

Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 1 of 195

ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 15 SUBPART E REQUIREMENT

OF

Product Name: 7-inch Rugged Tablet

Pioneerpos Brand Name:

DASH 7" Robust Tablet PC **Marketing Name:**

DASH7E1 Model No.:

N/A **Model Difference:**

CPOD7E1 FCC ID:

ER/2015/40012 **Report No.:**

Jul. 09, 2015 **Issue Date:**

FCC Rule Part: §15.407

Prepared for: **Pioneer POS Solution, Inc.**

238 Benton Ct., City of Industry, CA 91789

SGS Taiwan Ltd. Prepared by:

> **Electronics & Communication Laboratory** No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan

24803





0513

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

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

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 2 of 195

VERIFICATION OF COMPLIANCE

Pioneer POS Solution, Inc. **Applicant:**

238 Benton Ct., City of Industry, CA 91789

Product Name: 7-inch Rugged Tablet

Brand Name: Pioneerpos

DASH 7" Robust Tablet PC **Marketing Name:**

Model No.: DASH7E1

Model Difference: N/A

FCC ID: CPOD7E1

File Number: ER/2015/40012

Date of test: Apr. 02, 2015 ~ Jul. 03, 2015

Date of EUT Received: Apr. 02, 2015

We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. Electronics & Communication Laboratory The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10: 2009 and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits.

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

Test By:	Marcus Tseng	Date:	Jul. 09, 2015
Prepared By:	Marcus Tseng / Engineer Uto letta Tang	Date:	Jul. 09, 2015
Approved By:	Violetta Tang / Clerk Lang Jim Chang / Asst. Manager	Date:	Jul. 09, 2015

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告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 appearance of this decument is understanded to the victor of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 3 of 195

Revision History

Report Number	Revision	Description	Issue Date
ER/2015/40012	Rev.00	Initial creation of document	Jul. 09, 2015

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and purisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery 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 WuKunRopad New TaipeiIndustrialPark WukupDistrict New TaipeiCity Taiwan 24803/新北市五股區新北春業園區五工路 134 赞

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 4 of 195

Table of Contents

1.	GEN	ERAL INFORMATION	6
	1.1	Product Description	6
	1.2	Product Feature of Equipment Under Test	8
	1.3	Test Methodology of Applied Standards	9
	1.4	Test Facility	9
	1.5	Special Accessories	9
	1.6	Equipment Modifications	9
2.	SYS	ΓΕΜ TEST CONFIGURATION	10
	2.1	EUT Configuration.	10
	2.2	EUT Exercise	10
	2.3	Test Procedure	10
	2.4	Measurement Results Explanation Example	11
	2.5	Configuration of Tested System	12
3.	SUM	IMARY OF TEST RESULT	13
4.	DES	CRIPTION OF TEST MODES	14
	4.1	Operated in U-NII Bands	14
	4.2	The Worst Test Modes and Channel Details	16
5.	MEA	ASUREMENT UNCERTAINTY	18
6.	CON	DUCTED EMISSION TEST	19
	6.1.	Standard Applicable	19
	6.2.	Measurement Equipment Used	19
	6.3.	EUT Setup	19
	6.4.	Test SET-UP	20
	6.5.	Measurement Procedure	20
	6.6.	Measurement Result	20
7.	DUT	Y CYCLE TEST SIGNAL	23
8.	26dB	8 & 6dB EMISSION BANDWIDTH MEASUREMENT	26
	8.1	Standard Applicable	26
	8.2	Measurement Procedure	26
	8.3	Measurement Equipment Used	26
	8.4	Test Set-up.	26
	8.5	Measurement Result	27

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and purisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery 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 WuKunRopad New TaipeiIndustrialPark WukupDistrict New TaipeiCity Taiwan 24803/新北市五股區新北春業園區五工路 134 赞

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 5 of 195

9.	MAX	XIMUM CONDUCTED OUTPUT POWER MEASUREMENT	64
	9.1	Standard Applicable	64
	9.2	Measurement Procedure	65
	9.3	Measurement Equipment Used	65
	9.4	Test Set-up.	65
	9.5	Measurement Result	66
10.	PEA	K POWER SPECTRAL DENSITY	68
	10.1	Standard Applicable	68
	10.2	Measurement Procedure	69
	10.3	Measurement Equipment Used	70
	10.4	Test Set-up.	70
	10.5	Measurement Result	70
11.	UND	ESIRABLE RADIATED EMISSION MEASUREMENT1	93
	11.1	Standard Applicable	93
	11.2	Measurement Equipment Used	95
	11.3	Test SET-UP	96
	11.4	Measurement Procedure	97
	11.5	Field Strength Calculation	97
	11.6	Test Results of Radiated Spurious Emissions form 9 KHz to 30 MHz	98
	11.7	Measurement Result	98
12.	TRA	NSMISSION IN THE ABSENCE OF DATA	191
	12.1	Standard Applicable	191
	12.2	Result	191
13.	FRE	QUENCY STABILITY	192
	13.1	Standard Applicable	192
	13.2	Measurement Procedure	192
	13.3	Test SET-UP	192
	13.4	Measurement Equipment Used	192
	13.5	Measurement Result	193
14.	ANT	ENNA REQUIREMENT	195
	14.1	Standard Applicable	
	14.2	Antenna Connected Construction	195

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

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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of his document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery 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, NewTaipeiIndustrict, NewTaipeiCity, Taiwan24803/新北市五股區新北產業園區五工路 134 號

10.134, WuKungRoad, NewTaipeiIndustrict, NewTaipeiCity, Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 6 of 195

GENERAL INFORMATION

Product Description

General:

<u> </u>	chetat.				
Product Name:	7-inch Rugged Tablet				
Brand Name:	Pioneerpos				
Marketing Name:	DASH 7" Robust Tablet PC				
Model No.:	DASH7E1				
Model Difference:	N/A				
Product SW/HW version:	20150128 / A0.3_0_0				
Radio SW/HW version:	N/A				
Test SW Version:	N/A				
RF power setting in TEST SW:	N/A				
	7.4Vdc from Rechargeable Li-ion Battery or 12V from AC/DC Adapter				
Power Supply:	Battery:	Model No.: J1067, Supplier: JHT			
	Adapter: Model No.: LTE-24E-S2-2, Supplier: Li Tone Electronics Co., Ltd				

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 7 of 195

WLAN 5GHz:

Wi-Fi	Frequency Range	Channels	Rated Power (Avg.)	Modulation Technology	
	5150~5250	4	9.88dBm		
	5250~5350	4	10.34dBm	OFDIA	
11a	5470~5725	11	10.19dBm	OFDM	
	5725-5850	5	10.32dBm		
	HT20 5150~5250	4	10.36dBm (MIMO Chain 0+1)		
11	HT20 5250~5350	4	10.31dBm (MIMO Chain 0+1)	OFDM	
11n	HT20 5470~5725	11	10.50dBm (MIMO Chain 0+1)		
	HT20 5725-5850	5	10.15dBm (MIMO Chain 0+1)		
	HT40 5150~5250	2	10.45dBm (MIMO Chain 0+1)		
11	HT40 5250~5350	2	10.29dBm (MIMO Chain 0+1)	OFDM	
11n	HT40 5470~5725	5	9.90dBm (MIMO Chain 0+1)	OFDM	
	HT40 5725-5850	2	10.51dBm (MIMO Chain 0+1)		
Antenna Designation			PIFA Antenna, Main: Gain: 6.54dBi (5150MHz-5350MHz) 5.19dBi (5470MHz-5725MHz) / 3.67dBi (5725MHz-5850MHz) Aux: Gain: 1.79dBi (5150MHz-5350MHz) 1.90dBi (5470MHz-5725MHz) / 2.43dBi (5725MHz-5850MHz)		
Modulation type			64QAM, 16QAM, QPSK, BPSK for OFDM		
Transition Rate:		802.11 a: 6/9/12/18/24/36/48/54 Mbps ransition Rate: 802.11 n_20MHz: 6.5 - 135Mbps 802.11 n_40MHz: 13.5 - 300Mbps			

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

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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of his document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery 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, NewTaipeiIndustrict, NewTaipeiCity, Taiwan24803/新北市五股區新北產業園區五工路 134 號

10.134, WuKungRoad, NewTaipeiIndustrict, NewTaipeiCity, Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 8 of 195

Product Feature of Equipment Under Test

The equipment under Test (Hereafter Called: EUT) is 7-inch Rugged Tablet supporting, Wi-Fi 802.11abgn, Bluetooth with GPS and NFC features, and below is details of information

	Product Feature				
Product Name: 7-inch Rugged Tablet					
Brand Name: Pioneerpos					
Marketing Name:	DASH 7" Robust Tablet PC				
Model No.:	DASH7E1				
Model Difference:	N/A				
FCC ID	CPOD7E1				
Wi-Fi Specification	802.11a/b/g/n				
Bluetooth Version	V4.0 dual mode +EDR				
NFC Specification	NFC				

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

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

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



Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 9 of 195

1.3 **Test Methodology of Applied Standards**

FCC Part 15, Subpart E §15.407

FCC KDB 789033 D02 General UNII Test Procedures New Rules v01

FCC KDB 662311 D01 Multiple Transmitter Output

ANSI C63.10:2009

Note:

- 1. All test items have been performed and record as per the above standards.
- 2. The composite system is compliance with FCC Subpart B is authorized under the certification procedure.
- The EUT was placed 0.8m height for frequency above 1GHz in accordance with AN-3. SI C63.10:2009.

Test Facility

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

FCC Registration Numbers are: 990257

Canada Registration Number: 4620A-5.

Special Accessories 1.5

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.

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 10 of 195

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. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz,. The CISPR Quasi-Peak and Average detector mode is employed according to §15.207. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

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.

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

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

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

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 11 of 195

Measurement Results Explanation Example For all conducted test items:

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

Note:

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

Following shows an offset computation example with cable loss 1.6dB and 10dB attenuator.

Single mode offset

= \overrightarrow{RF} cable loss (dB)+ attenuation factor(dB) +duty factor = 11.6(dB)

N20 MIMO mode offset

= RF cable loss (dB)+ attenuation factor(dB)+ 10 log(NANT) dB+duty factor=14.6(dB)

N40 MIMO mode offset

= RF cable loss (dB)+ attenuation factor(dB)+ 10 log(NANT) dB+duty factor=14.6(dB)

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

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 12 of 195

Configuration of Tested System

Fig. 2-1 Radiated Emission & Conducted (Antenna Port) Configuration

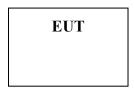


Fig. 2-2 AC Power Line Conducted Emission

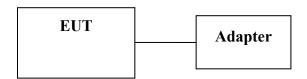


Table 2-1 Equipment Used in Tested System

]	Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Data Cable	Power Cord
	1.	WLAN Test Software	N/A	N/A	N/A	N/A	N/A

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,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. 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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 13 of 195

SUMMARY OF TEST RESULT

FCC Rules	Description Of Test	Result
§15.207	AC Power Line Conducted Emission	Compliant
§15.403(i) §15.407(e)	26 dB & 6dB Emission Bandwidth	Compliant
§15.407(a)	Maximum Conducted Output Power	Compliant
§15.407(a)	Power Spectral Density	Compliant
§15.407(b)	Undesirable Radiated Emissions	Compliant
§15.407(c)	Transmission in case of Absence of Information	Compliant
§15.407(g)	Frequency Stability	Compliant
\$15.203 \$15.407(a)	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.

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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery 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 WulkungRand NewTaipeilindustrialPark WukupDistrict NewTaipeiCity. Taiwan 24803/新北市市及股區新北產業園區五工路 134 號

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 14 of 195

DESCRIPTION OF TEST MODES

Operated in U-NII Bands

Operated band in 5150 MHz ~5250 MHz:

4 channels are provided for 802.11a, 802.11n HT20

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

2 channels are provided for 802.11n HT40

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

Operated band in 5250 MHz ~5350 MHz:

4 channels are provided for 802.11a, 802.11n HT20

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

2 channels are provided for 802.11n HT40

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

Operated band in 5470 MHz ~5725 MHz:

11 channels are provided for 802.11a, 802.11n HT20

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	124	5620 MHz
104	5520 MHz	128	5640 MHz
108	5540 MHz	132	5660 MHz
112	5560 MHz	136	5680 MHz
116	5580 MHz	140	5700 MHz
120	5600 MHz		

5 channels are provided for 802.11n HT40

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	126	5630 MHz
110	5550 MHz	134	5670 MHz
118	5590 MHz		

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

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 15 of 195

Operated band in 5725 MHz ~5850 MHz:

5 channels are provided for 802.11a, 802.11n_HT20

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
149	5745 MHz	161	5805 MHz
153	5765 MHz	165	5825 MHz
157	5785 MHz		

2 channels are provided for 802.11n_HT40

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755 MHz	159	5795 MHz

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

f (886-2) 2298-0488

www.tw.sqs.com



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 16 of 195

4.2 The Worst Test Modes and Channel Details

- 1. The EUT has been tested under operating condition.
- 2. Test program used to control the EUT for staying in continuous transmitting mode is programmed.
- 3. Investigation has been done on all the possible configurations for searching the worst case.

RADIATED EMISSION TEST.

KADIATEI	RADIATED EMISSION TEST:						
	RADIATED EMISSION TEST (BELOW 1 GHz)						
MODE	FREQUENCY BAND (MHz)		TESTED CHANNEL	MODULATION	DATA RATE (Mbps)	ANTENNA PORT	
802.11a	5180~5240	36 to 48	44	OFDM	6	MAIN	
802.11a	5260~5320	52 to 64	60	OFDM	6	MAIN	
802.11a	5500~5700	100 to 140	116	OFDM	6	MAIN	
802.11a	5745~5825	149 to 165	157	OFDM	6	MAIN	
	\mathbf{R}^{A}	ADIATED EM	ISSION TEST	(ABOVE 1 GHz))		
MODE	FREQUENCY BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)	ANTENNA PORT	
802.11a	5190 5240	36 to 48	26 44 49	OFDM	6	MAIN	
802.11n_HT20	5180~5240	30 10 48	36,44,48	OFDM	MCS8	MIMO	
802.11n_HT40	5190~5230	38 to 46	38,46	OFDM	MCS8	MIMO	
802.11a	5260~5320	52 to 64	52,60,64	OFDM	6	MAIN	
802.11n_HT20	3200~3320	32 10 04	32,00,04	OFDM	MCS8	MIMO	
802.11n_HT40	5270~5310	54 to 62	54,62	OFDM	MCS8	MIMO	
802.11a	5500~5700	100 to 140	100,116,140	OFDM	6	MAIN	
802.11n_HT20	3300~3700	100 to 140	100,110,140	OFDM	MCS8	MIMO	
802.11n_HT40	5510~5670	102 to 134	102,110,134	OFDM	MCS8	MIMO	
802.11a	5715 5005	140 to 165	140 157 165	OFDM	6	MAIN	
802.11n_HT20	5745~5825	149 to 165	149,157,165	OFDM	MCS8	MIMO	
802.11n_HT40	5755~5795	151 to 159	151,159	OFDM	MCS8	MIMO	

Note:

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/n WLAN Transmitter for channel Low, Mid and High, the worst case E1 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.

