6.50	0.29	6.79	46.00	-39.21	AVG	
11		20.9340	33.50	0.53	34.03	60.00	-25.97	QP	
12		20.9340	15.80	0.53	16.33	50.00	-33.67	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.

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 24 of 248

Temperature:

Humidity: 60%

26 °C

Operation Mode:	Operation mode			Test Date:	Feb. 12, 2014
Temperature:	26 ℃	Humidity:	60 %	Test By:	Marcus
Model No.:	EP880				

Phase:

Power:

L1

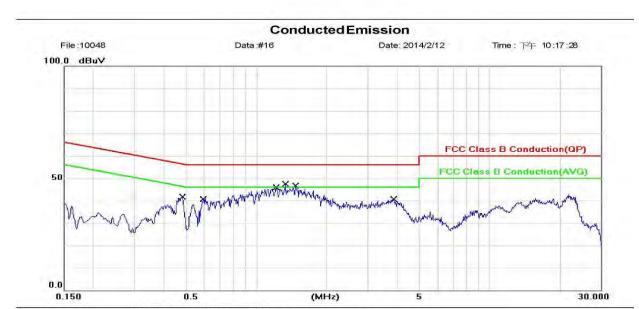
AC 120V/60Hz

Site ConductionRoom

Limit: FCC Class B Conduction(QP)

Mode: Operation Mode

Note:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dВ	Detector	Comment
1		0.4780	39.00	0.16	39.16	56.37	-17.21	QP	
2		0.4780	29.20	0.16	29.36	46.37	-17.01	AVG	
3		0.5913	36.10	0.16	36.26	56.00	-19.74	QP	
4		0.5913	25.90	0.16	26.06	46.00	-19.94	AVG	
5		1.2226	41.30	0.17	41.47	56.00	-14.53	QP	
6		1.2226	30.20	0.17	30.37	46.00	-15.63	AVG	
7	*	1.3373	41.30	0.18	41.48	56.00	-14.52	QP	
8		1.3373	30.70	0.18	30.88	46.00	-15.12	AVG	
9		1.4827	41.10	0.18	41.28	56.00	-14.72	QP	
10		1.4827	28.80	0.18	28.98	46.00	-17.02	AVG	
11		3.8820	34.10	0.24	34.34	56.00	-21.66	QР	
12		3.8820	22.90	0.24	23.14	46.00	-22,86	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.

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



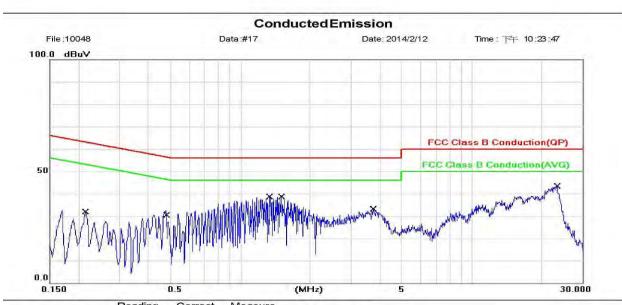
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 25 of 248

Temperature: 26 °C Site ConductionRoom Phase: AC 120V/60Hz Humidity: Limit: FCC Class B Conduction(QP) Power:

Mode: Operation Mode

Note:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dВ	dBuV	dBuV	dВ	Detector	Comment
1		0.2134	26.80	0.19	26.99	63.07	-36.08	QP	
2		0.2134	18.00	0.19	18.19	53.07	-34.88	AVG	
3		0.4833	31.70	0.19	31.89	56.28	-24.39	QP	
4		0.4833	21.40	0.19	21.59	46.28	-24.69	AVG	
5	*	1.3413	34.80	0.21	35.01	56.00	-20.99	QP	
6		1.3413	21.80	0.21	22.01	46.00	-23.99	AVG	
7		1.5015	34.60	0.23	34.83	56.00	-21.17	QP	
8		1.5015	22.20	0.23	22.43	46.00	-23.57	AVG	
9		3.7420	27.30	0.28	27.58	56.00	-28.42	QP	
10		3.7420	16.40	0.28	16.68	46.00	-29.32	AVG	
11		23.3660	34.70	0.55	35.25	60.00	-24.75	QP	
12		23.3660	19.00	0.55	19.55	50.00	-30.45	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.

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 Issue Date: Mar. 21, 2014

Page: 26 of 248

7 PEAK OUTPUT POWER MEASUREMENT

7.1 Standard Applicable:

According to §15.247 (b)

(3) For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

(4) The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

As an alternative to a peak power measurement, compliance can be based on a measurement of the maximum conducted output power. The maximum conducted output power is the total transmit power delivered to all antennas and antenna elements, averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or transmitting at a reduced power level. If multiple modes of operation are implemented, the maximum conducted output power is the highest total transmit power occurring in any 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.

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

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

SGS Taiwan Ltd. No.134 WukungRoad NewTaipeilndustrialPark WukuDistrict NewTaipeiCity.Taiwan24803/新·t. 市 五 股 區 新·t. 產 業 图 區 五 工 路 134 號



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 27 of 248

Measurement Equipment Used:

	Conducted Emission Test Site											
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.							
TYPE		NUMBER	NUMBER	CAL.								
Power Sensor	Anritsu	ML2495A	1005007	01/13/2014	01/12/2015							
Power Meter	Anritsu	MA2411B	917032	01/13/2014	01/12/2015							
Spectrum Analyzer	Agilent	E4446A	MY51100003	05/30/2013	05/29/2014							
Spectrum Analyzer	Agilent	E4440A	MY45304525	03/08/2014	03/07/2015							
DC Block	Mini-Circuits	BLK-18-S+	1	02/28/2013	02/27/2014							
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	N/A	01/03/2014	01/02/2015							
Attenuator	Mini-Circuit	BW-S10W2+	002	02/28/2013	02/27/2014							
Splitter	Agilent	11636B	N/A	02/28/2013	02/27/2014							

DC Block	Mini-Circuits	BLK-18-S+	1	02/27/2014	02/26/2015
Attenuator	Mini-Circuit	BW-S10W2+	002	02/27/2014	02/26/2015
Splitter	Agilent	11636B	N/A	02/27/2014	02/26/2015

Remark: Please note that the duration to conduct the test took place in the mean time when the calibration for several equipments is due, and therefore extra tables of equipment calibration is constructed to indicate the calibration work is still maintained.

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

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

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

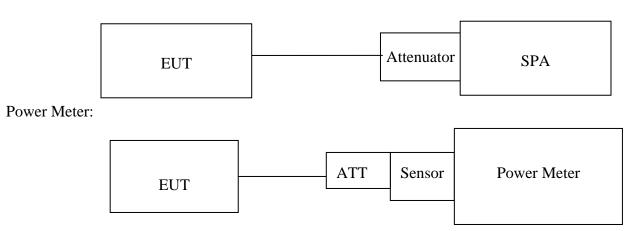


Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 28 of 248

7.3 **Test Set-up:**

Spectrum:



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. (**Peak power setting on Spectrum:** Channel power function, RBW = 1MHz, VBW = 3MHz, Span: 30/60MHz, Detector =peak, Sweep = Auto. Setting on spectrum is adjusted based on the mandatory procedure in 9.1.2 of the KDB558074). Power Meter is used as the auxiliary test equipment to conduct the output power measurement. 9.1.3 in KDB558074 is followed.

(Avg. power setting on Spectrum: Channel power function, RBW = 1MHz, VBW = 3MHz, Span: 30/60MHz, Detector =Avg., Trace avg =100, Sweep = Auto, Setting on spectrum is adjusted based on the mandatory procedure in 9.2.2.4 of the KDB558074). Power Meter is used as the auxiliary test equipment to conduct the output power measurement. 9.2.3, option 3 in KDB558074 is followed.

- 3. Record the max. Reading as observed from Spectrum or Power Meter.
- 4. Repeat above procedures until all frequency of interest measured was 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. Market And Andrews A

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



Report No.: EH/2014/10015 Issue Date: Mar. 21, 2014

Page: 29 of 248

Pre-anaysis Check: While conducting average power measurement, duty cycle of each mode (a/n_ht20 /n_ht40) shall be checked to ensure its duty cycle in order to compensate for the loss due to insufficient ratio of duty cycle. All duty cycle is pre-scanned, and result as obtained below shows only the most representative ones

b = 99%, g = 99%, and $n_ht_20 = 99\%$, a = 99%, $n_20(5G) = 99\%$, and $n_40(5G) = 99\%$, where duty cycle is conducted as the given transmission with given virtual operation that expresses the percentage.

Formula:

 $Duty\ Cycle = Ton/(Ton+Toff)$

Test Procedure:

Set span = 0, RBW = 1MHz, VBW = 3MHz, Detector = Peak Duty Cycle:

	Duty Cycle
802.11b	0.990
802.11g	0.990
802.11n_20 (2.4G)	0.990
802.11a	0.990
802.11n_20 (5G)	0.990
802.11n_40 (5G)	0.990

Duty Cycle Factor: $10 * \log (1/0.99) = 0.04$

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

t (886-2) 2299-3279

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

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

台灣檢驗科技股份有限公司

f (886-2) 2298-0488

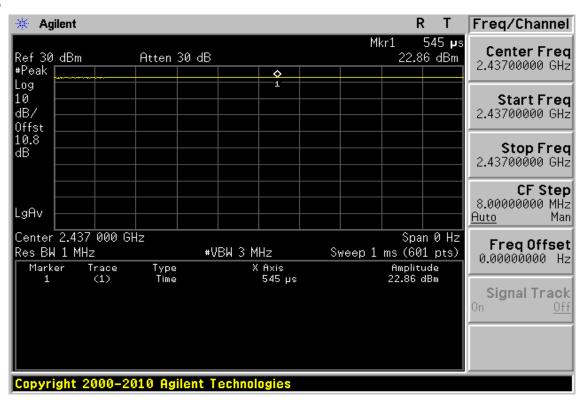


Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

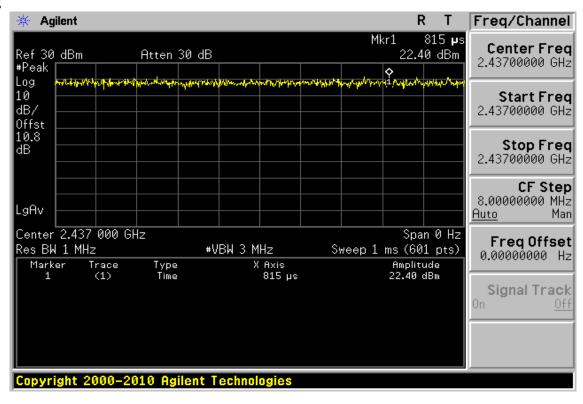
Page: 30 of 248

Duty Factor:

802.11 b



802.11 g



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

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

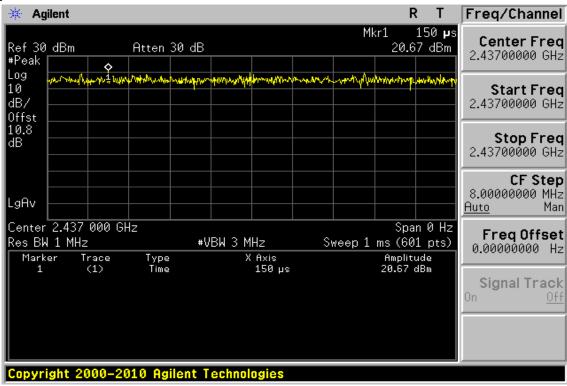
f (886-2) 2298-0488



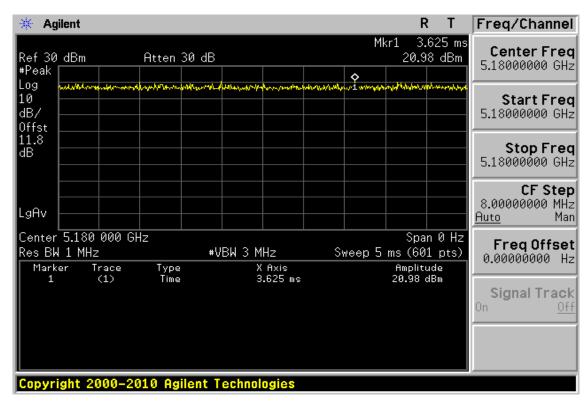
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 31 of 248

802.11 n 20 MHz



802.11a



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

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

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

t (886-2) 2299-3279

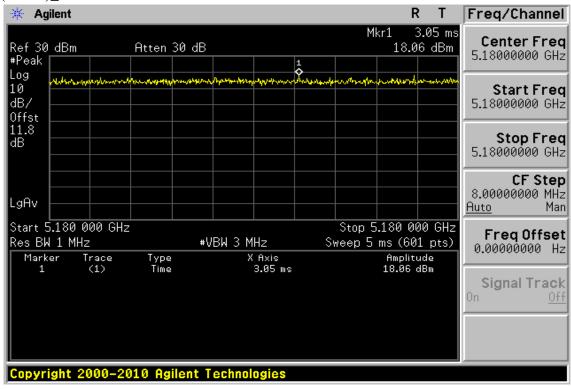
f (886-2) 2298-0488



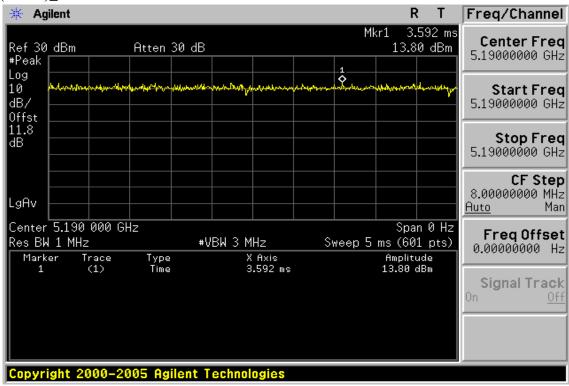
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 32 of 248

802.11 n (5GHz) 20M



802.11 n (5GHz) 40M



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

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 33 of 248

7.5 **Measurement Result:**

802.11b

/ <u>U#•11</u>	~													
			Peak Power Output (dBm)											
CII	Frequency		Data Rate											
СН	(MHz)	1	2	11	Required Limit									
1	2412	20.10	19.97	19.95	19.90	1 Watt = 30 dBm								
6	2437	20.34	1 Watt = 30 dBm											
11	2462	20.35												

CII	Frequency		Do amino d I imit								
СН	(MHz)	1	2	Required Limit							
1	2412	17.93	17.79	17.77	17.70	1 Watt = 30 dBm					
6	2437	17.98	17.93	17.85	17.77	1 Watt = 30 dBm					
11	2462	17.96									

802.11g

				sm)						
CII	Frequency				D 11' 4					
СН	(MHz)	6	9	12	18	24	36	48	54	Required Limit
1	2412	19.91	19.85	19.79	19.68	19.56	19.44	19.40	19.33	1 Watt = 30 dBm
6	2437	21.91	21.81	21.68	21.62	21.52	21.39	21.35	21.26	1 Watt = 30 dBm
11	2462	20.84	20.71	20.69	20.64	20.59	20.45	20.31	20.18	1 Watt = 30 dBm

					Bm)					
CII	Frequency			D 11' 4						
СН	(MHz)	6	9	12	18	24	36	48	54	Required Limit
1	2412	11.97	11.84	11.73	11.71	11.63	11.51	11.49	11.46	1 Watt = 30 dBm
6	2437	14.94	14.82	14.69	14.67	14.57	14.53	14.50	14.48	1 Watt = 30 dBm
11	2462	12.94	12.84	12.79	12.70	12.65	12.59	12.51	12.40	1 Watt = 30 dBm

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

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

SCSCT always Liv

**INCLUDED AND ALW With unported New Trigologic Part With Unior Part Multiput Part Multiput Part With Unior Part With Unior Part

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

SGS Taiwan Ltd.

www.tw.sqs.com



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 34 of 248

802.11n 20M

			Peak Power Output(dBm)										
CII	Frequency		Required										
СН	(MHz)		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	Limit			
1	2412	19.72	19.58	19.44	19.33	19.20	19.12	19.10	19.03	1 Watt = 30 dBm			
6	2437	20.55	20.53	20.48	20.37	20.33	20.19	20.10	19.99	1 Watt = 30 dBm			
11	2462	20.22	20.08	19.99	19.92	19.90	19.83	19.72	19.64	1 Watt = 30 dBm			

			Average Power Output(dBm)										
CII	Frequency		Required										
СН	(MHz)		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	Limit			
1	2412	11.83	11.79	11.69	11.65	11.59	11.55	11.45	11.33	1 Watt = 30 dBm			
6	2437	12.88	12.85	12.76	12.62	12.50	12.47	12.35	12.31	1 Watt = 30 dBm			
11	2462	10.97	10.90	10.85	10.78	10.68	10.58	10.53	10.46	1 Watt = 30 dBm			

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

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

SCSCT always Liv

**INCLUDED AND ALW With unported New Trigologic Part With Unior Part Multiput Part Multiput Part With Unior Part With Unior Part

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

SGS Taiwan Ltd.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 35 of 248

802.11a

CII	Frequency									
СН	CH (MHz)	6	9	12	18	24	36	48	54	Required Limit
149	5745	21.15	21.08	20.98	20.84	20.81	20.68	20.60	20.48	1 Watt = 30 dBm
157	5785	21.04	21.03	20.99	20.91	20.86	20.80	20.73	20.65	1 Watt = 30 dBm
165	5825	20.88	20.78	20.67	20.57	20.45	20.32	20.25	20.21	1 Watt = 30 dBm

			Average Power Output(dBm)										
CII	Frequency				Data	Rate							
СН	(MHz)	6	9	12	18	24	36	48	54	Required Limit			
149	5745	13.98	13.93	13.83	13.79	13.71	13.68	13.65	13.60	1 Watt = 30 dBm			
157	5785	13.95	13.87	13.76	13.71	13.68	13.64	13.61	13.57	1 Watt = 30 dBm			
165	5825	13.99	13.89	13.85	13.82	13.73	13.68	13.64	13.62	1 Watt = 30 dBm			

802.11n (5GHz) 20M

			Peak Power Output(dBm)									
CIT	Frequency											
СН	(MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	Required Limit		
149	5745	19.61	19.58	19.44	19.34	19.29	19.22	19.17	19.04	1 Watt = 30 dBm		
157	5785	20.22	20.19	20.08	20.04	19.97	19.90	19.86	19.84	1 Watt = 30 dBm		
165	5825	19.99	19.90	19.76	19.68	19.66	19.60	19.53	19.49	1 Watt = 30 dBm		

CIT	Frequency									
СН	CH (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	Required Limit
149	5745	11.38	11.34	11.27	11.20	11.12	11.03	10.94	10.91	1 Watt = 30 dBm
157	5785	11.42	11.35	11.28	11.21	11.17	11.06	10.96	10.93	1 Watt = 30 dBm
165	5825	11.44	11.39	11.28	11.14	11.08	11.05	10.97	10.84	1 Watt = 30 dBm

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 36 of 248

802.11n (5GHz) 40M

			Peak Power Output(dBm)									
CII	Frequency				Data	Rate				Required Limit		
СН	(MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7			
151	5755	19.50	19.44	19.41	19.38	19.34	19.25	19.18	19.05	1 Watt = 30 dBm		
159	5795	19.20	19.14	19.09	19.06	19.01	18.96	18.92	18.88	1 Watt = 30 dBm		

			Average Power Output(dBm)										
CII	Frequency				Data	Rate				Required Limit			
СН	(MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7				
151	5755	10.31	10.25	10.19	10.16	10.11	10.08	9.96	9.91	1 Watt = 30 dBm			
159	5795	10.36	10.31	10.27	10.22	10.17	10.11	10.06	9.99	1 Watt = 30 dBm			

^{*} Note: The duty cycle factor is compensated to obtain the maximum value of measurement in average.

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

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

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



Report No.: EH/2014/10015 Issue Date: Mar. 21, 2014

Page: 37 of 248

8 6dB BANDWIDTH

8.1 Standard Applicable:

According to §15.247(a)(2), Systems using digital modulation techniques may operate in the 902 - 928 MHz,2400 - 2483.5 MHz, and 5725 - 5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500kHz.

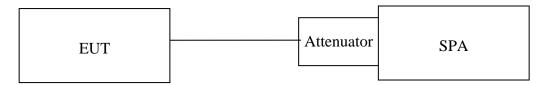
8.2 Measurement Equipment Used:

Conducted Emission Test Site							
EQUIPMENT	PMENT MFR		MODEL SERIAL		CAL DUE.		
ТҮРЕ		NUMBER	NUMBER	CAL.			
Power Sensor	Anritsu	ML2495A	1005007	01/13/2014	01/12/2015		
Power Meter	Anritsu	MA2411B	917032	01/13/2014	01/12/2015		
Spectrum Analyzer	Agilent	E4446A	MY51100003	05/30/2013	05/29/2014		
Spectrum Analyzer	Agilent	E4440A	MY45304525	03/08/2014	03/07/2015		
DC Block	Mini-Circuits	BLK-18-S+	1	02/28/2013	02/27/2014		
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	N/A	01/03/2014	01/02/2015		
Attenuator	Mini-Circuit	BW-S10W2+	002	02/28/2013	02/27/2014		
Splitter	Agilent	11636B	N/A	02/28/2013	02/27/2014		

DC Block	Mini-Circuits	BLK-18-S+	1	02/27/2014	02/26/2015
Attenuator	Mini-Circuit	BW-S10W2+	002	02/27/2014	02/26/2015
Splitter	Agilent	11636B	N/A	02/27/2014	02/26/2015

Remark: Please note that the duration to conduct the test took place in the mean time when the calibration for several equipments is due, and therefore extra tables of equipment calibration is constructed to indicate the calibration work is still maintained.

8.3 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.

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

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 38 of 248

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 = 100 kHz, VBW = 3*RBW, Span = 30M/50MHz, Detector=Peak, Sweep=auto, the setting on spectrum is adjusted based on the procedure as guide in 8.1 option 1 of KDB558074.
- 4. Mark the peak frequency and –6dB (upper and lower) frequency.
- 5. Repeat above procedures until all frequency of interest measured was complete.

8.5 **Measurement Result:**

802.11b

Frequency	y Bandwidth Limit		Result
(MHz)	(kHz)	(kHz)	
2412	9089	> 500	PASS
2437	8612	> 500	PASS
2462	8126	> 500	PASS

802.11g

Frequency	Bandwidth	Limit	Result
(MHz)	(kHz)	(kHz)	
2412	16402	> 500	PASS
2437	16437	> 500	PASS
2462	16499	> 500	PASS

802.11n_20M

Frequency	Bandwidth	Limit	Result
(MHz)	(kHz)	(kHz)	
2412	17644	> 500	PASS
2437	17633	> 500	PASS
2462	17651	> 500	PASS

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

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

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

台灣檢驗科技股份有限公司



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 39 of 248

802.11a

Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Result
5745	16433	> 500	PASS
5785	16428	> 500	PASS
5825	16609	> 500	PASS

802.11n (5GHz)_20M

Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Result
5745	17638	> 500	PASS
5785	17636	> 500	PASS
5825	17808	> 500	PASS

802.11n (5GHz) 40M

Frequency	Bandwidth	Limit	Result
(MHz)	(kHz)	(kHz)	
5755	35740	> 500	PASS
5795	35220	> 500	PASS

* Note: Offset 10.8dB for 2.4G 802.11b/g/n_20;

Offset 11.8dB for 5G 802.11a/n_20/n_40.

* Note: The arrow "->" reveals X decibel level

*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.

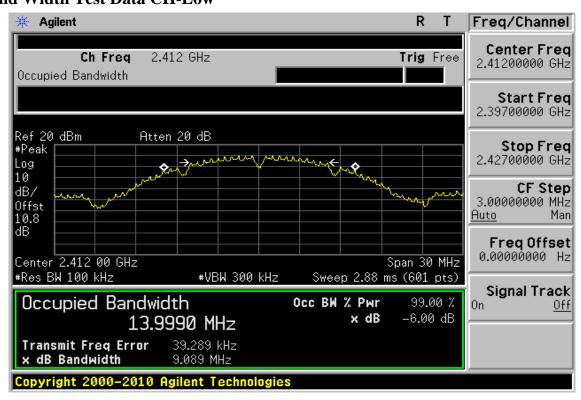
Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

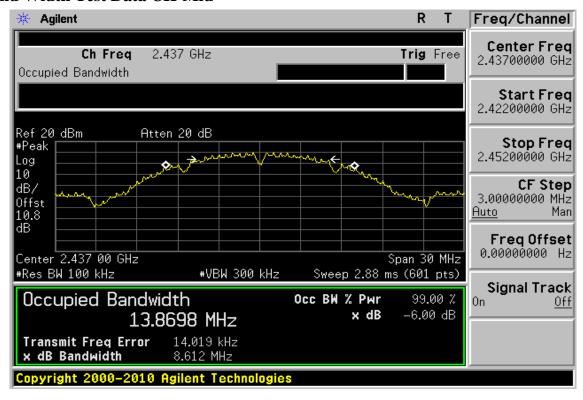
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 40 of 248

802.11b 6dB Band Width Test Data CH-Low



6dB Band Width Test Data CH-Mid



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

t (886-2) 2299-3279

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

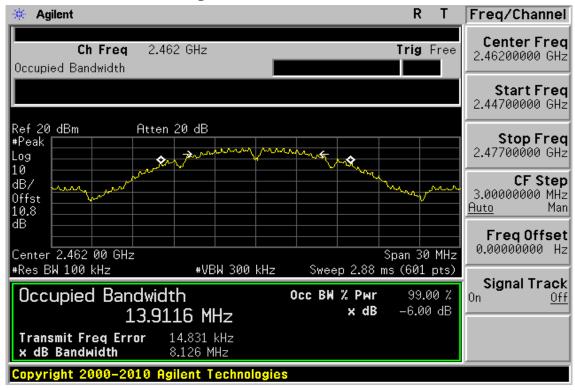
GS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488

www.tw.sqs.com

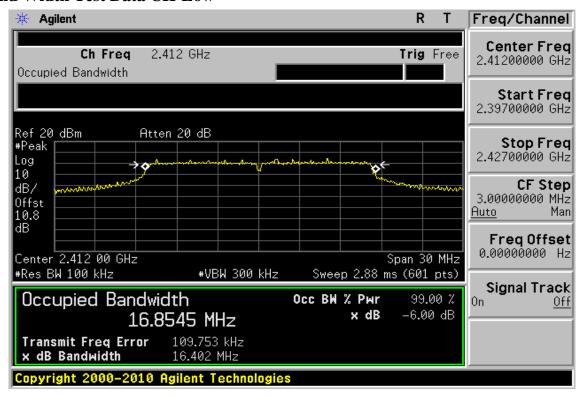
Page: 41 of 248

6dB Band Width Test Data CH-High



802.11g

6dB Band Width Test Data CH-Low



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

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

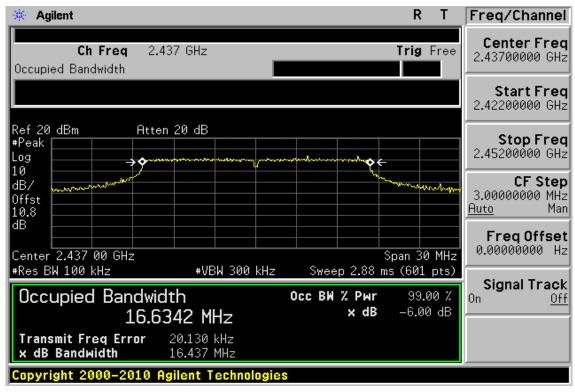
SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

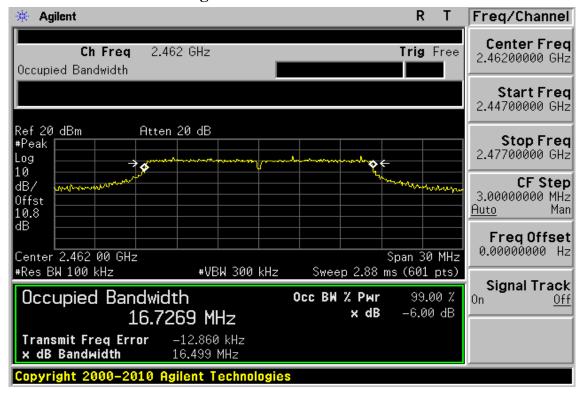
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 42 of 248

6dB Band Width Test Data CH-Mid



6dB Band Width 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 document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

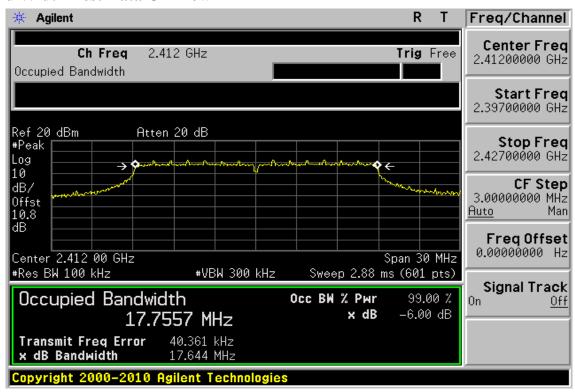
t (886-2) 2299-3279



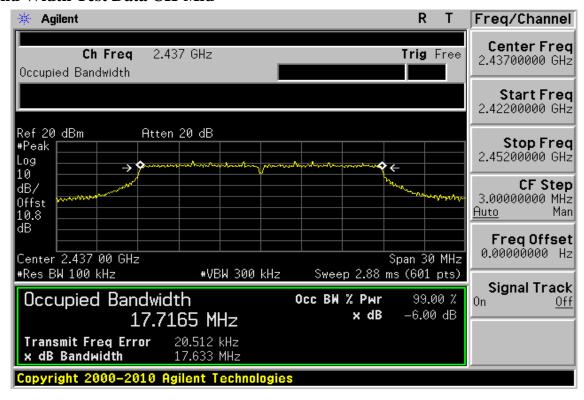
Page: 43 of 248

802.11n 20M

6dB Band Width Test Data CH-Low



6dB Band Width Test Data CH-Mid



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

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

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

台灣檢驗科技股份有限公司

f (886-2) 2298-0488

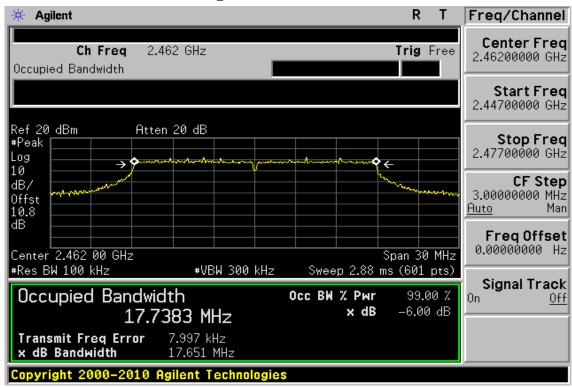
www.tw.sqs.com



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 44 of 248

6dB Band Width 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.

t (886-2) 2299-3279

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

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

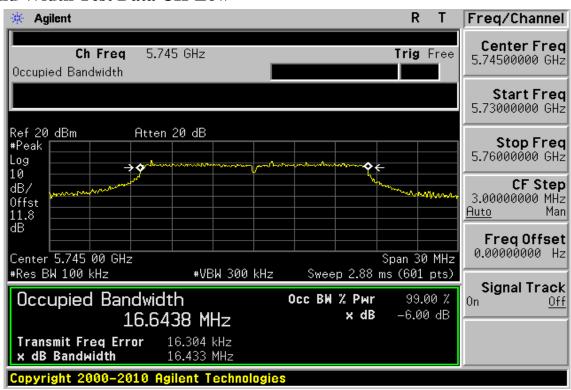
台灣檢驗科技股份有限公司

Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

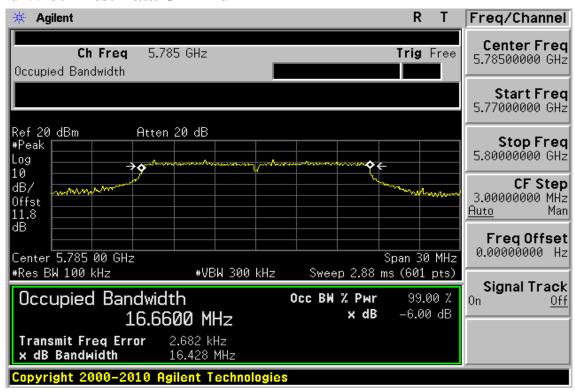
Page: 45 of 248

802.11a

6dB Band Width Test Data CH-Low



6dB Band Width Test Data CH-Mid



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

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

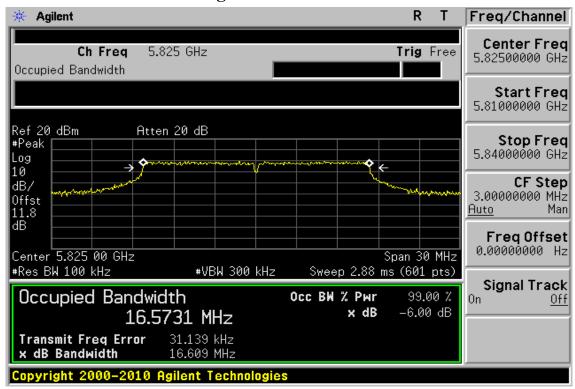
GS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

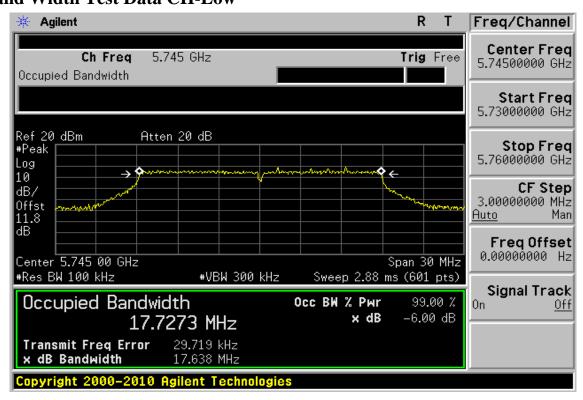
Page: 46 of 248

6dB Band Width Test Data CH-High



802.11n (5GHz)_20M

6dB Band Width Test Data CH-Low



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

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

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

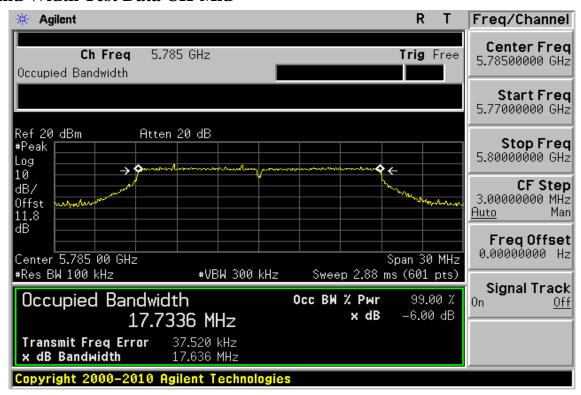
台灣檢驗科技股份有限公司

t (886-2) 2299-3279

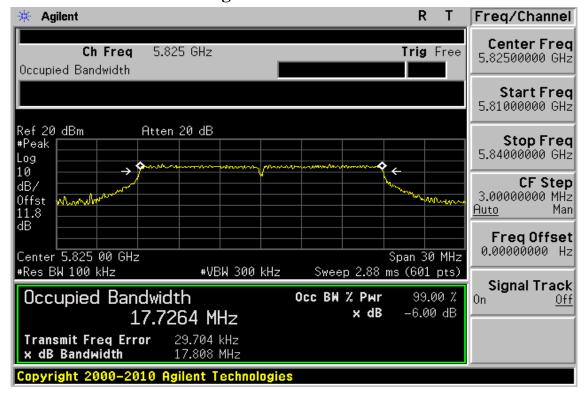
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 47 of 248

6dB Band Width Test Data CH-Mid



6dB Band Width 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.

t (886-2) 2299-3279

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

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

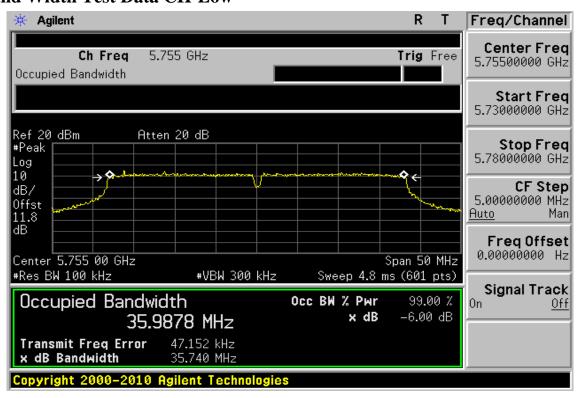
f (886-2) 2298-0488

www.tw.sqs.com

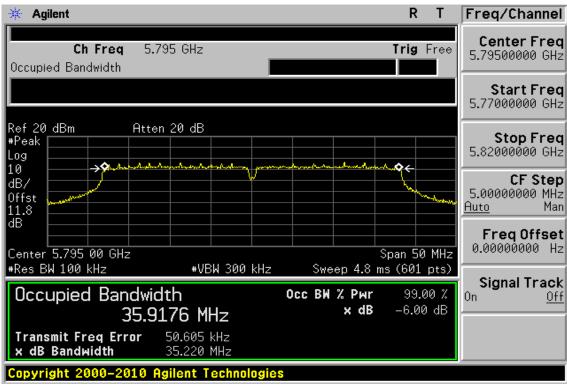
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 48 of 248

802.11n (5GHz) 40M 6dB Band Width Test Data CH-Low



6dB Band Width 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 document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 49 of 248

BAND EDGES MEASUREMENT

Standard Applicable:

According to §15.247(d), 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 100 kHz 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 in 15.209(a).