Offices otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 17 of 195

ANTENNA PORT CONDUCTED MEASUREMENT:

	ANTENNATORI CONDUCTED MEASUREMENT.					
	CONDUCTED TEST					
MODE	FREQUENCY BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)	ANTENNA PORT
802.11a	5180~5240	36 to 48	36,44,48	OFDM	6	MAIN
802.11n_HT20	3100~3240	30 10 48	30,44,46	OFDM	MCS8	MIMO
802.11n_HT40	5190~5230	38 to 46	38,46	OFDM	MCS8	MIMO
802.11a	5260~5320	52 to 64	52 60 64	OFDM	6	MAIN
802.11n_HT20	3200~3320	32 10 04	52,60,64	OFDM	MCS8	MIMO
802.11n_HT40	5270~5310	54 to 62	54,62	OFDM	MCS8	MIMO
802.11a	5500~5700	100 to 140	100,116,140	OFDM	6	MAIN
802.11n_HT20	3300~3700	100 to 140	100,110,140	OFDM	MCS8	MIMO
802.11n_HT40	5510~5670	102 to 134	102,110,134	OFDM	MCS8	MIMO
802.11a	5745 500F	140 40 165	140 157 165	OFDM	6	MAIN
802.11n_HT20	5745~5825	149 to 165	149,157,165	OFDM	MCS8	MIMO
802.11n_HT40	5755~5795	151 to 159	151,159	OFDM	MCS8	MIMO

Note: FCC ID, CPOD7E1, and FCC ID CPOD7E1-LTE share the equivalently identical enclosure, material of coating, I/O function, PCB board, display, and power source. In addition, ID CPOD7E1, and ID CPOD7E1-LTE implement the same Bluetooth/WLAN chipset/module with the same antenna that operates with the same transmitted power level. Hence, this given test report contains the identical test results that inherent from ID CPOD7E1-LTE.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and frequence in which proved the transaction of the content or approval of the company. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

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

SGS Taiwan Ltd.



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 18 of 195

MEASUREMENT UNCERTAINTY

Test Items	Uncertainty
AC Power Line Conducted Emission	+/- 2.586 dB
26dB Emission Bandwidth	+/- 123.36 Hz
The Maximum Output Power Measurement	+/- 0.96 dB
Peak Power Spectral Density Measurement	+/- 1.67 dB
Frequency Stability	+/- 123.36 Hz
Temperature	+/- 0.65 °C
Humidity	+/- 4.6 %
DC / AC Power Source	DC= +/- 0.13%, AC=+/- 0.2%

Radiated Spurious Emission:

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

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

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

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

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 19 of 195

6. CONDUCTED EMISSION TEST

6.1. Standard Applicable

According to §15.207, frequency range within 150 kHz to 30 MHz 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

- 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.

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	05/04/2014	05/03/2015		
LISN	SCHWARZBECK	NSLK 8127	8127-649	05/15/2015	05/14/2016		
LISN	FCC	FCC-LISN-50/250-25 -2-01	04034	03/13/2015	03/12/2016		
Coaxial Cables	N/A	WK CE Cable	N/A	11/26/2014	11/25/2015		

6.3. EUT Setup

- 1. The conducted emission tests were performed in the test site, using the setup in accordance with the ANSI C63.10:2009.
- 2. The AC/DC Power adaptor of EUT was plug-in LISN. The rear of the EUT and peripherals were placed flushed with the rear of the tabletop.
- 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.

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

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

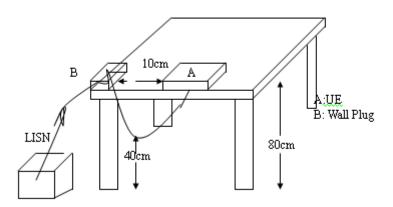
SGS Taiwan Ltd. No.134, WuKungRoad, NewTaipeiIndustrialPark, WukuDistrict, NewTaipeiCity, Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 20 of 195

6.4. Test SET-UP



6.5. 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 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.

t (886-2) 2299-3279

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

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

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 21 of 195

AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode:	Operation mode			Test Date:	Apr. 22, 2015
Temperature:	24	Humidity:	66 %	Test By:	Marcus
				Phase:	L1

Phase:

Site ConductionRoom

L1

Power: AC 120V/60Hz

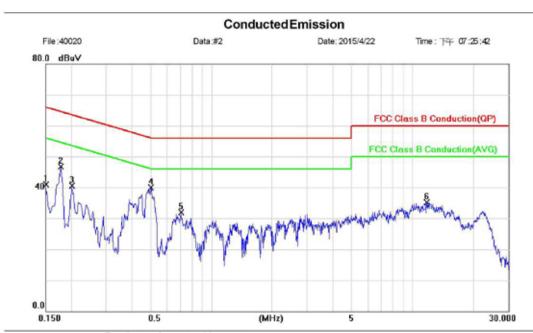
Temperature:

Humidity:

Mode: Operation

Note: Adapter:LTE24E-S2-2

Limit: FCC Class B Conduction(QP)



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dВ	dBuV	dBuV	dΒ	Detector	Comment
1		0.1500	40.84	0.05	40.89	66.00	-25.11	peak	
2		0.1780	46.69	0.06	46.75	64.58	-17.83	peak	
3		0.2020	40.51	0.06	40.57	63.53	-22.96	peak	
4	٠	0.5020	39.79	80.0	39.87	56.00	-16.13	peak	
5		0.7060	31.80	0.09	31.89	56.00	-24.11	peak	
6		11.7460	34.79	0.38	35.17	60.00	-24.83	peak	

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,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

台灣檢驗科技股份有限公司



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

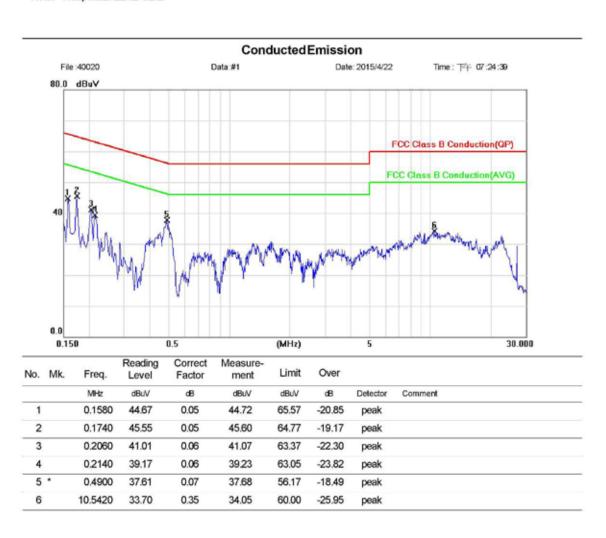
Page 22 of 195

Operation Mode:	Operation mode			Test Date:	Apr. 22, 2015
Temperature:	24	Humidity:	66 %	Test By:	Marcus
				Phase:	N

24 10 Site ConductionRoom Temperature: Phase: N Limit: FCC Class B Conduction(QP) AC 120V/60Hz Humidity: Power:

Mode: Operation

Note: Adapter:LTE24E-S2-2



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 23 of 195

DUTY CYCLE TEST SIGNAL

Pre-analysis Check: While conducting average power measurement, duty cycle of each mode 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 where duty cycle is conducted as the given transmission with given virtual operation that expresses the percentage.

Formula:

Duty Cycle = Ton / (Ton+Toff)

Measurement Procedure:

- Set span = Zero
- 2. RBW = 8MHz
- 3. VBW = 8MHz,
- 4. Detector = Peak

Duty Cycle:

	Duty Cycle	Duty Factor (dB)
802.11a	95.35%	0.21
802.11n_20 (MIMO)	90.78%	0.42
802.11n_40 (MIMO)	83.76%	0.77

Duty Cycle Factor: $10 * \log (1/0.9535) = 0.21$ Duty Cycle Factor: $10 * \log (1/0.9078) = 0.42$ Duty Cycle Factor: $10 * \log (1/0.8376) = 0.77$

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

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

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

台灣檢驗科技股份有限公司

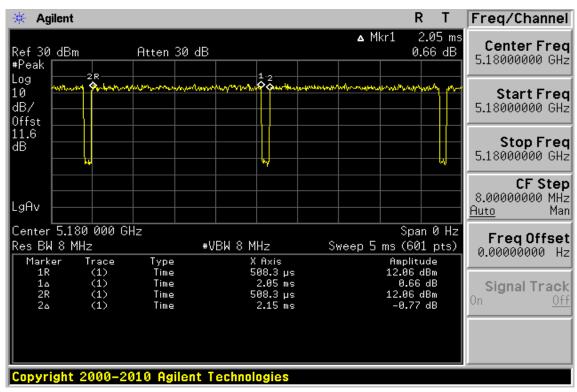
SGS Taiwan Ltd.



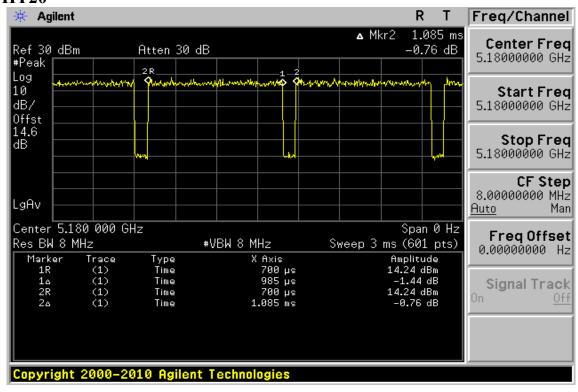
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 24 of 195

DUTY CYCLE TEST SIGNAL Measurement Result 802.11a



802.11n HT20



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and frequence in which proved the transaction of the content or approval of the company. pearance 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

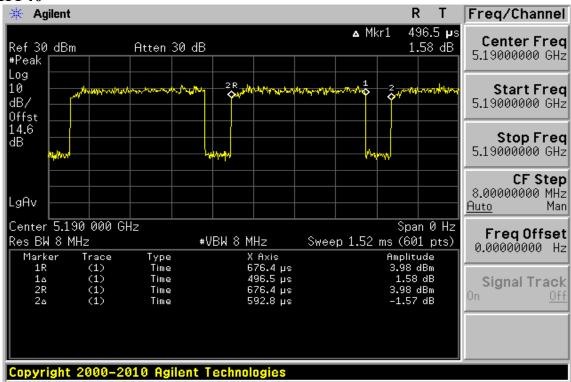
t (886-2) 2299-3279



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 25 of 195

802.11n HT40



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,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 26 of 195

26dB & 6dB EMISSION BANDWIDTH MEASUREMENT

Standard Applicable

There is no limit bandwidth for U-NII-1, U-NII-2-A and U-NII-2-C.

The minimum of 6dB Bandwidth measurement is 0.5 MHz for U-NII-3

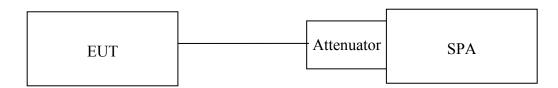
8.2 Measurement Procedure

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.
- 3. Remove the antenna from the EUT and then connect a low loss RF cable from the Antenna port to the spectrum analyzer.
 - a. 26dB Band width Measurement: Set the spectrum analyzer as 1% of emission BW Sweep=auto, Detector = Peak, Trace Mode = Max Hold, Manually readjust RBW until the RBW/EBW ratio is 1% based on EBW as observed on the result of pre-sequence measurement.
 - b. Mark the peak frequency and –26dB (upper and lower) frequency.
- 4. Repeat the procedures as list above until all test default channels (low, middle, and high) are completed.
- 5. Minimum Emission Bandwidth for the band 5.725-5.850GHz.
 - a. Set the spectrum analyzer as RBW = 100 kHz, VBW = 3*RBW, Span = 30M/50MHz, Detector=Peak, Sweep=auto
 - b. Mark the peak frequency and –6dB (upper and lower) frequency.
- 6. Repeat above procedures until all test default channel measured were complete.

Measurement Equipment Used 8.3

	Conducted Emission Test Site					
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.	
TYPE		NUMBER	NUMBER	CAL.		
Spectrum Analyzer	Agilent	E4446A	MY51100003	01/29/2015	01/28/2016	
DC Block	Mini-Circuits	BLK-18-S+	1	01/02/2015	01/01/2016	
Attenuator	Mini-Circuit	BW-S10W2+	002	01/02/2015	01/01/2016	
Splitter	Agilent	11636B	N/A	01/02/2015	01/01/2016	

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

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 27 of 195

Measurement Result

26dB Bandwidth

802.11a

Frequency (MHz)	26dB Bandwidth (MHz)	10 Log (B) (dB)
5180	22.518	13.53
5220	22.371	13.50
5240	22.396	13.50
5260	22.930	13.60
5300	22.060	13.44
5320	22.482	13.52
5500	21.460	13.32
5580	22.861	13.59
5700	22.014	13.43

802.11n HT20 (Main)

Frequency (MHz)	26dB Bandwidth (MHz)	10 Log (B) (dB)
5180	22.055	13.44
5220	22.698	13.56
5240	23.189	13.65
5260	22.683	13.56
5300	22.535	13.53
5320	21.449	13.31
5500	22.401	13.50
5580	22.316	13.49
5700	22.875	13.59

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

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 28 of 195

802.11n_HT20 (Aux)

Frequency (MHz)	26dB Bandwidth (MHz)	10 Log (B) (dB)
5180	23.103	13.64
5220	22.306	13.48
5240	21.651	13.35
5260	21.922	13.41
5300	23.094	13.63
5320	21.443	13.31
5500	21.446	13.31
5580	22.073	13.44
5700	22.679	13.56

802.11n HT40 (Main)

Frequency (MHz)	26dB Bandwidth (B) (MHz)	10 Log (B) (dB)
5190	48.519	16.86
5230	48.013	16.81
5270	48.328	16.84
5310	47.937	16.81
5510	47.612	16.78
5550	46.976	16.72
5670	47.254	16.74

802.11n HT40 (Aux)

Frequency (MHz)	26dB Bandwidth (B) (MHz)	10 Log (B) (dB)
5190	48.864	16.89
5230	48.464	16.85
5270	47.912	16.80
5310	48.593	16.87
5510	47.130	16.73
5550	47.396	16.76
5670	47.708	16.79

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

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 29 of 195

6dB Bandwidth (5725 MHz~ 5850 MHz)

802.11a

Frequency (MHz)	6dB Bandwidth (MHz)	10 Log (B) (dB)
5745	15.158	11.81
5785	16.055	12.06
5825	15.888	12.01

802.11n_HT20 (Main)

Frequency (MHz)	6dB Bandwidth (MHz)	10 Log (B) (dB)
5745	14.476	11.61
5785	15.939	12.02
5825	14.802	11.70

802.11n_HT20 (Aux)

Frequency (MHz)	6dB Bandwidth (MHz)	10 Log (B) (dB)
5745	15.120	11.80
5785	15.160	11.81
5825	15.516	11.91

802.11n HT40 (Main)

Frequency (MHz)	6dB Bandwidth (B) (MHz)	10 Log (B) (dB)
5755	36.370	15.61
5795	36.387	15.61

802.11n_HT40 (Aux)

Frequency (MHz)	6dB Bandwidth (B) (MHz)	10 Log (B) (dB)
5755	36.304	15.60
5795	36.380	15.61

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

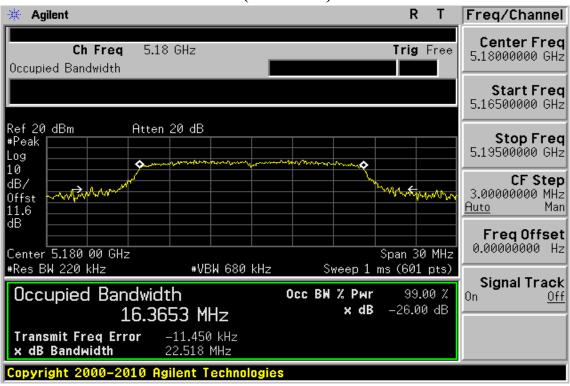
No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



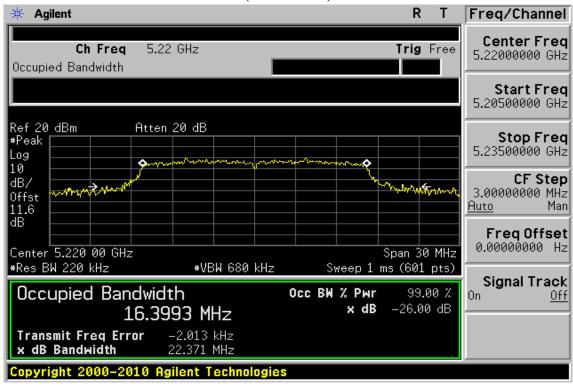
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 30 of 195

802.11a, 5150~5250 MHz 26dB Band Width Test Data CH-Low (5180MHz)



26dB Band Width Test Data CH-Mid (5220MHz)



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

t (886-2) 2299-3279

Offices otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 31 of 195

26dB Band Width Test Data CH-High (5240MHz)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and frequence in which proved the transaction of the content or approval of the company. 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

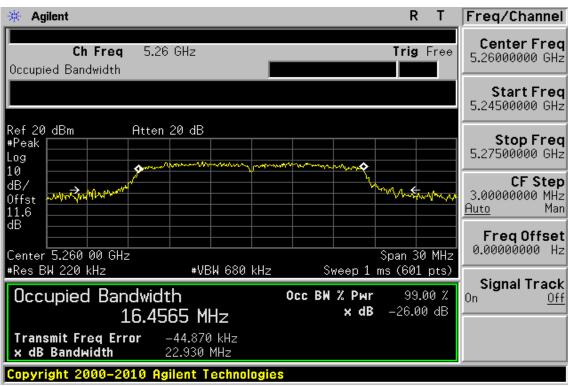
t (886-2) 2299-3279



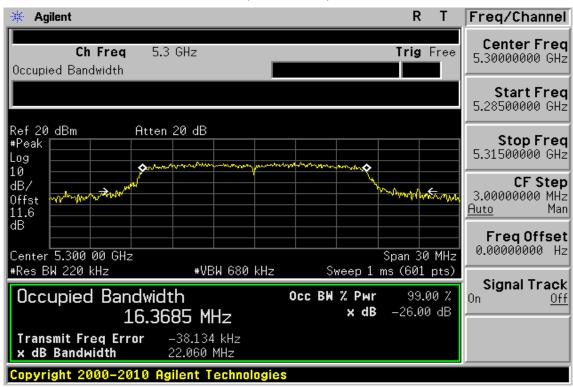
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 32 of 195

802.11a, 5250~5350 MHz 26dB Band Width Test Data CH-Low (5260MHz)



26dB Band Width Test Data CH-Mid (5300MHz)



Unless otherwise stated 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 otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

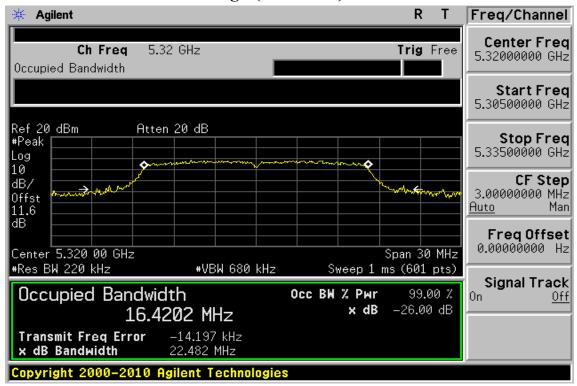
t (886-2) 2299-3279



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 33 of 195

26dB Band Width Test Data CH-High (5320MHz)



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 approval of this document is unquited and frequence in which proved the transaction of the content or approval of the company. 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

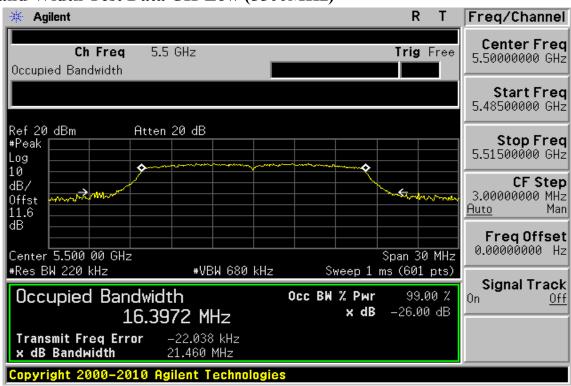
www.tw.sqs.com



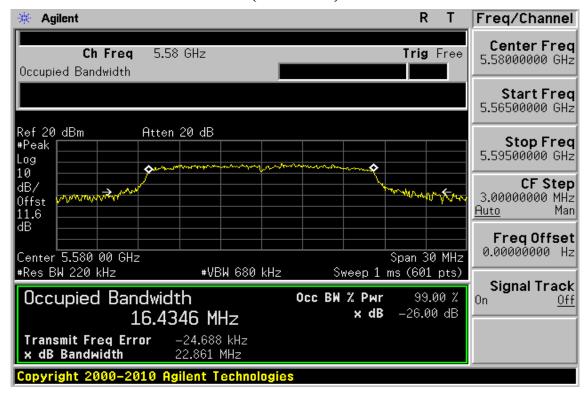
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 34 of 195

802.11a, 5470~5725 MHz 26dB Band Width Test Data CH-Low (5500MHz)



26dB Band Width Test Data CH-Mid (5580MHz)



Unless otherwise stated 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 otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

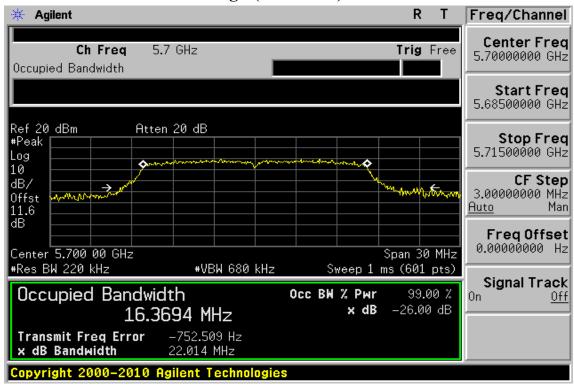
t (886-2) 2299-3279



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 35 of 195

26dB Band Width Test Data CH-High (5700MHz)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and frequence in which proved the transaction of the content or approval of the company. 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

t (886-2) 2299-3279



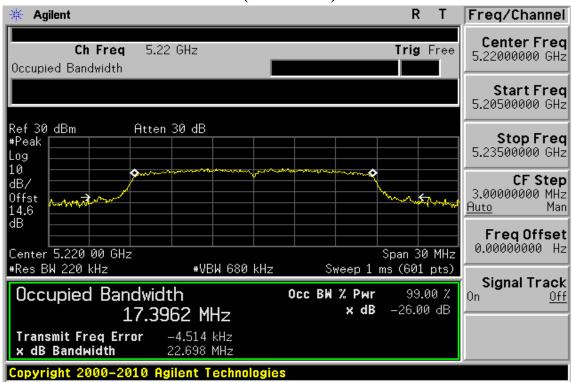
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 36 of 195

802.11n HT20, 5150~5250 MHz (Main) 26dB Band Width Test Data CH-Low (5180 MHz)



26dB Band Width Test Data CH-Mid (5220 MHz)



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

t (886-2) 2299-3279

Offices otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

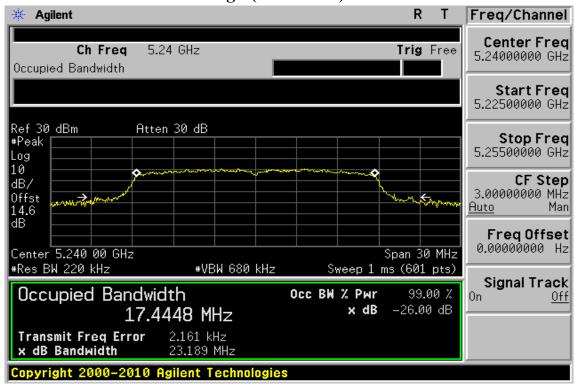
SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 37 of 195

26dB Band Width Test Data CH-High (5240 MHz)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. 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

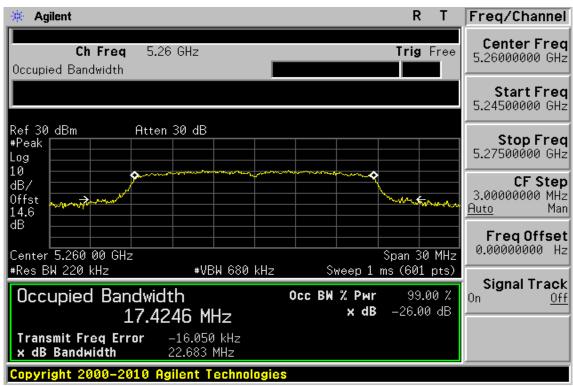
台灣檢驗科技股份有限公司



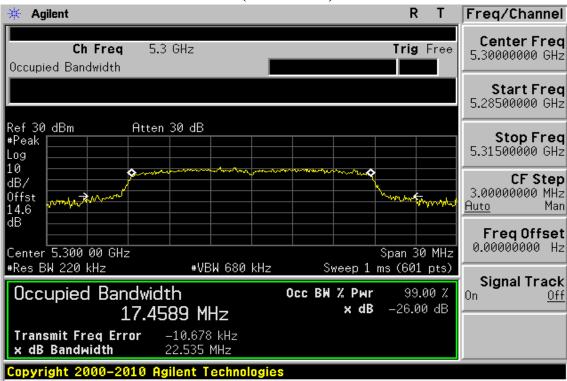
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 38 of 195

802.11n HT20, 5250~5350 MHz (Main) 26dB Band Width Test Data CH-Low (5260 MHz)



26dB Band Width Test Data CH-Mid (5300 MHz)



Unless otherwise stated 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 otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

t (886-2) 2299-3279

f (886-2) 2298-0488

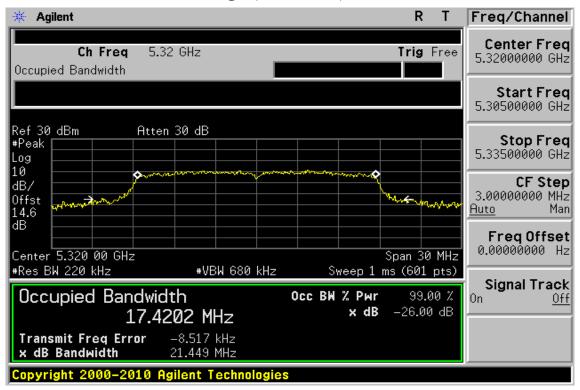
www.tw.sgs.com



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 39 of 195

26dB Band Width Test Data CH-High (5320 MHz)



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 approval of this document is unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

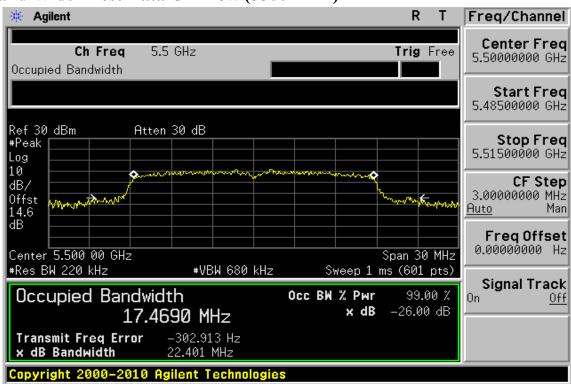
SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



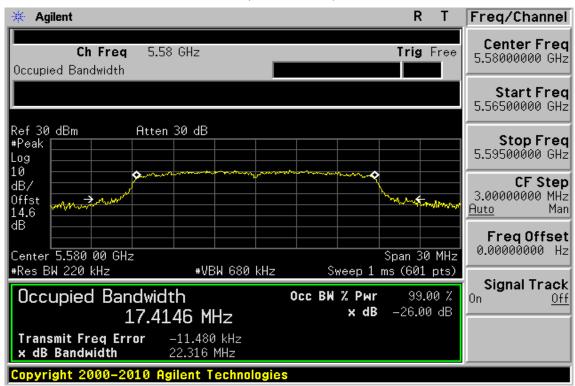
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 40 of 195

802.11n HT20, 5470~5725 MHz (Main) 26dB Band Width Test Data CH-Low (5500 MHz)



26dB Band Width Test Data CH-Mid (5580 MHz)