9.2 **Measurement Equipment Used:**

9.2.1 Conducted Emission at antenna port:

Refer to section 7.2 for details.

Radiated emission: 9.2.2

966 Chamber							
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.		
TYPE		NUMBER	NUMBER	CAL.			
EMI Test Receiver	R&S	ESCI7	100760	05/27/2013	05/26/2014		
Spectrum Analyzer	Agilent	E4446A	MY51100003	05/30/2013	05/29/2014		
EXA Spectrum Analyzer	Agilent	N9010A	MY50420195	01/20/2014	01/19/2015		
Spectrum Analyzer	R&S	FSV-30	101398	10/22/2013	10/21/2014		
Bilog Antenna	SCHWAZBECK	VULB9168	378	01/02/2014	01/02/2015		
Horn antenna	ETS.LINDGREN	3117	123995	05/31/2013	05/30/2014		
Horn Antenna	Schwarzbeck	BBHA9170	184	01/23/2014	01/22/2015		
Pre-Amplifier	Agilent	8447D	2944A07676	01/03/2014	01/02/2015		
Pre-Amplifier	Agilent	8449B	3008A00578	01/03/2014	01/02/2015		
Pre-Amplifier	EMC Instruments Corp.	EMC184045	980135	01/24/2014	01/23/2015		
Filter 2400-2483.5 MHz	EWT	EWT-14-0166	M2	02/27/2014	02/26/2015		
Attenuator	Mini-Circuit	BW-S10W2+	004	02/27/2014	02/26/2015		
Turn Table	HD	DT420	N/A	N.C.R	N.C.R		
Antenna Tower	HD	MA240-N	240/657	N.C.R	N.C.R		
Controller	HD	HD100	N/A	N.C.R	N.C.R		
Low Loss Cable	Huber Suhner	966_Rx	9	01/03/2014	01/02/2015		
3m Site NSA	SGS	966 chamber	N/A	07/15/2013	07/14/2014		

Note: N.C.R refers to Not Calibrated Required.

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

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

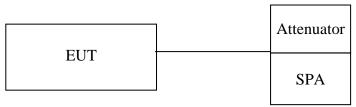
SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 50 of 248

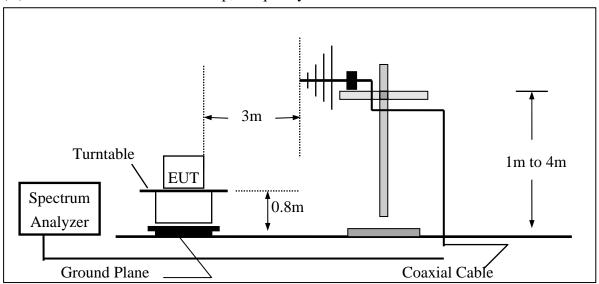
9.3 **Test SET-UP:**

Conducted Emission at antenna port:

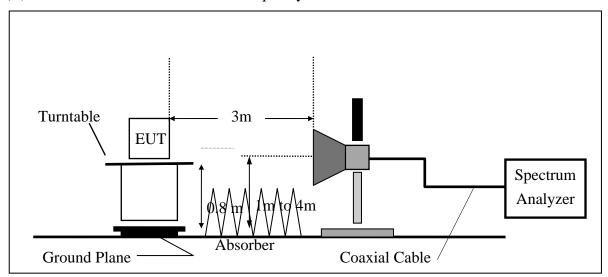


9.3.2 Radiated emission:

(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.

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

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

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 51 of 248

Measurement Procedure:

Unwanted Emissions into Non-Restricted Frequency Bands, Measurement Procedure followed by 11.1 of KDB558074 D01

- 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 start to edge frequency, and stop frequency of spectrum analyzer so as to encompass the spectrum to be examined.
- 4. Set the spectrum analyzer as RBW, VBW=300KHz, Detector = Peak, Sweep = auto
- 5. Mark the highest reading of the emission as the reference level measurement.
- 6. Set DL as the limit = reading on marker 1 20dBm
- 7. Marker on frequency, 2.3999GHz and 2.4836GHz, and examine shall 100 KHz immediately outside the authorized (2400~2483.5) be attenuated by 20dB at least relative to the maximum emission of power.
- 8. Repeat above procedures until all default test channel (low, middle, and high) was complete.

Unwanted Emission falling into Restricted Frequency Bands, Measurement Procedure followed by 12.1 of KDB558074:

- 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.On spectrum, following 8.1.2, and RBW = 1MHz, VBW = 3MHz, & Marker 2390MHz, and 2483.5MHz (Peak Measurement). Average Measurement: following 8.2 with the modification span to 1MHz, &RBW = 1MHz, VBW = 3MHz and peak marker function to obtain the highest reading on 2390, and 2483.5MHz.
- 8. Repeat above procedures until all default test channel (low, middle, and high) was 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

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

tronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 52 of 248

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	

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.

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

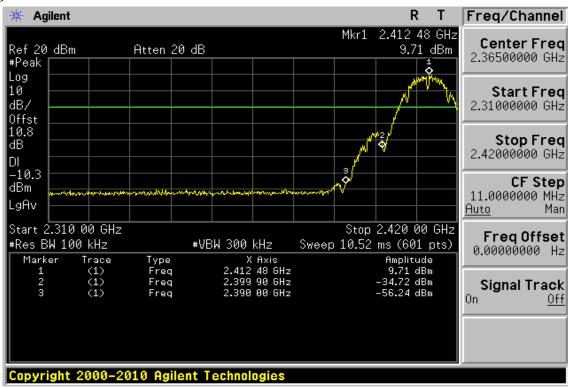
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms and conditions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

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

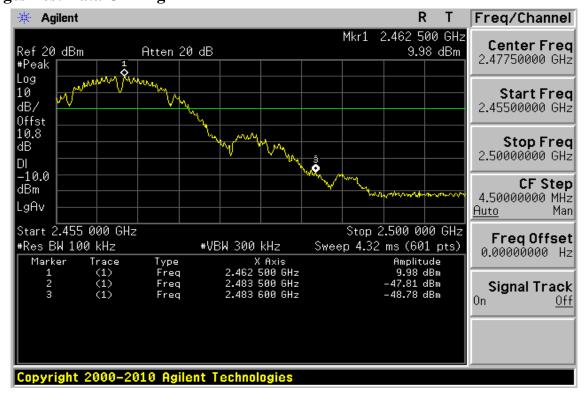
台灣檢驗科技股份有限公司

Page: 53 of 248

802.11b - Unwanted Emissions into Non-Restricted Frequency Bands **Band Edges Test Data CH-Low**



Band Edges 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 document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of

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

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

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 54 of 248

Tabular Results:

802.11b

Frequency (GHz)	Results (dBm)	Ref (dBm)	Limit (dBm)	Verdict
2.3999	-34.72	9.71	-10.30	Pass
2.4835	-47.81	9.98	-10.00	Pass

Note: Limit = Ref (The highest level of emission) dBm - 20dBm

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

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

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

SGS Taiwan Ltd.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 55 of 248

Radiated Emission:

For measurement plot of radiation revealing the compliance of 15.209, please refer to Appendix I.

(Unwanted Emissions into Restricted Frequency Bands): 802.11 b mode

Operation Band :802.11 b Test Date :2014-03-18

Fundamental Frequency :2412 MHz Temp./Humi. :20.5 deg C / 66 RH

Operation Mode :Band Edge LOW Engineer :Curry

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

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

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

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

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

The trace on RE(radiation emission) plot is as colored blue, and the detection manner we've employed is peak detector.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Lev	el	FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
2390.00	E	Average	32.38	2.42	34.80	54.00	-19.20
2390.00	E	Peak	43.72	2.42	46.14	74.00	-27.86
Operation Band Fundamental F Operation Mod EUT Pol.	requency	:802.11 b :2412 MHz :Band Edge I :H Plane		Test Date Temp./Humi. Engineer		:2014-03-18 :20.5 deg_C / :Curry :HORIZONT.	
EUI FOI.		.n riane		Measurement An	tenna Pol.	.HOKIZUN I	AL

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

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

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

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

The trace on RE(radiation emission) plot is as colored blue, and the detection manner we've employed is peak detector.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
2390.00	E	Average	33.26	2.42	35.68	54.00	-18.32
2390.00	E	Peak	48.09	2.42	50.51	74.00	-23.49

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

tronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 56 of 248

Operation Band :802.11 b Test Date :2014-03-18

Fundamental Frequency :2462 MHz Temp./Humi. :20.5 deg_C / 66 RH

Operation Mode :Band Edge HIGH Engineer :Curry

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

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

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

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

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

The trace on RE(radiation emission) plot is as colored blue, and the detection manner we've employed is peak detector.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
2483.50	E	Average	33.77	2.74	36.51	54.00	-17.49
2483.50	E	Peak	44.91	2.74	47.65	74.00	-26.35

Operation Band Test Date :802.11 b :2014-03-18

Fundamental Frequency :2462 MHz Temp./Humi. :20.5 deg_C / 66 RH

Engineer Operation Mode :Band Edge HIGH :Curry

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

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

Factor(dB) = Antenna Factor(dB μ V/m) + Cable Loss(dB) – Pre Amplifier Gain(dB)

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

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

The trace on RE(radiation emission) plot is as colored blue, and the detection manner we've employed is peak detector.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
2483.50	E	Average	36.53	2.74	39.27	54.00	-14.73
2483.50	E	Peak	47.13	2.74	49.87	74.00	-24.13

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

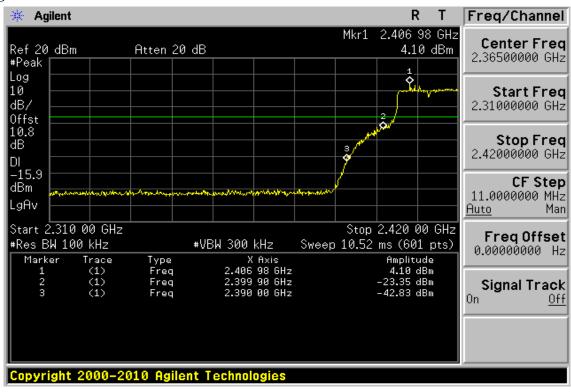
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms and conditions.htm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

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

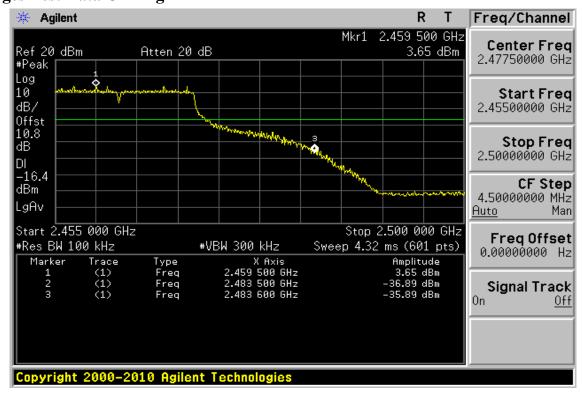


Page: 57 of 248

802.11g - Unwanted Emissions into Non-Restricted Frequency Bands **Band Edges Test Data CH-Low**



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

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

台灣檢驗科技股份有限公司

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 58 of 248

Tabular Results:

802.11g

Frequency (GHz)	Results (dBm)	Ref (dBm)	Limit (dBm)	Verdict
2.3999	-23.35	4.10	-15.90	Pass
2.4836	-35.89	3.65	-16.40	Pass

Note: Limit = Ref (The highest level of emission) dBm - 20dBm

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 59 of 248

Radiated Emission:

For measurement plot of radiation revealing the compliance of 15.209, please refer to Appendix I.

(Unwanted Emissions into Restricted Frequency Bands): 802.11 g mode

:802.11 g Test Date **Operation Band** :2014-03-18

Temp./Humi. Fundamental Frequency :2412 MHz :20.5 deg_C / 66 RH

Operation Mode :Band Edge LOW Engineer :Curry EUT Pol. :H Plane :VERTICAL Measurement Antenna Pol.

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

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

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

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

The trace on RE(radiation emission) plot is as colored blue, and the detection manner we've employed is peak detector.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Leve	el	FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
2390.00	E	Average	33.24	2.42	35.66	54.00	-18.34
2390.00	E	Peak	51.85	2.42	54.27	74.00	-19.73
1 2		:802.11 g :2412 MHz :Band Edge I		Test Date Temp./Humi. Engineer		:2014-03-18 :20.5 deg_C / :Curry	66 RH
EUT Pol.		:H Plane		Measurement An	itenna Pol	:HORIZONT	AL

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

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

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

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

The trace on RE(radiation emission) plot is as colored blue, and the detection manner we've employed is peak detector.

Measurement Antenna Pol.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
2390.00	E	Average	35.54	2.42	37.96	54.00	-16.04
2390.00	E	Peak	56.76	2.42	59.18	74.00	-14.82

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

:HORIZONTAL

Page: 60 of 248

Operation Band :802.11 g Test Date :2014-03-18

Fundamental Frequency :2462 MHz Temp./Humi. :20.5 deg_C / 66 RH

Operation Mode :Band Edge HIGH Engineer :Curry

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

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

Factor(dB) = Antenna Factor(dB μ V/m) + Cable Loss(dB) – Pre_Amplifier Gain(dB)

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

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

The trace on RE(radiation emission) plot is as colored blue, and the detection manner we've employed is peak detector.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Lev	el	FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
2483.50	E	Average	39.13	2.74	41.87	54.00	-12.13
2483.50	E	Peak	57.46	2.74	60.20	74.00	-13.80
Fundamental Frequency :2462 l		:802.11 g :2462 MHz :Band Edge I		Test Date Temp./Humi. Engineer		:2014-03-18 :20.5 deg_C / :Curry	66 RH

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

:H Plane

EUT Pol.

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

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

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

The trace on RE(radiation emission) plot is as colored blue, and the detection manner we've employed is peak detector.

Measurement Antenna Pol.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
2483.50	E	Average	40.17	2.74	42.91	54.00	-11.09
2483.50	E	Peak	60.72	2.74	63.46	74.00	-10.54

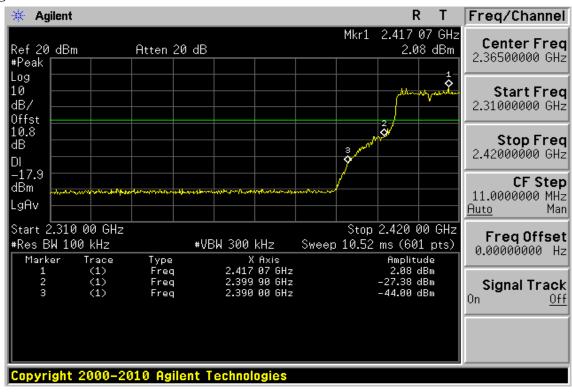
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

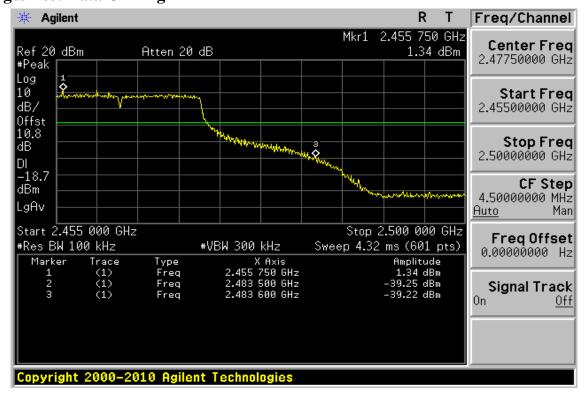
SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 t (886-2) 2299-3279

Page: 61 of 248

802.11n_20M- Unwanted Emissions into Non-Restricted Frequency Bands **Band Edges Test Data CH-Low**



Band Edges 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

Offices Office Windows States the Company In this act report from the States and State

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

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

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sqs.com



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 62 of 248

802.11n_20MHz

Frequency (GHz)	Results (dBm)	Ref (dBm)	Limit (dBm)	Verdict
2.3999	-27.38	2.08	-17.90	Pass
2.4836	-39.22	1.34	-18.70	Pass

Note: Limit = Ref (The highest level of emission) dBm – 20dBm

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

t (886-2) 2299-3279

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

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

台灣檢驗科技股份有限公司



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 63 of 248

Radiated Emission: 802.11 n 20M mode

For measurement plot of radiation revealing the compliance of 15.209, please refer to Appendix I

(Unwanted Emissions into Restricted Frequency Bands): 802.11 n 20M mode

Operation Band :802.11 n20M Test Date :2014-03-18

Fundamental Frequency :2412 MHz Temp./Humi. :20.5 deg_C / 66 RH

Operation Mode :Band Edge LOW Engineer :Curry EUT Pol. :H Plane :VERTICAL Measurement Antenna Pol.

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

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

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

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

The trace on RE(radiation emission) plot is as colored blue, and the detection manner we've employed is peak detector.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
2390.00	E	Average	33.22	2.42	35.64	54.00	-18.36
2390.00	E	Peak	50.33	2.42	52.75	74.00	-21.25

Operation Band Test Date :802.11 n20M :2014-03-18

Fundamental Frequency :2412 MHz Temp./Humi. :20.5 deg_C / 66 RH

Operation Mode :Band Edge LOW Engineer :Curry

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

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

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

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

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

The trace on RE(radiation emission) plot is as colored blue, and the detection manner we've employed is peak detector.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
2390.00	E	Average	35.76	2.42	38.18	54.00	-15.82
2390.00	E	Peak	53.06	2.42	55.48	74.00	-18.52

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 64 of 248

Operation Band :802.11 n20M Test Date :2014-03-18

Fundamental Frequency :2462 MHz Temp./Humi. :20.5 deg_C / 66 RH

Operation Mode :Band Edge HIGH Engineer :Curry

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

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

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

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

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

The trace on RE(radiation emission) plot is as colored blue, and the detection manner we've employed is peak detector.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Lev	el	FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
2483.50	E	Average	37.34	2.74	40.08	54.00	-13.92
2483.50	E	Peak	55.62	2.74	58.36	74.00	-15.64
Operation Band :802.11 n20M Fundamental Frequency :2462 MHz Operation Mode :Band Edge HI			Test Date Temp./Humi. Engineer		:2014-03-18 :20.5 deg_C / :Curry	66 RH	
EUT Pol.		:H Plane		Measurement An	tenna Pol.	:HORIZONT	AL

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

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

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

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

The trace on RE(radiation emission) plot is as colored blue, and the detection manner we've employed is peak detector.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
2483.50	E	Average	40.36	2.74	43.10	54.00	-10.90
2483.50	E	Peak	61.69	2.74	64.43	74.00	-9.57

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

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

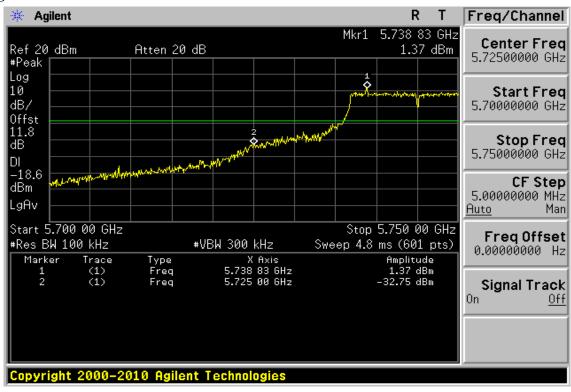
SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 t (886-2) 2299-3279

台灣檢驗科技股份有限公司

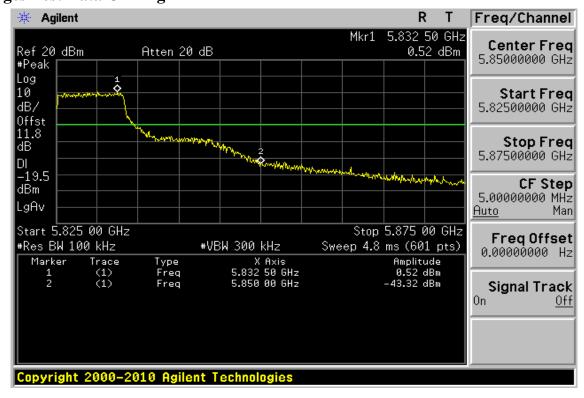


Page: 65 of 248

802.11a - Unwanted Emissions into Non-Restricted Frequency Bands **Band Edges Test Data CH-Low**



Band Edges 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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

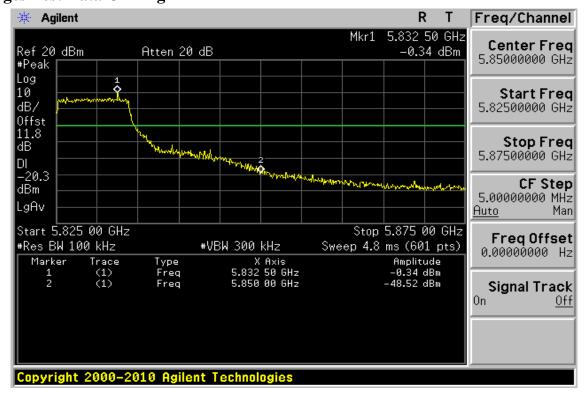
www.tw.sqs.com

Page: 66 of 248

802.11n (5GHz) 20M - Unwanted Emissions into Non-Restricted Frequency Bands **Band Edges Test Data CH-Low**



Band Edges 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

Offices Office Windows States the Company In this act report from the States and State tronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or ap-

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

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

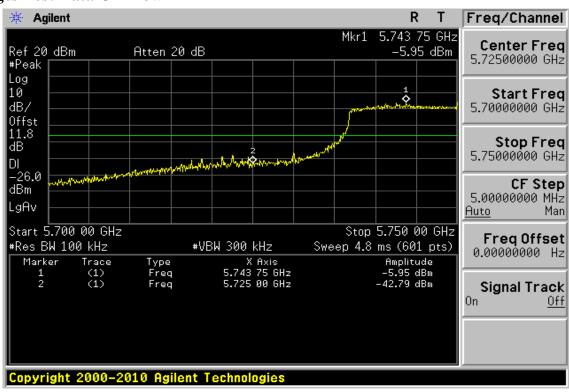
台灣檢驗科技股份有限公司

t (886-2) 2299-3279

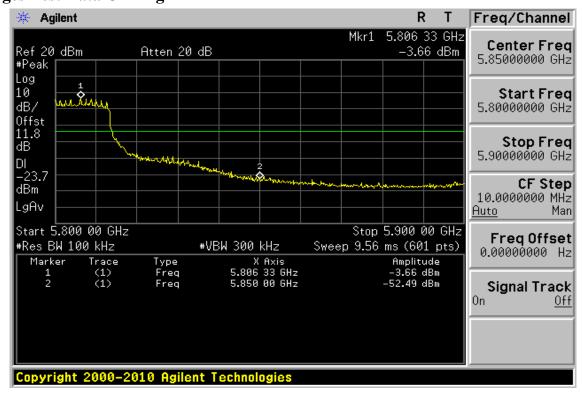


Page: 67 of 248

802.11n (5GHz)_40M - Unwanted Emissions into Non-Restricted Frequency Bands **Band Edges Test Data CH-Low**



Band Edges 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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 68 of 248

Tabular Results:

802.11a

Frequency (GHz)	Results (dBm)	Ref (dBm)	Limit (dBm)	Verdict
5.7250	-32.75	1.37	-18.60	Pass
5.8500	-43.32	0.52	-19.50	Pass

802.11n_20M

Frequency (GHz)	Results (dBm)	Ref (dBm)	Limit (dBm)	Verdict
5.7250	-40.75	-0.88	-20.90	Pass
5.8500	-48.52	-0.34	-20.30	Pass

802.11n_40M

Frequency (GHz)	Results (dBm)	Ref (dBm)	Limit (dBm)	Verdict
5.7250	-42.79	-5.95	-26.00	Pass
5.8500	-52.49	-3.66	-23.70	Pass

Note: Limit = Ref (The highest level of emission) dBm – 20dBm

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

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

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



Report No.: EH/2014/10015 Issue Date: Mar. 21, 2014

Page: 69 of 248

10 SPURIOUS EMISSION TEST

10.1 Standard Applicable

According to §15.247(d),

Emission at antenna port:

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

Radiated Spurious Emission

Attenuation below the general limits specified in § 15.209(a) is not required. 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 in § 15.209(a) (see § 15.205(c)).

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.

10.2 Measurement Equipment Used:

10.2.1 Conducted Emission at antenna port:

Refer to section 7.2 for details.

10.2.2 Radiated emission:

Refer to section 9.2.2 for details.

10.3 Test SET-UP:

10.3.1 Conducted Emission at antenna port:

Refer to section 7.3 for details.

10.3.2 Radiated emission:

Refer to section 9.3.2 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. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

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

SGS Taiwan Ltd. No.1

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 70 of 248

10.4 Measurement Procedure:

Radiated Emission:

- 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 emis-
- 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. On spectrum, change spectrum mode in linear display mode, and reduce VBW = 10Hz if average reading is measured.
- 7. Repeat above procedures until all default test channel measured were complete.

Conducted Emission:

- 1. To connect Antenna Port of EUT to Spectrum.
- 2. Set RBW = 100K & VBW = 300K on Spectrum.
- Sweep the frequency to determine spurious emission as seen on spectrum from span of 30 to 3G, 3G to 3. 8G, 8G to 13G, 13G to 18G and 18G to 26.5GHz, 18G to 40GHz (applicable if operation mode is 5GHz)
- Via Software, combine 5 spans of frequency range into one plot 4.
- Repeat above procedures until all default test channel measured were complete. 5.

10.5 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	

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

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

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

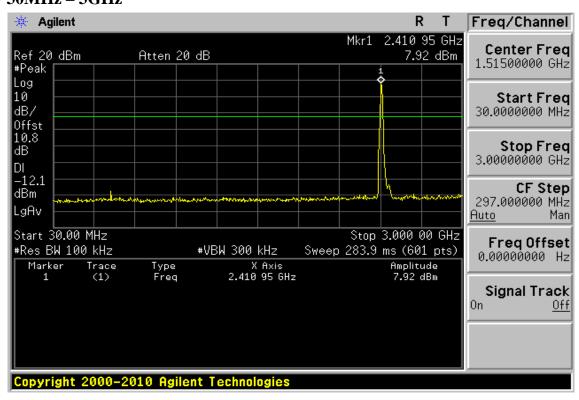
SGS Taiwan Ltd.



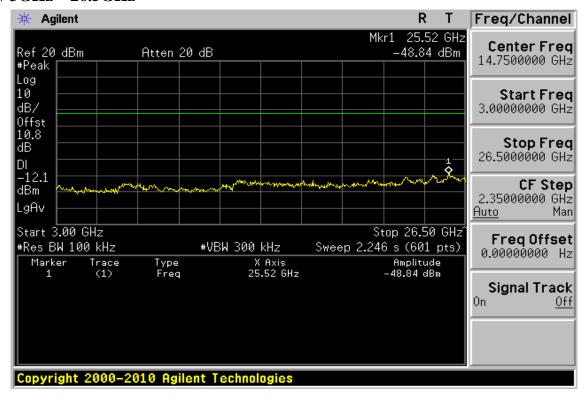
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 71 of 248

Conducted Spurious Emission Measurement Result (802.11b) 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 document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

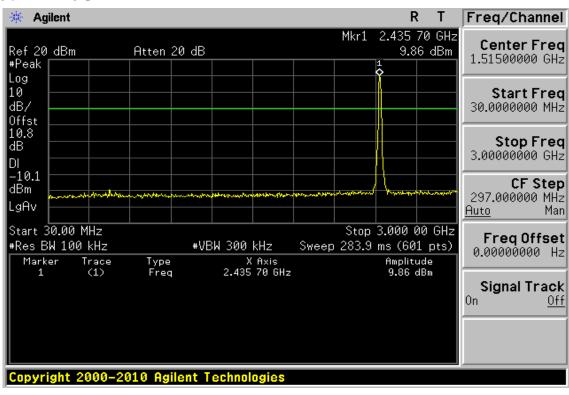
No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

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

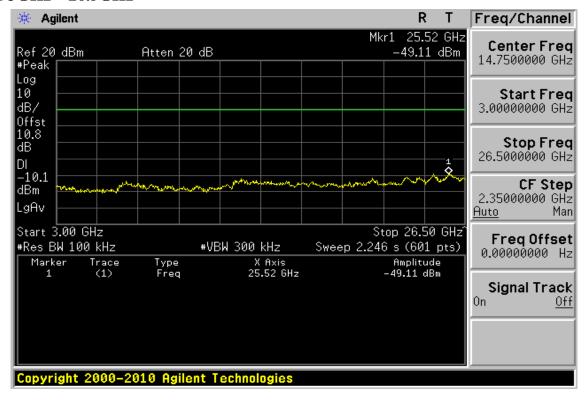
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 72 of 248

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.

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

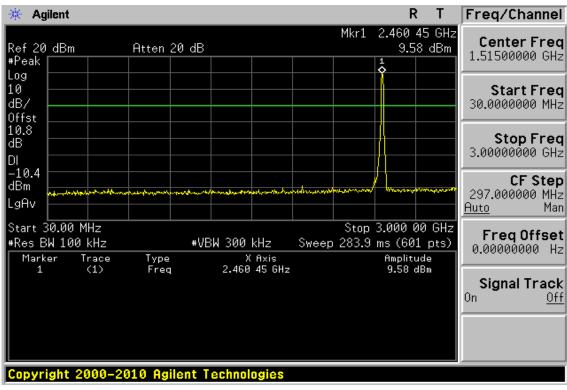
No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

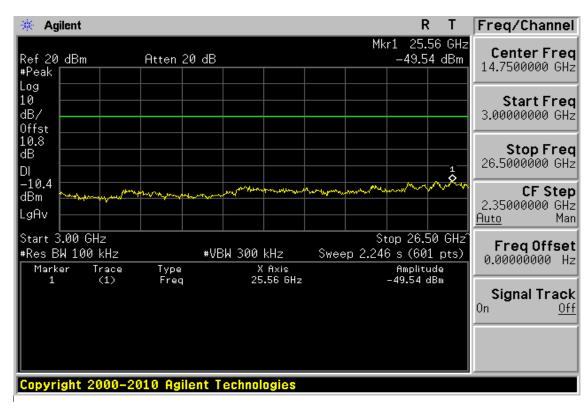
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 73 of 248

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.

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

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

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 74 of 248

Tabular Results:

Out of Band emission at antenna terminals – 802.11b

Engineer Fundamental Frequency 2412 MHz :Nick

Operation Mode :TX Low

Freq. (MHz)	Note F/H/E/S	Reading dBm	Limit dBm	Safe Margin dB
2412.00	Ref	7.92		
< 30	S		-12.10	
30-1000	S		-12.10	
4824.00	Н		-12.10	
7236.00	Н		-12.10	
9648.00	Н		-12.10	
12060.00	Н		-12.10	
14472.00	Н		-12.10	
16884.00	Н		-12.10	
19296.00	Н		-12.10	
24120.00	Н		-12.10	
25520.00	S	-48.84	-12.10	36.74

Note: "H": denotes Harmonic Frequency. "S": denotes Spurious Frequency.

"---": denotes Noise Floor. Ref: Reference Signal

Note2: Limit = Ref (the highest emission of the fundamental) – 20dBm

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

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

台灣檢驗科技股份有限公司 t (886-2) 2299-3279 www.tw.sqs.com



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 75 of 248

Fundamental Frequency Engineer 2437 MHz :Nick Operation Mode :TX Mid

Freq. (MHz)	Note F/H/E/S	Reading dBm	Limit dBm	Safe Margin dB
2437.00	Ref	9.86		
< 30	S		-10.10	
30-1000	S		-10.10	
4874.00	Н		-10.10	
7311.00	Н		-10.10	
9748.00	Н		-10.10	
12185.00	Н		-10.10	
14622.00	Н		-10.10	
17059.00	Н		-10.10	
19496.00	Н		-10.10	
21933.00	Н		-10.10	
24370.00	Н		-10.10	
25520.00	S	-49.11	-10.10	39.01

"H": denotes Harmonic Frequency. "S": denotes Spurious Frequency. Note:

"---": denotes Noise Floor.

Note2: Limit = Ref (the highest emission of the fundamental) – 20dBm

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

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

台灣檢驗科技股份有限公司 t (886-2) 2299-3279

SGS Taiwan Ltd.

f (886-2) 2298-0488

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 76 of 248

Fundamental Frequency 2462 MHz Engineer :Nick Operation Mode :TX High

Freq. (MHz)	Note F/H/E/S	Reading dBm	Limit dBm	Safe Margin dB
2462.00	Ref	9.58		
< 30	S		-10.40	
30-1000	S		-10.40	
4924.00	Н		-10.40	
7386.00	Н		-10.40	
9848.00	Н		-10.40	
12310.00	Н		-10.40	
14772.00	Н		-10.40	
17234.00	Н		-10.40	
19696.00	Н		-10.40	
22158.00	Н		-10.40	
24620.00	Н		-10.40	
25560.00	S	-49.54	-10.40	39.14

"H": denotes Harmonic Frequency. "S": denotes Spurious Frequency. Note:

"---": denotes Noise Floor.

Note2: Limit = Ref (the highest emission of the fundamental) – 20dBm

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

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

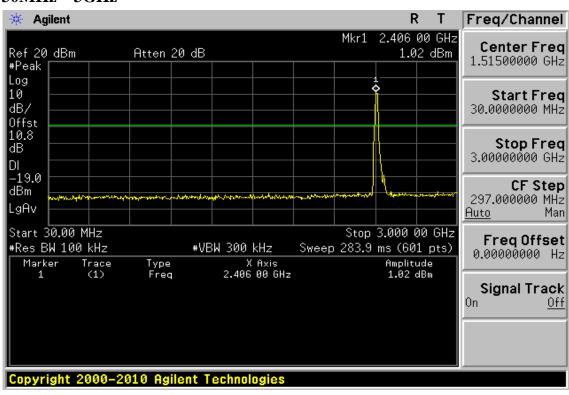
SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



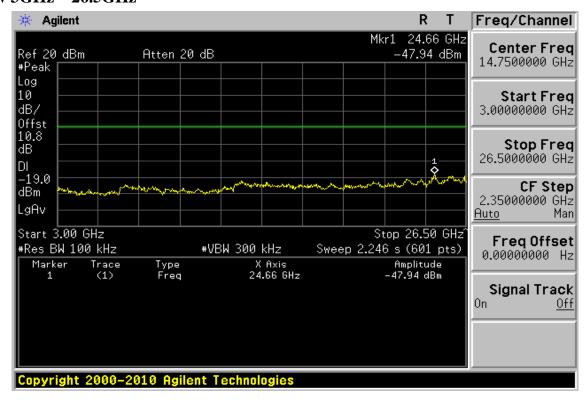
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 77 of 248

Conducted Spurious Emission Measurement Result (802.11g) 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 document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

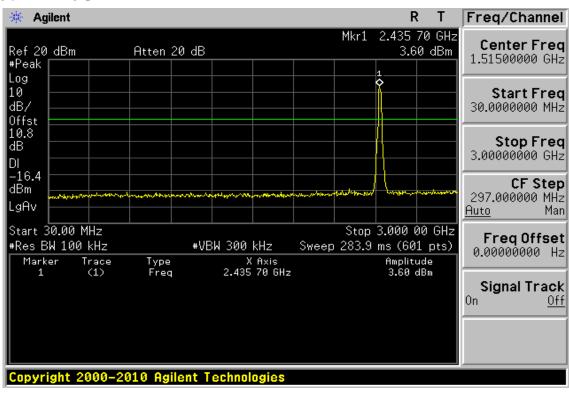
f (886-2) 2298-0488

www.tw.sqs.com

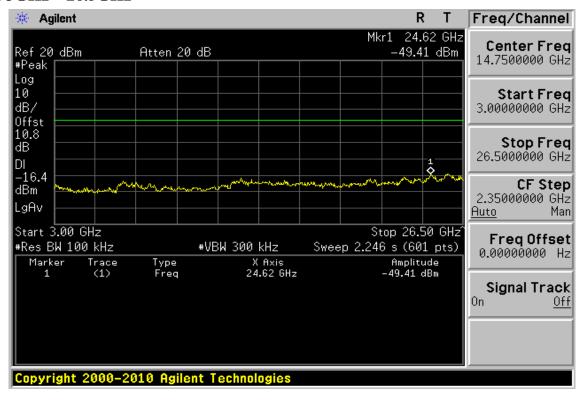
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 78 of 248

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.