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

t (886-2) 2299-3279

Offices otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

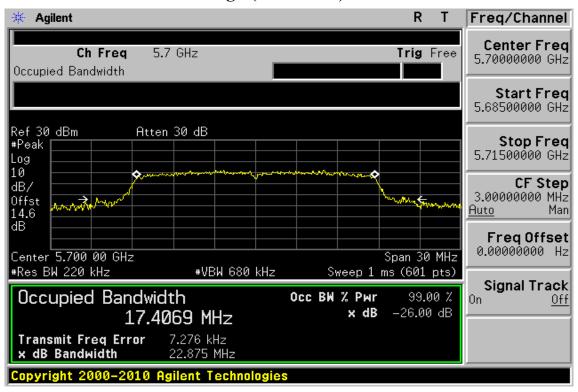
SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 41 of 195

26dB Band Width Test Data CH-High (5700 MHz)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. 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

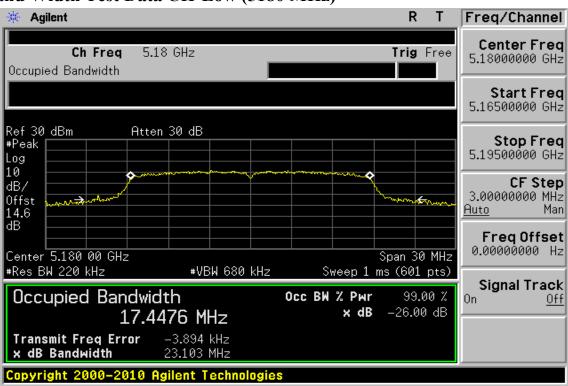
t (886-2) 2299-3279



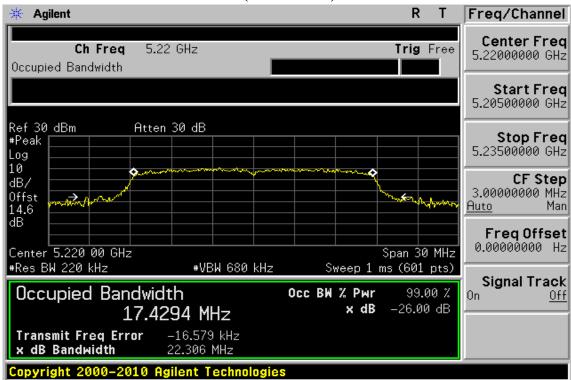
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 42 of 195

802.11n HT20, 5150~5250 MHz (Aux) 26dB Band Width Test Data CH-Low (5180 MHz)



26dB Band Width Test Data CH-Mid (5220 MHz)



Unless otherwise stated 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 otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

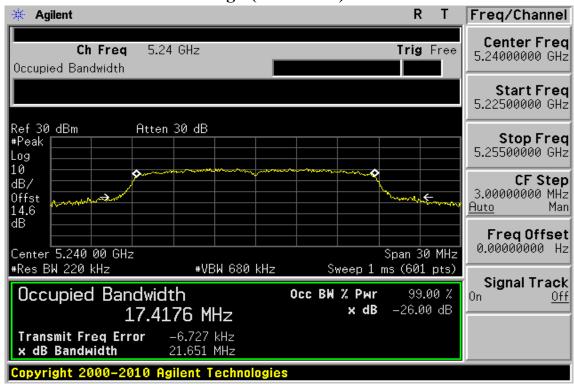
t (886-2) 2299-3279



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 43 of 195

26dB Band Width Test Data CH-High (5240 MHz)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. 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

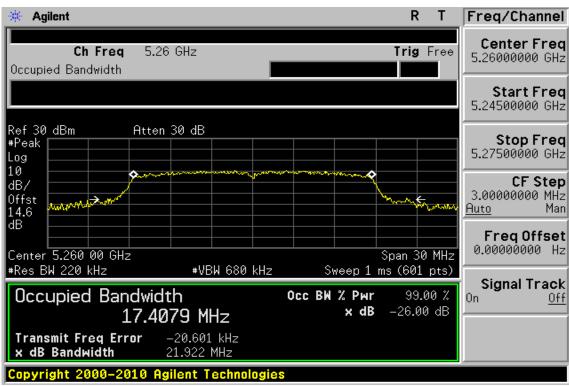
t (886-2) 2299-3279



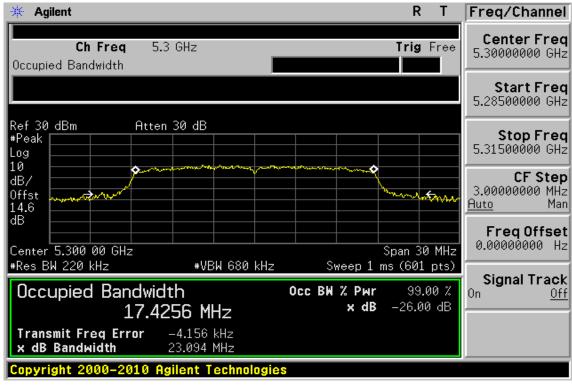
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 44 of 195

802.11n HT20, 5250~5350 MHz (Aux) 26dB Band Width Test Data CH-Low (5260 MHz)



26dB Band Width Test Data CH-Mid (5300 MHz)



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

t (886-2) 2299-3279

Offices otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

f (886-2) 2298-0488

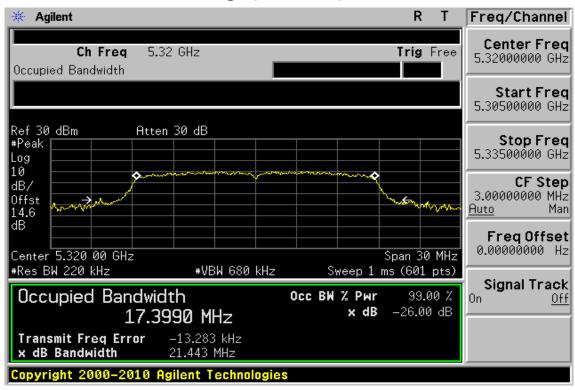
www.tw.sgs.com



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 45 of 195

26dB Band Width Test Data CH-High (5320 MHz)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. 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

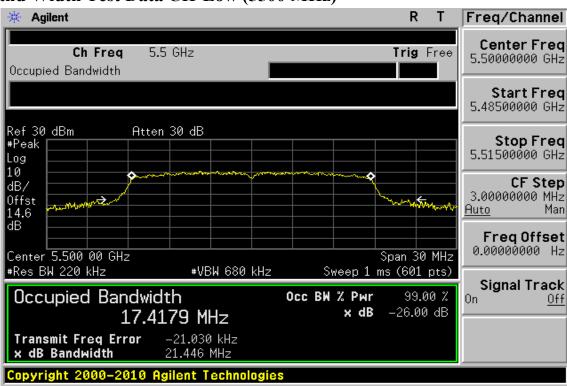
t (886-2) 2299-3279



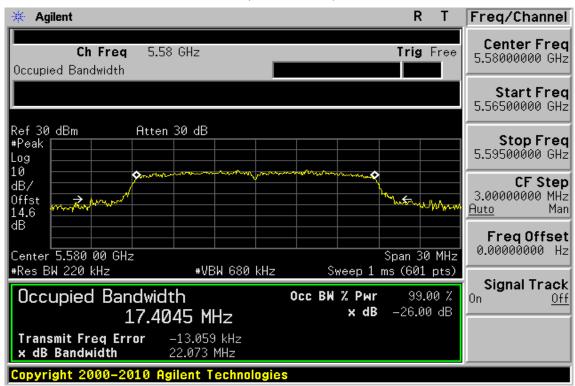
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 46 of 195

802.11n HT20, 5470~5725 MHz (Aux) 26dB Band Width Test Data CH-Low (5500 MHz)



26dB Band Width Test Data CH-Mid (5580 MHz)



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

t (886-2) 2299-3279

Offices otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

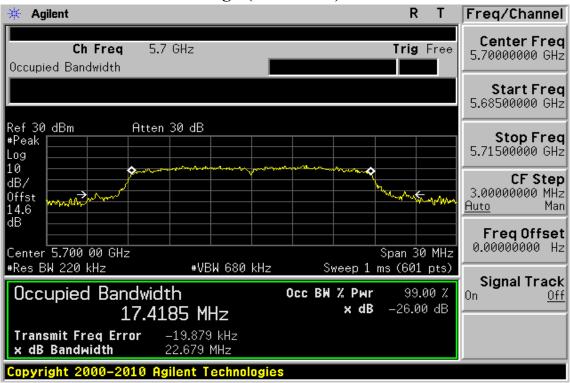
台灣檢驗科技股份有限公司



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 47 of 195

26dB Band Width Test Data CH-High (5700 MHz)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. 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

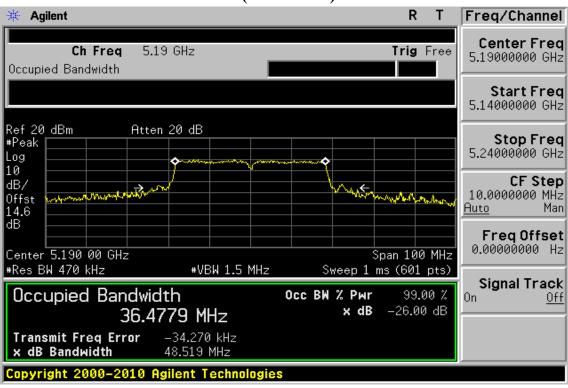
t (886-2) 2299-3279



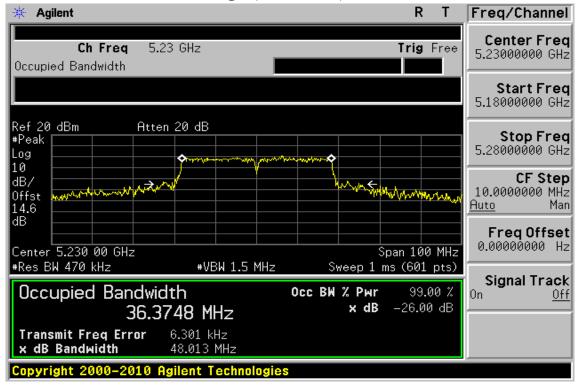
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 48 of 195

802.11n HT40, 5150~5250 MHz (Main) 26dB Band Width Test Data CH-Low (5190 MHz)



26dB Band Width Test Data CH-High (5230 MHz)



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

t (886-2) 2299-3279

Offices otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

f (886-2) 2298-0488

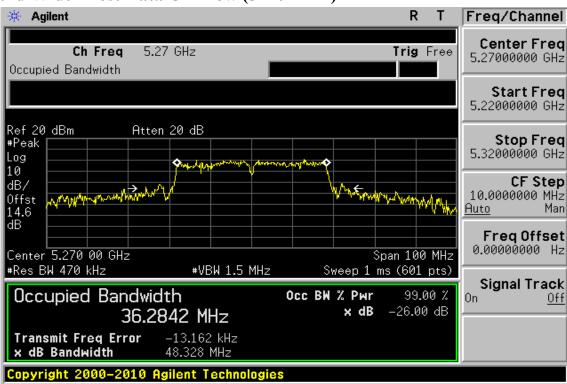
www.tw.sqs.com



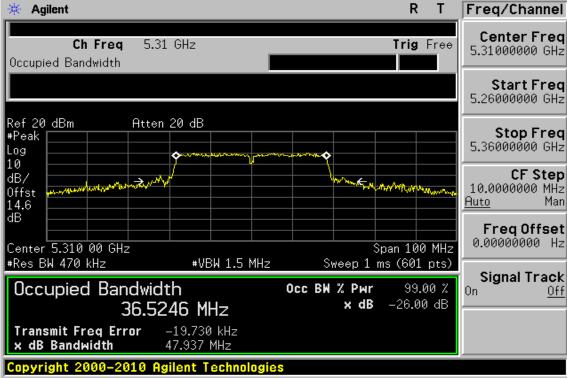
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 49 of 195

802.11n HT40, 5250~5350 MHz (Main) 26dB Band Width Test Data CH-Low (5270 MHz)



26dB Band Width Test Data CH-High (5310MHz)



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

t (886-2) 2299-3279

Offices otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

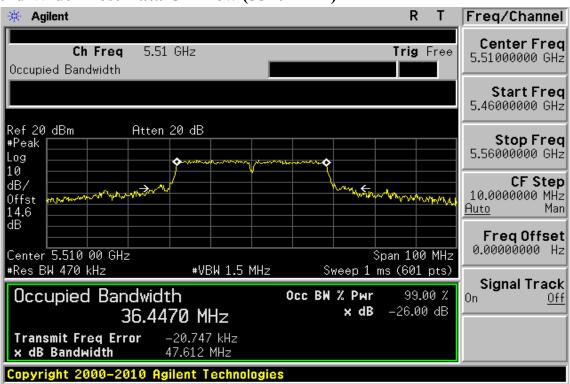
SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



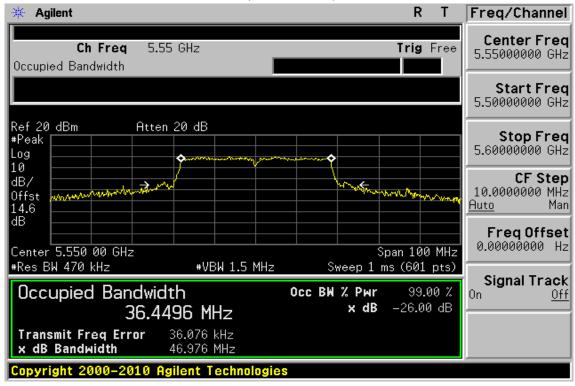
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 50 of 195

802.11n HT40, 5470~5725 MHz (Main) 26dB Band Width Test Data CH-Low (5510 MHz)



26dB Band Width Test Data CH-Mid (5550 MHz)



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

t (886-2) 2299-3279

Offices otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

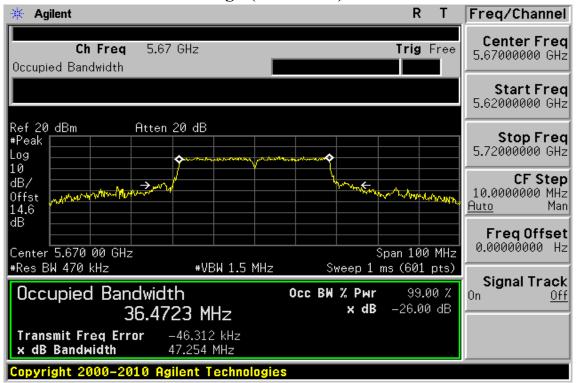
SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 51 of 195

26dB Band Width Test Data CH-High (5670 MHz)



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 approval of this document is unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

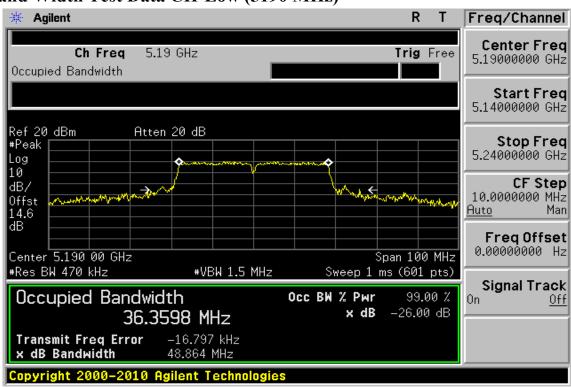
SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



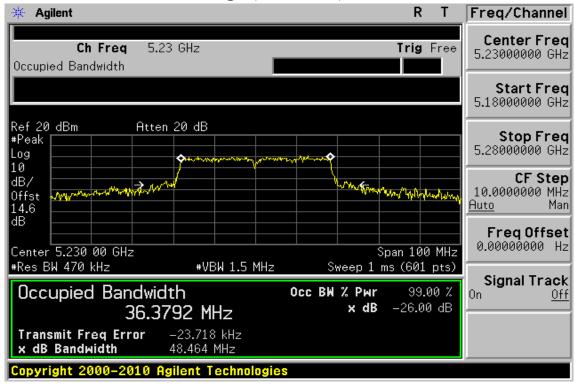
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 52 of 195

802.11n HT40, 5150~5250 MHz (Aux) 26dB Band Width Test Data CH-Low (5190 MHz)



26dB Band Width Test Data CH-High (5230 MHz)



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

t (886-2) 2299-3279

Offices otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

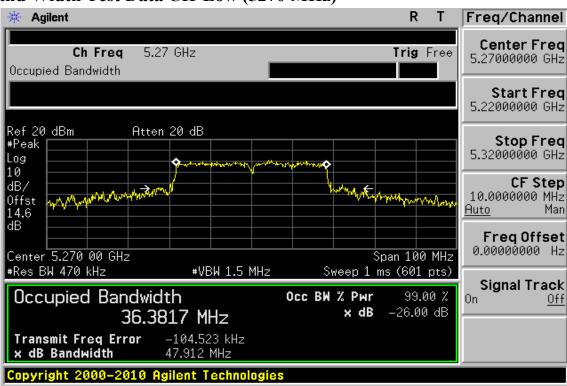
台灣檢驗科技股份有限公司



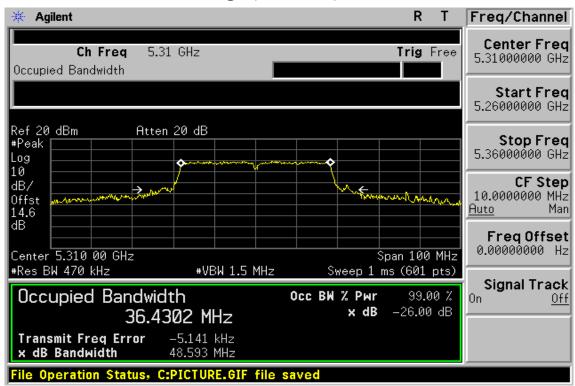
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 53 of 195

802.11n HT40, 5250~5350 MHz (Aux) 26dB Band Width Test Data CH-Low (5270 MHz)



26dB Band Width Test Data CH-High (5310MHz)



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

t (886-2) 2299-3279

Offices otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

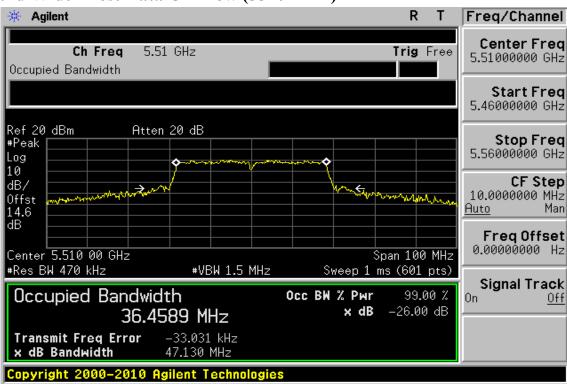
SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



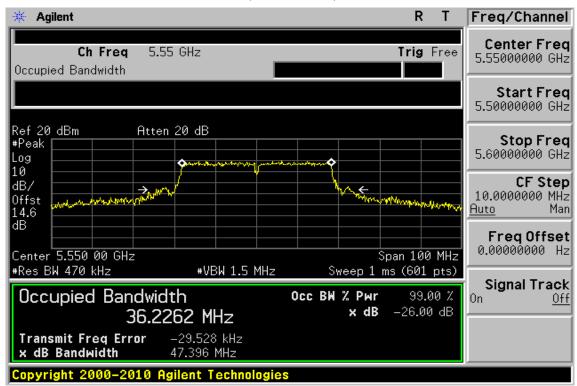
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 54 of 195

802.11n HT40, 5470~5725 MHz (Aux) 26dB Band Width Test Data CH-Low (5510 MHz)



26dB Band Width Test Data CH-Mid (5550 MHz)



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

t (886-2) 2299-3279

Offices otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

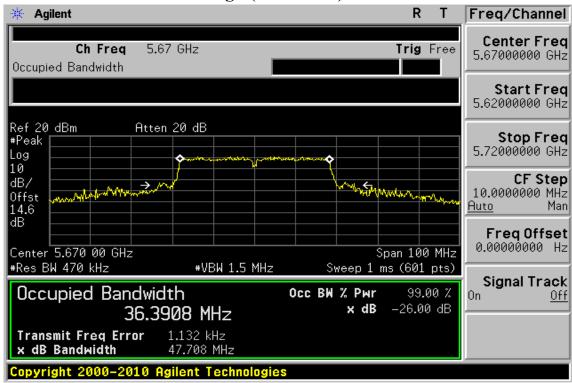
SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 55 of 195

26dB Band Width Test Data CH-High (5670 MHz)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. 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

t (886-2) 2299-3279



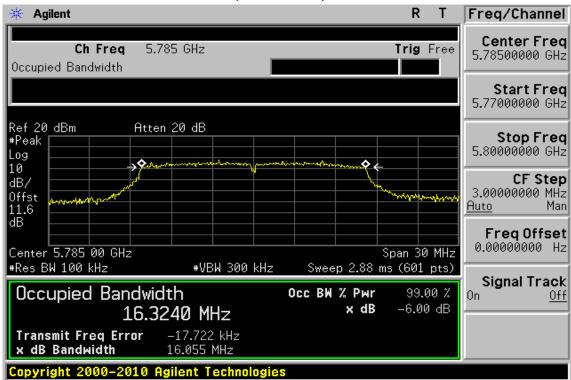
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 56 of 195

802.11a, 5725~5850 MHz 6dB Band Width Test Data CH-Low (5745 MHz)



6dB Band Width Test Data CH-Mid (5785 MHz)



Unless otherwise stated 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 otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

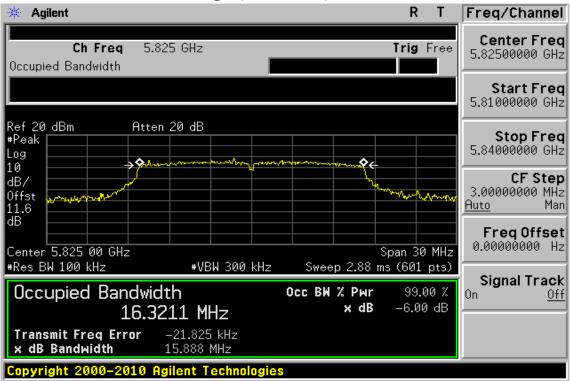
t (886-2) 2299-3279



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 57 of 195

6dB Band Width Test Data CH-High (5825 MHz)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. 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

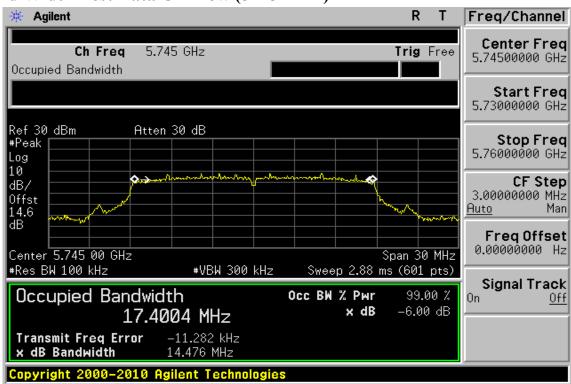
t (886-2) 2299-3279



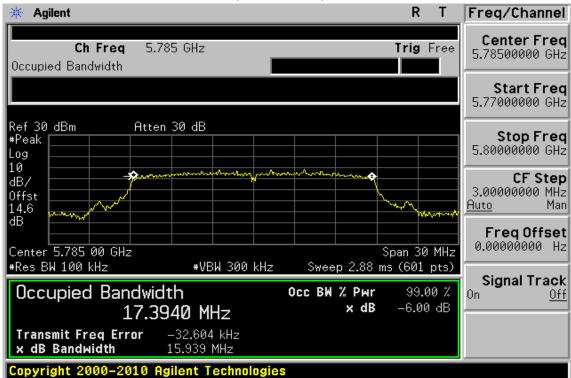
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 58 of 195

802.11n HT20, 5725~5850 MHz (Main) 6dB Band Width Test Data CH-Low (5745 MHz)



6dB Band Width Test Data CH-Mid (5785 MHz)



Unless otherwise stated 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 otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

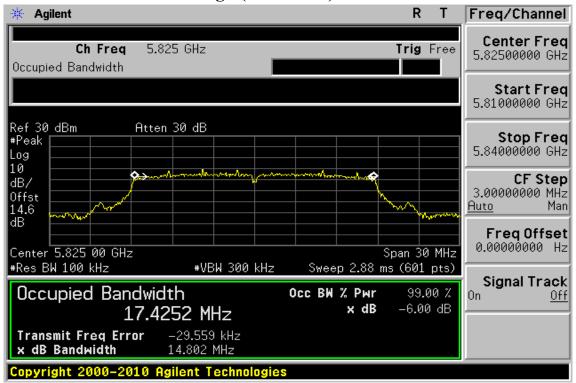
t (886-2) 2299-3279



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 59 of 195

6dB Band Width Test Data CH-High (5825 MHz)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. 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

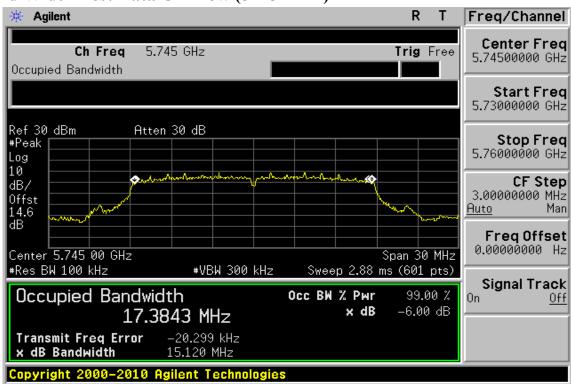
t (886-2) 2299-3279



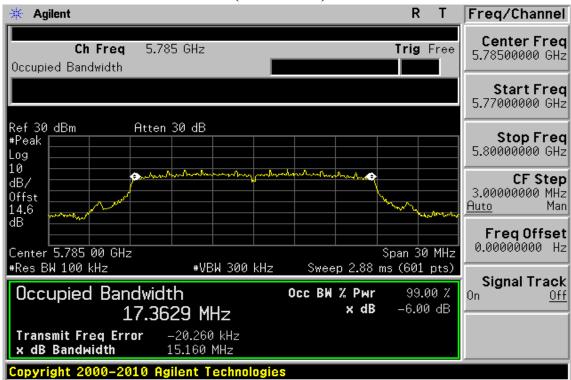
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 60 of 195

802.11n HT20, 5725~5850 MHz (Aux) 6dB Band Width Test Data CH-Low (5745 MHz)



6dB Band Width Test Data CH-Mid (5785 MHz)



Unless otherwise stated 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 otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

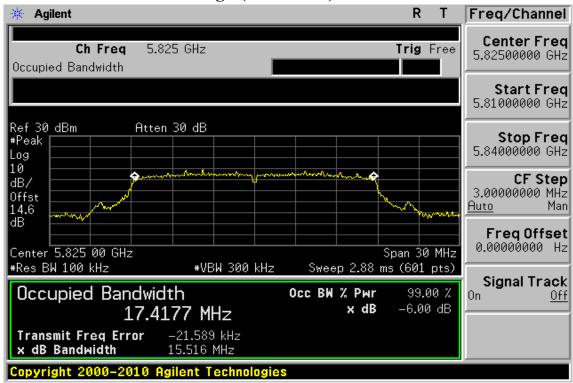
t (886-2) 2299-3279



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 61 of 195

6dB Band Width Test Data CH-High (5825 MHz)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. 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

t (886-2) 2299-3279

f (886-2) 2298-0488

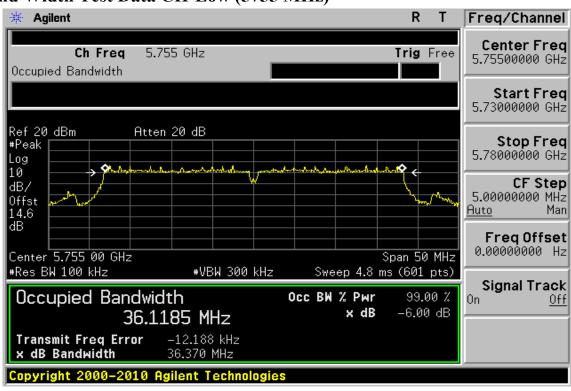
www.tw.sqs.com



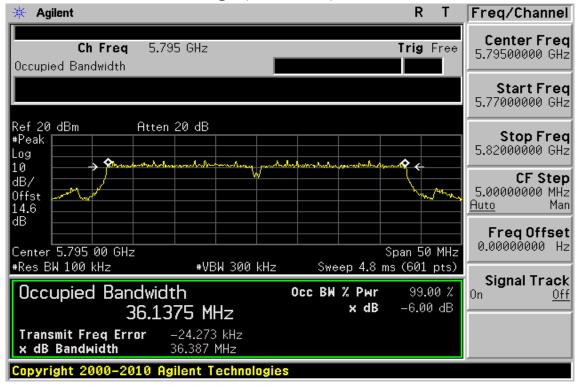
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 62 of 195

802.11n HT40, 5725~5850 MHz (Main) 6dB Band Width Test Data CH-Low (5755 MHz)



6dB Band Width Test Data CH-High (5795 MHz)



Unless otherwise stated 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 otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