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

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

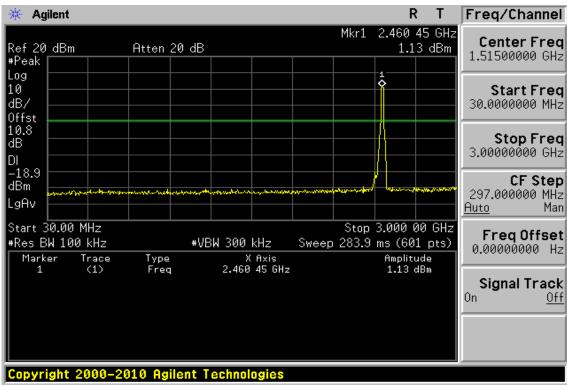
台灣檢驗科技股份有限公司

t (886-2) 2299-3279

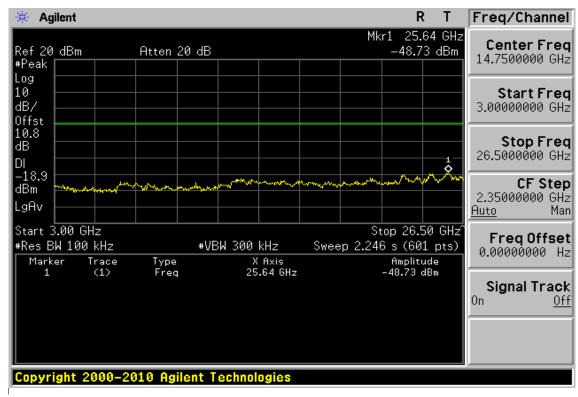
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 79 of 248

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.

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 80 of 248

Tabular Results:

Out of Band emission at antenna terminals – 802.11g

Fundamental Frequency 2412 MHz :Nick Engineer

Operation Mode :TX Low

Freq. (MHz)	Note F/H/E/S	Reading dBm	Limit dBm	Safe Margin dB
2412.00	Ref	1.02		
< 30	S		-19.00	
30-1000	S		-19.00	
4824.00	Н		-19.00	
7236.00	Н		-19.00	
9648.00	Н		-19.00	
12060.00	Н		-19.00	
14472.00	Н		-19.00	
16884.00	Н		-19.00	
19296.00	Н		-19.00	
24120.00	Н		-19.00	
24660.00	S	-47.94	-19.00	28.94

"H": denotes Harmonic Frequency. "S": denotes Spurious Frequency. Note:

"---": denotes Noise Floor. Ref: Reference Signal

Note2: Limit = Ref (the highest emission of the fundamental) – 20dBm

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

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

台灣檢驗科技股份有限公司 t (886-2) 2299-3279 www.tw.sqs.com



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 81 of 248

Fundamental Frequency Engineer 2437 MHz :Nick Operation Mode :TX Mid

Freq. (MHz)	Note F/H/E/S	Reading dBm	Limit dBm	Safe Margin dB
2437.00	Ref	3.60		
< 30	S		-16.40	
30-1000	S		-16.40	
4874.00	Н		-16.40	
7311.00	Н		-16.40	
9748.00	Н		-16.40	
12185.00	Н		-16.40	
14622.00	Н		-16.40	
17059.00	Н		-16.40	
19496.00	Н		-16.40	
21933.00	Н		-16.40	
24370.00	Н		-16.40	
24620.00	S	-49.41	-16.40	33.01

"H": denotes Harmonic Frequency. "S": denotes Spurious Frequency. Note:

"---": denotes Noise Floor.

Note2: Limit = Ref (the highest emission of the fundamental) – 20dBm

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 82 of 248

Fundamental Frequency 2462 MHz Engineer :Nick Operation Mode :TX High

Freq. (MHz)	Note F/H/E/S	Reading dBm	Limit dBm	Safe Margin
2462.00	D . C	1 12		dB
2462.00	Ref	1.13		
< 30	S		-18.90	
30-1000	S		-18.90	
4924.00	Н		-18.90	
7386.00	Н		-18.90	
9848.00	Н		-18.90	
12310.00	Н		-18.90	
14772.00	Н		-18.90	
17234.00	Н		-18.90	
19696.00	Н		-18.90	
22158.00	Н		-18.90	
24620.00	Н		-18.90	
25640.00	S	-48.73	-18.90	29.83

"H": denotes Harmonic Frequency. "S": denotes Spurious Frequency. Note:

"---": denotes Noise Floor.

Note2: Limit = Ref (the highest emission of the fundamental) – 20dBm

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

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

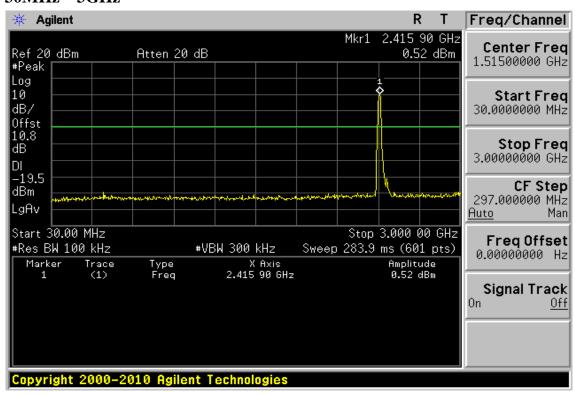
台灣檢驗科技股份有限公司 t (886-2) 2299-3279 www.tw.sqs.com



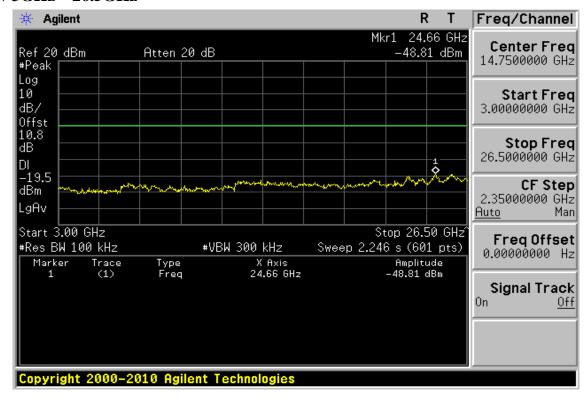
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 83 of 248

Conducted Spurious Emission Measurement Result (802.11n_20M) 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

t (886-2) 2299-3279

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

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

台灣檢驗科技股份有限公司

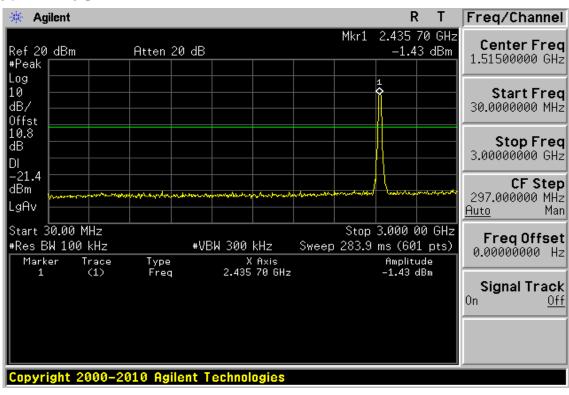
f (886-2) 2298-0488

www.tw.sqs.com

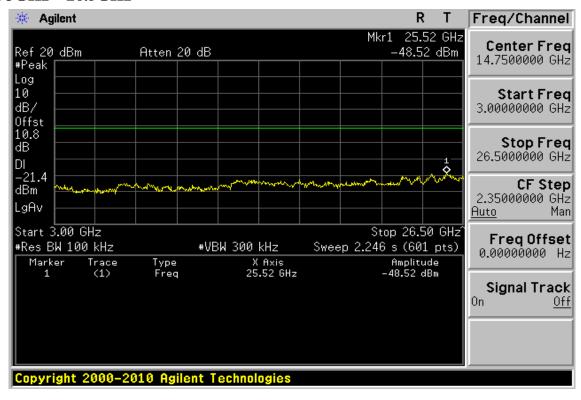
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 84 of 248

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.

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

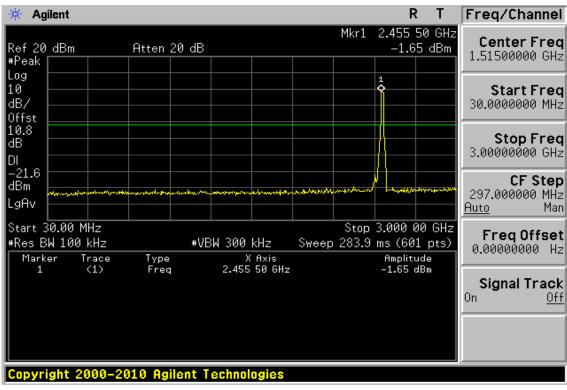
pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

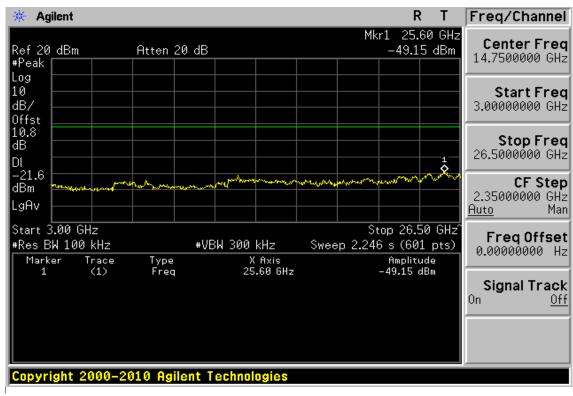
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 85 of 248

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.

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

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

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 86 of 248

Tabular Results:

Out of Band emission at antenna terminals - 802.11n_20M

Fundamental Frequency 2412 MHz Engineer :Nick

Operation Mode :TX Low

Freq. (MHz)	Note F/H/E/S	Reading dBm	Limit dBm	Safe Margin dB
2412.00	Ref	0.52		
< 30	S		-19.50	
30-1000	S		-19.50	
4824.00	Н		-19.50	
7236.00	Н		-19.50	
9648.00	Н		-19.50	
12060.00	Н		-19.50	
14472.00	Н		-19.50	
16884.00	Н		-19.50	
19296.00	Н		-19.50	
24120.00	Н		-19.50	
24660.00	S	-48.81	-19.50	29.31

Note: "H": denotes Harmonic Frequency. "S": denotes Spurious Frequency.

"---": denotes Noise Floor. Ref: Reference Signal

Note2: Limit = Ref (the highest emission of the fundamental) – 20dBm

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

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

台灣檢驗科技股份有限公司 t (886-2) 2299-3279

SGS Taiwan Ltd.

f (886-2) 2298-0488

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 87 of 248

Fundamental Frequency Engineer 2437 MHz :Nick Operation Mode :TX Mid

Freq. (MHz)	Note F/H/E/S	Reading dBm	Limit dBm	Safe Margin dB
2437.00	Ref	-1.43		
< 30	S		-21.40	
30-1000	S		-21.40	
4874.00	Н		-21.40	
7311.00	Н		-21.40	
9748.00	Н		-21.40	
12185.00	Н		-21.40	
14622.00	Н		-21.40	
17059.00	Н		-21.40	
19496.00	Н		-21.40	
21933.00	Н		-21.40	
24370.00	Н		-21.40	
25520.00	S	-48.52	-21.40	27.12

"H": denotes Harmonic Frequency. "S": denotes Spurious Frequency. Note:

"---": denotes Noise Floor.

Note2: Limit = Ref (the highest emission of the fundamental) – 20dBm

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 88 of 248

Fundamental Frequency 2462 MHz Engineer :Nick Operation Mode :TX High

Freq. (MHz)	Note F/H/E/S	Reading dBm	Limit dBm	Safe Margin dB
2462.00	Ref	-1.65		
< 30	S		-21.60	
30-1000	S		-21.60	
4924.00	Н		-21.60	
7386.00	Н		-21.60	
9848.00	Н		-21.60	
12310.00	Н		-21.60	
14772.00	Н		-21.60	
17234.00	Н		-21.60	
19696.00	Н		-21.60	
22158.00	Н		-21.60	
24620.00	Н		-21.60	
25600.00	S	-49.15	-21.60	27.55

"H": denotes Harmonic Frequency. "S": denotes Spurious Frequency. Note:

"---": denotes Noise Floor.

Note2: Limit = Ref (the highest emission of the fundamental) – 20dBm

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

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

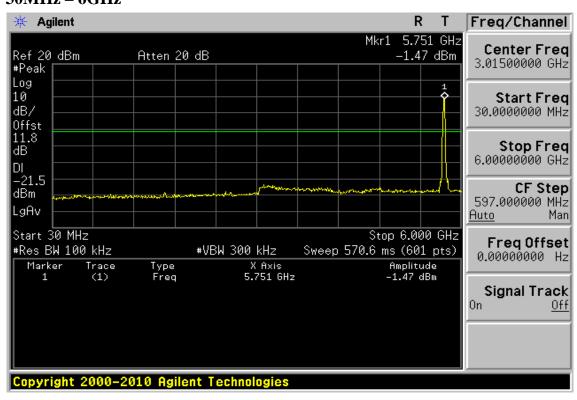
台灣檢驗科技股份有限公司 t (886-2) 2299-3279 www.tw.sqs.com



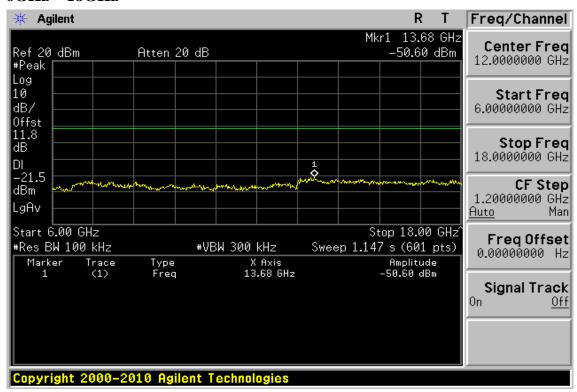
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 89 of 248

Conducted Spurious Emission Measurement Result (802.11a) Ch Low 30MHz - 6GHz



Ch Low 6GHz - 18GHz



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

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

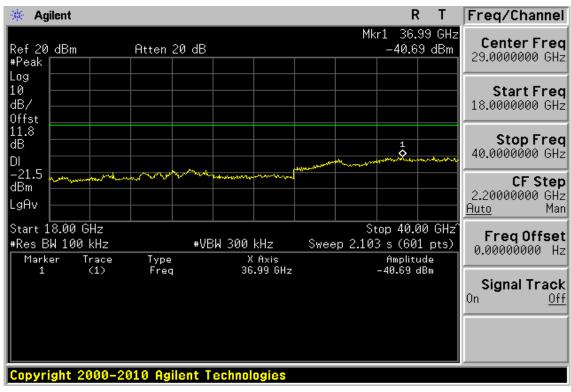
No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

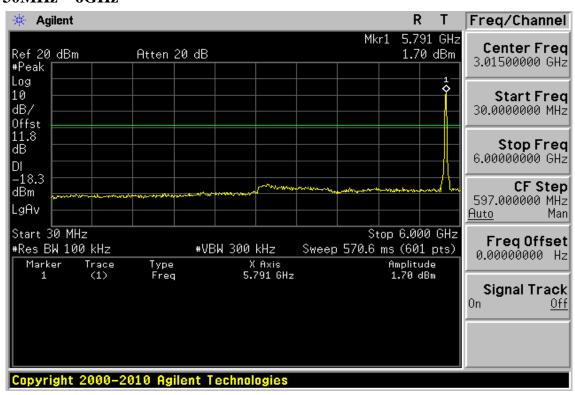
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 90 of 248

Ch Low 18GHz – 40GHz



Ch Mid 30MHz - 6GHz



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

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

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

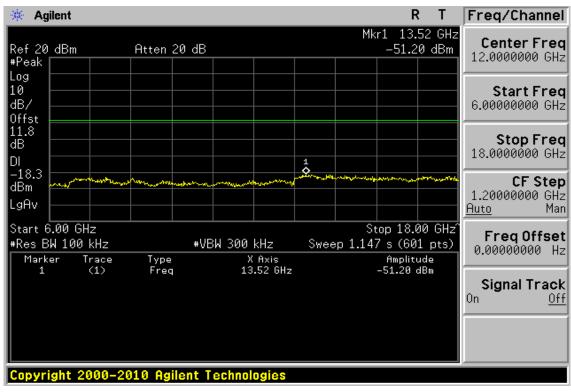
t (886-2) 2299-3279

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

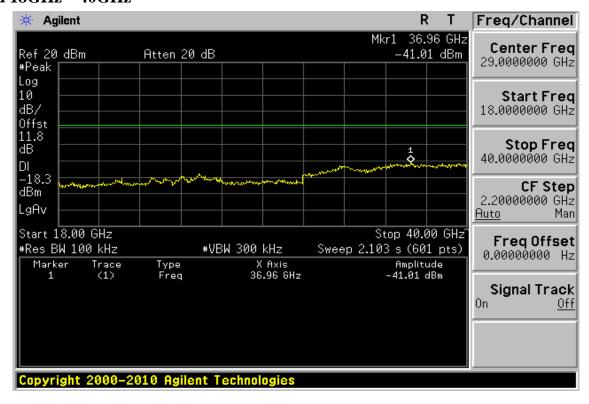
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 91 of 248

Ch Mid 6GHz – 18GHz



Ch Mid 18GHz - 40GHz



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

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

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

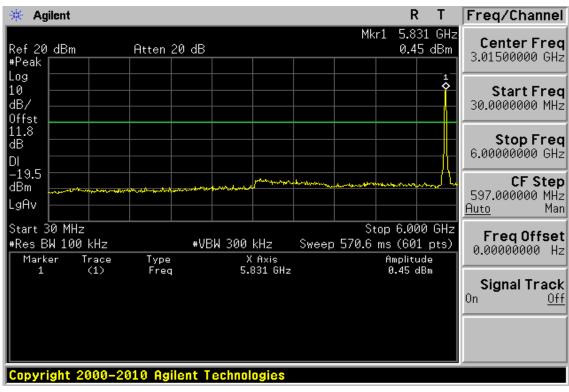
t (886-2) 2299-3279

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

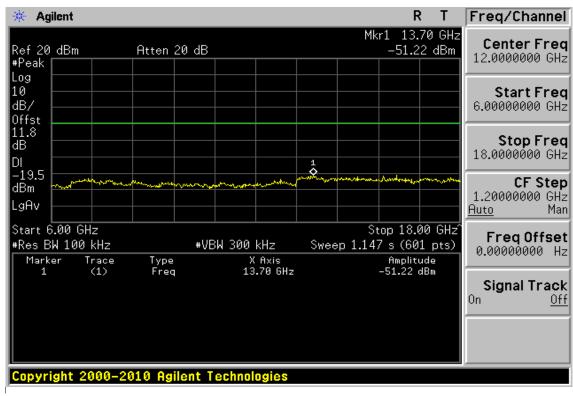
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 92 of 248

Ch High 30MHz - 6GHz



Ch High 6GHz – 18GHz



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

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

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

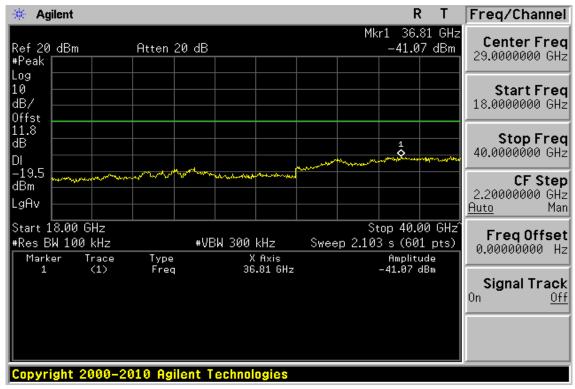
t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 93 of 248

Ch High 18GHz - 40GHz



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

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

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

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

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 94 of 248

Tabular Results:

Out of Band emission at antenna terminals – 802.11a

Fundamental Frequency 5745 MHz :Nick Engineer

:TX Low Operation Mode

Freq. (MHz)	Note F/H/E/S	Reading dBm	Limit dBm	Safe Margin dB
5751.00	Ref	-1.47		
<30	S		-21.50	
30-1000	S		-21.50	
11490.00	Н	 -	-21.50	
13680.00	Н	-50.6	-21.50	29.10
17235.00	Н	 -	-21.50	
22980.00	Н		-21.50	
28725.00	Н		-21.50	
34470.00	Н	 -	-21.50	
36990.00	S	-40.69	-21.50	19.19

Note: "H": denotes Harmonic Frequency. "S": denotes Spurious Frequency.

"---": denotes Noise Floor. Ref: Reference Signal

Note2: Limit = Ref (the highest emission of the fundamental) – 20dBm

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

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

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

SGS Taiwan Ltd.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 95 of 248

Fundamental Frequency Engineer 5785 MHz :Nick Operation Mode :TX Mid

Freq. (MHz)	Note F/H/E/S	Reading dBm	Limit dBm	Safe Margin dB
5791.00	Ref	1.70		
< 30	S		-18.30	
30-1000	S		-18.30	
11570.00	Н		-18.30	
13520.00	S	-51.2	-18.30	32.90
17355.00	Н		-18.30	
23140.00	Н		-18.30	
28925.00	Н		-18.30	
34710.00	H		-18.30	
36960.00	S	-41.01	-18.30	22.71

"H": denotes Harmonic Frequency. "S": denotes Spurious Frequency. Note:

"---": denotes Noise Floor.

Note2: Limit = Ref (the highest emission of the fundamental) – 20dBm

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 96 of 248

Fundamental Frequency 5825 MHz Engineer :Nick Operation Mode :TX High

Freq. (MHz)	Note F/H/E/S	Reading dBm	Limit dBm	Safe Margin dB
5831.00	Ref	0.45		
< 30	S		-19.50	
30-1000	S		-19.50	
11650.00	Н		-19.50	
13700.00	S	-51.22	-19.50	31.72
17475.00	Н		-19.50	
23300.00	Н		-19.50	
29125.00	Н		-19.50	
34950.00	Н		-19.50	
36810.00	S	-41.07	-19.50	21.57

"H": denotes Harmonic Frequency. "S": denotes Spurious Frequency. Note:

"---": denotes Noise Floor.

Note2: Limit = Ref (the highest emission of the fundamental) – 20dBm

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

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

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 台灣檢驗科技股份有限公司 t (886-2) 2299-3279 f (886-2) 2298-0488 www.tw.sqs.com

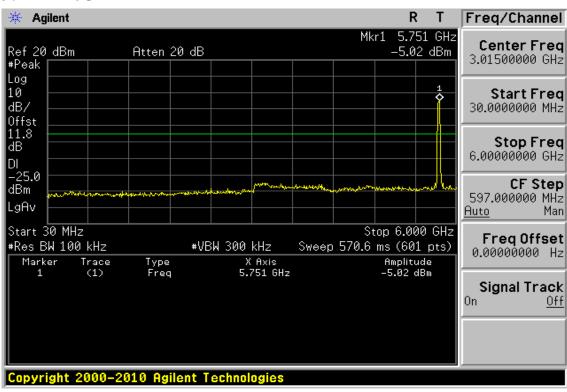
SGS Taiwan Ltd.



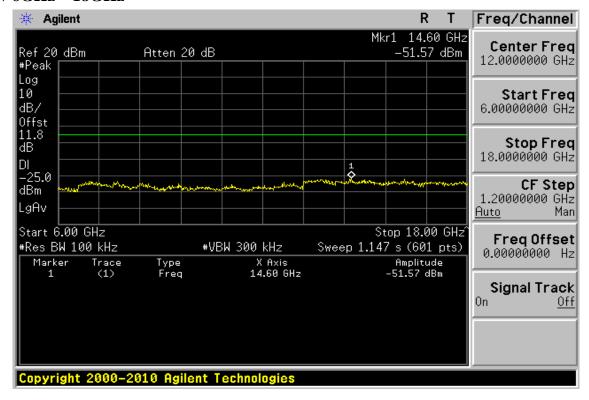
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 97 of 248

Conducted Spurious Emission Measurement Result (802.11n (5GHz)_20M) Ch Low 30MHz - 6GHz



Ch Low 6GHz - 18GHz



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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

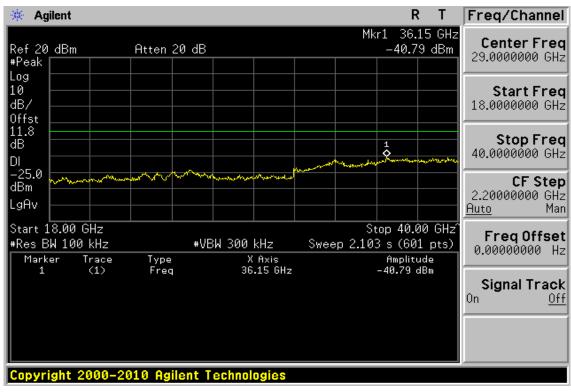
f (886-2) 2298-0488

www.tw.sqs.com

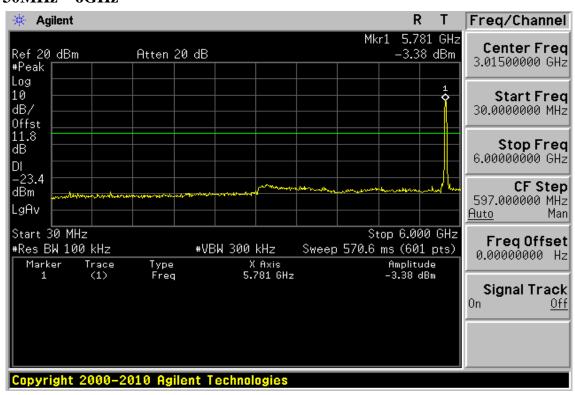
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 98 of 248

Ch Low 18GHz – 40GHz



Ch Mid 30MHz – 6GHz



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

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

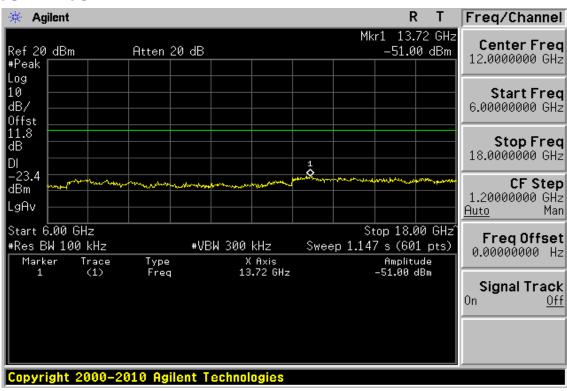
No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

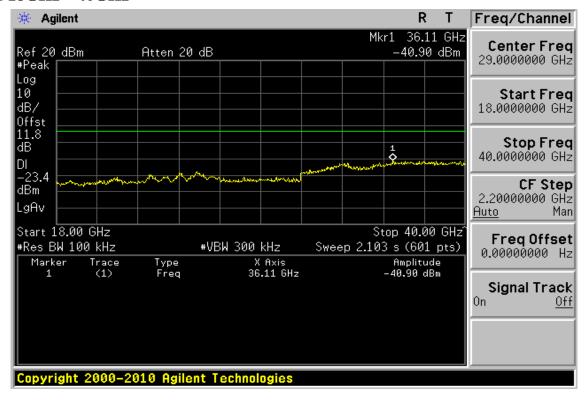
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 99 of 248

Ch Mid 6GHz – 18GHz



Ch Mid 18GHz - 40GHz



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

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

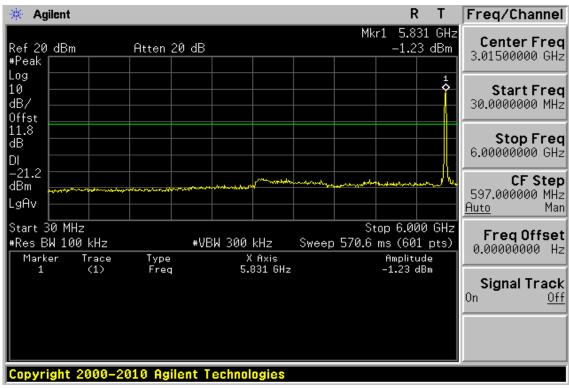
No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

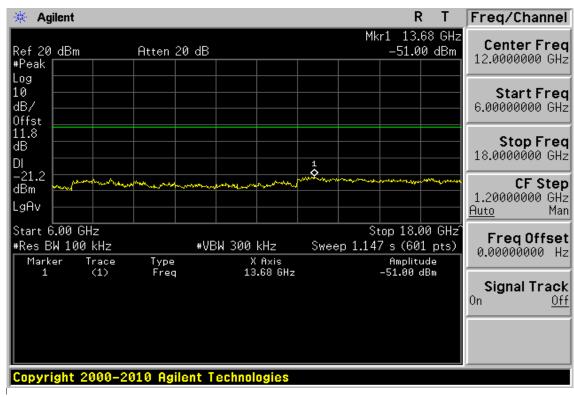
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 100 of 248

Ch High 30MHz - 6GHz



Ch High 6GHz – 18GHz



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

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

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

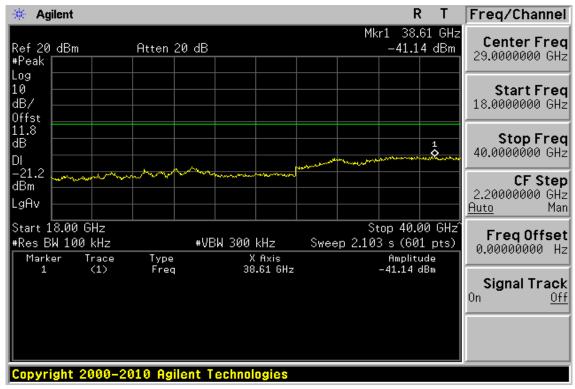
台灣檢驗科技股份有限公司



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 101 of 248

Ch High 18GHz - 40GHz



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

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 102 of 248

Out of Band emission at antenna terminals - 802.11n_20M

Fundamental Frequency 5745 MHz Engineer :Nick

Operation Mode :TX Low

Freq. (MHz)	Note F/H/E/S	Reading dBm	Limit dBm	Safe Margin dB
5751.00	Ref	-5.02		
<30	S		-25.00	
30-1000	S		-25.00	
11490.00	Н		-25.00	
14600.00	S	-51.57	-25.00	26.57
17235.00	Н		-25.00	
22980.00	H		-25.00	
34470.00	Н		-25.00	
36150.00	S	-40.79	-25.00	15.79

"H": denotes Harmonic Frequency. "S": denotes Spurious Frequency. Note:

"---": denotes Noise Floor. Ref: Reference Signal

Note2: Limit = Ref (the highest emission of the fundamental) – 20dBm

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

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

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

台灣檢驗科技股份有限公司 t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 103 of 248

Fundamental Frequency Engineer 5785 MHz :Nick Operation Mode :TX Mid

Freq. (MHz)	Note F/H/E/S	Reading dBm	Limit dBm	Safe Margin dB
5781.00	Ref	-3.38		
< 30	S		-23.40	
30-1000	S		-23.40	
11570.00	H		-23.40	
13720.00	S	-51.00	-23.40	27.60
17355.00	Н		-23.40	
23140.00	Н		-23.40	
28925.00	Н		-23.40	
34710.00	H		-23.40	
36110.00	S	-41.56	-23.40	18.16

"H": denotes Harmonic Frequency. "S": denotes Spurious Frequency. Note:

"---": denotes Noise Floor.

Note2: Limit = Ref (the highest emission of the fundamental) – 20dBm

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

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

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 台灣檢驗科技股份有限公司 t (886-2) 2299-3279 f (886-2) 2298-0488 www.tw.sqs.com

SGS Taiwan Ltd.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 104 of 248

Fundamental Frequency 5825 MHz Engineer :Nick Operation Mode :TX High

Freq. (MHz)	Note F/H/E/S	Reading dBm	Limit dBm	Safe Margin dB
5831.00	Ref	-1.23		
< 30	S		-21.20	
30-1000	S		-21.20	
11650.00	Н		-21.20	
13680.00	S	-51.00	-21.20	29.80
17475.00	Н		-21.20	
23300.00	Н		-21.20	
29125.00	Н		-21.20	
34950.00	Н		-21.20	
38610.00	S	-41.57	-21.20	20.37

"H": denotes Harmonic Frequency. "S": denotes Spurious Frequency. Note:

"---": denotes Noise Floor.

Note2: Limit = Ref (the highest emission of the fundamental) – 20dBm

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

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

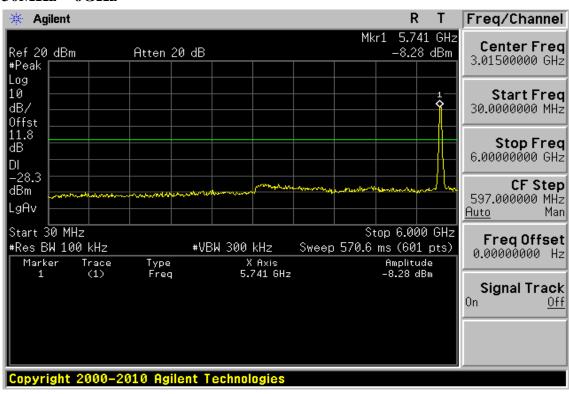
SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



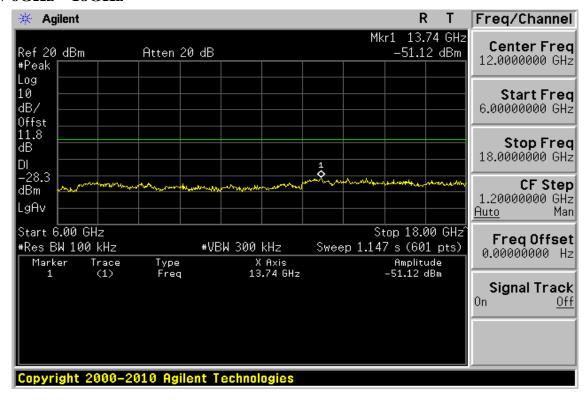
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 105 of 248

Conducted Spurious Emission Measurement Result (802.11n (5GHz)_40M) Ch Low 30MHz - 6GHz



Ch Low 6GHz - 18GHz



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

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

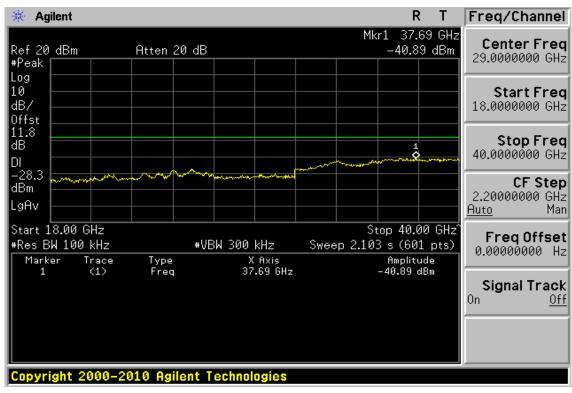
No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

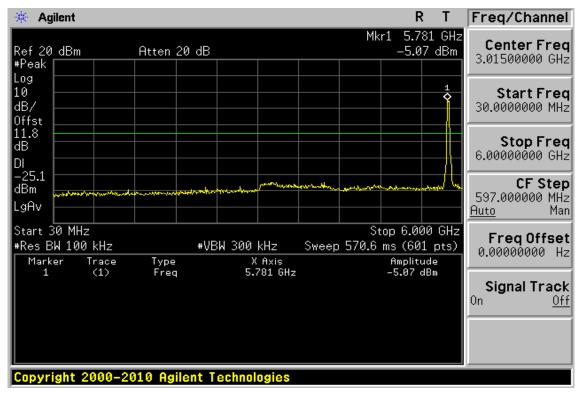
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 106 of 248

Ch Low 18GHz – 40GHz



Ch High 30MHz - 6GHz



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

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

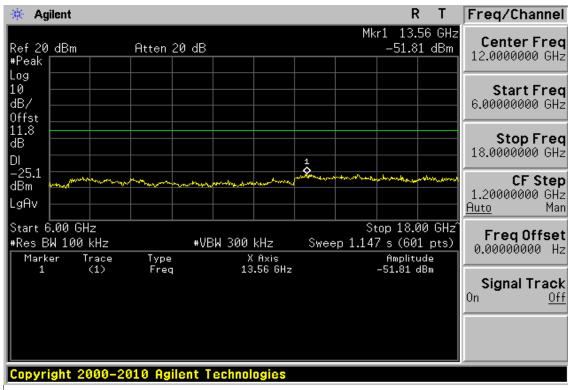
No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

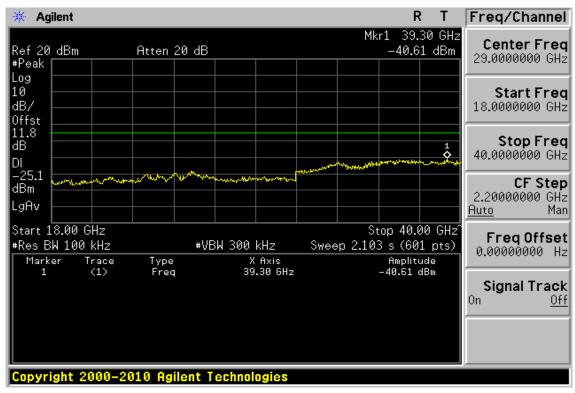
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 107 of 248

Ch High 6GHz - 18GHz



Ch High 18GHz – 40GHz



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

t (886-2) 2299-3279

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

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

台灣檢驗科技股份有限公司

f (886-2) 2298-0488

www.tw.sqs.com



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 108 of 248

Out of Band emission at antenna terminals - 802.11n_40M

Fundamental Frequency 5755 MHz Engineer :Nick

Operation Mode :TX Low

Freq. (MHz)	Note F/H/E/S	Reading dBm	Limit dBm	Safe Margin dB
5741.00	Ref	-8.28		
<30	S		-28.30	
30-1000	S		-28.30	 -
11510.00	Н	 -	-28.30	 -
13740.00	S	-51.12	-28.30	22.82
17265.00	Н		-28.30	
23020.00	Н		-28.30	
28775.00	Н		-28.30	 -
34530.00	Н		-28.30	
37690.00	S	-40.89	-28.30	12.59

"H": denotes Harmonic Frequency. "S": denotes Spurious Frequency. Note:

"---": denotes Noise Floor. Ref: Reference Signal

Note2: Limit = Ref (the highest emission of the fundamental) – 20dBm

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

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

台灣檢驗科技股份有限公司 t (886-2) 2299-3279

SGS Taiwan Ltd.

f (886-2) 2298-0488

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 109 of 248

Fundamental Frequency 5795 MHz Engineer :Nick Operation Mode :TX High

Freq. (MHz)	Note F/H/E/S	Reading dBm	Limit dBm	Safe Margin dB
5781.00	Ref	-5.07		
< 30	S		-25.10	
30-1000	S		-25.10	
11590.00	Н		-25.10	
13560.00	S	-51.81	-25.10	26.71
17385.00	Н		-25.10	
23180.00	Н		-25.10	
28975.00	Н		-25.10	
34770.00	Н		-25.10	
39300.00	S	-40.61	-25.10	15.51

"H": denotes Harmonic Frequency. "S": denotes Spurious Frequency. Note:

"---": denotes Noise Floor.

Note2: Limit = Ref (the highest emission of the fundamental) – 20dBm

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

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

台灣檢驗科技股份有限公司 t (886-2) 2299-3279

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 110 of 248

Radiated Spurious Emission Measurement Result (802.11b)

For measurement plot of radiation, please refer to Appendix I.

Operation Band :802.11 b Test Date :2014-03-20 Fundamental Frequency :2412 MHz Temp./Humi. :21deg_C/59RH :TX LOW Engineer

Operation Mode :Curry EUT Pol. :VERTICAL :H Plane Measurement Antenna Pol.

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
99.84	S	Peak	32.22	-17.86	14.36	43.50	-29.14
161.92	S	Peak	27.60	-12.69	14.91	43.50	-28.59
272.50	S	Peak	26.63	-11.85	14.78	46.00	-31.22
464.56	S	Peak	28.11	-8.00	20.11	46.00	-25.89
691.54	S	Peak	27.35	-3.76	23.59	46.00	-22.41
949.56	S	Peak	27.52	0.18	27.70	46.00	-18.30
4824.00	Н	Average	34.36	6.89	41.25	54.00	-12.75
4824.00	Н	Peak	38.26	6.89	45.15	74.00	-28.85
7236.00	Н						
9648.00	Н						
12060.00	Н						
14472.00	Н						
16884.00	Н						
19296.00	Н						
21708.00	Н						
24120.00	Н						

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

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 111 of 248

Operation Band :802.11 b Test Date :2014-03-20 Fundamental Frequency :2412 MHz Temp./Humi. :21deg_C/59RH

Operation Mode :TX LOW Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
50.37	S	Peak	26.28	-12.96	13.32	40.00	-26.68
154.16	S	Peak	28.22	-12.73	15.49	43.50	-28.01
270.56	S	Peak	25.40	-11.93	13.47	46.00	-32.53
500.45	S	Peak	27.19	-7.52	19.67	46.00	-26.33
693.48	S	Peak	28.42	-3.83	24.59	46.00	-21.41
995.15	S	Peak	27.30	0.32	27.62	54.00	-26.38
4824.00	Н	Average	25.65	6.89	32.54	54.00	-21.46
4824.00	Н	Peak	37.60	6.89	44.49	74.00	-29.51
7236.00	Н						
9648.00	Н						
12060.00	Н						
14472.00	Н						
16884.00	Н						
19296.00	Н						
21708.00	H						
24120.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 112 of 248

Operation Band :802.11 b Test Date :2014-03-20 Fundamental Frequency :2437 MHz Temp./Humi. :21deg_C/59RH

Operation Mode Engineer :TX MID :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
99.84	S	Peak	32.75	-17.86	14.89	43.50	-28.61
155.13	S	Peak	26.94	-12.71	14.23	43.50	-29.27
258.92	S	Peak	26.87	-12.60	14.27	46.00	-31.73
490.75	S	Peak	28.11	-7.68	20.43	46.00	-25.57
700.27	S	Peak	27.77	-4.08	23.69	46.00	-22.31
904.94	S	Peak	28.80	-0.67	28.13	46.00	-17.87
4874.00	Н	Average	31.54	6.96	38.50	54.00	-15.50
4874.00	Н	Peak	38.76	6.96	45.72	74.00	-28.28
7311.00	Н						
9748.00	Н						
12185.00	Н						
14622.00	Н						
17059.00	Н						
19496.00	Н						
21933.00	Н						
24370.00	Н						

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

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 113 of 248

Operation Band :802.11 b Test Date :2014-03-20 Fundamental Frequency :2437 MHz Temp./Humi. :21deg_C/59RH

Operation Mode Engineer :TX MID :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
49.40	S	Peak	26.90	-12.95	13.95	40.00	-26.05
162.89	S	Peak	26.91	-12.72	14.19	43.50	-29.31
275.41	S	Peak	26.24	-11.72	14.52	46.00	-31.48
465.53	S	Peak	27.96	-7.97	19.99	46.00	-26.01
676.99	S	Peak	27.87	-3.78	24.09	46.00	-21.91
964.11	S	Peak	27.26	0.20	27.46	54.00	-26.54
4874.00	Н	Average	25.78	6.96	32.74	54.00	-21.26
4874.00	Н	Peak	36.71	6.96	43.67	74.00	-30.33
7311.00	Н						
9748.00	Н						
12185.00	Н						
14622.00	Н						
17059.00	Н						
19496.00	Н						
21933.00	Н						
24370.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 114 of 248

Operation Band :802.11 b Test Date :2014-03-20 Fundamental Frequency :2462 MHz Temp./Humi. :21deg_C/59RH

Operation Mode Engineer :TX HIGH :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
99.84	S	Peak	31.94	-17.86	14.08	43.50	-29.42
162.89	S	Peak	27.18	-12.72	14.46	43.50	-29.04
248.25	S	Peak	27.22	-13.01	14.21	46.00	-31.79
500.45	S	Peak	27.65	-7.52	20.13	46.00	-25.87
577.08	S	Peak	29.38	-5.43	23.95	46.00	-22.05
995.15	S	Peak	27.26	0.32	27.58	54.00	-26.42
4924.00	Н	Average	27.78	7.01	34.79	54.00	-19.21
4924.00	Н	Peak	36.45	7.01	43.46	74.00	-30.54
7386.00	Н						
9848.00	Н						
12310.00	Н						
14772.00	Н						
17234.00	Н						
19696.00	Н						
22158.00	Н						
24620.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 115 of 248

Operation Band :802.11 b Test Date :2014-03-20 Fundamental Frequency :2462 MHz Temp./Humi. :21deg_C/59RH

Operation Mode Engineer :TX HIGH :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
59.10	S	Peak	27.79	-13.52	14.27	40.00	-25.73
162.89	S	Peak	26.58	-12.72	13.86	43.50	-29.64
272.50	S	Peak	25.97	-11.85	14.12	46.00	-31.88
477.17	S	Peak	27.99	-7.79	20.20	46.00	-25.80
685.72	S	Peak	28.11	-3.69	24.42	46.00	-21.58
952.47	S	Peak	27.63	0.18	27.81	46.00	-18.19
4924.00	Н	Average	24.71	7.01	31.72	54.00	-22.28
4924.00	Н	Peak	36.04	7.01	43.05	74.00	-30.95
7386.00	Н						
9848.00	Н						
12310.00	Н						
14772.00	Н						
17234.00	Н						
19696.00	Н						
22158.00	Н						
24620.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 116 of 248

Radiated Spurious Emission Measurement Result (802.11g)

Operation Band :802.11 g Test Date :2014-03-20 Fundamental Frequency :2412 MHz Temp./Humi. :21deg_C/59RH

Operation Mode :TX LOW Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
53.28	S	Peak	27.70	-13.16	14.54	40.00	-25.46
168.71	S	Peak	26.79	-12.90	13.89	43.50	-29.61
275.41	S	Peak	26.27	-11.72	14.55	46.00	-31.45
482.99	S	Peak	27.82	-7.73	20.09	46.00	-25.91
678.93	S	Peak	27.51	-3.70	23.81	46.00	-22.19
969.93	S	Peak	28.20	0.17	28.37	54.00	-25.63
4824.00	Н	Average	25.40	6.89	32.29	54.00	-21.71
4824.00	Н	Peak	37.32	6.89	44.21	74.00	-29.79
7236.00	Н						
9648.00	Н						
12060.00	Н						
14472.00	Н						
16884.00	Н						
19296.00	Н						
21708.00	Н						
24120.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 117 of 248

Operation Band :802.11 g Test Date :2014-03-20 Fundamental Frequency :2412 MHz Temp./Humi. :21deg_C/59RH

Operation Mode :TX LOW Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
48.43	S	Peak	26.61	-12.97	13.64	40.00	-26.36
158.04	S	Peak	26.61	-12.66	13.95	43.50	-29.55
274.44	S	Peak	25.82	-11.76	14.06	46.00	-31.94
475.23	S	Peak	27.88	-7.81	20.07	46.00	-25.93
684.75	S	Peak	26.99	-3.67	23.32	46.00	-22.68
951.50	S	Peak	28.03	0.18	28.21	46.00	-17.79
4824.00	Н	Average	24.64	6.89	31.53	54.00	-22.47
4824.00	Н	Peak	37.04	6.89	43.93	74.00	-30.07
7236.00	Н						
9648.00	Н						
12060.00	Н						
14472.00	Н						
16884.00	Н						
19296.00	Н						
21708.00	Н						
24120.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 118 of 248

Operation Band :802.11 g Test Date :2014-03-20 Fundamental Frequency :2437 MHz Temp./Humi. :21deg_C/59RH

Operation Mode Engineer :TX MID :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
99.84	S	Peak	33.46	-17.86	15.60	43.50	-27.90
159.98	S	Peak	26.41	-12.63	13.78	43.50	-29.72
243.40	S	Peak	27.73	-13.15	14.58	46.00	-31.42
468.44	S	Peak	28.17	-7.90	20.27	46.00	-25.73
681.84	S	Peak	27.36	-3.66	23.70	46.00	-22.30
961.20	S	Peak	27.85	0.21	28.06	54.00	-25.94
4874.00	Н	Average	25.37	6.96	32.33	54.00	-21.67
4874.00	Н	Peak	37.69	6.96	44.65	74.00	-29.35
7311.00	Н						
9748.00	Н						
12185.00	Н						
14622.00	Н						
17059.00	Н						
19496.00	Н						
21933.00	Н						
24370.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 119 of 248

Operation Band :802.11 g Test Date :2014-03-20 Fundamental Frequency :2437 MHz Temp./Humi. :21deg_C/59RH

Operation Mode Engineer :TX MID :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
50.37	S	Peak	26.47	-12.96	13.51	40.00	-26.49
170.65	S	Peak	27.28	-12.99	14.29	43.50	-29.21
275.41	S	Peak	25.48	-11.72	13.76	46.00	-32.24
490.75	S	Peak	28.45	-7.68	20.77	46.00	-25.23
680.87	S	Peak	28.00	-3.66	24.34	46.00	-21.66
995.15	S	Peak	28.06	0.32	28.38	54.00	-25.62
4874.00	Н	Average	24.62	6.96	31.58	54.00	-22.42
4874.00	Н	Peak	37.09	6.96	44.05	74.00	-29.95
7311.00	Н						
9748.00	Н						
12185.00	Н						
14622.00	Н						
17059.00	Н						
19496.00	Н						
21933.00	Н						
24370.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 120 of 248

Operation Band :802.11 g Test Date :2014-03-20 Fundamental Frequency :2462 MHz Temp./Humi. :21deg_C/59RH

Operation Mode :TX HIGH Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
57.16	S	Peak	27.49	-13.41	14.08	40.00	-25.92
173.56	S	Peak	27.14	-13.26	13.88	43.50	-29.62
274.44	S	Peak	26.91	-11.76	15.15	46.00	-30.85
476.20	S	Peak	28.04	-7.80	20.24	46.00	-25.76
684.75	S	Peak	27.54	-3.67	23.87	46.00	-22.13
936.95	S	Peak	28.45	0.00	28.45	46.00	-17.55
4924.00	Н	Average	25.11	7.01	32.12	54.00	-21.88
4924.00	Н	Peak	37.23	7.01	44.24	74.00	-29.76
7386.00	Н						
9848.00	Н						
12310.00	Н						
14772.00	Н						
17234.00	Н						
19696.00	Н						
22158.00	Н						
24620.00	Н						

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 121 of 248

Operation Band :802.11 g Test Date :2014-03-20 Fundamental Frequency :2462 MHz Temp./Humi. :21deg_C/59RH

Operation Mode :TX HIGH Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
48.43	S	Peak	26.68	-12.97	13.71	40.00	-26.29
160.95	S	Peak	26.81	-12.66	14.15	43.50	-29.35
275.41	S	Peak	25.94	-11.72	14.22	46.00	-31.78
480.08	S	Peak	28.49	-7.75	20.74	46.00	-25.26
678.93	S	Peak	27.82	-3.70	24.12	46.00	-21.88
906.88	S	Peak	28.33	-0.60	27.73	46.00	-18.27
4924.00	Н	Average	23.57	7.01	30.58	54.00	-23.42
4924.00	Н	Peak	37.25	7.01	44.26	74.00	-29.74
7386.00	Н						
9848.00	Н						
12310.00	Н						
14772.00	Н						
17234.00	Н						
19696.00	Н						
22158.00	Н						
24620.00	Н						

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

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sqs.com



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 122 of 248

Radiated Spurious Emission Measurement Result (802.11n_20M)

Operation Band :802.11 n20M Test Date :2014-03-20 Fundamental Frequency :2412 MHz Temp./Humi. :21deg_C/59RH

Operation Mode :TX LOW Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
99.84	S	Peak	32.34	-17.86	14.48	43.50	-29.02
160.95	S	Peak	26.54	-12.66	13.88	43.50	-29.62
272.50	S	Peak	26.78	-11.85	14.93	46.00	-31.07
486.87	S	Peak	28.16	-7.71	20.45	46.00	-25.55
683.78	S	Peak	26.89	-3.67	23.22	46.00	-22.78
957.32	S	Peak	28.24	0.20	28.44	46.00	-17.56
4824.00	Н	Average	25.62	6.89	32.51	54.00	-21.49
4824.00	Н	Peak	36.82	6.89	43.71	74.00	-30.29
7236.00	Н						
9648.00	Н						
12060.00	Н						
14472.00	Н						
16884.00	Н						
19296.00	Н						
21708.00	Н						
24120.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 123 of 248

Operation Band :802.11 n20M Test Date :2014-03-20 Fundamental Frequency :2412 MHz Temp./Humi. :21deg_C/59RH

Operation Mode :TX LOW Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
51.34	S	Peak	26.93	-13.03	13.90	40.00	-26.10
154.16	S	Peak	27.06	-12.73	14.33	43.50	-29.17
275.41	S	Peak	26.21	-11.72	14.49	46.00	-31.51
482.99	S	Peak	28.24	-7.73	20.51	46.00	-25.49
651.77	S	Peak	27.50	-4.57	22.93	46.00	-23.07
952.47	S	Peak	28.00	0.18	28.18	46.00	-17.82
4824.00	Н	Average	24.31	6.89	31.20	54.00	-22.80
4824.00	Н	Peak	37.83	6.89	44.72	74.00	-29.28
7236.00	Н						
9648.00	Н						
12060.00	Н						
14472.00	Н						
16884.00	Н						
19296.00	Н						
21708.00	Н						
24120.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 124 of 248

Operation Band :802.11 n20M Test Date :2014-03-20 Fundamental Frequency :2437 MHz Temp./Humi. :21deg_C/59RH

Operation Mode :TX MID Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
51.34	S	Peak	26.13	-13.03	13.10	40.00	-26.90
150.28	S	Peak	26.94	-12.79	14.15	43.50	-29.35
272.50	S	Peak	26.37	-11.85	14.52	46.00	-31.48
454.86	S	Peak	28.61	-8.26	20.35	46.00	-25.65
691.54	S	Peak	27.45	-3.76	23.69	46.00	-22.31
943.74	S	Peak	27.98	0.10	28.08	46.00	-17.92
4874.00	Н	Average	25.73	6.96	32.69	54.00	-21.31
4874.00	Н	Peak	36.18	6.96	43.14	74.00	-30.86
7311.00	Н						
9748.00	Н						
12185.00	Н						
14622.00	Н						
17059.00	Н						
19496.00	Н						
21933.00	Н						
24370.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 125 of 248

Operation Band :802.11 n20M Test Date :2014-03-20 Fundamental Frequency :2437 MHz Temp./Humi. :21deg_C/59RH

Operation Mode Engineer :TX MID :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
52.31	S	Peak	26.27	-13.09	13.18	40.00	-26.82
148.34	S	Peak	27.18	-12.86	14.32	43.50	-29.18
273.47	S	Peak	26.93	-11.81	15.12	46.00	-30.88
536.34	S	Peak	28.54	-7.59	20.95	46.00	-25.05
685.72	S	Peak	26.56	-3.69	22.87	46.00	-23.13
912.70	S	Peak	28.47	-0.44	28.03	46.00	-17.97
4874.00	Н	Average	24.11	6.96	31.07	54.00	-22.93
4874.00	Н	Peak	38.15	6.96	45.11	74.00	-28.89
7311.00	Н						
9748.00	Н						
12185.00	Н						
14622.00	Н						
17059.00	Н						
19496.00	Н						
21933.00	Н						
24370.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 126 of 248

Operation Band :802.11 n20M Test Date :2014-03-20 Fundamental Frequency :2462 MHz Temp./Humi. :21deg_C/59RH

Operation Mode :TX HIGH Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
99.84	S	Peak	33.01	-17.86	15.15	43.50	-28.35
162.89	S	Peak	26.68	-12.72	13.96	43.50	-29.54
276.38	S	Peak	27.33	-11.68	15.65	46.00	-30.35
474.26	S	Peak	28.32	-7.82	20.50	46.00	-25.50
509.18	S	Peak	28.76	-7.45	21.31	46.00	-24.69
682.81	S	Peak	26.98	-3.67	23.31	46.00	-22.69
4924.00	Н	Average	24.37	7.01	31.38	54.00	-22.62
4924.00	Н	Peak	36.26	7.01	43.27	74.00	-30.73
7386.00	Н						
9848.00	Н						
12310.00	Н						
14772.00	Н						
17234.00	Н						
19696.00	Н						
22158.00	Н						
24620.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 127 of 248

Operation Band :802.11 n20M Test Date :2014-03-20 Fundamental Frequency :2462 MHz Temp./Humi. :21deg_C/59RH

Operation Mode :TX HIGH Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
61.04	S	Peak	27.97	-13.77	14.20	40.00	-25.80
153.19	S	Peak	26.74	-12.74	14.00	43.50	-29.50
274.44	S	Peak	25.61	-11.76	13.85	46.00	-32.15
489.78	S	Peak	29.08	-7.70	21.38	46.00	-24.62
719.67	S	Peak	27.86	-4.26	23.60	46.00	-22.40
951.50	S	Peak	27.75	0.18	27.93	46.00	-18.07
4924.00	Н	Average	23.61	7.01	30.62	54.00	-23.38
4924.00	Н	Peak	37.04	7.01	44.05	74.00	-29.95
7386.00	Н						
9848.00	Н						
12310.00	Н						
14772.00	Н						
17234.00	Н						
19696.00	Н						
22158.00	Н						
24620.00	Н						

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

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sqs.com



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 128 of 248

Radiated Spurious Emission Measurement Result (802.11a)

Operation Band Test Date :802.11 a :2014-03-20

Fundamental Frequency :5745 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode :TX LOW Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
62.01	S	Peak	27.52	-13.97	13.55	40.00	-26.45
164.83	S	Peak	27.14	-12.78	14.36	43.50	-29.14
362.71	S	Peak	27.78	-9.96	17.82	46.00	-28.18
559.62	S	Peak	28.45	-6.72	21.73	46.00	-24.27
755.56	S	Peak	28.33	-2.69	25.64	46.00	-20.36
927.25	S	Peak	27.98	-0.17	27.81	46.00	-18.19
11490.00	Н	Average	23.12	17.78	40.90	54.00	-13.10
11490.00	Н	Peak	25.25	17.78	43.03	74.00	-30.97
17235.00	Н						
22980.00	Н						
28725.00	Н						
34470.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 129 of 248

Operation Band :802.11 a Test Date :2014-03-20

Fundamental Frequency :5745 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode :TX LOW Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
41.64	S	Peak	27.57	-13.32	14.25	40.00	-25.75
141.55	S	Peak	26.97	-13.10	13.87	43.50	-29.63
286.08	S	Peak	27.77	-11.47	16.30	46.00	-29.70
483.96	S	Peak	28.59	-7.73	20.86	46.00	-25.14
680.87	S	Peak	28.80	-3.66	25.14	46.00	-20.86
831.22	S	Peak	28.75	-2.21	26.54	46.00	-19.46
11490.00	Н	Average	22.48	17.78	40.26	54.00	-13.74
11490.00	Н	Peak	26.38	17.78	44.16	74.00	-29.84
17235.00	Н						
22980.00	Н						
28725.00	Н						
34470.00	Н						

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

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 130 of 248

Operation Band :802.11 a Test Date :2014-03-20

Fundamental Frequency :5785 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode Engineer :TX MID :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
44.55	S	Peak	27.42	-13.11	14.31	40.00	-25.69
253.10	S	Peak	27.00	-12.84	14.16	46.00	-31.84
406.36	S	Peak	27.09	-9.00	18.09	46.00	-27.91
588.72	S	Peak	28.17	-5.12	23.05	46.00	-22.95
773.99	S	Peak	28.17	-2.82	25.35	46.00	-20.65
923.37	S	Peak	27.37	-0.24	27.13	46.00	-18.87
11570.00	Н	Average	23.64	17.66	41.30	54.00	-12.70
11570.00	Н	Peak	25.83	17.66	43.49	74.00	-30.51
17355.00	Н						
23140.00	Н						
28925.00	Н						
34710.00	Н						

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

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 131 of 248

Operation Band :802.11 a Test Date :2014-03-20

Fundamental Frequency :5785 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode Engineer :TX MID :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
45.52	S	Peak	27.14	-13.07	14.07	40.00	-25.93
159.98	S	Peak	26.37	-12.63	13.74	43.50	-29.76
293.84	S	Peak	26.73	-11.36	15.37	46.00	-30.63
424.79	S	Peak	27.18	-8.96	18.22	46.00	-27.78
653.71	S	Peak	29.45	-4.51	24.94	46.00	-21.06
842.86	S	Peak	27.09	-2.10	24.99	46.00	-21.01
11570.00	Н	Average	22.48	17.66	40.14	54.00	-13.86
11570.00	Н	Peak	26.12	17.66	43.78	74.00	-30.22
17355.00	Н						
23140.00	Н						
28925.00	Н						
34710.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 132 of 248

Operation Band :802.11 a Test Date :2014-03-20

Fundamental Frequency :5825 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode :TX HIGH Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
57.16	S	Peak	27.82	-13.41	14.41	40.00	-25.59
150.28	S	Peak	27.47	-12.79	14.68	43.50	-28.82
391.81	S	Peak	27.07	-9.35	17.72	46.00	-28.28
585.81	S	Peak	27.85	-5.17	22.68	46.00	-23.32
757.50	S	Peak	27.67	-2.70	24.97	46.00	-21.03
920.46	S	Peak	27.76	-0.29	27.47	46.00	-18.53
11650.00	Н	Average	23.18	17.87	41.05	54.00	-12.95
11650.00	Н	Peak	25.33	17.87	43.20	74.00	-30.80
17475.00	Н						
23300.00	Н						
29125.00	Н						
34950.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 133 of 248

Operation Band :802.11 a Test Date :2014-03-20

Fundamental Frequency :5825 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode :TX HIGH Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
53.28	S	Peak	27.42	-13.16	14.26	40.00	-25.74
152.22	S	Peak	27.29	-12.76	14.53	43.50	-28.97
471.35	S	Peak	29.28	-7.85	21.43	46.00	-24.57
574.17	S	Peak	28.45	-5.62	22.83	46.00	-23.17
769.14	S	Peak	28.37	-2.83	25.54	46.00	-20.46
943.74	S	Peak	28.36	0.10	28.46	46.00	-17.54
11650.00	Н	Average	23.05	17.87	40.92	54.00	-13.08
11650.00	Н	Peak	25.13	17.87	43.00	74.00	-31.00
17475.00	Н						
23300.00	Н						
29125.00	Н						
34950.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 134 of 248

Radiated Spurious Emission Measurement Result (802.11n (5GHz)_20M)

Operation Band Test Date :802.11 n20M :2014-03-20

Temp./Humi. Fundamental Frequency :5745 MHz :22.7 deg_C / 67 RH

Operation Mode :TX LOW Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

N. T.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
49.40	S	Peak	27.07	-12.95	14.12	40.00	-25.88
161.92	S	Peak	27.28	-12.69	14.59	43.50	-28.91
380.17	S	Peak	26.96	-9.57	17.39	46.00	-28.61
601.33	S	Peak	28.24	-5.56	22.68	46.00	-23.32
817.64	S	Peak	28.16	-2.14	26.02	46.00	-19.98
942.77	S	Peak	27.21	0.08	27.29	46.00	-18.71
11490.00	Н	Average	23.48	17.78	41.26	54.00	-12.74
11490.00	Н	Peak	25.41	17.78	43.19	74.00	-30.81
17235.00	Н						
22980.00	Н						
28725.00	Н						
34470.00	Н						

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

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 135 of 248

Operation Band :802.11 n20M Test Date :2014-03-20

Fundamental Frequency :5745 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode :TX LOW Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
48.43	S	Peak	27.27	-12.97	14.30	40.00	-25.70
138.64	S	Peak	26.93	-13.29	13.64	43.50	-29.86
316.15	S	Peak	27.60	-10.99	16.61	46.00	-29.39
473.29	S	Peak	28.34	-7.83	20.51	46.00	-25.49
788.54	S	Peak	28.51	-2.54	25.97	46.00	-20.03
937.92	S	Peak	28.01	0.01	28.02	46.00	-17.98
11490.00	Н	Average	22.45	17.78	40.23	54.00	-13.77
11490.00	Н	Peak	26.32	17.78	44.10	74.00	-29.90
17235.00	Н						
22980.00	Н						
28725.00	Н						
34470.00	Н						

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

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 136 of 248

Operation Band :802.11 n20M Test Date :2014-03-20

Fundamental Frequency :5785 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode Engineer :TX MID :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
52.31	S	Peak	26.56	-13.09	13.47	40.00	-26.53
153.19	S	Peak	27.37	-12.74	14.63	43.50	-28.87
419.94	S	Peak	27.03	-8.92	18.11	46.00	-27.89
647.89	S	Peak	27.53	-4.71	22.82	46.00	-23.18
813.76	S	Peak	27.47	-2.14	25.33	46.00	-20.67
939.86	S	Peak	27.15	0.05	27.20	46.00	-18.80
11570.00	Н	Average	23.37	17.66	41.03	54.00	-12.97
11570.00	Н	Peak	25.81	17.66	43.47	74.00	-30.53
17355.00	Н						
23140.00	Н						
28925.00	Н						
34710.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 137 of 248

Operation Band :802.11 n20M Test Date :2014-03-20

Fundamental Frequency :5785 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode Engineer :TX MID :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
54.25	S	Peak	26.48	-13.22	13.26	40.00	-26.74
154.16	S	Peak	27.17	-12.73	14.44	43.50	-29.06
300.63	S	Peak	26.07	-11.22	14.85	46.00	-31.15
523.73	S	Peak	27.61	-7.47	20.14	46.00	-25.86
715.79	S	Peak	27.65	-4.29	23.36	46.00	-22.64
858.38	S	Peak	27.94	-1.64	26.30	46.00	-19.70
11570.00	Н	Average	22.74	17.66	40.40	54.00	-13.60
11570.00	Н	Peak	25.94	17.66	43.60	74.00	-30.40
17355.00	Н						
23140.00	Н						
28925.00	Н						
34710.00	Н						

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

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 138 of 248

Operation Band :802.11 n20M Test Date :2014-03-20

Fundamental Frequency :5825 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode :TX HIGH Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
52.31	S	Peak	27.65	-13.09	14.56	40.00	-25.44
156.10	S	Peak	27.43	-12.70	14.73	43.50	-28.77
385.02	S	Peak	26.85	-9.47	17.38	46.00	-28.62
556.71	S	Peak	28.49	-6.91	21.58	46.00	-24.42
756.53	S	Peak	27.22	-2.69	24.53	46.00	-21.47
858.38	S	Peak	27.26	-1.64	25.62	46.00	-20.38
11650.00	Н	Average	22.98	17.87	40.85	54.00	-13.15
11650.00	Н	Peak	25.62	17.87	43.49	74.00	-30.51
17475.00	Н						
23300.00	Н						
29125.00	Н						
34950.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 139 of 248

Operation Band :802.11 n20M Test Date :2014-03-20

Fundamental Frequency :5825 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode :TX HIGH Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
47.46	S	Peak	27.03	-13.00	14.03	40.00	-25.97
154.16	S	Peak	26.96	-12.73	14.23	43.50	-29.27
353.01	S	Peak	26.82	-10.16	16.66	46.00	-29.34
608.12	S	Peak	27.94	-5.83	22.11	46.00	-23.89
800.18	S	Peak	26.87	-2.29	24.58	46.00	-21.42
938.89	S	Peak	27.78	0.03	27.81	46.00	-18.19
11650.00	S	Average	22.76	17.87	40.63	54.00	-13.37
11650.00	Н	Peak	25.68	17.87	43.55	74.00	-30.45
17475.00	Н						
23300.00	Н						
29125.00	Н						
34950.00	Н						

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

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

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

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

台灣檢驗科技股份有限公司



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 140 of 248

Radiated Spurious Emission Measurement Result (802.11n (5GHz)_40M)

Operation Band Test Date :802.11 n40M :2014-03-20

Temp./Humi. Fundamental Frequency :5755 MHz :22.7 deg_C / 67 RH

Operation Mode :TX LOW Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

N. T.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
52.31	S	Peak	27.31	-13.09	14.22	40.00	-25.78
155.13	S	Peak	26.35	-12.71	13.64	43.50	-29.86
401.51	S	Peak	27.46	-9.12	18.34	46.00	-27.66
638.19	S	Peak	27.50	-5.12	22.38	46.00	-23.62
744.89	S	Peak	27.33	-2.92	24.41	46.00	-21.59
876.81	S	Peak	26.87	-1.59	25.28	46.00	-20.72
11510.00	Н	Average	23.77	17.78	41.55	54.00	-12.45
11510.00	Н	Peak	26.55	17.78	44.33	74.00	-29.67
17265.00	Н						
23020.00	Н						
28775.00	Н						
34530.00	H						

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

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 141 of 248

Operation Band :802.11 n40M Test Date :2014-03-20

Fundamental Frequency :5755 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode :TX LOW Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
52.31	S	Peak	27.19	-13.09	14.10	40.00	-25.90
148.34	S	Peak	26.90	-12.86	14.04	43.50	-29.46
301.60	S	Peak	26.56	-11.19	15.37	46.00	-30.63
482.99	S	Peak	27.91	-7.73	20.18	46.00	-25.82
649.83	S	Peak	27.13	-4.63	22.50	46.00	-23.50
854.50	S	Peak	27.45	-1.77	25.68	46.00	-20.32
11510.00	Н	Average	23.12	17.78	40.90	54.00	-13.10
11510.00	Н	Peak	25.89	17.78	43.67	74.00	-30.33
17265.00	Н						
23020.00	Н						
28775.00	Н						
34530.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 142 of 248

Operation Band :802.11 n40M Test Date :2014-03-20

Fundamental Frequency :5795 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode :TX HIGH Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
52.31	S	Peak	26.83	-13.09	13.74	40.00	-26.26
158.04	S	Peak	27.04	-12.66	14.38	43.50	-29.12
382.11	S	Peak	27.77	-9.53	18.24	46.00	-27.76
515.97	S	Peak	28.73	-7.44	21.29	46.00	-24.71
852.56	S	Peak	28.25	-1.82	26.43	46.00	-19.57
924.34	S	Peak	26.35	-0.21	26.14	46.00	-19.86
11590.00	Н	Average	23.44	17.74	41.18	54.00	-12.82
11590.00	Н	Peak	25.45	17.74	43.19	74.00	-30.81
17385.00	Н						
23180.00	Н						
28975.00	Н						
34770.00	Н						

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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 143 of 248

Operation Band :802.11 n40M Test Date :2014-03-20

Fundamental Frequency :5795 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode :TX HIGH Engineer :Curry

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

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

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

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

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

"---": denotes Noise Floor.

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
54.25	S	Peak	27.05	-13.22	13.83	40.00	-26.17
146.40	S	Peak	27.45	-12.93	14.52	43.50	-28.98
369.50	S	Peak	28.12	-9.80	18.32	46.00	-27.68
642.07	S	Peak	27.94	-4.95	22.99	46.00	-23.01
824.43	S	Peak	27.49	-2.17	25.32	46.00	-20.68
922.40	S	Peak	27.01	-0.26	26.75	46.00	-19.25
11590.00	Н	Average	22.37	17.74	40.11	54.00	-13.89
11590.00	Н	Peak	25.46	17.74	43.20	74.00	-30.80
17385.00	Н						
23180.00	Н						
28975.00	Н						
34770.00	Н						

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

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 144 of 248

11 PEAK POWER SPECTRAL DENSITY

11.1 Standard Applicable:

According to §15.247(e) For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

11.2 Measurement Equipment Used:

Refer to section 7.2 for details.