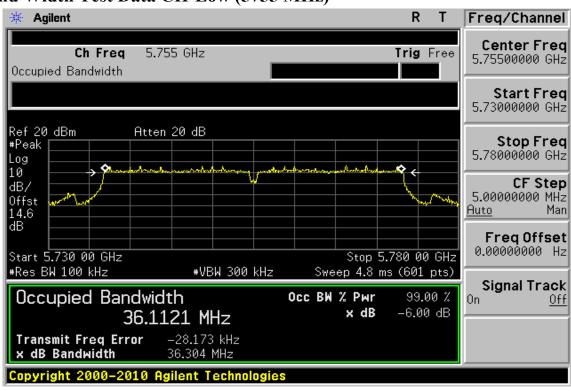
t (886-2) 2299-3279



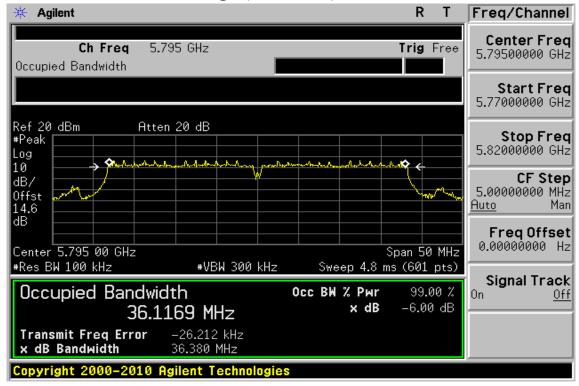
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 63 of 195

802.11n HT40, 5725~5850 MHz (Aux) 6dB Band Width Test Data CH-Low (5755 MHz)



6dB Band Width Test Data CH-High (5795 MHz)



Unless otherwise stated 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 otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 64 of 195

9. MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

9.1 Standard Applicable

OPERZTION Band	EUT CATEGORY		LIMIT
U-NII-1		Access Point (Mater device)	1 Watt(30dBm)
		Fixed point-to-point Acess Ponit	1 Watt(30dBm)
	√	Mobile and portable clinet device	250mW(23.98dBm)
U-NII-2A	V		250mW(23.98dBm) or 11dBm+10 log B
U-NII-2C	√		250mW(23.98dBm) or 11dBm+10 log B
U-NII-3	V		1 Watt(30dBm)

If transmitting antennas of directional gain greater than 6dBi are used, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the direction-al gain of the antenna exceeds 6dBi.

The antenna gain is greater than 6dBi in MIMO mode the limit reduce as below:

Directional gain = gain of antenna element + $10 \log (\# \text{ of TX antenna elements})$

Effective Legacy Gain (dBi) = 6.54+3.01=9.55dBi

Limit: 23.98dBm - (9.55 - 6dBi) = 20.43dBm

Therefore the limit needs to reduce for the U-NII-1 and U-NII-2A band.

Effective Legacy Gain (dBi) = 5.19+3.01=8.20dBi

Limit: 23.98dBm - (8.20 - 6dBi) = 21.78dBm

Therefore the limit needs to reduce for the U-NII-2C band.

Effective Legacy Gain (dBi) = 3.67+3.01=6.68dBi

Limit: 30dBm - (6.68-6dBi) = 29.32dBm

Therefore the limit needs to reduce for the U-NII-3 Band.

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 65 of 195

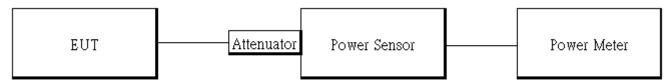
Measurement Procedure 9.2

- Place the EUT on the table and set it in transmitting mode.
- 2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.
- 3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the power meter
- Power Meter is used as the auxiliary test equipment to conduct the output power measurement. 4.
- 5. Record the max. reading and add 10 log(1/duty cycle).
- Repeat above procedures until all frequency (low, middle, and high channel) measured were complete.

Measurement Equipment Used 9.3

Refer to section 8.3 for details.

Test Set-up



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

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

SGS Taiwan Ltd.

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 66 of 195

9.5 **Measurement Result**

802.11a

СН	Frequency (MHz)	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
36	5180	9.36	8.630	23.98	PASS
44	5220	9.88	9.727	23.98	PASS
48	5240	9.76	9.462	23.98	PASS
52	5260	10.32	10.765	23.98 or 11+10log(B) =24.60	PASS
60	5300	10.34	10.814	23.98 or 11+10log(B) =24.44	PASS
64	5320	8.91	7.780	23.98 or 11+10log(B) =24.52	PASS
100	5500	5.90	3.890	23.98 or 11+10log(B) =24.32	PASS
116	5580	10.19	10.447	23.98 or 11+10log(B) =24.59	PASS
140	5700	7.69	5.875	23.98 or 11+10log(B) =24.43	PASS
149	5745	10.08	10.186	30	PASS
157	5785	10.32	10.765	30	PASS
165	5825	10.24	10.568	30	PASS

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

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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of his document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery 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, NewTaipeiIndustrict, NewTaipeiCity, Taiwan24803/新北市五股區新北產業園區五工路 134 號

10.134, WuKungRoad, NewTaipeiIndustrict, NewTaipeiCity, Taiwan24803/新北市五股區新北產業園區五工路 134 號



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 67 of 195

802.11n HT20 (MIMO)

	F	AVERAGE P	POWER (dBm)	TOTAL TOTAL		REQUIRED	
СН	Frequency (MHz)	CHAIN 0 CHAIN 1		POWER (dBm)	POWER (mW)	LIMIT (dBm)	RESULT
36	5180	7.60	7.08	10.36	10.859	20.43	PASS
44	5220	7.45	6.55	10.03	10.078	20.43	PASS
48	5240	7.33	6.41	9.90	9.783	20.43	PASS
52	5260	7.27	6.18	9.77	9.483	20.43 or 11+10log(B) =24.56	PASS
60	5300	7.67	6.89	10.31	10.734	20.43 or 11+10log(B) =24.53	PASS
64	5320	6.90	6.04	9.50	8.916	$20.43 \text{ or } 11+10\log(B) = 24.31$	PASS
100	5500	5.73	5.17	8.47	7.030	21.78 or 11+10log(B) =24.50	PASS
116	5580	7.29	6.73	10.03	10.068	21.78 or 11+10log(B) =24.49	PASS
140	5700	7.75	7.22	10.50	11.229	21.78 or 11+10log(B) =24.59	PASS
149	5745	7.26	6.50	9.91	9.788	29.32	PASS
157	5785	7.21	6.69	9.97	9.927	29.32	PASS
165	5825	7.36	6.90	10.15	10.343	29.32	PASS

802.11n HT40 (MIMO)

	E	AVERAGE POWER (dBm) CHAIN 0 CHAIN 1		TOTAL	TOTAL	REQUIRED	
СН	Frequency (MHz)			POWER COMERCIAL (dBm) POWER (mW)		LIMIT (dBm)	RESULT
38	5190	6.33	5.63	9.00	7.951	20.43	PASS
46	5230	7.87	6.97	10.45	11.101	20.43	PASS
54	5270	7.73	6.77	10.29	10.683	20.43 or 11+10log(B) =27.84	PASS
62	5310	5.59	4.49	8.09	6.434	20.43 or 11+10log(B) =27.81	PASS
102	5510	3.93	3.50	6.73	4.710	21.78 or 11+10log(B) =27.78	PASS
110	5550	6.93	6.55	9.75	9.450	21.78 or 11+10log(B) =27.72	PASS
134	5670	7.13	6.63	9.90	9.767	21.78 or 11+10log(B) =27.74	PASS
151	5755	7.66	7.11	10.40	10.975	29.32	PASS
159	5795	7.80	7.18	10.51	11.250	29.32	PASS

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

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 68 of 195

10. PEAK POWER SPECTRAL DENSITY

10.1 Standard Applicable

OPERZTION Band	EUT CATEGORY		LIMIT	
U-NII-1		Access Point (Mater device)	17dBm/ MHz	
		Fixed point-to-point Acess Ponit		
		Mobile and portable clinet device	11dBm/ MHz	
U-NII-2A	√		11dBm/ MHz	
U-NII-2C	$\sqrt{}$		11dBm/ MHz	
U-NII-3			30dBm/ 500kHz	

If transmitting antennas of directional gain greater than 6dBi are used, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

Note: The antenna gain is granter than 6 dBi in MIMO mode the limit reduce as below:

Directional gain = gain of antenna element + 10 log (# of TX antenna elements)

Effective Legacy Gain (dBi) = 6.54+3.01=9.55dBi

Limit: 11dBm - (9.55 - 6dBi) = 7.45dBm

Therefore the limit needs to reduce for the U-NII-1 and U-NII-2A band.

Effective Legacy Gain (dBi) = 5.19+3.01=8.20dBi

Limit: 11dBm - (8.20-6dBi) = 8.80dBm

Therefore the limit needs to reduce for the U-NII-2C band.

Effective Legacy Gain (dBi) = 3.67+3.01=6.68dBi

Limit: 30dBm - (6.68 - 6dBi) = 29.32dBm

Therefore the limit needs to reduce for the U-NII-3 band.

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 69 of 195

10.2 Measurement Procedure

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.
- 3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to Spectrum.

4. For U-NII1, U-NII-2A, U-NII-2C Band:

Set RBW=1MHz, VBW=3MHz, where span is enough to capture the entire bandwidth, Sweep time = Auto (601 pts), detector = sample, traces 100 sweeps of video averaging. (SA-2 with the omission of procedure x, the integration with 26dB EBW bandwidth)

For U-NII-3 Band:

Set RBW=510 kHz, VBW= 3*RBW, where span is enough to capture the entire bandwidth, Sweep time = Auto (601 pts), detector = sample, traces 100 sweeps of video averaging. (SA-2 with the omission of procedure x, the integration with 26dB EBW bandwidth)

- 5. User the cursor on spectrum to peak search the highest level of trace
- 6. Record the max. reading and add 10 log(1/duty cycle).
- 7. MIMO Mode: offset is set following "measure and add 10 Log (N)" on spectrum to measure the PSD for MIMO mode. Offset = cable loss + 10 log (N), where N is number of transmitting antenna. N=2 for this given application.
- 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.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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



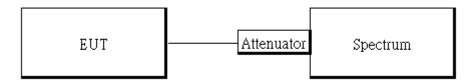
Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 70 of 195

10.3 Measurement Equipment Used

Conducted Emission Test Site						
EQUIPMENT MFR MODEL SERIAL			SERIAL	LAST	CAL DUE.	
TYPE		NUMBER	NUMBER	CAL.		
Spectrum Analyzer	Agilent	E4446A	MY51100003	01/29/2015	01/28/2016	
DC Block	Mini-Circuits	BLK-18-S+	1	01/02/2015	01/01/2016	
Attenuator	Mini-Circuit	BW-S10W2+	002	01/02/2015	01/01/2016	

10.4 Test Set-up



10.5 Measurement Result

802.11a

Frequency	PPSD	Limit	Margin
(MHz)	(dBm)	(dBm)	(dB)
5180	-5.71	11.00	-16.71
5220	-5.83	11.00	-16.83
5240	-4.81	11.00	-15.81
5260	-3.83	11.00	-14.83
5300	-4.27	11.00	-15.27
5320	-5.85	11.00	-16.85
5500	-9.61	11.00	-20.61
5580	-4.69	11.00	-15.69
5700	-6.29	11.00	-17.29
5745	2.86	30.00	-27.14
5785	3.84	30.00	-26.16
5825	3.10	30.00	-26.90

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 71 of 195

802.11n HT20 (MIMO)

Frequency	PPSD	Limit	Margin
(MHz)	(dBm)	(dBm)	(dB)
5180	-4.16	7.45	-11.61
5220	-6.34	7.45	-13.79
5240	-5.71	7.45	-13.16
5260	-6.06	7.45	-13.51
5300	-4.29	7.45	-11.74
5320	-6.79	7.45	-14.24
5500	-6.86	8.80	-15.66
5580	-6.29	8.80	-15.09
5700	-6.30	8.80	-15.10
5745	2.94	29.32	-26.38
5785	4.08	29.32	-25.24
5825	3.75	29.32	-25.57

802.11n HT40 (MIMO)

Frequency	PPSD	Limit	Margin
(MHz)	(dBm)	(dBm)	(dB)
5190	-14.22	7.45	-21.67
5230	-10.98	7.45	-18.43
5270	-11.88	7.45	-19.33
5310	-12.94	7.45	-20.39
5510	-14.48	8.80	-23.28
5550	-11.46	8.80	-20.26
5670	-11.58	8.80	-20.38
5755	0.93	29.32	-28.39
5795	1.92	29.32	-27.40

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

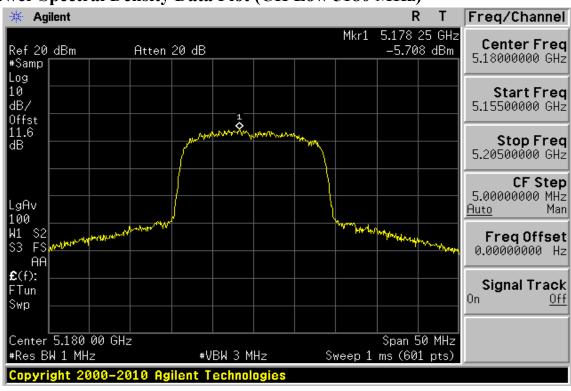
t (886-2) 2299-3279



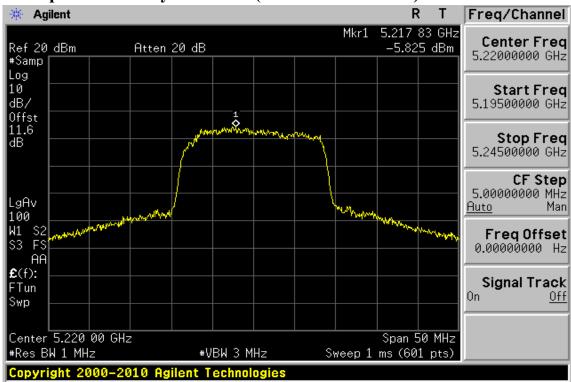
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 72 of 195

802.11a, 5150~5250 MHz Peak Power Spectral Density Data Plot (CH Low 5180 MHz)



Peak Power Spectral Density Data Plot (CH Mid 5220 MHz)



Unless otherwise stated 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 otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

t (886-2) 2299-3279

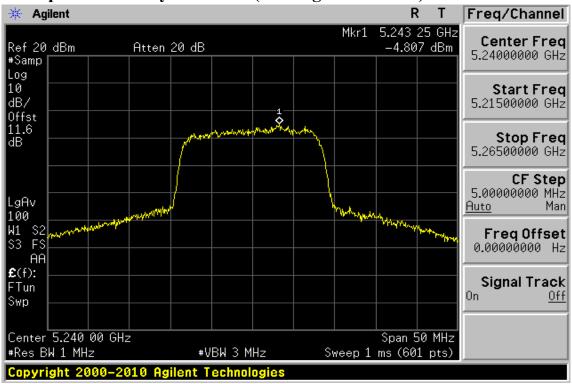
f (886-2) 2298-0488 www.tw.sgs.com



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 73 of 195

Peak Power Spectral Density Data Plot (CH High 5240 MHz)



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,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

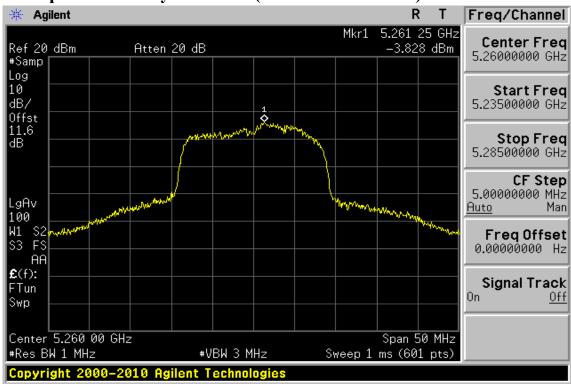


Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

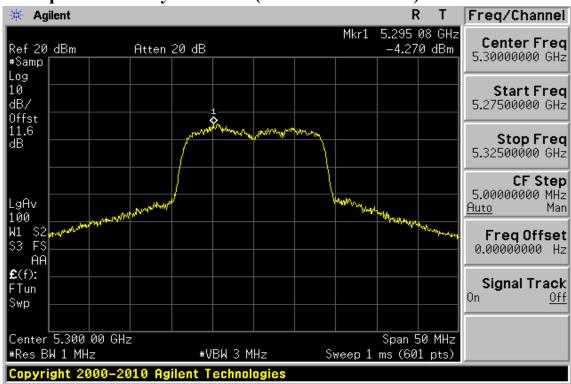
Page 74 of 195

802.11a, 5250~5350 MHz

Peak Power Spectral Density Data Plot (CH Low 5260 MHz)



Peak Power Spectral Density Data Plot (CH Mid 5300 MHz)



Unless otherwise stated 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 otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

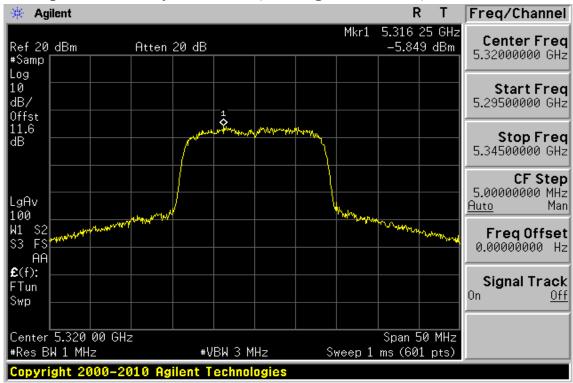
t (886-2) 2299-3279



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 75 of 195

Peak Power Spectral Density Data Plot (CH High 5320 MHz)



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 approval of this document is unquited and frequence in which proved the transaction of the content or approval of the company. 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

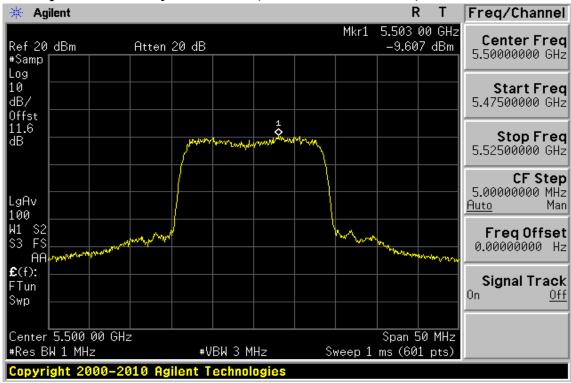


Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

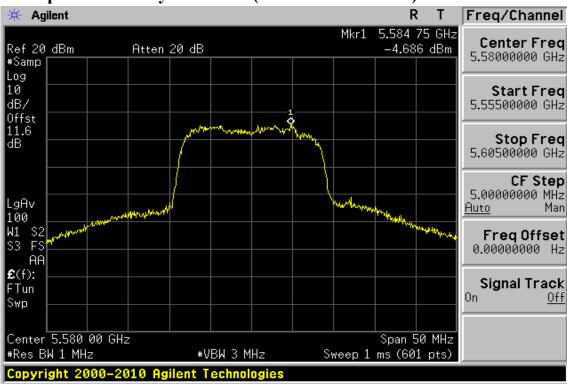
Page 76 of 195

802.11a, 5470~5725 MHz

Peak Power Spectral Density Data Plot (CH Low 5500 MHz)



Peak Power Spectral Density Data Plot (CH Mid 5580 MHz)



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

t (886-2) 2299-3279

Offices otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

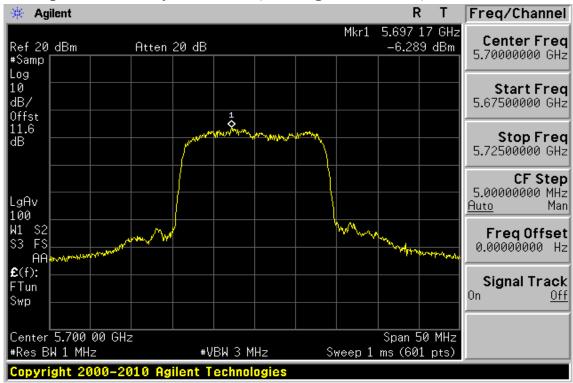
台灣檢驗科技股份有限公司



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 77 of 195

Peak Power Spectral Density Data Plot (CH High 5700 MHz)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and frequence in which proved the transaction of the content or approval of the company. 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

t (886-2) 2299-3279

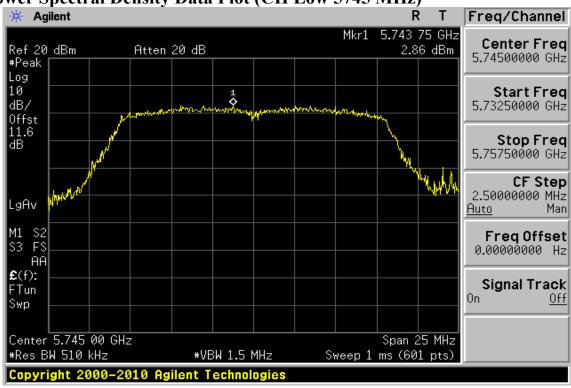


Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

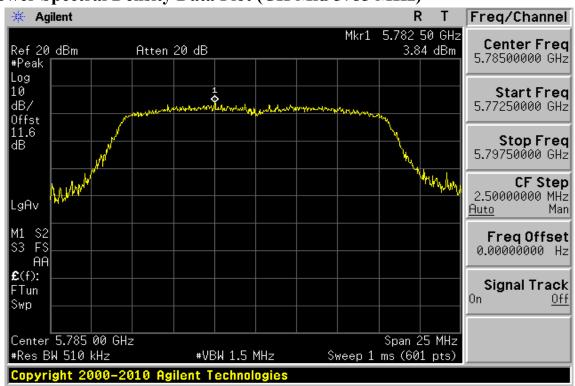
Page 78 of 195

802.11a, 5725~5850 MHz

Peak Power Spectral Density Data Plot (CH Low 5745 MHz)



Peak Power Spectral Density Data Plot (CH Mid 5785 MHz)



Unless otherwise stated 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 otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

f (886-2) 2298-0488

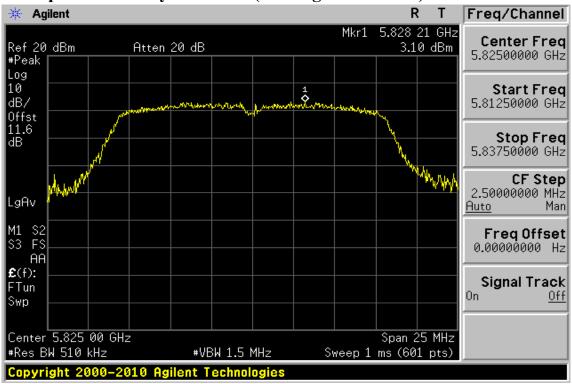
www.tw.sqs.com



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 79 of 195

Peak Power Spectral Density Data Plot (CH High 5825 MHz)



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,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

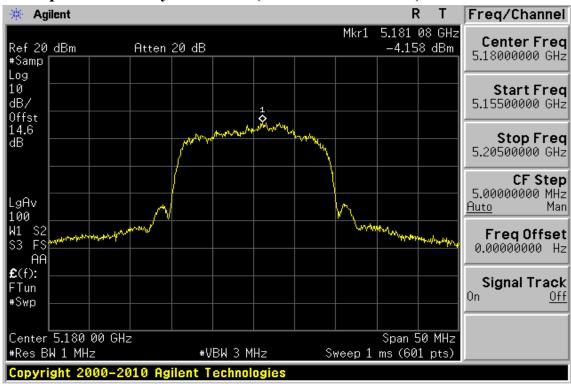


Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

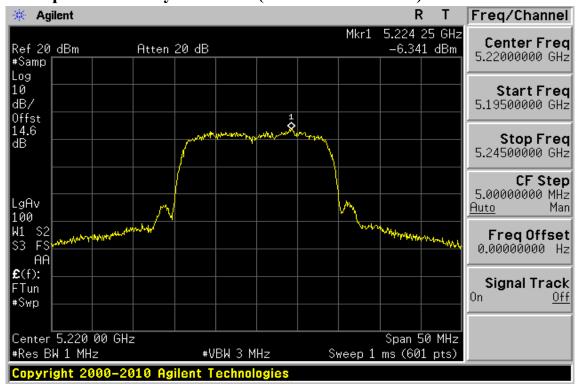
Page 80 of 195

802.11n HT20, 5150~5250 MHz (MIMO)

Peak Power Spectral Density Data Plot (CH Low 5180 MHz)



Peak Power Spectral Density Data Plot (CH Mid 5220 MHz)



Unless otherwise stated 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 otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

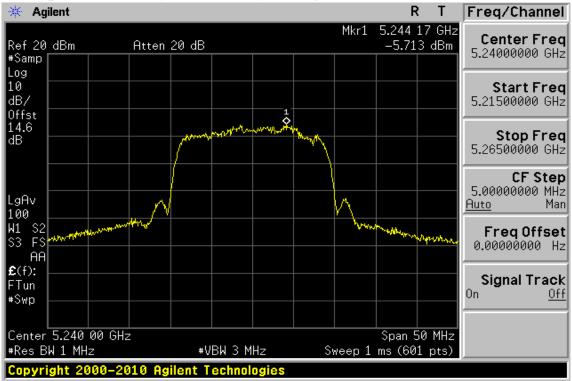
台灣檢驗科技股份有限公司



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 81 of 195

Peak Power Spectral Density Data Plot (CH High 5240 MHz)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

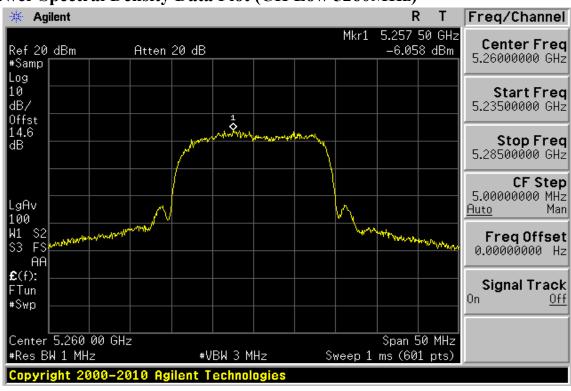
台灣檢驗科技股份有限公司



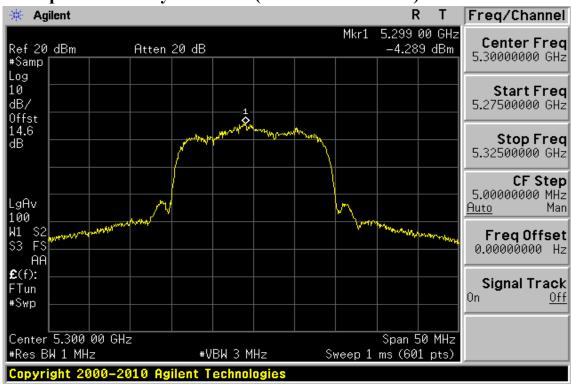
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 82 of 195

802.11n HT20, 5250~5350 MHz (MIMO) Peak Power Spectral Density Data Plot (CH Low 5260MHz)



Peak Power Spectral Density Data Plot (CH Mid 5300 MHz)



Unless otherwise stated 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 otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

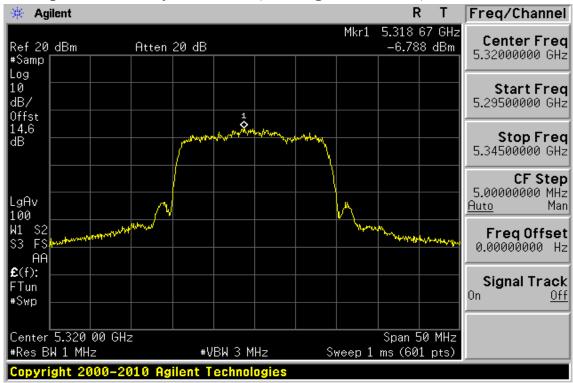
t (886-2) 2299-3279



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 83 of 195

Peak Power Spectral Density Data Plot (CH High 5320 MHz)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and frequence in which proved the transaction of the content or approval of the company. 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

f (886-2) 2298-0488

www.tw.sqs.com

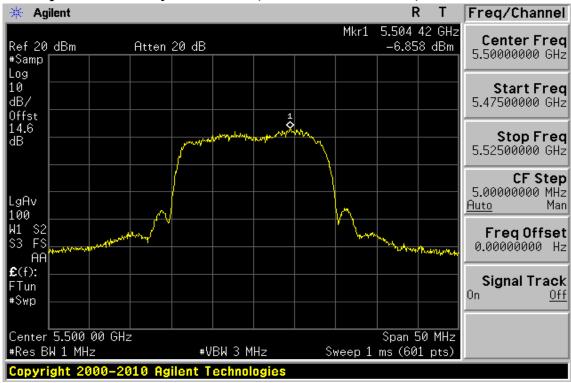


Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

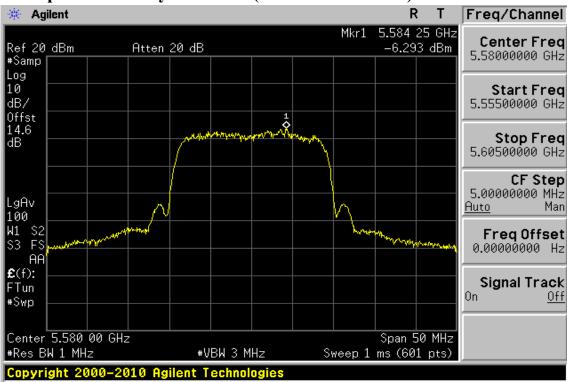
Page 84 of 195

802.11n HT20, 5470~5725 MHz (MIMO)