11.3 Test Set-up:

Refer to section 7.3 for details. (Spectrum Option)

11.4 Measurement Procedure (following the measurement procedure 10.2 of KDB558074):

- 1. Set analyzer center frequency to DTS channel center frequency.
- 2. Set the span to 1.5 times the DTS channel bandwidth.
- 3. Set the RBW \geq 3 kHz.
- 4. Set the $VBW > 3 \times RBW$.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode = max hold.
- 8. Allow trace to fully stabilize.
- 9. Use the peak marker function to determine the maximum amplitude level.
- 10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

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

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

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 台灣檢驗科技股份有限公司

SGS Taiwan Ltd.

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 145 of 248

11.5 Measurement Result:

802.11b

Frequency	RF Power Density	Maximum Limit
MHz	Reading (dBm)	(dBm)
2412	-4.03	8
2437	-3.82	8
2462	-4.22	8

802.11g

Frequency	RF Power Density	Maximum Limit
MHz	Reading (dBm)	(dBm)
2412	-10.04	8
2437	-9.04	8
2462	-9.92	8

802.11n 20M

Frequency	RF Power Density	Maximum Limit
MHz	Reading (dBm)	(dBm)
2412	-12.52	8
2437	-12.37	8
2462	-12.01	8

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

SGS Taiwan Ltd.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 146 of 248

802.11a

Frequency	RF Power Density	Maximum Limit
MHz	Reading (dBm)	(dBm)
5745	-10.42	8
5785	-12.06	8
5825	-10.66	8

802.11n (5GHz)_20M

Frequency	RF Power Density	Maximum Limit
MHz	Reading (dBm)	(dBm)
5745	-13.29	8
5785	-12.93	8
5825	-14.42	8

802.11n (5GHz)_40M

Frequency	RF Power Density	Maximum Limit
MHz	Reading (dBm)	(dBm)
5755	-18.58	8
5795	-17.87	8

* Note: Offset 10.8dB for 2.4G 802.11b/g/n_20; Offset 11.8dB for 5G 802.11a/n_20/n_40.

*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.

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

台灣檢驗科技股份有限公司

SGS Taiwan Ltd.

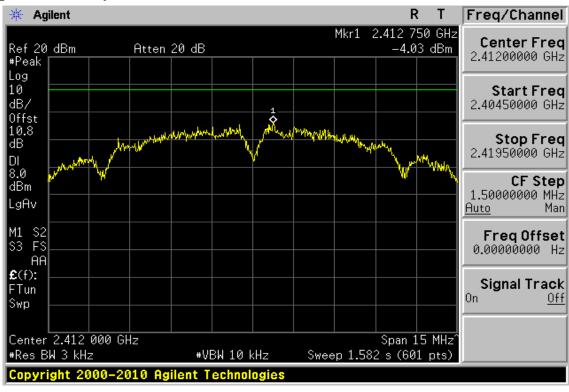
t (886-2) 2299-3279

f (886-2) 2298-0488

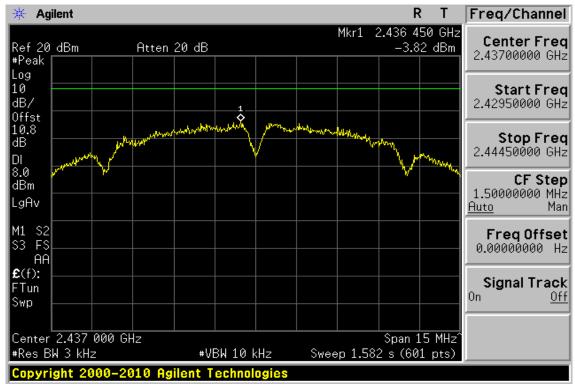
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 147 of 248

802.11b **Power Spectral Density Test Plot (CH-Low)**



Power Spectral Density Test Plot (CH-Mid)



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

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

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

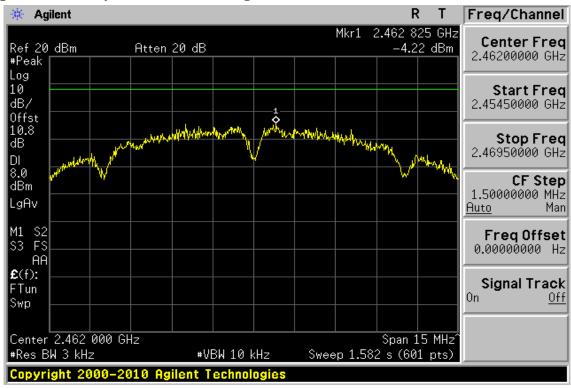
台灣檢驗科技股份有限公司

f (886-2) 2298-0488

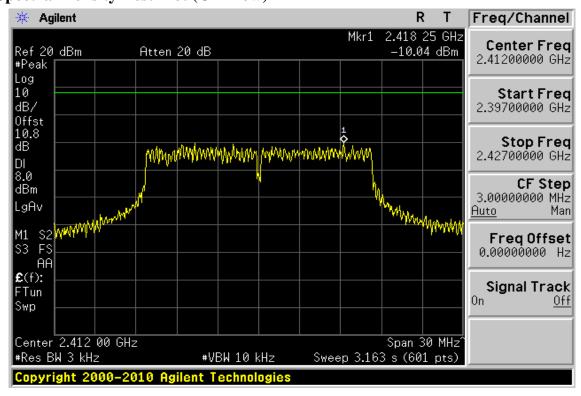
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 148 of 248

Power Spectral Density Test Plot (CH-High)



802.11g **Power Spectral Density Test Plot (CH-Low)**



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

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

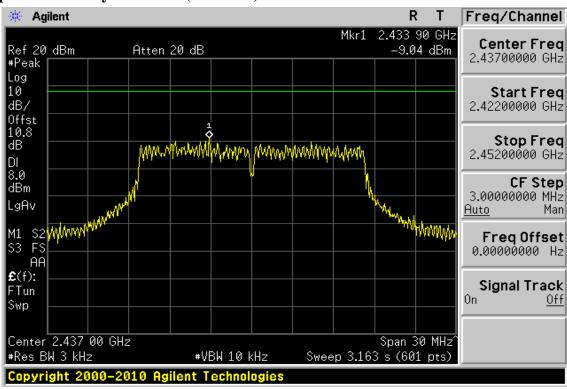
GS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

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

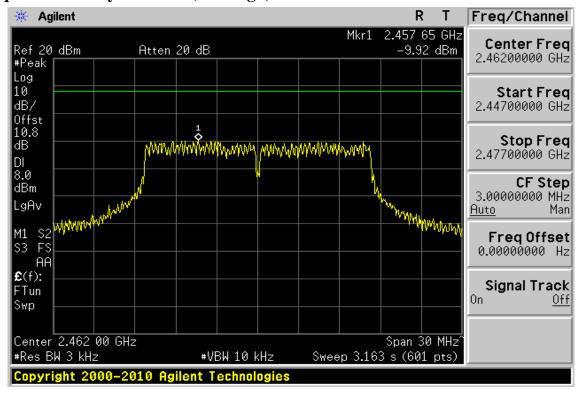
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 149 of 248

Power Spectral Density Test Plot (CH-Mid)



Power Spectral Density Test Plot (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.

t (886-2) 2299-3279

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

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

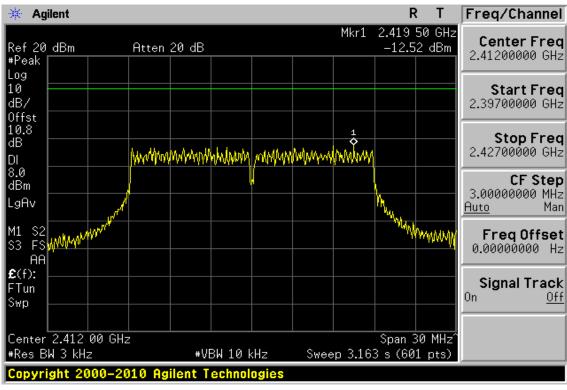


Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

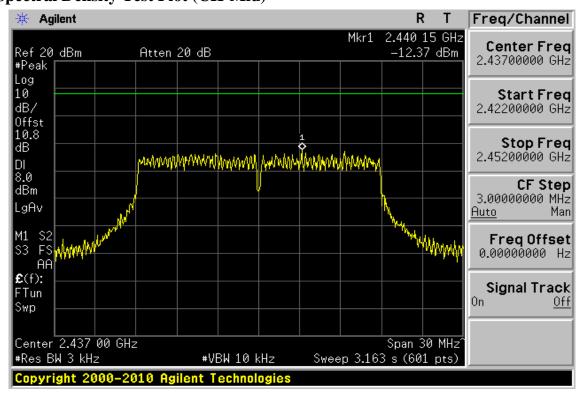
Page: 150 of 248

802.11n 20M

Power Spectral Density Test Plot (CH-Low)



Power Spectral Density Test Plot (CH-Mid)



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

t (886-2) 2299-3279

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

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

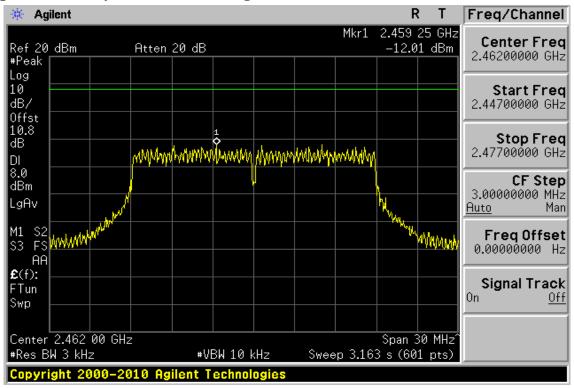
台灣檢驗科技股份有限公司



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 151 of 248

Power Spectral Density Test Plot (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.

t (886-2) 2299-3279

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

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

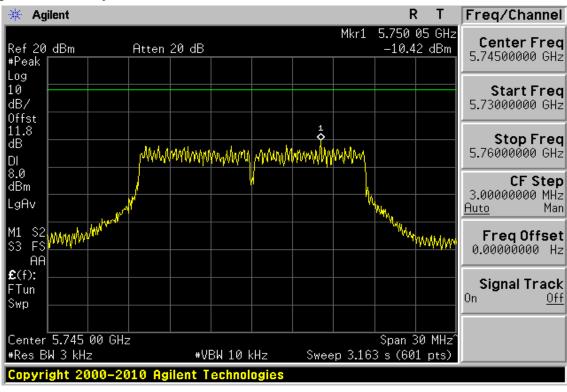
台灣檢驗科技股份有限公司

f (886-2) 2298-0488

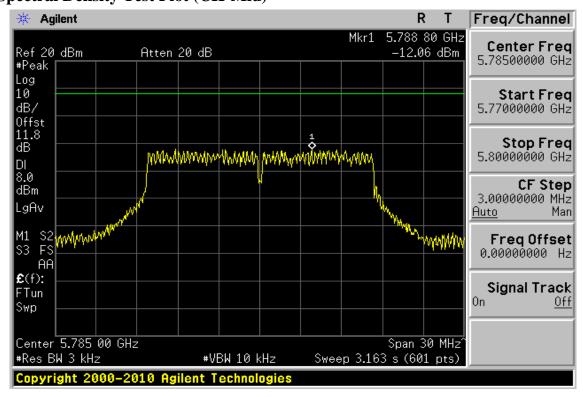
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 152 of 248

802.11a **Power Spectral Density Test Plot (CH-Low)**



Power Spectral Density Test Plot (CH-Mid)



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

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

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

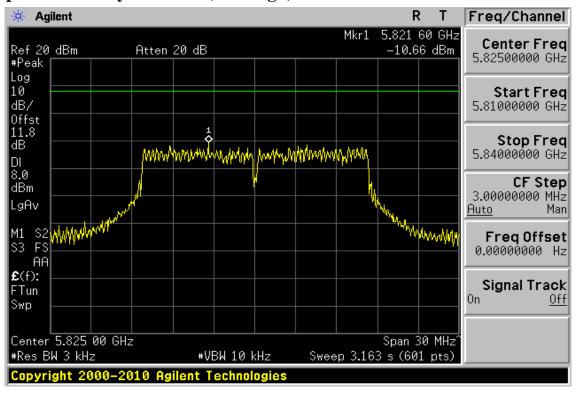
台灣檢驗科技股份有限公司

f (886-2) 2298-0488

Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

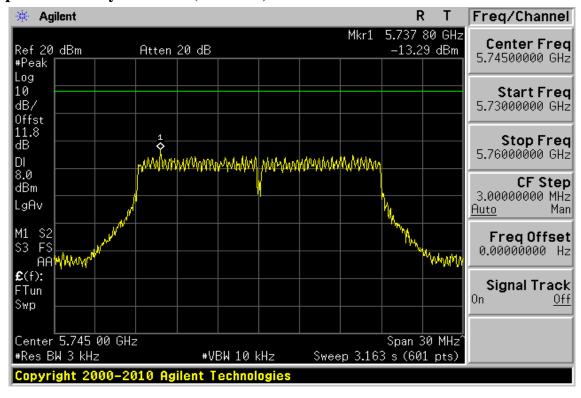
Page: 153 of 248

Power Spectral Density Test Plot (CH-High)



802.11n (5GHz)_20M

Power Spectral Density Test Plot (CH-Low)



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

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

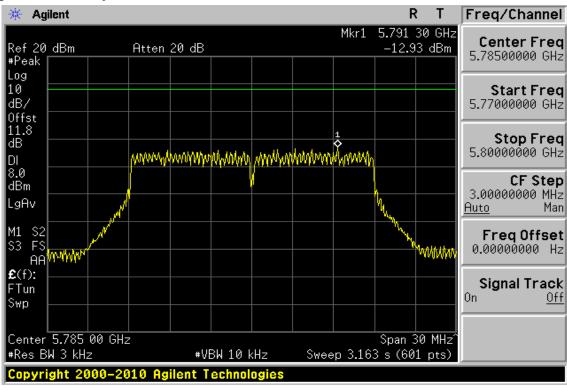
GS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

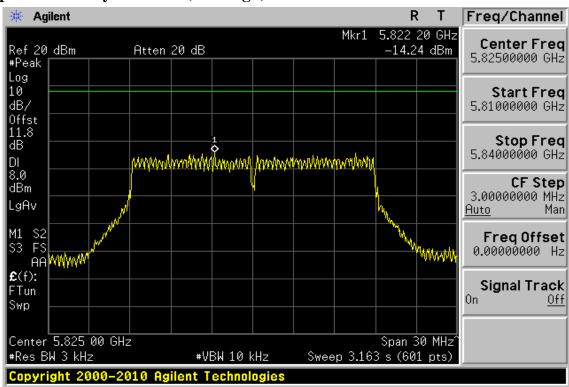
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 154 of 248

Power Spectral Density Test Plot (CH-Mid)



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

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

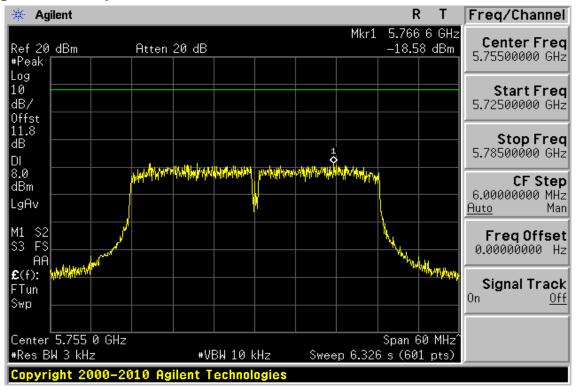
t (886-2) 2299-3279

Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

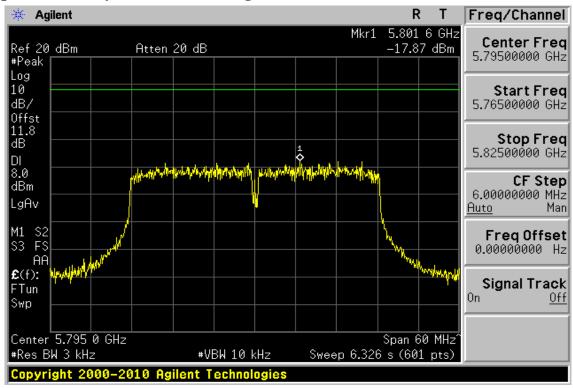
Page: 155 of 248

802.11n (5GHz)_40M

Power Spectral Density Test Plot (CH-Low)



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

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

t (886-2) 2299-3279



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 156 of 248

12 ANTENNA REQUIREMENT

12.1 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.

12.2 Antenna Connected Construction:

The directional gains of antenna used for transmitting is -1.34dBi for 2.4GHz, 4.51dBi for 5725-5850 MHz and the antenna connector is designed with unique type RF connector and no consideration of replacement. Please see EUT photo and antenna spec. 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 document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 157 of 248

APPENDIX 1 MEASUREMENT PLOT OF RADIATED SPURIOUS **EMISSION**

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

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

Refs 丹有说明,此根告结果僅對測試之樣品負責,同時此樣品僅保留的天。本根告未經本公司書面新年,不可部份複製。

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

SGS Taiwan Ltd.

f (886-2) 2298-0488



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 158 of 248

Band Edges Radiated Emission:

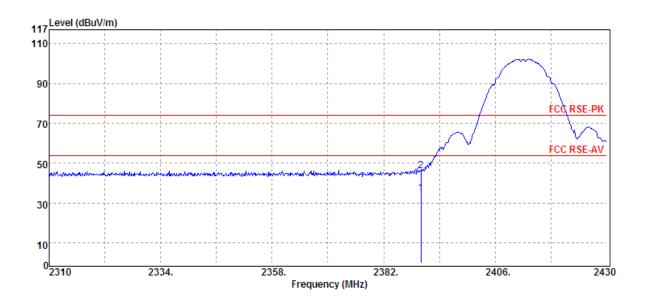
Note: The emission that surpasses the limit of peak represents the fundamental emission of the operation that does not account to be conformed to the limit of the interest.

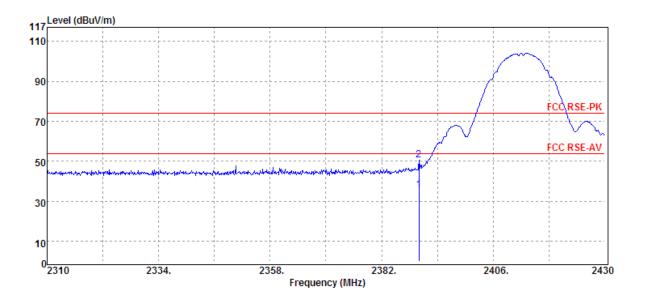
802.11b

Operation Band :802.11 b Test Date :2014-03-18

Fundamental Frequency :2412 MHz Temp./Humi. :20.5 deg_C / 66 RH

Operation Mode :Band edge LOW Engineer :Curry EUT Pol. :Ver. / Hor. :H Plane Measurement Antenna Pol.





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

Onless other wise stated the less that show it in this test report leter only to the sample(s) tested and such sample(s) are retained for 50 days only. Pk 非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



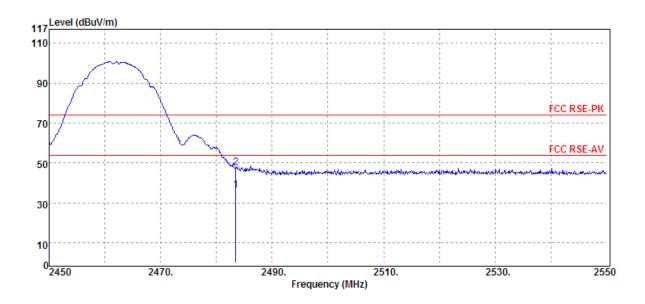
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

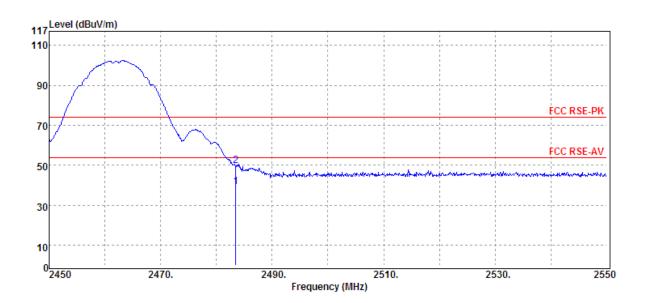
Page: 159 of 248

Operation Band :802.11 b Test Date :2014-03-18

Fundamental Frequency :2462 MHz Temp./Humi. :20.5 deg_C / 66 RH

Operation Mode :Band edge HIGH Engineer :Curry EUT Pol. :H Plane Measurement Antenna Pol. :Ver. / Hor.





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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

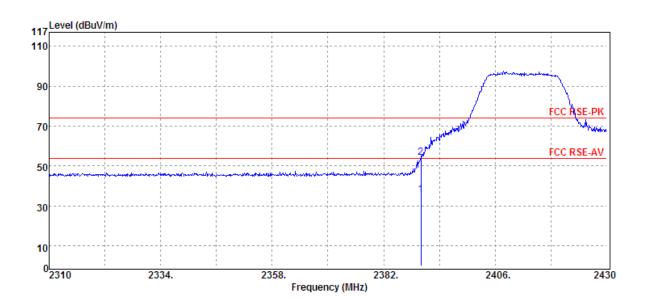
Page: 160 of 248

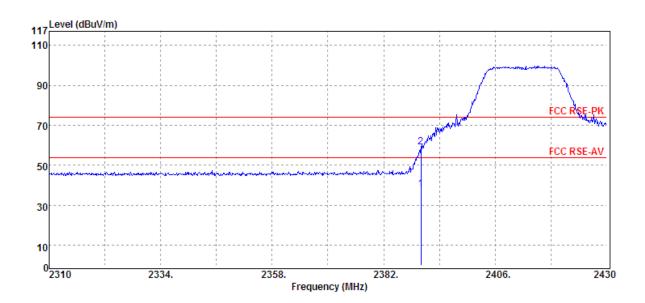
802.11g

Operation Band :802.11 g Test Date :2014-03-18

:2412 MHz Fundamental Frequency Temp./Humi. :20.5 deg_C / 66 RH

Operation Mode :Band edge LOW Engineer :Curry EUT Pol. :H Plane Measurement Antenna Pol. :Ver. / Hor.





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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

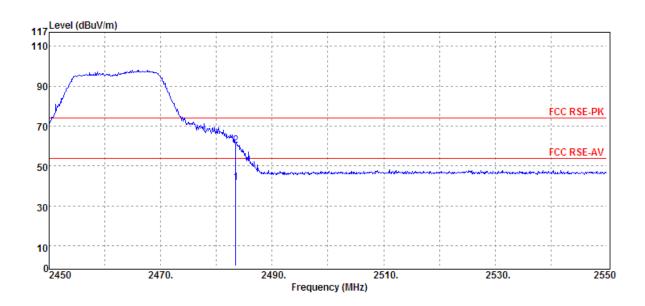
Page: 161 of 248

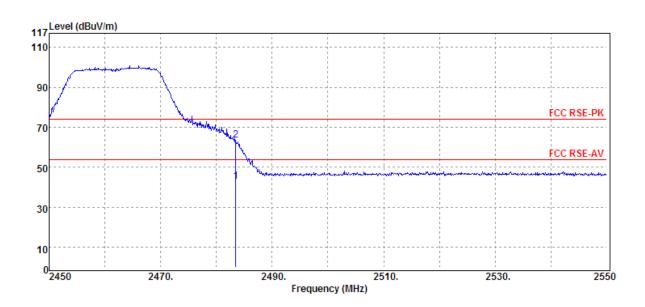
Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11 g :2462 MHz :Band edge HIGH :H Plane

Test Date Temp./Humi. :2014-03-18 :20.5 deg_C / 66 RH

Engineer :Curry Measurement Antenna Pol. :Ver. / Hor.





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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 162 of 248

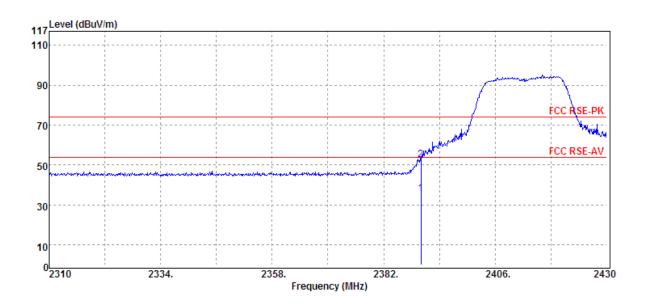
11n_20 (2.4GHz)

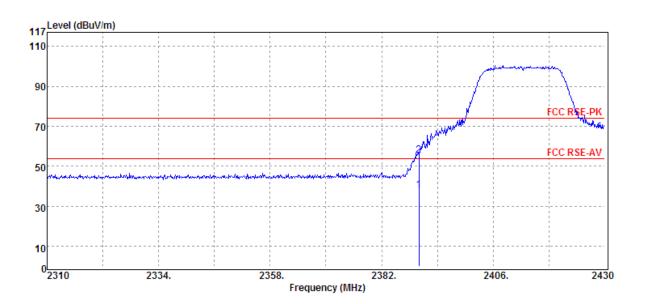
Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11 n20M :2412 MHz :Band edge LOW :H Plane

Test Date Temp./Humi. :2014-03-18 :20.5 deg_C / 66 RH

Engineer :Curry Measurement Antenna Pol. :Ver. / Hor.





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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 163 of 248

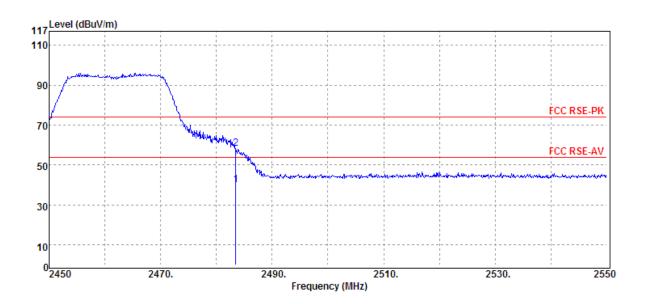
Operation Band Fundamental Frequency Operation Mode

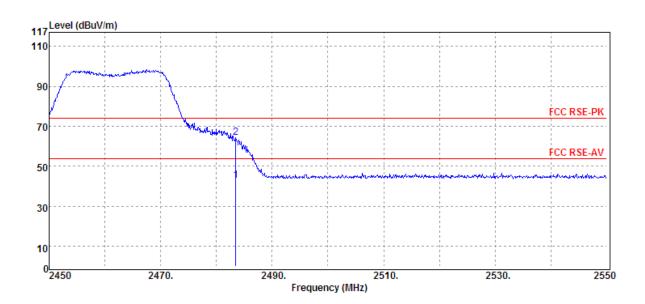
EUT Pol.

:802.11 n20M :2462 MHz :Band edge HIGH :H Plane

Test Date Temp./Humi. :2014-03-18 :20.5 deg_C / 66 RH

Engineer :Curry Measurement Antenna Pol. :Ver. / Hor.





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

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



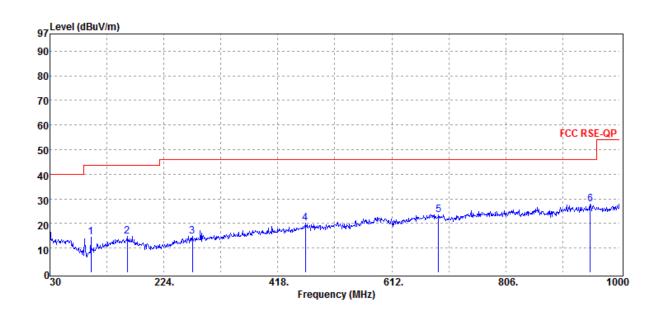
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

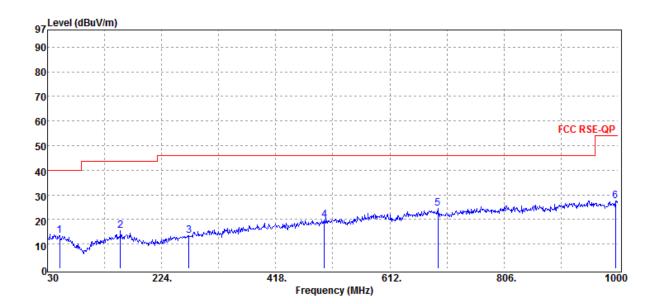
Page: 164 of 248

Radiated Spurious Emission Measurement photos Result (below 1GHz)

Operation Band :802.11 b Test Date :2014-03-20 Fundamental Frequency :2412 MHz Temp./Humi. :21deg_C/59RH

Operation Mode :TX LOW Engineer :Curry EUT Pol. :H Plane Measurement Antenna Pol. :Ver. / Hor.





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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 165 of 248

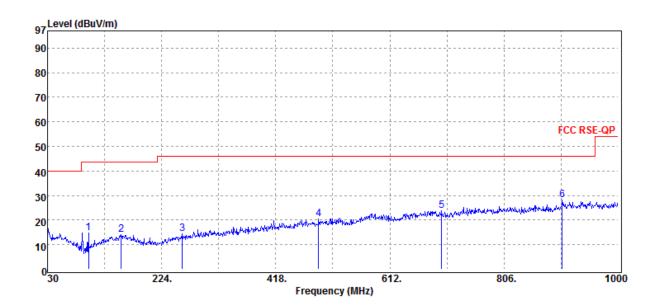
Operation Band Fundamental Frequency Operation Mode EUT Pol.

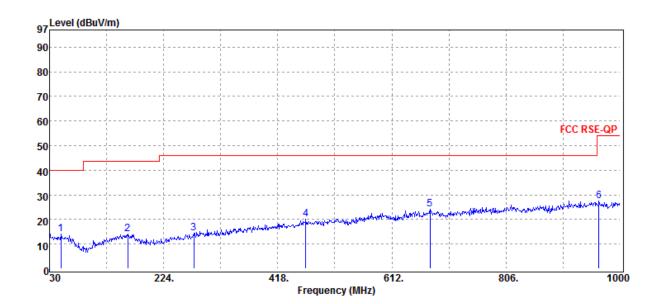
:802.11 b :2437 MHz :TX MID :H Plan

Test Date Temp./Humi. Engineer

:2014-03-20 :21deg_C/59RH

:Curry Measurement Antenna Pol. :Ver. / Hor.





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

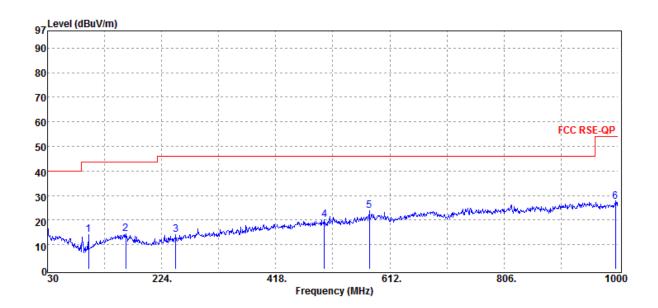
Page: 166 of 248

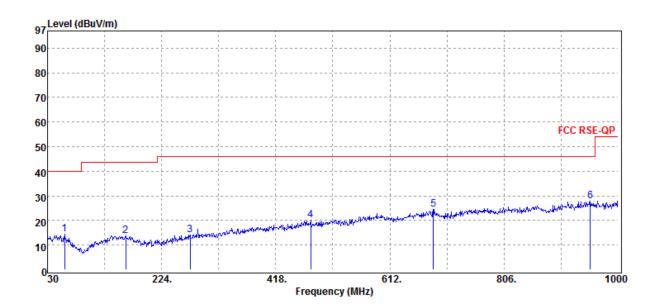
Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11 b :2462 MHz :TX HIGH :H Plane

Test Date Temp./Humi. :2014-03-20 :21deg_C/59RH

Engineer :Curry Measurement Antenna Pol. :Ver. / Hor.





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 167 of 248

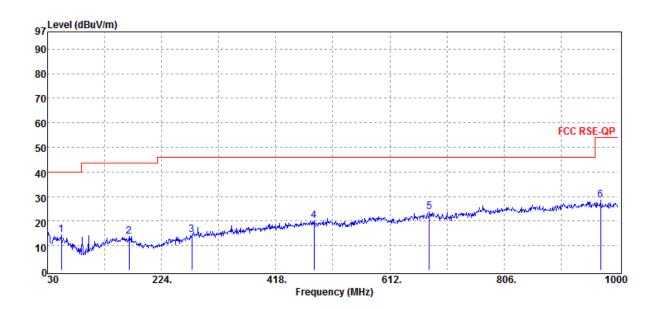
Operation Band Fundamental Frequency Operation Mode EUT Pol.

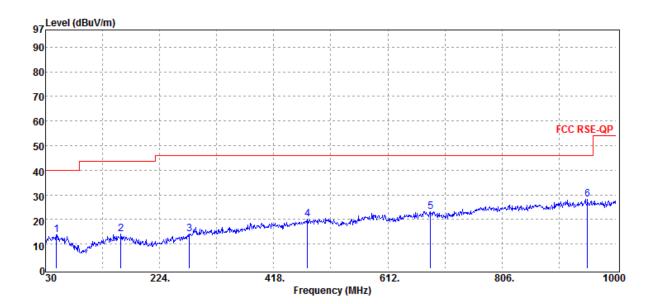
:802.11 g :2412 MHz :TX LOW :H Plane

Test Date Temp./Humi. Engineer

:2014-03-20 :21deg_C/59RH :Curry

Measurement Antenna Pol. :Ver. / Hor.





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 168 of 248

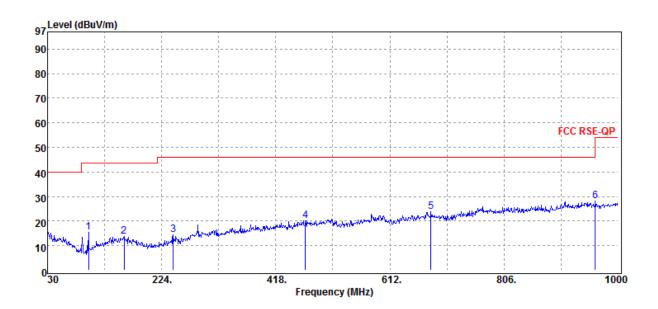
Operation Band Fundamental Frequency Operation Mode

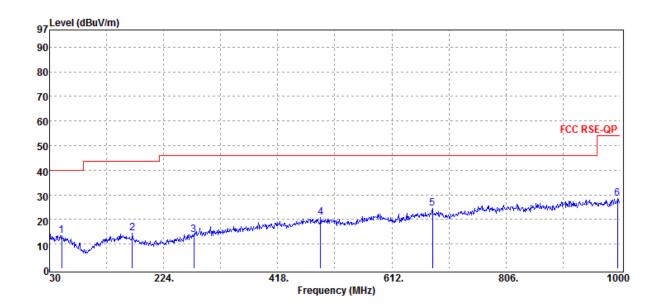
EUT Pol.

:802.11 g :2437 MHz :TX MID :H Plan

Test Date Temp./Humi. :2014-03-20 :21deg_C/59RH

Engineer :Curry Measurement Antenna Pol. :Ver. / Hor.





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

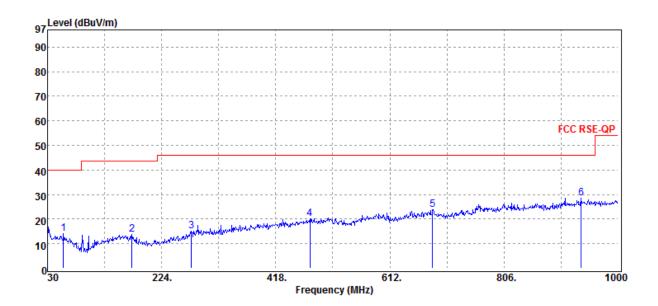
Page: 169 of 248

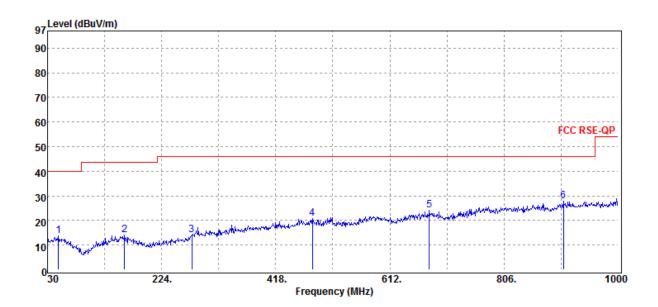
Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11 g :2462 MHz :TX HIGH :H Plane

Test Date Temp./Humi. :2014-03-20 :21deg_C/59RH

Engineer :Curry Measurement Antenna Pol. :Ver. / Hor.





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

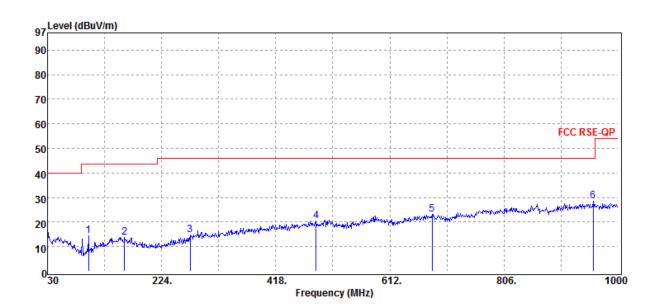
Page: 170 of 248

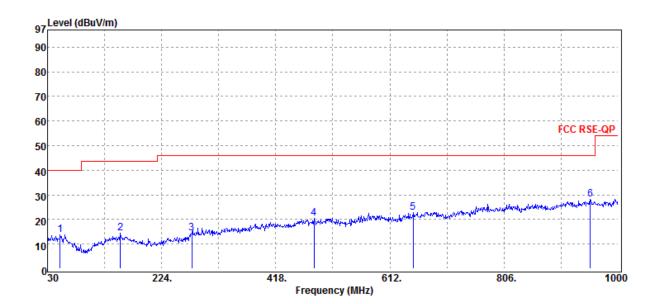
Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11 n20M :2412 MHz :TX LOW :H Plane

Test Date Temp./Humi. :2014-03-20 :21deg_C/59RH

Engineer :Curry Measurement Antenna Pol. :Ver. / Hor.





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 171 of 248

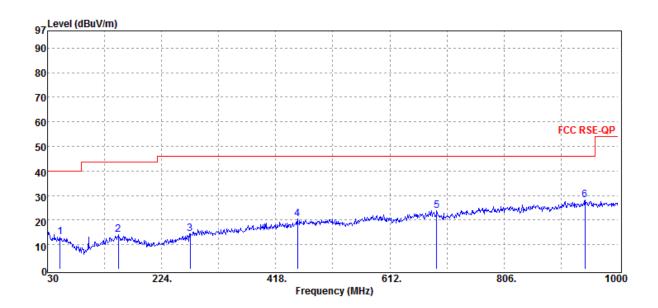
Operation Band Fundamental Frequency Operation Mode EUT Pol.

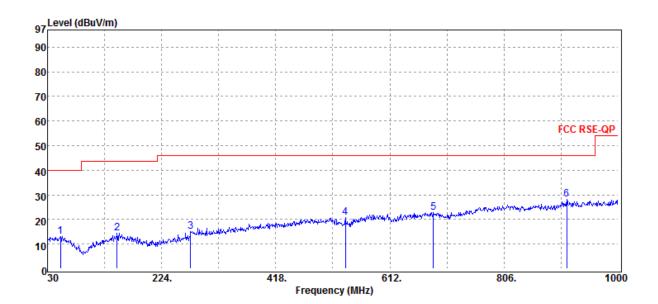
:802.11 n20M :2437 MHz :TX MID :H Plane

Test Date Temp./Humi. Engineer

:2014-03-20 :21deg_C/59RH

:Curry Measurement Antenna Pol. :Ver. / Hor.





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 172 of 248

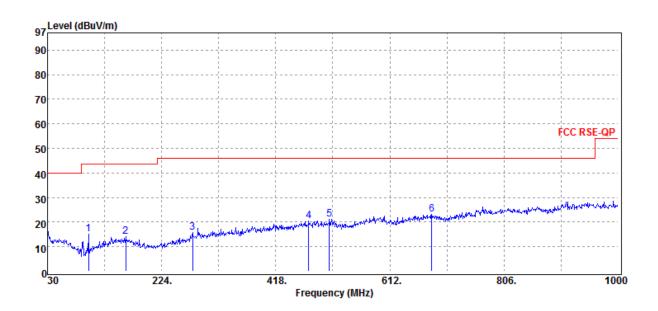
Operation Band Fundamental Frequency Operation Mode EUT Pol.

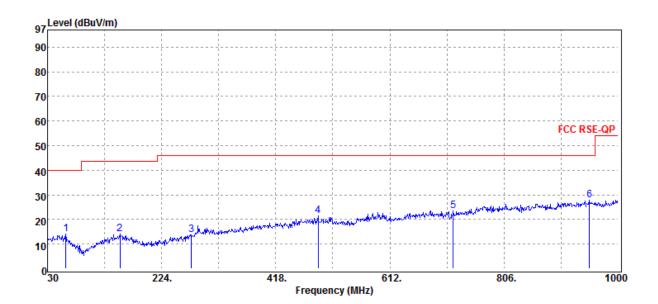
:802.11 n20M :2462 MHz :TX HIGH :H Plane

Test Date Temp./Humi. Engineer

:2014-03-20 :21deg_C/59RH

:Curry Measurement Antenna Pol. :Ver. / Hor.





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



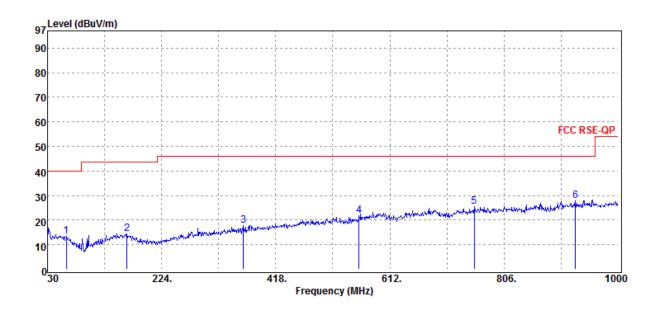
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

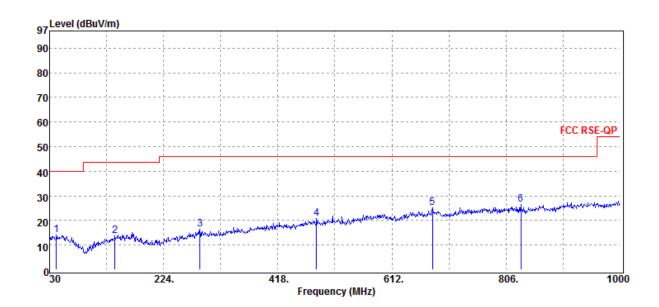
Page: 173 of 248

Operation Band :802.11 a Test Date :2014-03-20

Fundamental Frequency :5745 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode :TX LOW Engineer :Curry EUT Pol. :H Plane Measurement Antenna Pol. :Ver. / Hor.





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



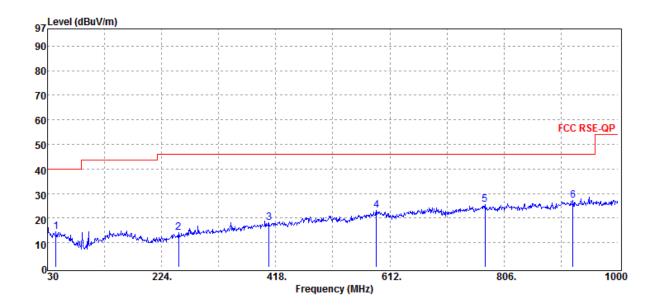
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

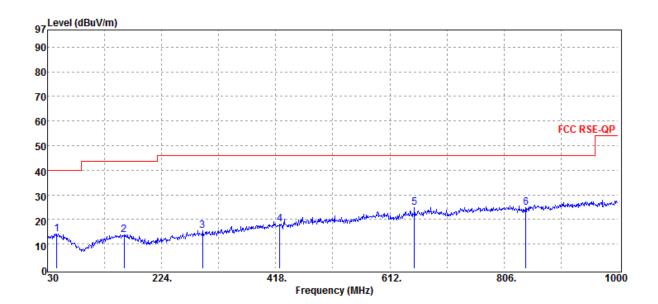
Page: 174 of 248

Operation Band :802.11 a Test Date :2014-03-20

Fundamental Frequency :5785 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode :TX MID Engineer :Curry EUT Pol. :H Plane Measurement Antenna Pol. :Ver. / Hor.





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



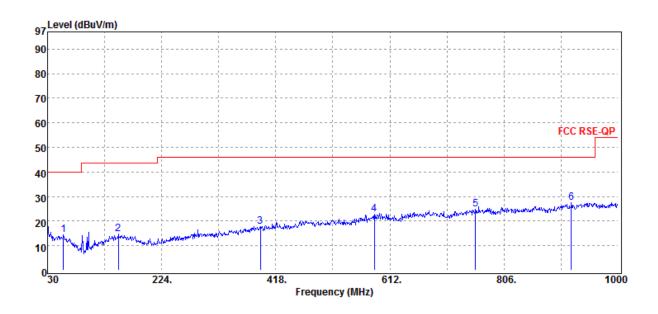
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

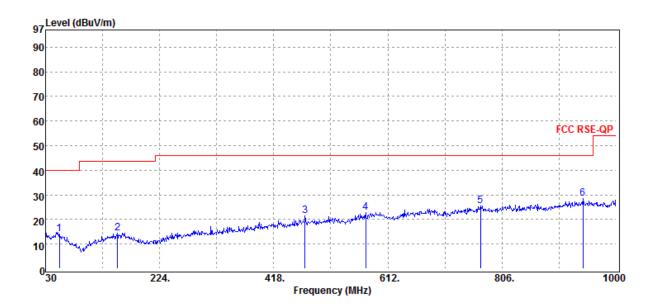
Page: 175 of 248

Operation Band :802.11 a Test Date :2014-03-20

Fundamental Frequency :5825 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode :TX HIGH Engineer :Curry EUT Pol. :H Plane Measurement Antenna Pol. :Ver. / Hor.





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 176 of 248

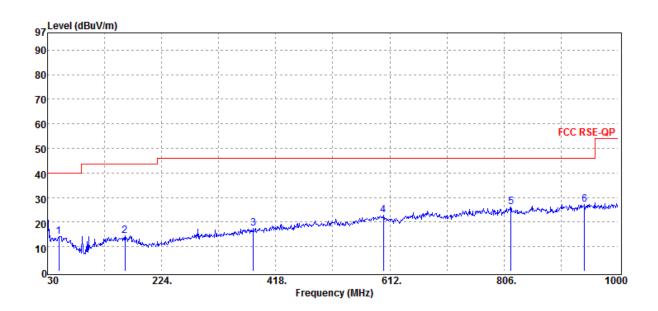
Operation Band Fundamental Frequency Operation Mode

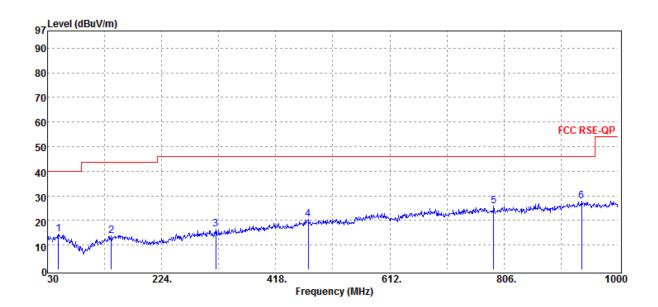
EUT Pol.

:802.11 n20M :5745 MHz :TX LOW :H Plane

Test Date Temp./Humi. :2014-03-20 :22.7 deg_C / 67 RH

Engineer :Curry Measurement Antenna Pol. :Ver. / Hor.





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 177 of 248

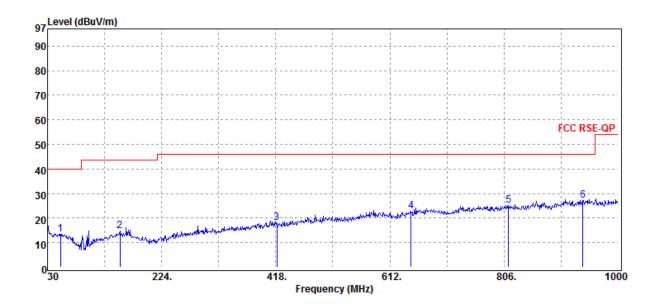
Operation Band Fundamental Frequency

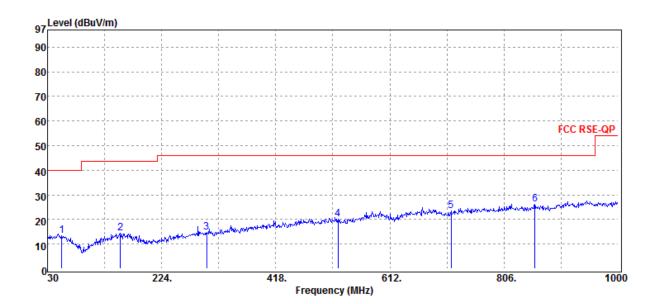
Operation Mode EUT Pol.

:802.11 n20M :5785 MHz :TX MID :H Plane

Test Date Temp./Humi. :2014-03-20 :22.7 deg_C / 67 RH

Engineer :Curry :Ver. /Hor. Measurement Antenna Pol.





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

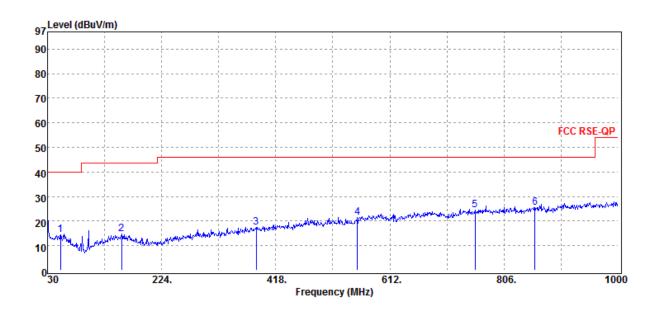
Page: 178 of 248

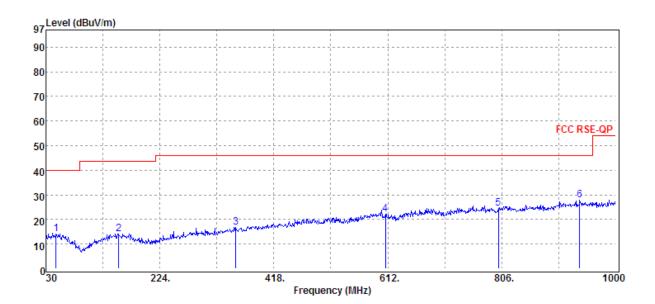
Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11 n20M :5825 MHz :TX HIGH :H Plane

Test Date Temp./Humi. :2014-03-20 :22.7 deg_C / 67 RH

Engineer :Curry Measurement Antenna Pol. :Ver. / Hor.





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

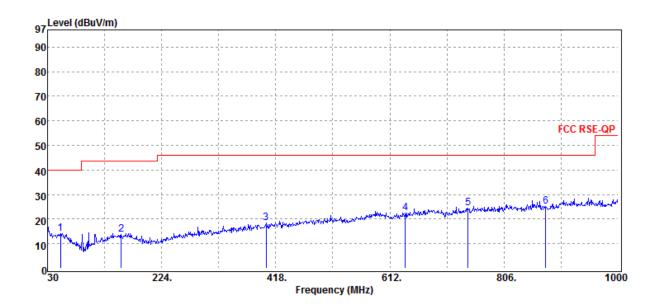
Page: 179 of 248

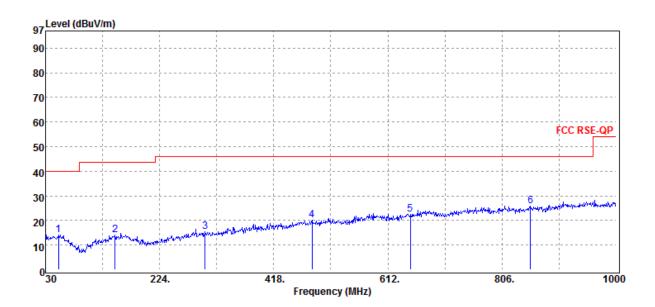
Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11 n40M :5755 MHz :TX LOW :H Plane

Test Date Temp./Humi. :2014-03-20 :22.7 deg_C / 67 RH

Engineer :Curry Measurement Antenna Pol. :Ver. / Hor.





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

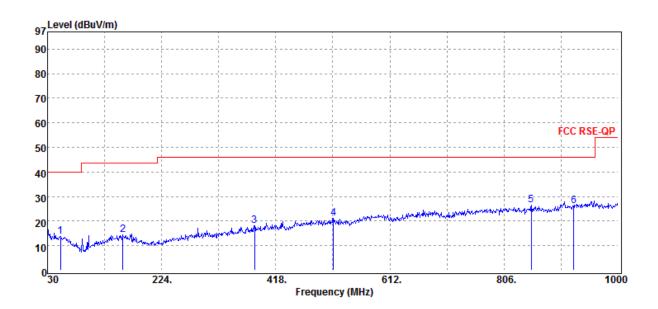
Page: 180 of 248

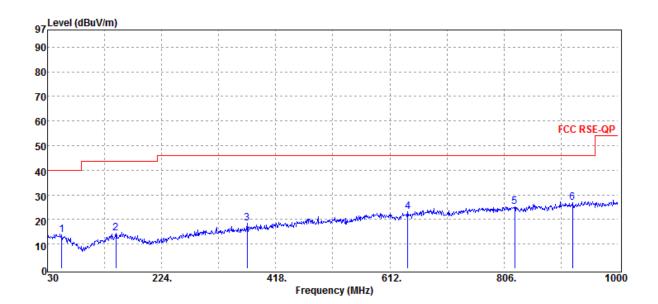
Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11 n40M :5795 MHz :TX HIGH :H Plane

Test Date Temp./Humi. :2014-03-20 :22.7 deg_C / 67 RH

Engineer :Curry Measurement Antenna Pol. :Ver. / Hor.





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

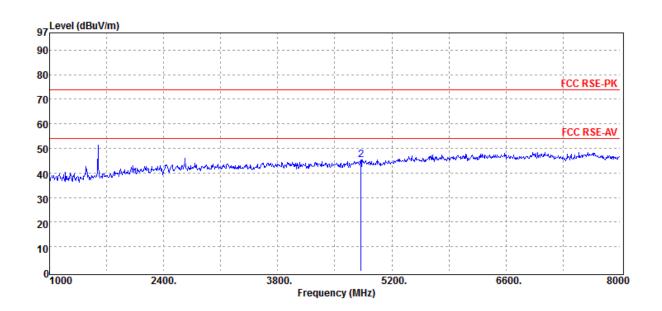
Page: 181 of 248

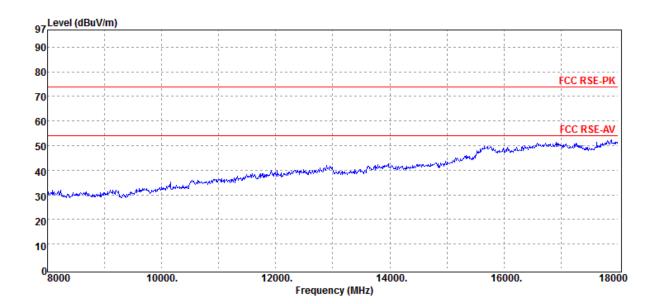
Radiated Spurious Emission Measurement photos Result (above 1GHz)

Operation Band Test Date :802.11 b :2014-03-20 Fundamental Frequency :2412 MHz Temp./Humi. :21deg_C/59RH

Operation Mode :TX LOW Engineer :Curry

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





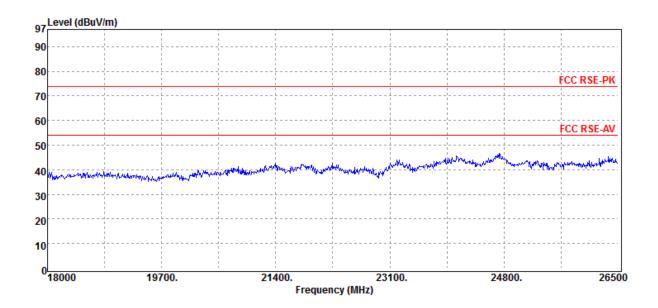
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 182 of 248



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

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

Refs 丹有说明,此根告结果僅對測試之樣品負責,同時此樣品僅保留的天。本根告未經本公司書面新年,不可部份複製。

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



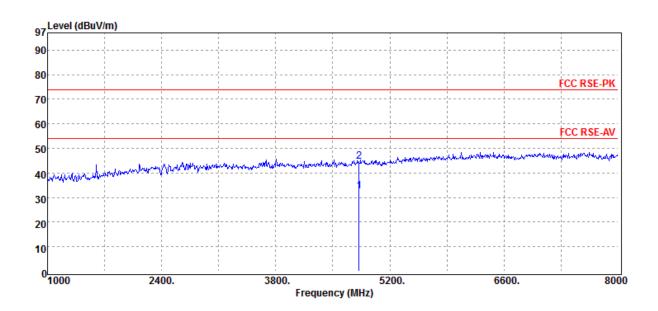
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

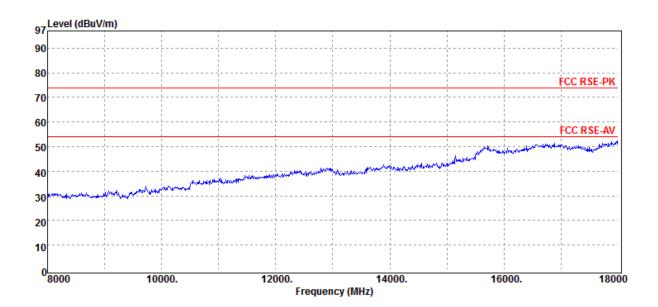
Page: 183 of 248

Operation Band :802.11 b Test Date :2014-03-20 Fundamental Frequency :2412 MHz Temp./Humi. :21deg_C/59RH

Operation Mode :TX LOW Engineer :Curry

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





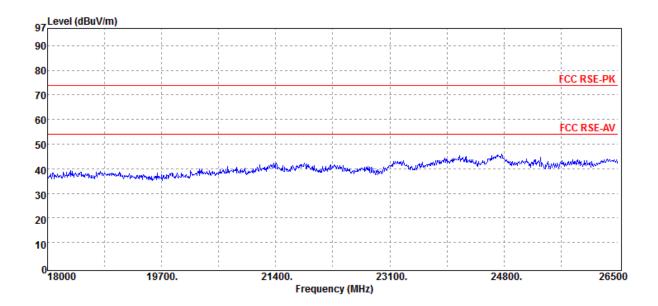
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 184 of 248



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

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

Refs 丹有说明,此根告结果僅對測試之樣品負責,同時此樣品僅保留的天。本根告未經本公司書面新年,不可部份複製。

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

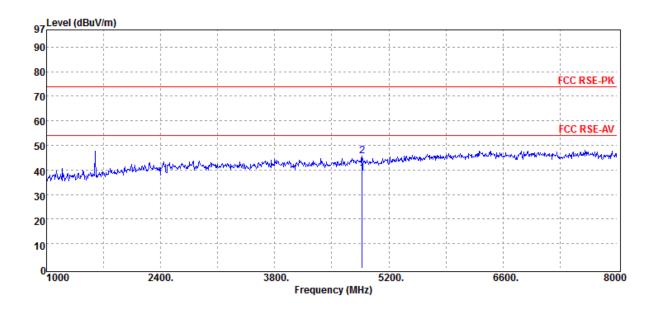


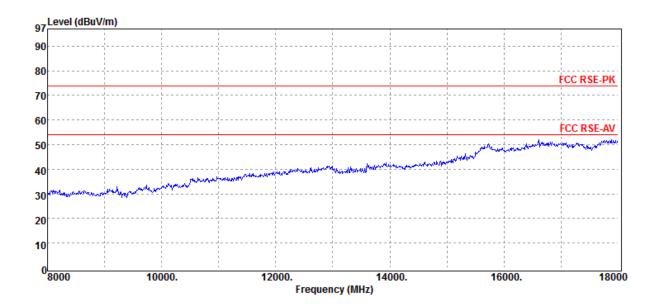
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 185 of 248

Operation Band :802.11 b Test Date :2014-03-20 Fundamental Frequency :2437 MHz Temp./Humi. :21deg_C/59RH

Operation Mode :TX MID Engineer :Curry :VERTICAL EUT Pol. :H Plane Measurement Antenna Pol.





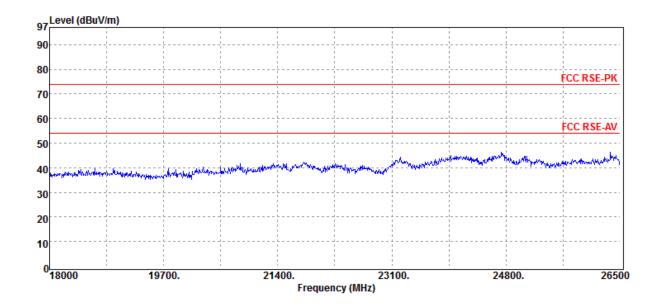
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 186 of 248



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

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

Refs 丹有说明,此根告结果僅對測試之樣品負責,同時此樣品僅保留的天。本根告未經本公司書面新年,不可部份複製。

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



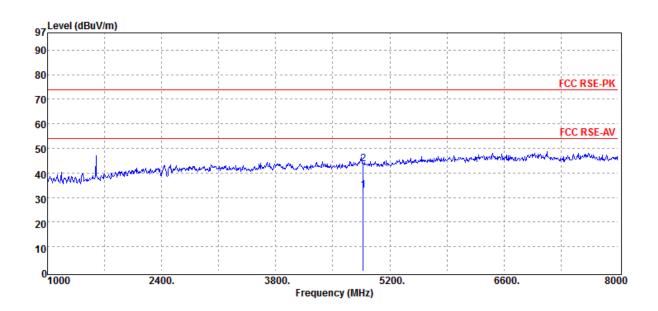
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

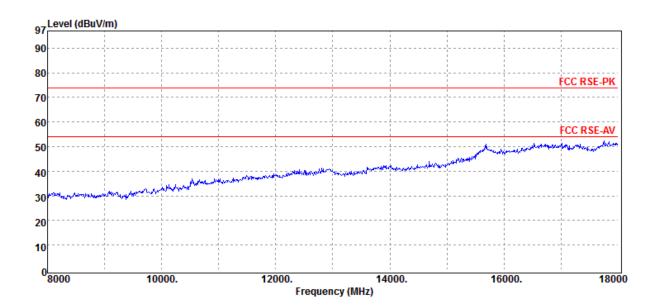
Page: 187 of 248

Operation Band :802.11 b Test Date :2014-03-20 Fundamental Frequency :2437 MHz Temp./Humi. :21deg_C/59RH

Operation Mode :TX MID Engineer :Curry

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





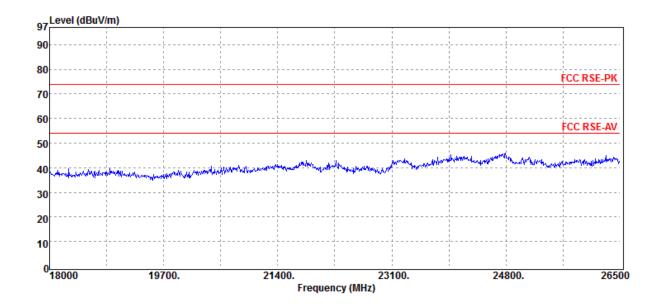
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 188 of 248



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

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

Refs 丹有说明,此根告结果僅對測試之樣品負責,同時此樣品僅保留的天。本根告未經本公司書面新年,不可部份複製。

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 189 of 248

Operation Band Fundamental Frequency Operation Mode

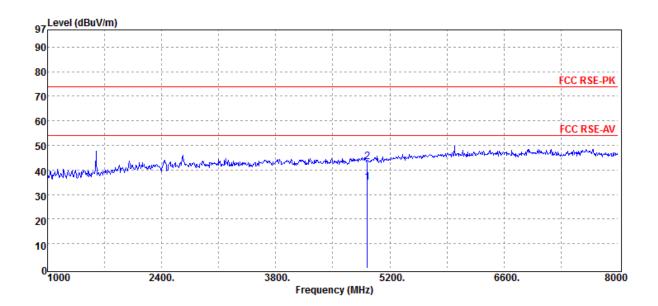
EUT Pol.

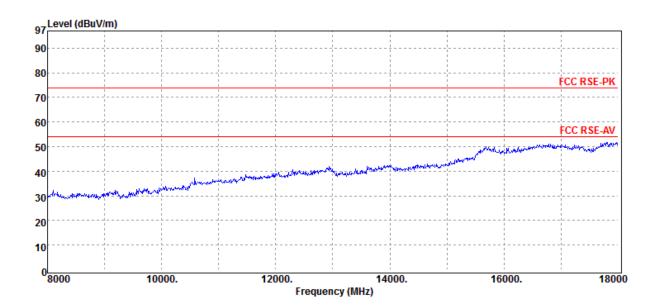
:802.11 b :2462 MHz :TX HIGH :H Plane

Test Date Temp./Humi. Engineer

:2014-03-20 :21deg_C/59RH

:Curry Measurement Antenna Pol. :VERTICAL





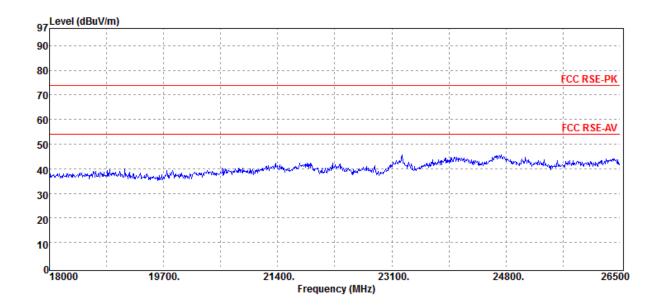
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 190 of 248



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

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

Refs 丹有说明,此根告结果僅對測試之樣品負責,同時此樣品僅保留的天。本根告未經本公司書面新年,不可部份複製。

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



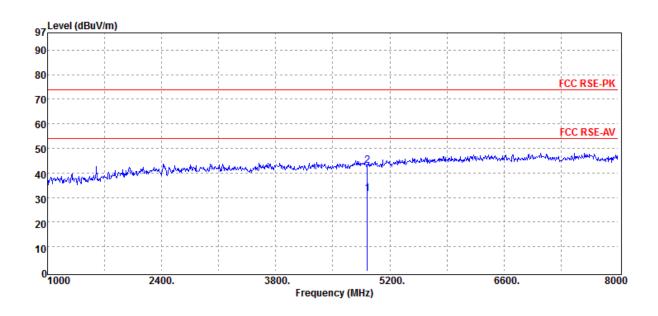
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

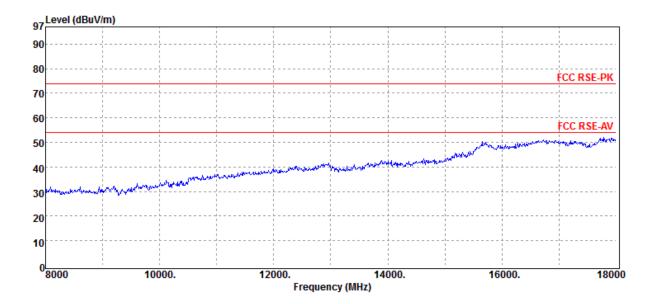
Page: 191 of 248

Operation Band :802.11 b Test Date :2014-03-20 Fundamental Frequency :2462 MHz Temp./Humi. :21deg_C/59RH

Operation Mode :TX HIGH Engineer :Curry

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





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

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

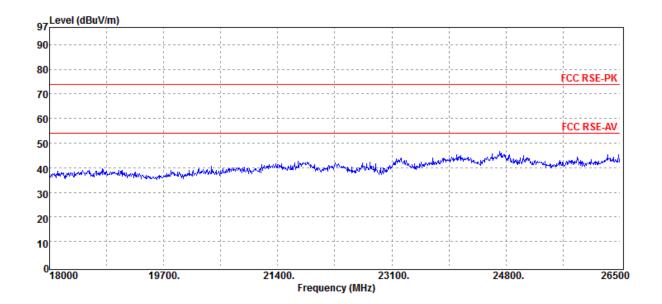
No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

www.tw.sqs.com



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 192 of 248



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

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

Refs 丹有说明,此根告结果僅對測試之樣品負責,同時此樣品僅保留的天。本根告未經本公司書面新年,不可部份複製。

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

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

台灣檢驗科技股份有限公司

f (886-2) 2298-0488



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 193 of 248

Operation Band Fundamental Frequency Operation Mode EUT Pol.

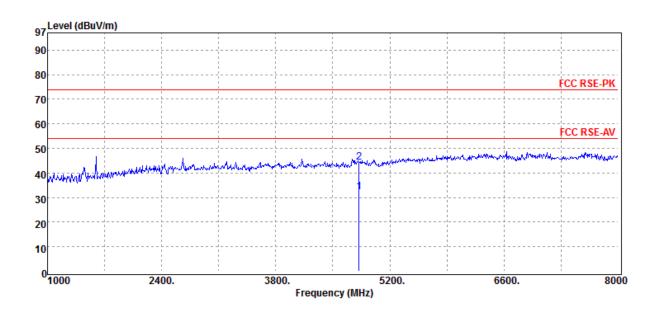
:802.11 g :2412 MHz :TX LOW :H Plane

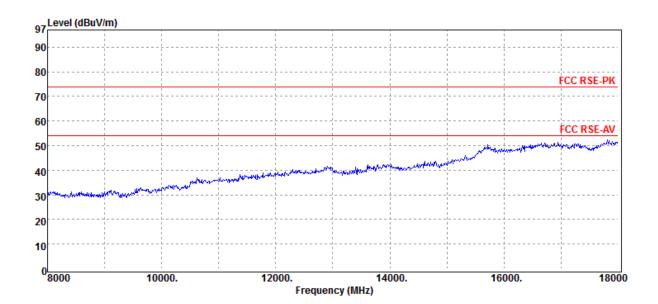
Test Date Temp./Humi. Engineer

:2014-03-20 :21deg_C/59RH

:Curry

Measurement Antenna Pol. :VERTICAL





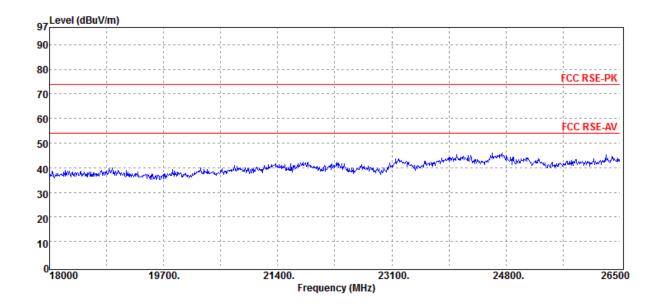
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 194 of 248



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

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

Refs 丹有说明,此根告结果僅對測試之樣品負責,同時此樣品僅保留的天。本根告未經本公司書面新年,不可部份複製。

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



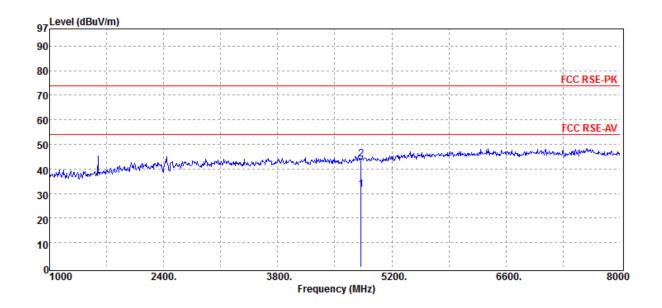
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

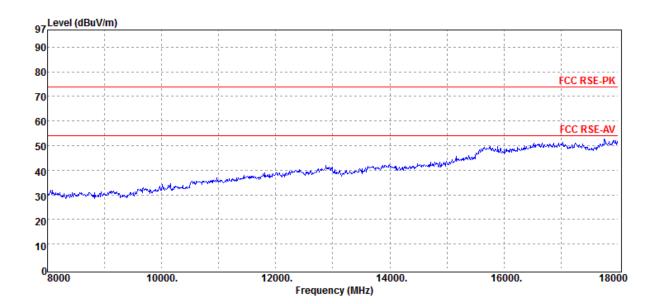
Page: 195 of 248

Operation Band :802.11 g Test Date :2014-03-20 Fundamental Frequency :2412 MHz Temp./Humi. :21deg_C/59RH

Operation Mode :TX LOW Engineer :Curry

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





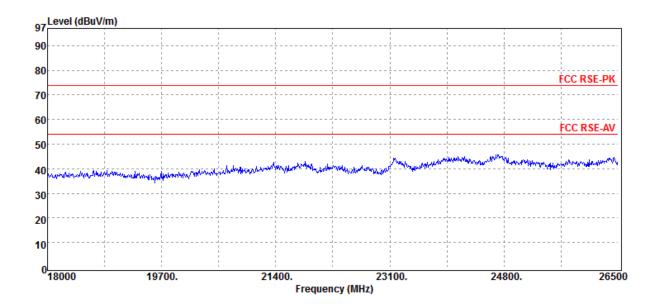
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 196 of 248



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

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

Refs 丹有说明,此根告结果僅對測試之樣品負責,同時此樣品僅保留的天。本根告未經本公司書面新年,不可部份複製。

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 197 of 248

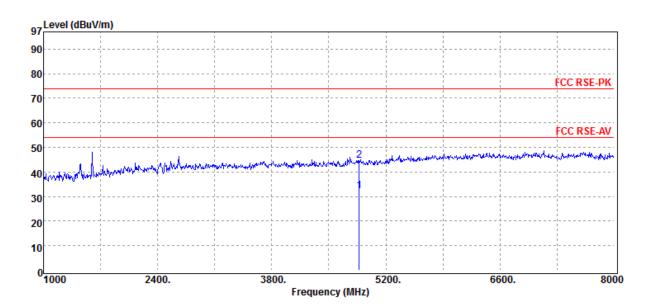
Operation Band Fundamental Frequency Operation Mode

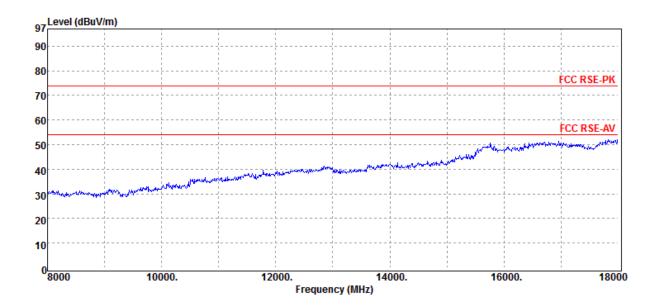
EUT Pol.

:802.11 g :2437 MHz :TX MID :H Plane

Test Date Temp./Humi. :2014-03-20 :21deg_C/59RH

Engineer :Curry :VERTICAL Measurement Antenna Pol.





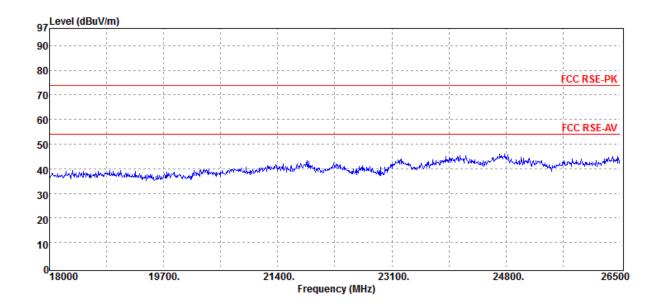
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 198 of 248



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

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

Refs 丹有说明,此根告结果僅對測試之樣品負責,同時此樣品僅保留的天。本根告未經本公司書面新年,不可部份複製。

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 199 of 248

Operation Band Fundamental Frequency Operation Mode

EUT Pol.

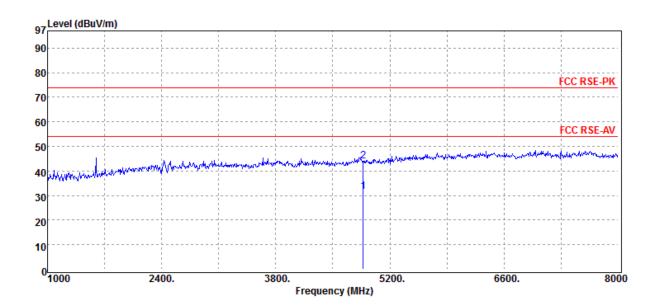
:802.11 g :2437 MHz :TX MID :H Plane

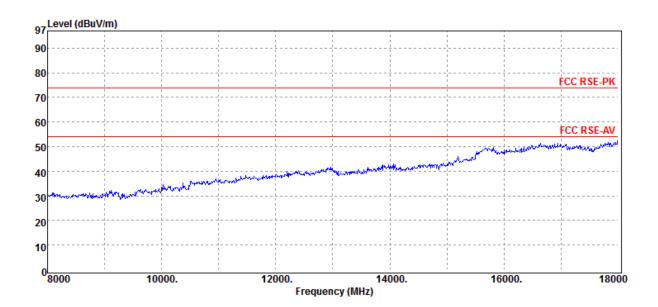
Test Date Temp./Humi. Engineer

:2014-03-20 :21deg_C/59RH

:Curry

Measurement Antenna Pol. :HORIZONTAL





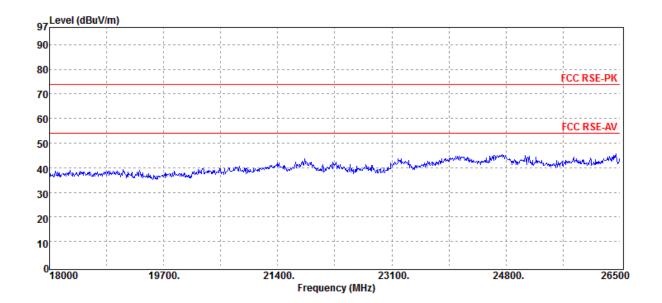
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 200 of 248



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

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

Refs 丹有说明,此根告结果僅對測試之樣品負責,同時此樣品僅保留的天。本根告未經本公司書面新年,不可部份複製。

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sgs.com



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 201 of 248

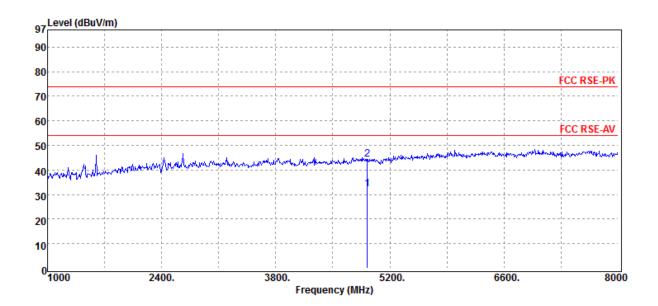
Operation Band Fundamental Frequency Operation Mode EUT Pol.

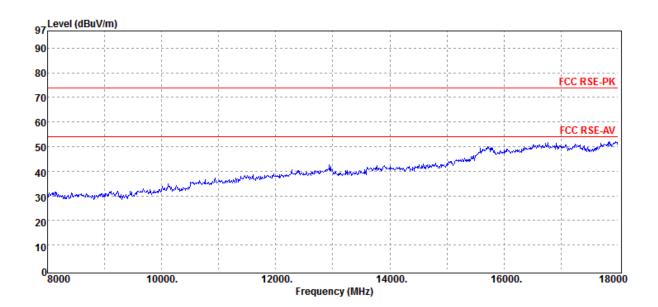
:802.11 g :2462 MHz :TX HIGH :H Plane

Test Date Temp./Humi. Engineer

:2014-03-20 :21deg_C/59RH

:Curry Measurement Antenna Pol. :VERTICAL





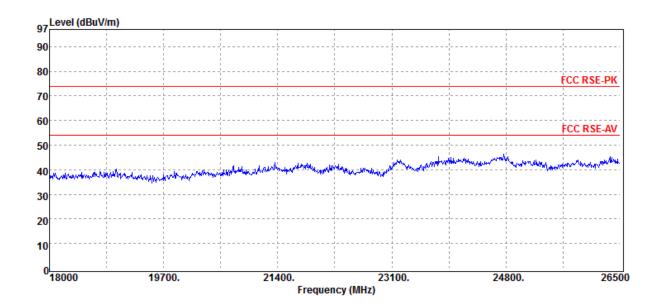
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 202 of 248



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

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

Refs 丹有说明,此根告结果僅對測試之樣品負責,同時此樣品僅保留的天。本根告未經本公司書面新年,不可部份複製。

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



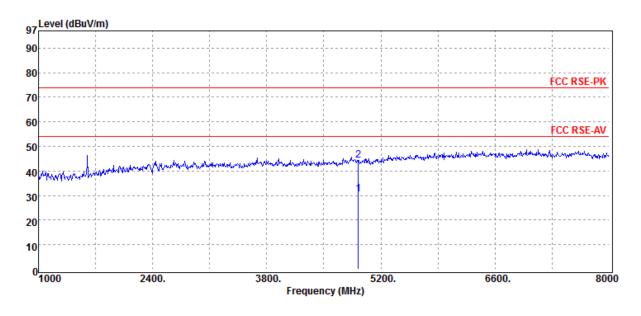
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

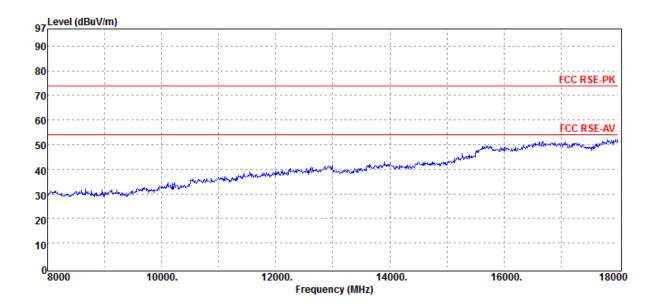
Page: 203 of 248

Operation Band :802.11 g Test Date :2014-03-20 Fundamental Frequency :2462 MHz Temp./Humi. :21deg_C/59RH

Operation Mode :TX HIGH Engineer :Curry

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





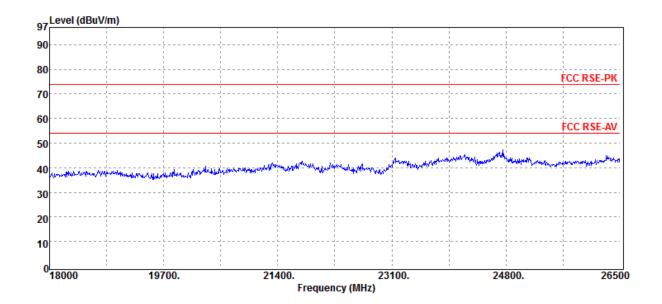
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 204 of 248



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

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

Refs 丹有说明,此根告结果僅對測試之樣品負責,同時此樣品僅保留的天。本根告未經本公司書面新年,不可部份複製。

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sgs.com



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

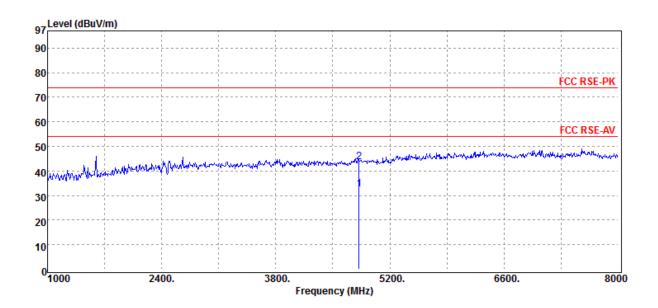
Page: 205 of 248

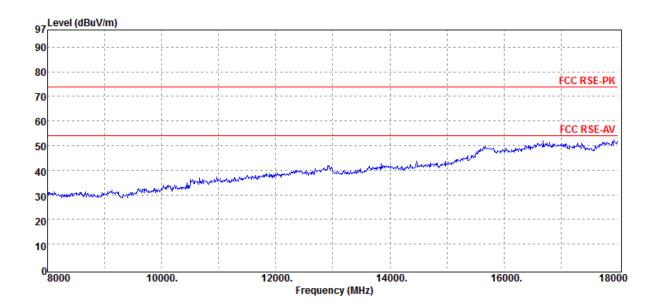
Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11 n20M :2412 MHz :TX LOW :H Plane

Test Date :2014-03-20 Temp./Humi. :21deg_C/59RH Engineer :Curry

Measurement Antenna Pol. :VERTICAL





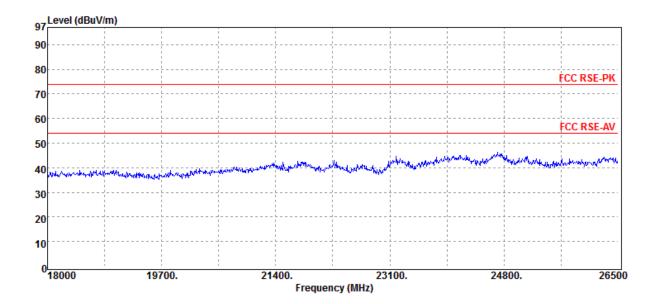
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 206 of 248



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

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

Refs 丹有说明,此根告结果僅對測試之樣品負責,同時此樣品僅保留的天。本根告未經本公司書面新年,不可部份複製。

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

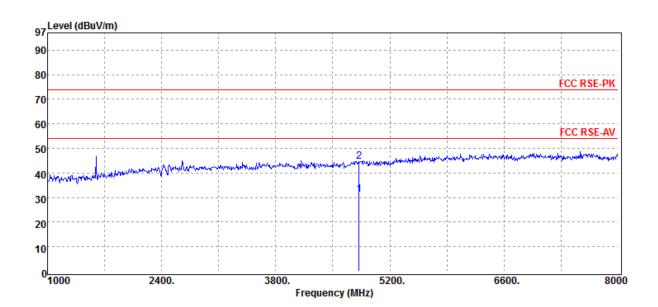
Page: 207 of 248

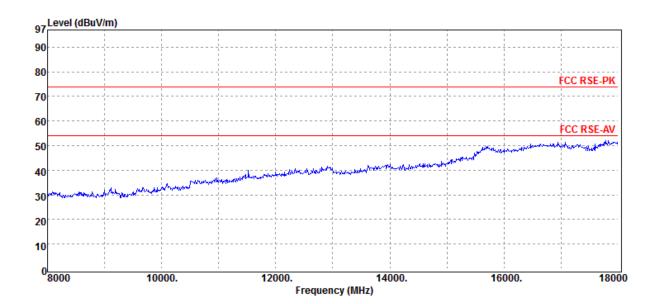
Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11 n20M :2412 MHz :TX LOW :H Plane

Test Date :2014-03-20 Temp./Humi. :21deg_C/59RH Engineer :Curry

Measurement Antenna Pol. :HORIZONTAL





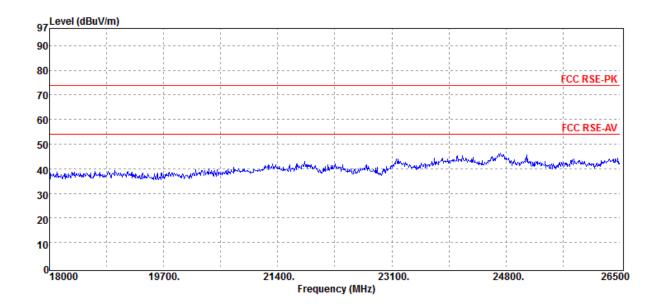
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 208 of 248



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

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

Refs 丹有说明,此根告结果僅對測試之樣品負責,同時此樣品僅保留的天。本根告未經本公司書面新年,不可部份複製。

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.tw.sgs.com



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

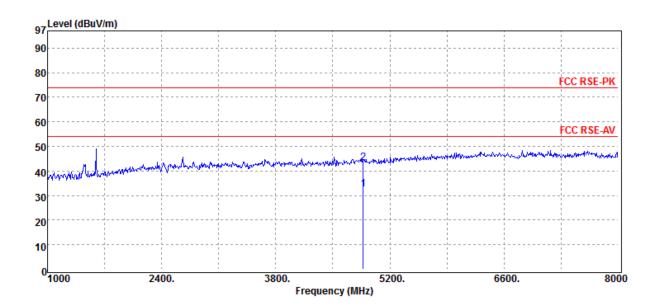
Page: 209 of 248

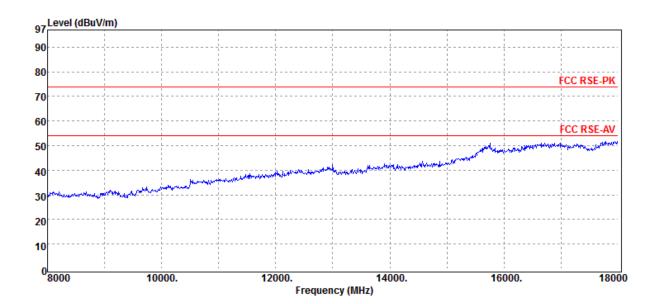
Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11 n20M :2437 MHz :TX MID :H Plane

Test Date :2014-03-20 Temp./Humi. :21deg_C/59RH Engineer :Curry

Measurement Antenna Pol. :VERTICAL





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

Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

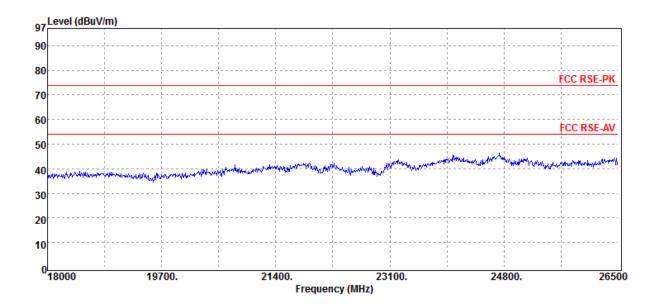
f (886-2) 2298-0488

www.tw.sqs.com



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 210 of 248



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

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

Refs 丹有说明,此根告结果僅對測試之樣品負責,同時此樣品僅保留的天。本根告未經本公司書面新年,不可部份複製。

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 211 of 248

Operation Band Fundamental Frequency Operation Mode EUT Pol.

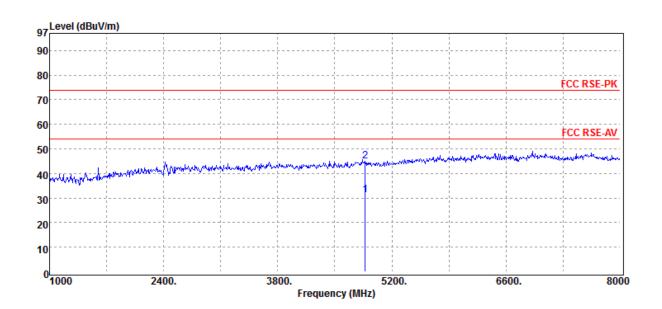
:802.11 n20M :2437 MHz :TX MID :H Plane

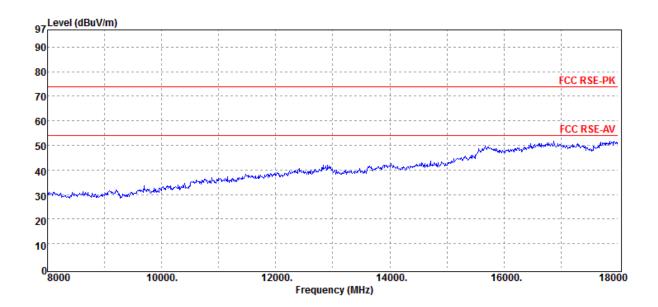
Test Date Temp./Humi. Engineer

:21deg_C/59RH :Curry

:2014-03-20

Measurement Antenna Pol. :HORIZONTAL





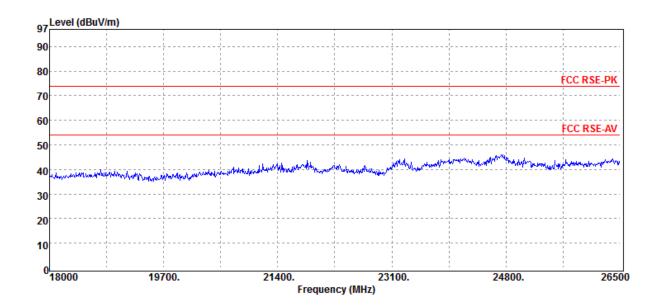
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 212 of 248



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

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

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

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

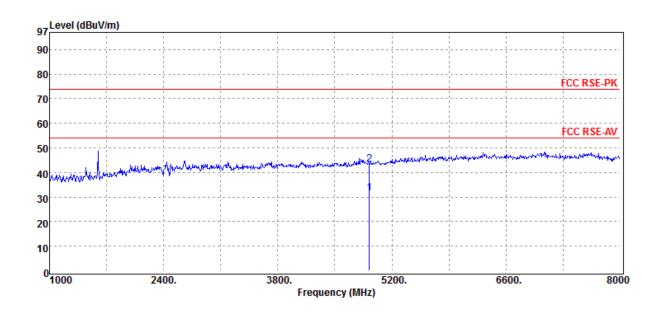


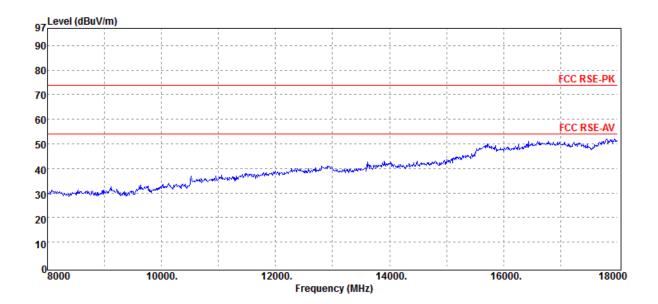
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 213 of 248

Operation Band Test Date :2014-03-20 :802.11 n20M Fundamental Frequency :2462 MHz Temp./Humi. :21deg C/59RH

Operation Mode :TX HIGH Engineer :Curry EUT Pol. :H Plane Measurement Antenna Pol. :VERTICAL





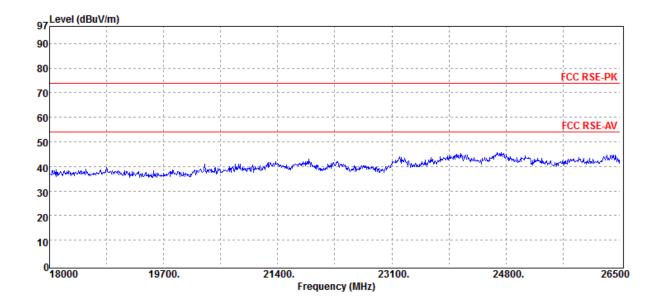
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 214 of 248



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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



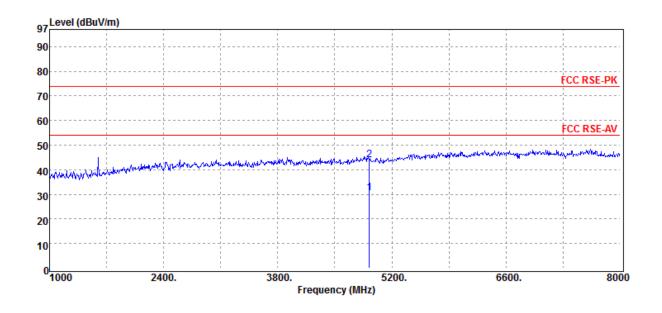
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

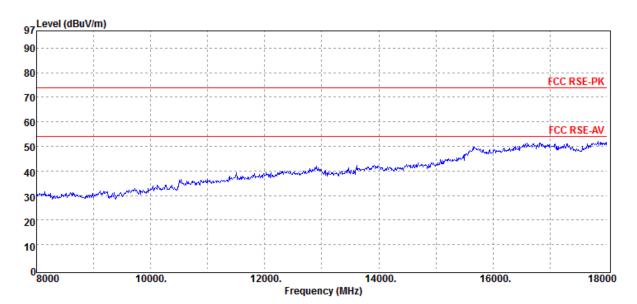
Page: 215 of 248

Operation Band Test Date :2014-03-20 :802.11 n20M Fundamental Frequency :2462 MHz Temp./Humi. :21deg C/59RH

Operation Mode :TX HIGH Engineer :Curry

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





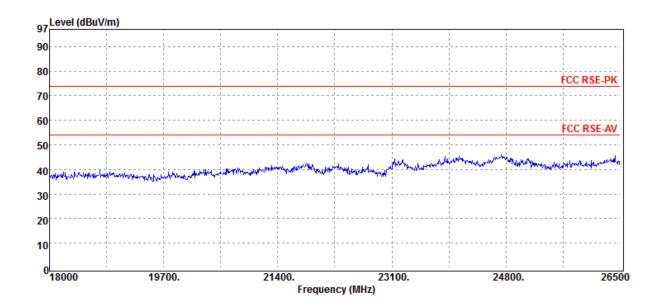
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 216 of 248



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

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

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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

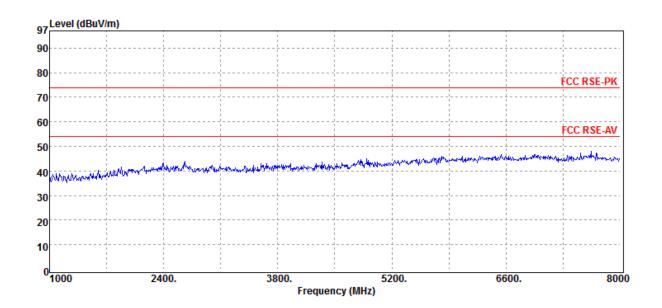
Page: 217 of 248

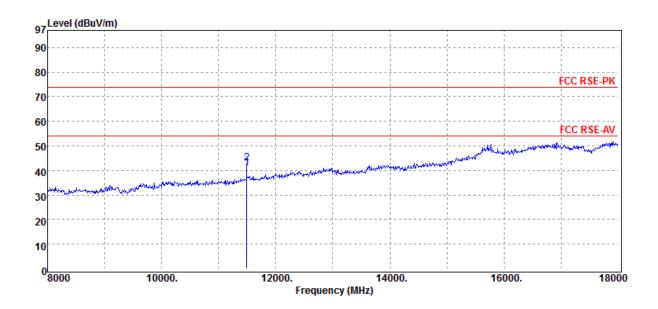
Operation Band :802.11 a Test Date :2014-03-20

Fundamental Frequency :5745 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode :TX LOW Engineer :Curry

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





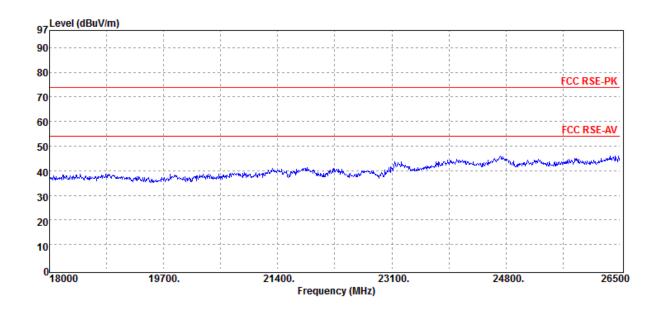
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

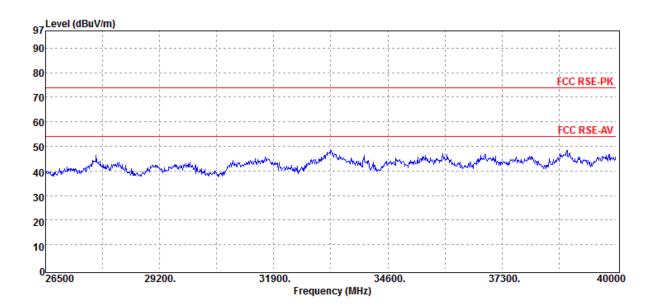
Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 218 of 248





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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 219 of 248

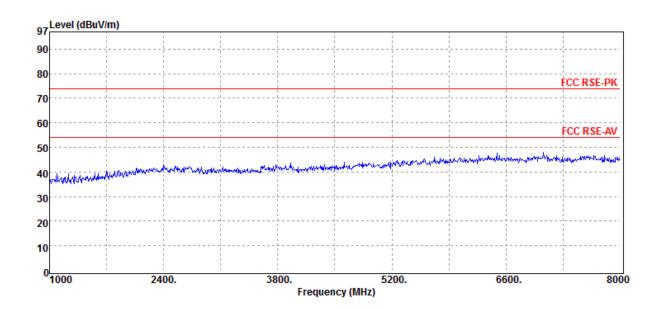
Operation Band :802.11 a

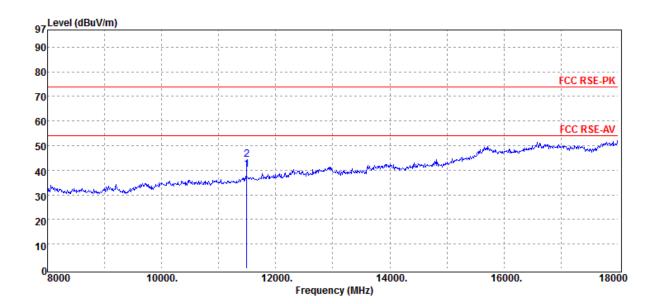
Fundamental Frequency :5745 MHz Operation Mode :TX LOW

EUT Pol. :H Plane Test Date :2014-03-20 Temp./Humi. :22.7 deg_C / 67 RH

Engineer :Curry

Measurement Antenna Pol. :HORIZONTAL





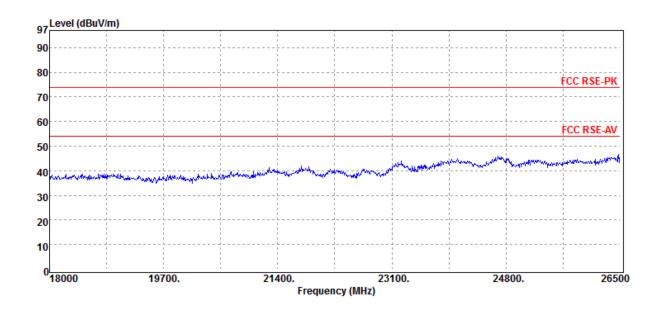
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

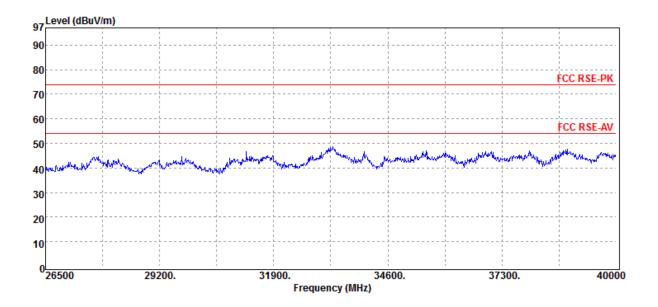
Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 220 of 248





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

f (886-2) 2298-0488

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

www.tw.sgs.com



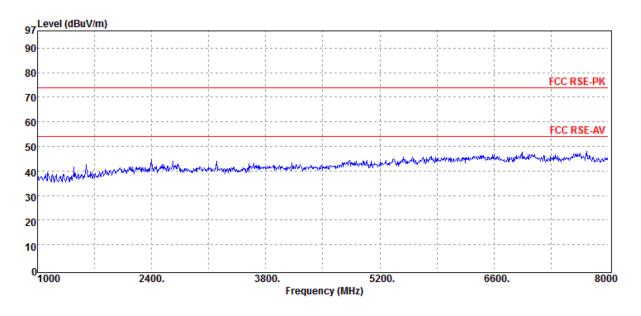
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

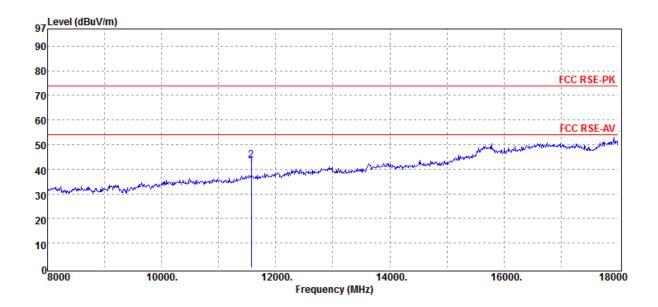
Page: 221 of 248

Operation Band :802.11 a Test Date :2014-03-20

Fundamental Frequency :5785 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode :TX MID Engineer :Curry :VERTICAL EUT Pol. :H Plane Measurement Antenna Pol.





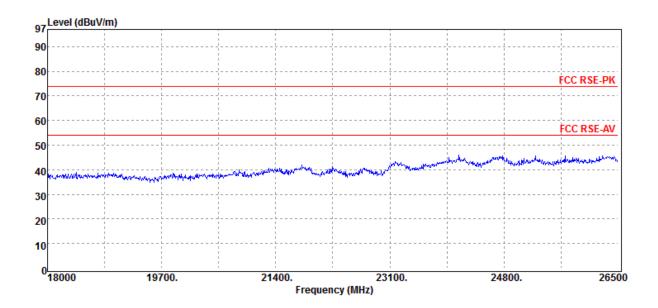
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

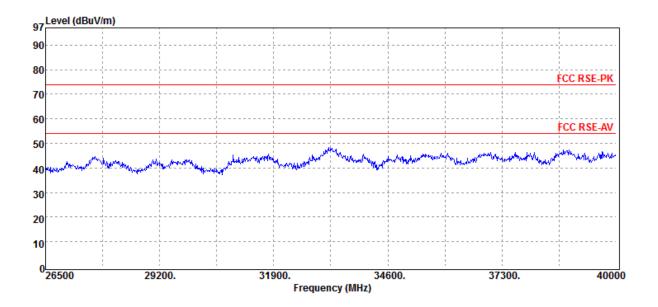
Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 222 of 248





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



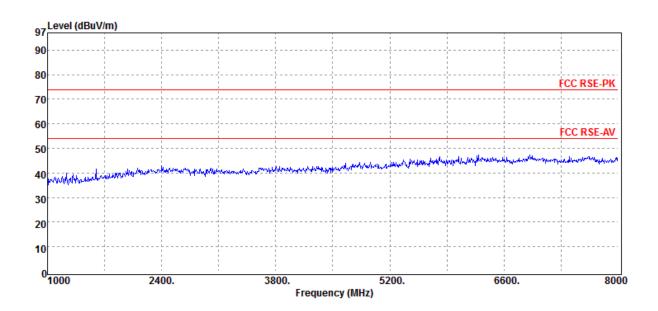
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

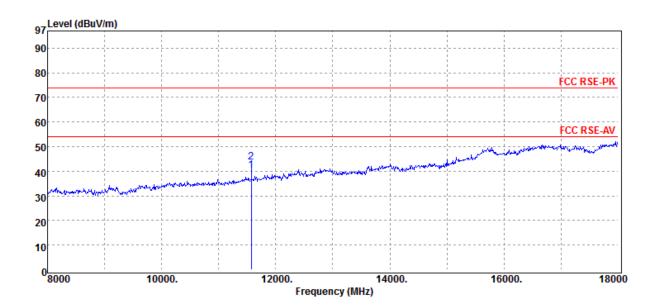
Page: 223 of 248

Operation Band :802.11 a Test Date :2014-03-20

Fundamental Frequency :5785 MHz Temp./Humi. :22.7 deg_C / 67 RH Operation Mode :TX MID Engineer :Curry

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





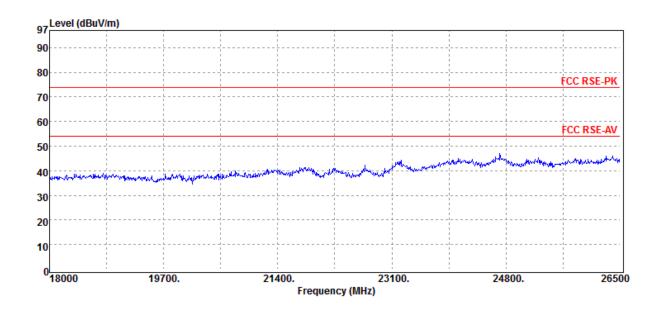
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

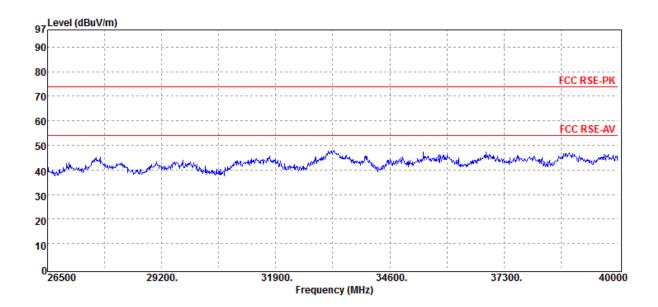
Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 224 of 248





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



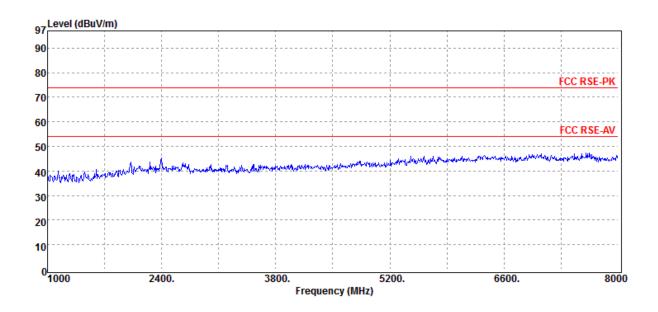
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

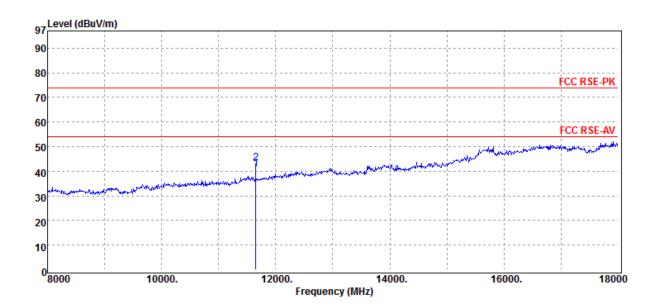
Page: 225 of 248

Operation Band :802.11 a Test Date :2014-03-20

Fundamental Frequency :5825 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode :TX HIGH Engineer :Curry EUT Pol. :H Plane Measurement Antenna Pol. :VERTICAL





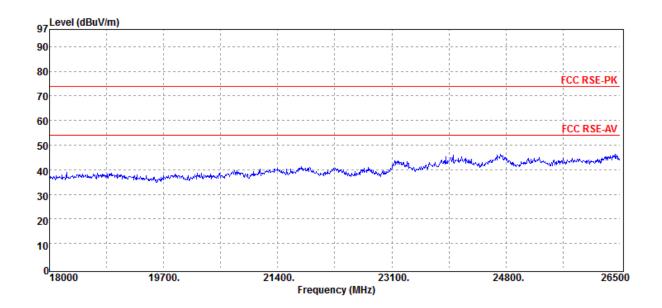
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

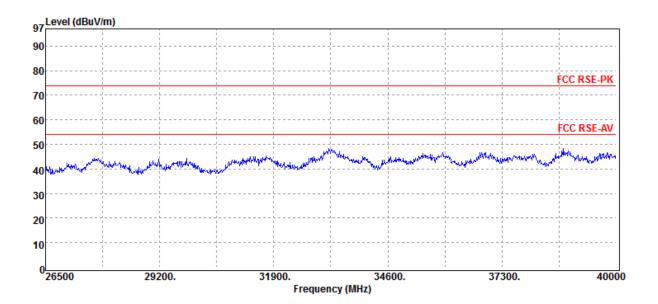
Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 226 of 248





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



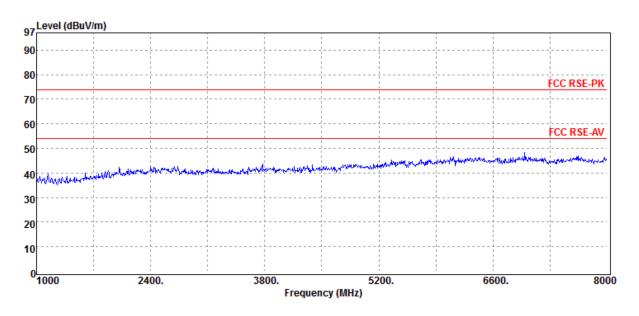
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

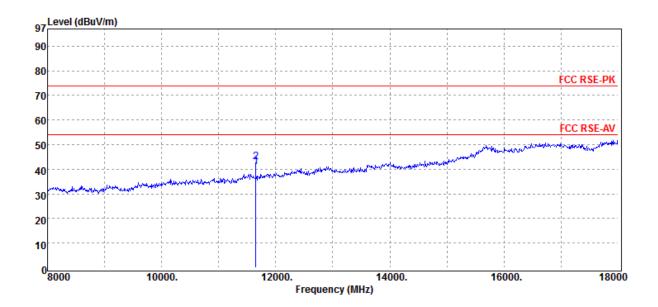
Page: 227 of 248

Operation Band :802.11 a Test Date :2014-03-20

Fundamental Frequency :5825 MHz Temp./Humi. :22.7 deg_C / 67 RH Operation Mode :TX HIGH Engineer :Curry

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





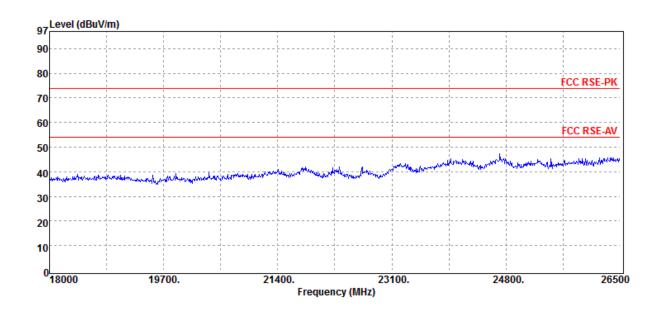
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

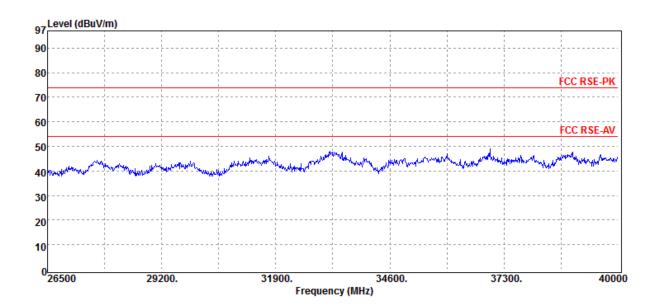
Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 228 of 248





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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 229 of 248

Operation Band

Fundamental Frequency Operation Mode

EUT Pol.

:802.11 n20M :5745 MHz :TX LOW :H Plane

Test Date Temp./Humi.

Engineer

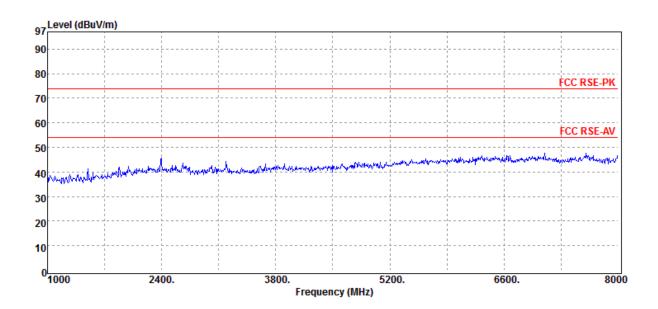
Measurement Antenna Pol.

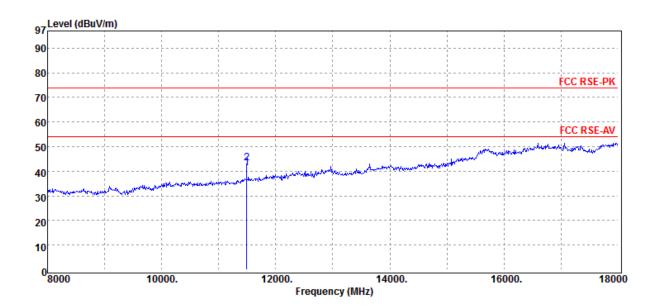
:2014-03-20

:22.7 deg_C / 67 RH

:Curry

:VERTICAL





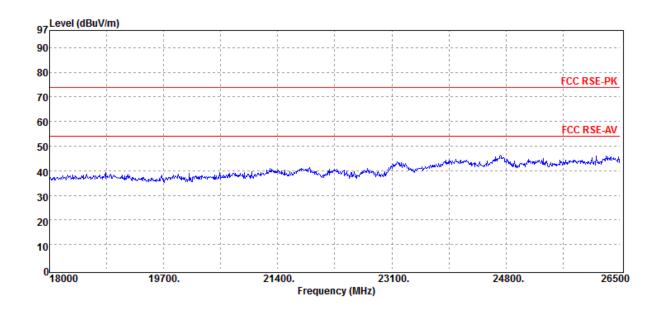
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

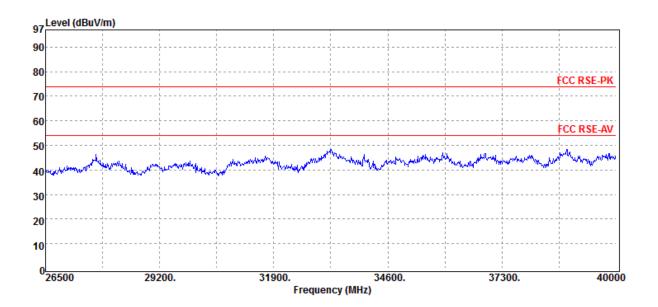
Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 230 of 248





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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 231 of 248

Operation Band Fundamental Frequency Operation Mode EUT Pol.

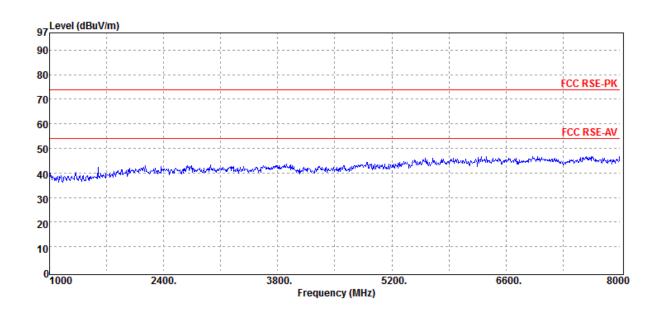
:802.11 n20M :5745 MHz :TX LOW :H Plane

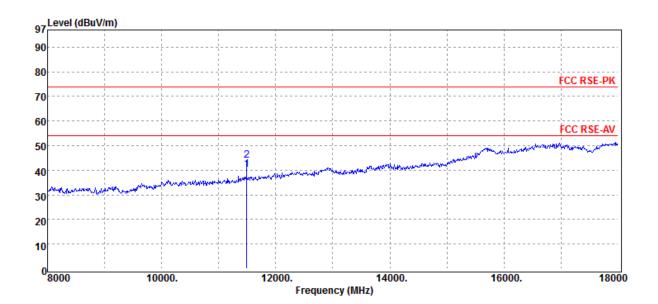
Test Date Temp./Humi. Engineer

:22.7 deg_C / 67 RH :Curry

:2014-03-20

Measurement Antenna Pol. :HORIZONTAL





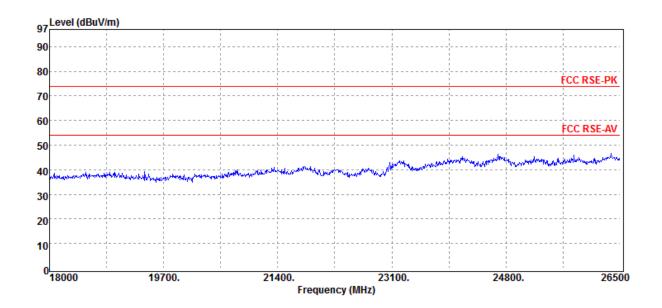
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

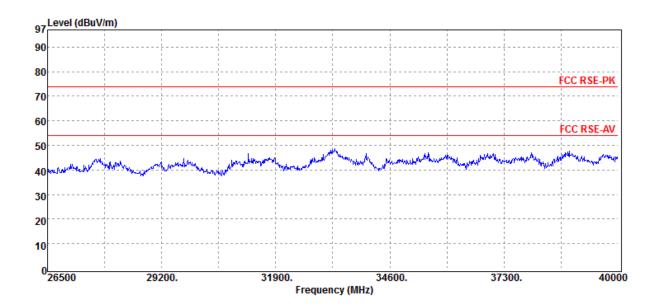
Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 232 of 248





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



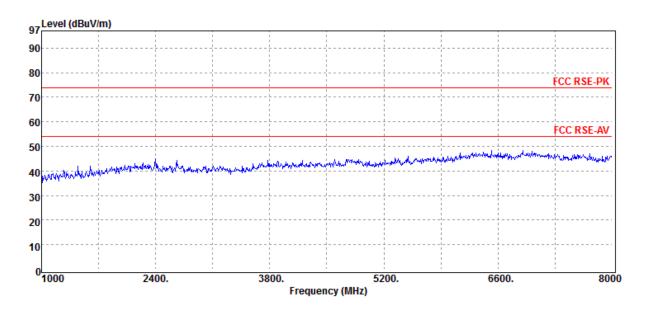
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

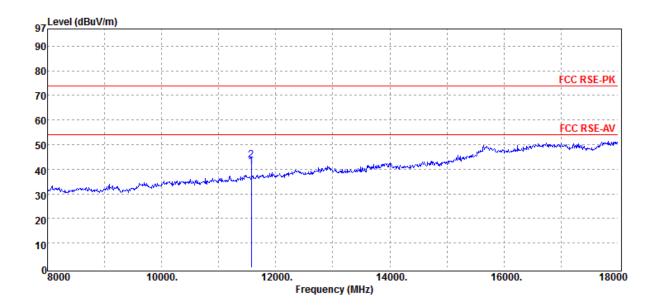
Page: 233 of 248

Operation Band :802.11 n20M Test Date :2014-03-20

Fundamental Frequency :5785 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode :TX MID Engineer :Curry :VERTICAL EUT Pol. :H Plane Measurement Antenna Pol.





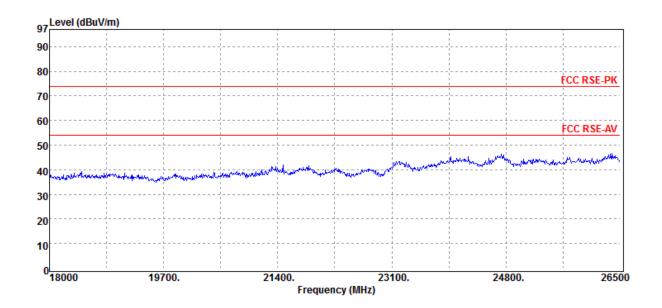
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

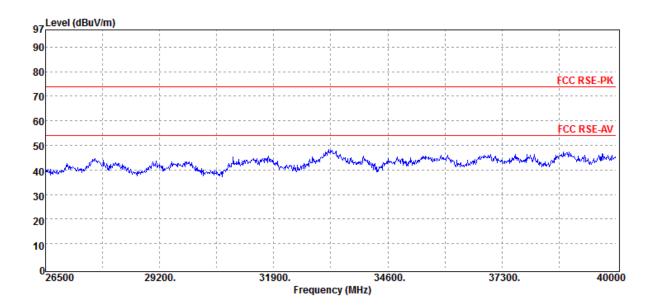
Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 234 of 248





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

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

f (886-2) 2298-0488

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

www.tw.sgs.com



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 235 of 248

Operation Band Fundamental Frequency Operation Mode

EUT Pol.

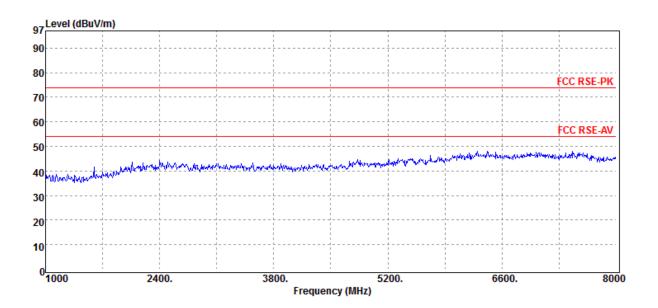
:802.11 n20M :5785 MHz :TX MID :H Plane

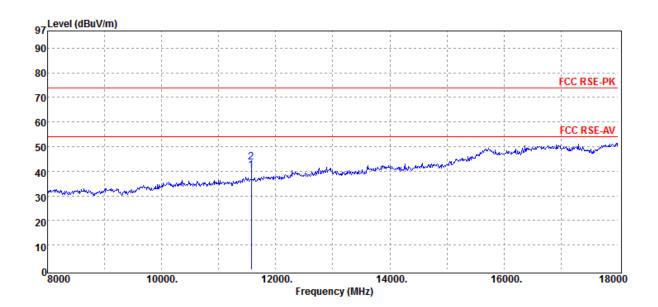
Test Date Temp./Humi. Engineer

:2014-03-20 :22.7 deg_C / 67 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL





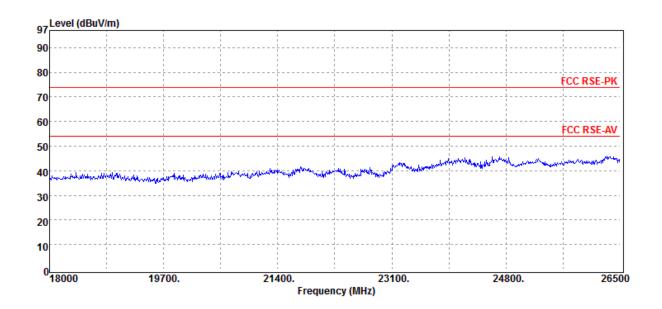
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

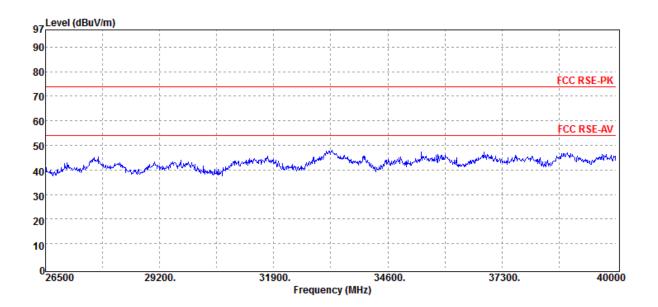
Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 236 of 248





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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

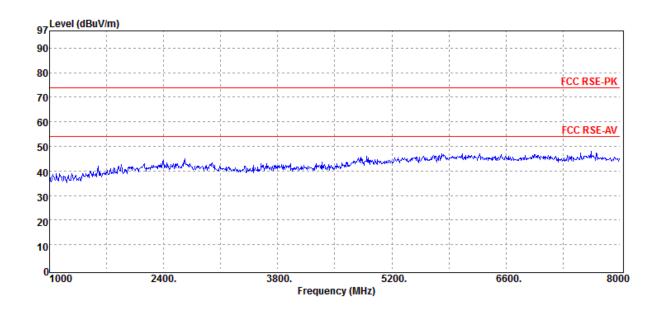
Page: 237 of 248

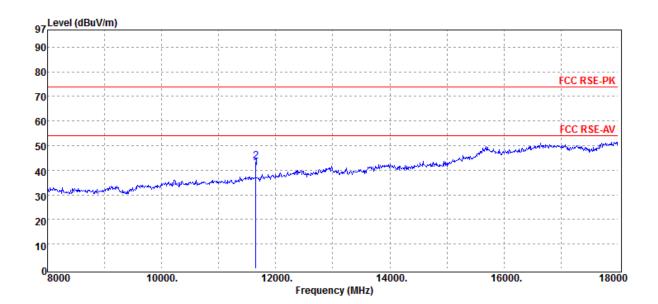
Operation Band :802.11 n20M Test Date

:2014-03-20 Fundamental Frequency :5825 MHz Temp./Humi. :22.7 deg_C / 67 RH

Operation Mode :TX HIGH Engineer :Curry

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





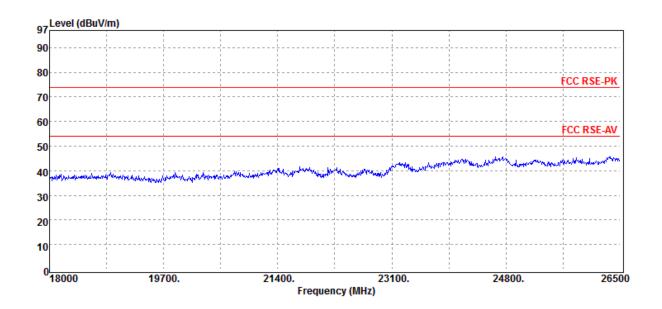
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

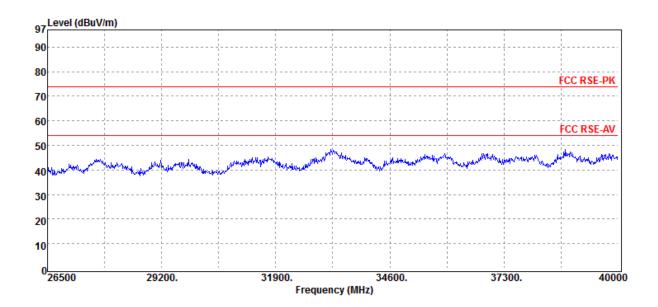
Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 238 of 248





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



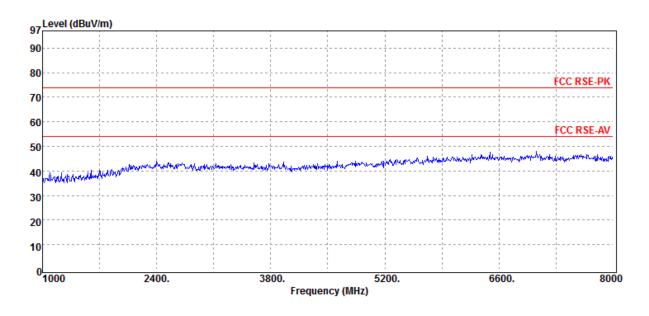
Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

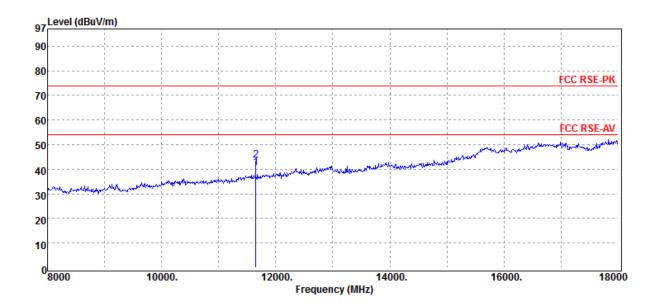
Page: 239 of 248

Operation Band :802.11 n20M Test Date :2014-03-20

Fundamental Frequency :5825 MHz Temp./Humi. :22.7 deg_C / 67 RH Operation Mode :TX HIGH Engineer :Curry

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





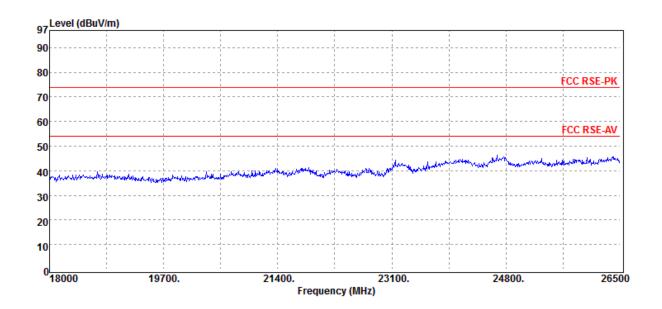
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

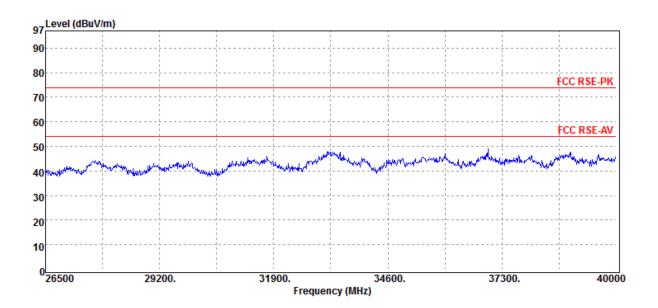
Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 240 of 248





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 241 of 248

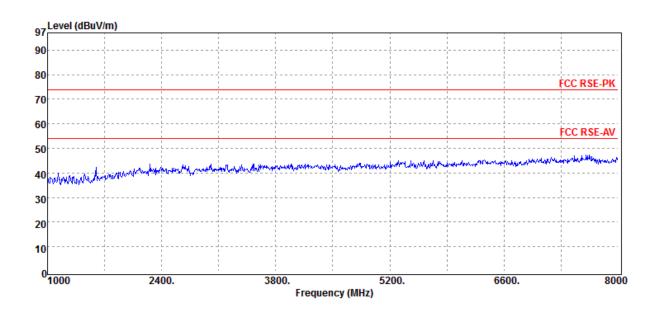
Operation Band Fundamental Frequency Operation Mode

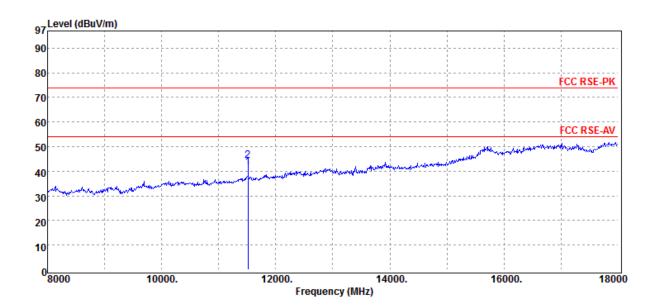
EUT Pol.

:802.11 n40M :5755 MHz :TX LOW :H Plane

Test Date Temp./Humi. :2014-03-20 :22.7 deg_C / 67 RH

Engineer :Curry Measurement Antenna Pol. :VERTICAL





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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

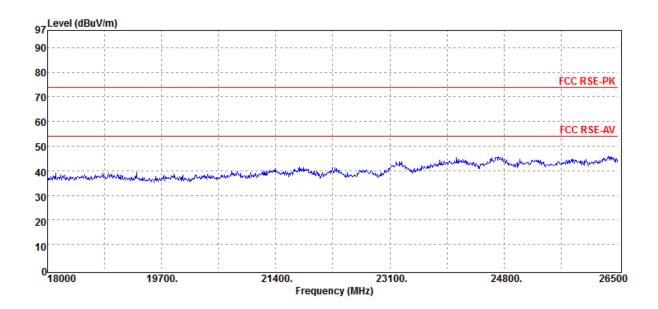
f (886-2) 2298-0488

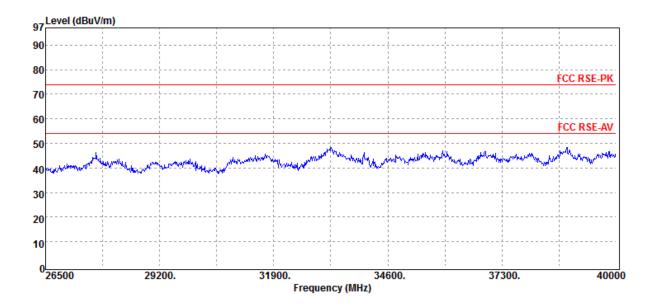
www.tw.sqs.com



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 242 of 248





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

www.tw.sgs.com



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 243 of 248

Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11 n40M :5755 MHz :TX LOW :H Plane

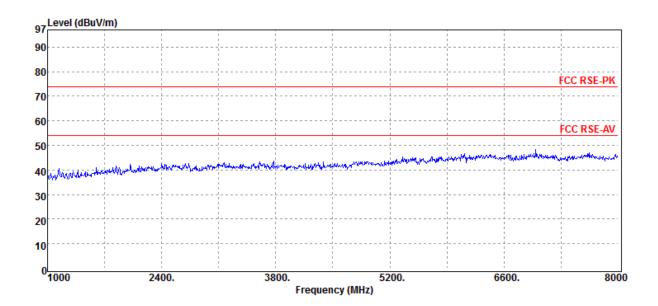
Test Date Temp./Humi. Engineer

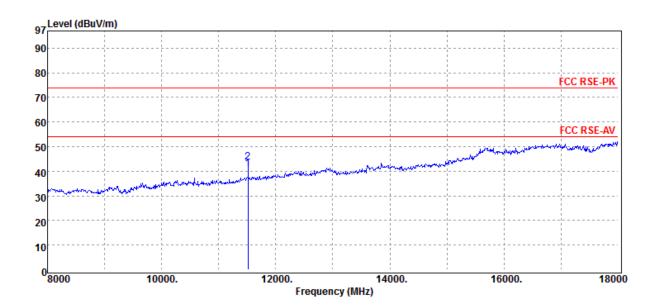
Measurement Antenna Pol.

:22.7 deg_C / 67 RH :Curry

:HORIZONTAL

:2014-03-20





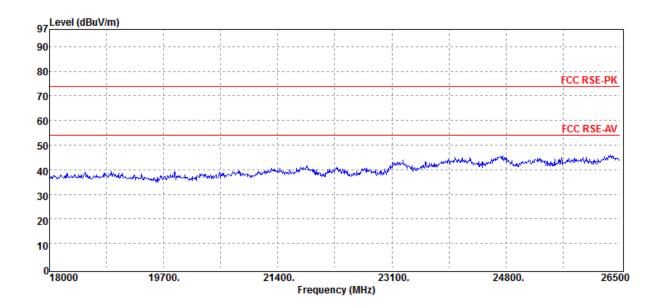
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

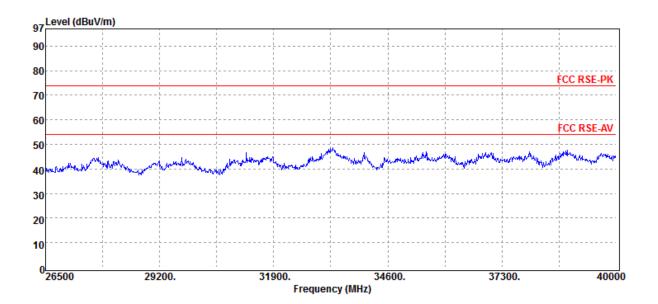
Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval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



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 244 of 248





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

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 245 of 248

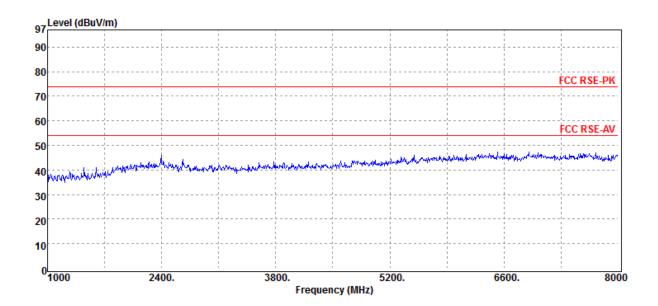
Operation Band Fundamental Frequency Operation Mode

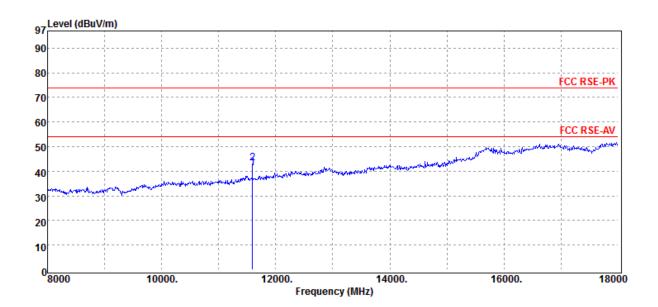
EUT Pol.

:802.11 n40M :5795 MHz :TX HIGH :H Plane

Test Date Temp./Humi. :2014-03-20 :22.7 deg_C / 67 RH

Engineer :Curry Measurement Antenna Pol. :VERTICAL





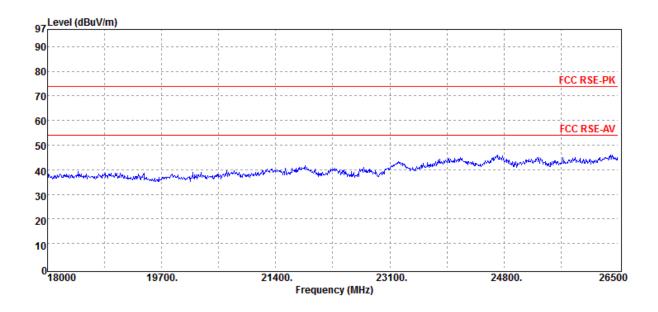
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

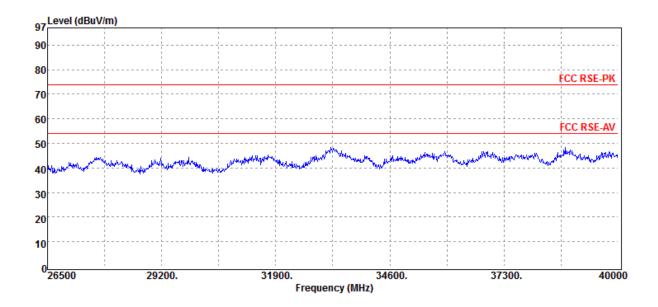
Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 246 of 248





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results snown in this test report reter only to the sample(s) tested and such sample(s) are retained for 90 days only.
Phys. P pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 247 of 248

Operation Band Fundamental Frequency Operation Mode

EUT Pol.

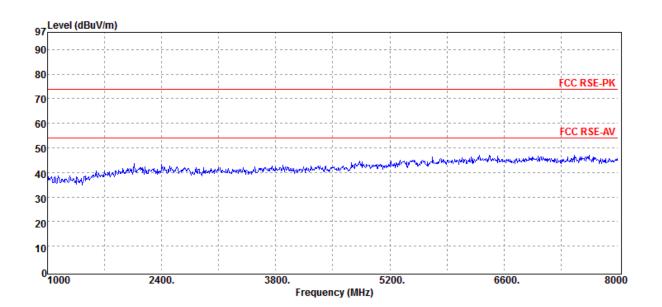
:802.11 n40M :5795 MHz :TX HIGH :H Plane

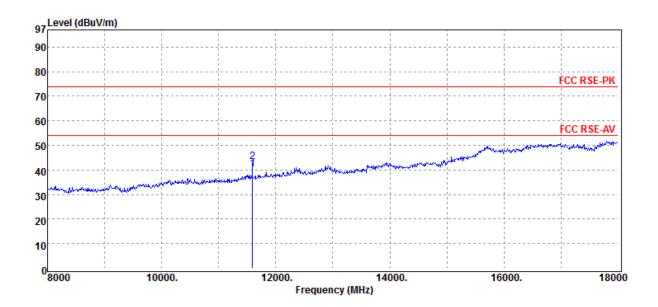
Test Date Temp./Humi. Engineer

:2014-03-20 :22.7 deg_C / 67 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL





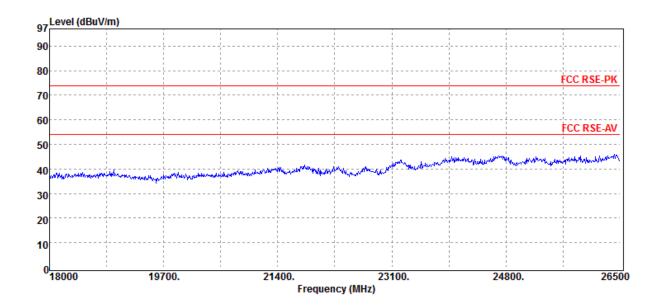
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

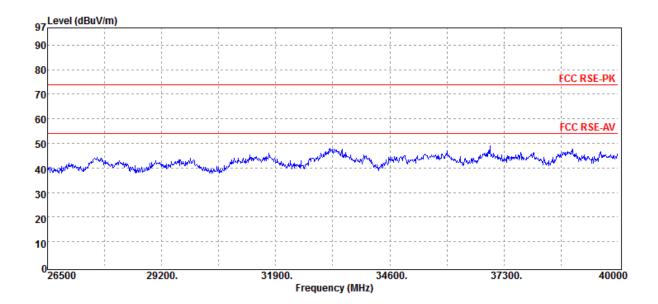
Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: EH/2014/10015 **Issue Date: Mar. 21, 2014**

Page: 248 of 248





Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.