Peak Power Spectral Density Data Plot (CH Low 5500 MHz)



Peak Power Spectral Density Data Plot (CH Mid 5580MHz)



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

t (886-2) 2299-3279

Offices otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

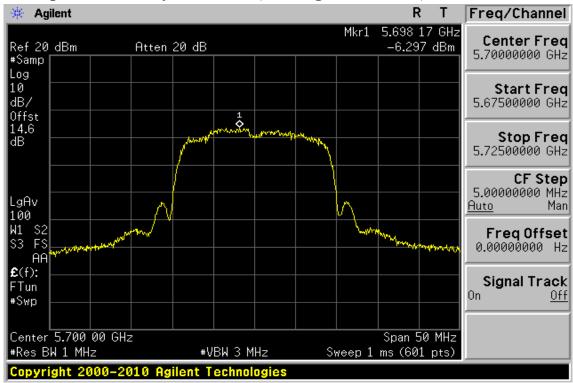
台灣檢驗科技股份有限公司



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 85 of 195

Peak Power Spectral Density Data Plot (CH High 5700 MHz)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and frequence in which proved the transaction of the content or approval of the company. 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

t (886-2) 2299-3279

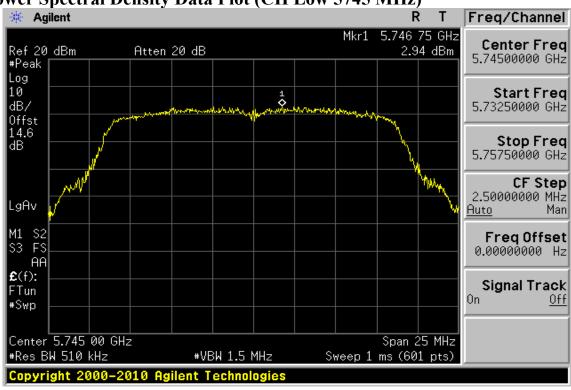


Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

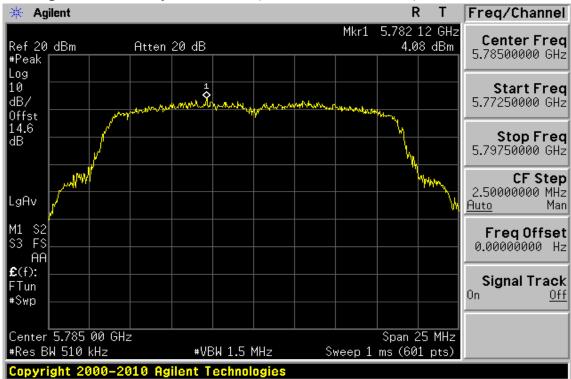
Page 86 of 195

802.11n HT20, 5725~5850 MHz (MIMO)

Peak Power Spectral Density Data Plot (CH Low 5745 MHz)



Peak Power Spectral Density Data Plot (CH Mid 5785 MHz)



Unless otherwise stated 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 otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

f (886-2) 2298-0488

www.tw.sqs.com



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 87 of 195

Peak Power Spectral Density Data Plot (CH High 5825 MHz)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

t (886-2) 2299-3279

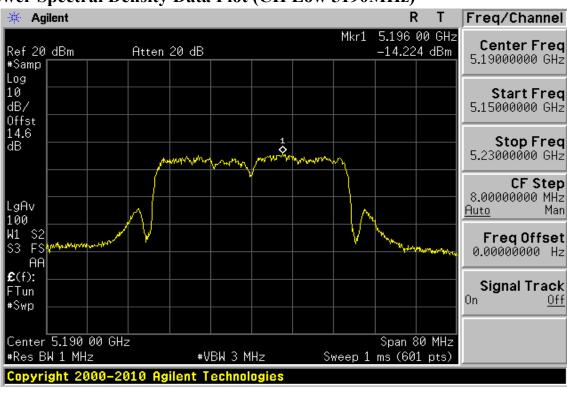
f (886-2) 2298-0488 www.tw.sqs.com



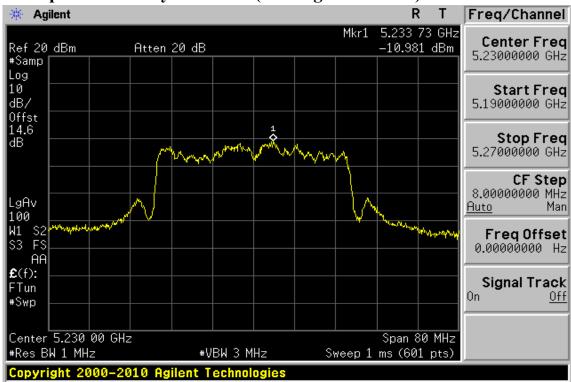
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 88 of 195

802.11n HT40, 5150~5250 MHz (MIMO) Peak Power Spectral Density Data Plot (CH Low 5190MHz)



Peak Power Spectral Density Data Plot (CH High 5230MHz)



Unless otherwise stated 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 otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

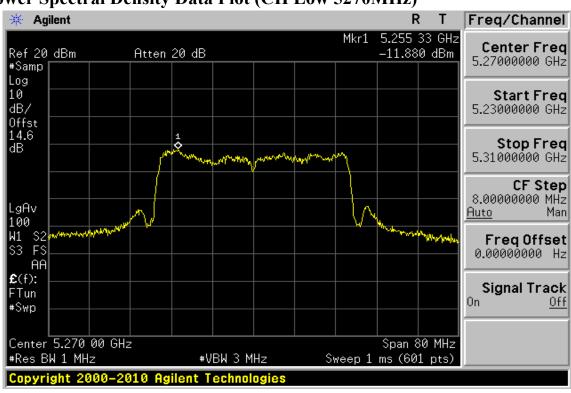
t (886-2) 2299-3279



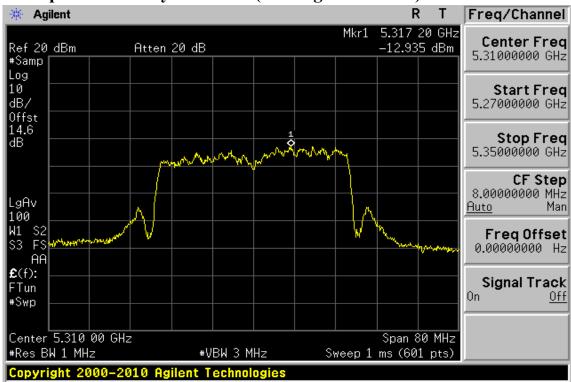
Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 89 of 195

802.11n HT40, 5250~5350 MHz (MIMO) Peak Power Spectral Density Data Plot (CH Low 5270MHz)



Peak Power Spectral Density Data Plot (CH High 5310MHz)



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

t (886-2) 2299-3279

Offices otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

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

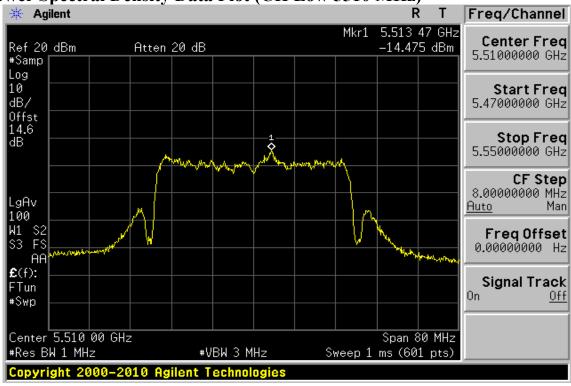


Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

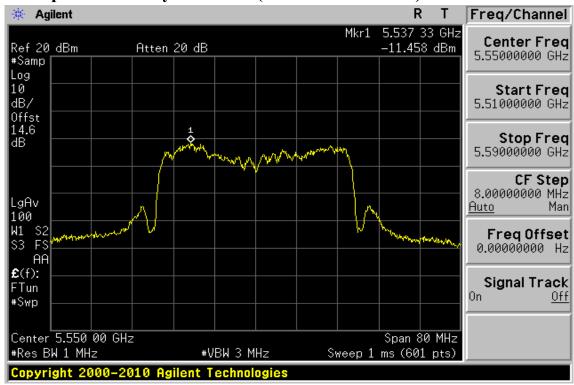
Page 90 of 195

802.11n HT40, 5470~5725 MHz (MIMO)

Peak Power Spectral Density Data Plot (CH Low 5510 MHz)



Peak Power Spectral Density Data Plot (CH Mid 5550 MHz)



Unless otherwise stated 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 otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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

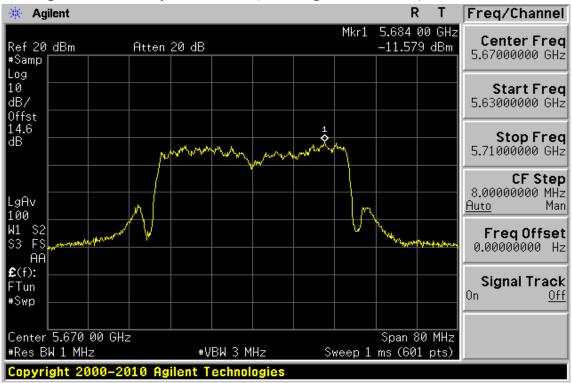
t (886-2) 2299-3279



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 91 of 195

Peak Power Spectral Density Data Plot (CH High 5670 MHz)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and frequence in which proved the transaction of the content or approval of the company. 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

t (886-2) 2299-3279

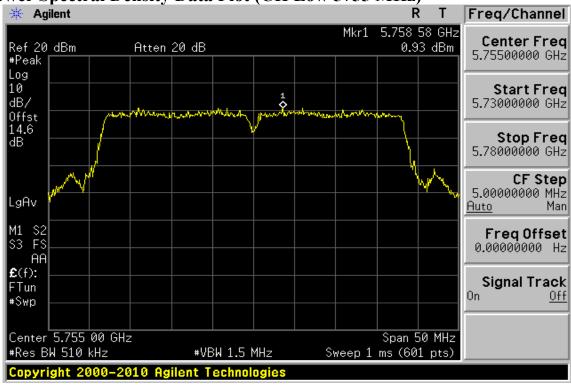


Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

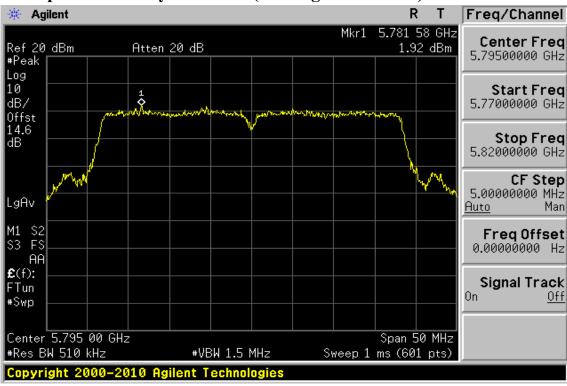
Page 92 of 195

802.11n HT40, 5725~5850 MHz (MIMO)

Peak Power Spectral Density Data Plot (CH Low 5755 MHz)



Peak Power Spectral Density Data Plot (CH High 5795 MHz)



Unless otherwise stated 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 otherwise stated the results shown in this less report teler only to the sample(s) tested and such sample(s) are fetalined for 90 days only.

Pk 并另有说明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without print without price of this document is required and the produced except in full, without prior or the land. pearance 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.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 93 of 195

11. UNDESIRABLE RADIATED EMISSION MEASUREMENT1

11.1 Standard Applicable

The maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- 1. For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- 2. For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- 3. For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- 4. For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of −17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of −27 dBm/MHz.

APPLICABLE TO	LII	LIMIT				
FCC KDB 789033 D02 General UNII Test Procedures New Rules v01	FIELD STRENGTH AT 3m					
	PK: 74 (dBμV/m)	AV 54 (dBμV/m)				
APPLICABLE TO	EIRP LIMIT	FIELD STRENGTH AT 3m				
15.407(b)(1)						
15.407(b)(2)	PK: -27 (dBm/MHz)	PK: 68.3 (dBµV/m)				
15.407(b)(3)						
15.407(b)(4)	PK: -27 (dBm/MHz) PK: -17 (dBm/MHz)	PK: 68.3 (dBμV/m) PK: 78.2 (dBμV/m)				

EIRP = $((E*d)^2) / 30$, where E is the field in V/m, d is the measurement distance (3m), EIRP is the equivalent isotropically radiated power in Watts.

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

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 94 of 195

Unwanted spurious emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table:

Frequency (MHz)	Field strength (microvolts/meter)	Distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Note:

- 1. The lower limit shall apply at the transition frequencies.
- 2. Emission level $(dB\mu V/m) = 20 \log Emission level (dB\mu V/m)$

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 95 of 195

Measurement Equipment Used 11.2

1	966 Chamber									
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.					
ТҮРЕ		NUMBER	NUMBER	CAL.						
EMI Test Receiver	R&S	ESCI7	100760	05/04/2015	05/03/2016					
Spectrum Analyzer	Agilent	E4446A	MY51100003	01/29/2015	01/28/2016					
EXA Spectrum Analyzer	Agilent	N9010A	MY50420195	12/22/2014	12/21/2015					
Spectrum Analyzer	R&S	FSV-30	101398	10/07/2014	10/06/2015					
Loop Antenna	ETS.LINDGREN	6502	00148045	07/03/2014	07/02/2015					
Bilog Antenna	SCHWAZBECK	VULB9168	378	12/23/2014	12/22/2015					
Horn antenna	ETS.LINDGREN	3117	123995	05/05/2015	05/04/2016					
Horn Antenna	Schwarzbeck	BBHA9170	184	12/25/2014	12/24/2015					
Pre-Amplifier	EMC Instruments Corp.	EMC0126530	980038	01/02/2015	01/01/2016					
Pre-Amplifier	Agilent	8447D	2944A07676	01/02/2015	01/01/2016					
Pre-Amplifier	Agilent	8449B	3008A00578	01/02/2015	01/01/2016					
Pre-Amplifier	EMC Instruments Corp.	EMC184045	980135	01/02/2015	01/01/2016					
5150-5350 Band Reject Filter	Micro-Tronics	BRM50703	1	01/02/2015	01/01/2016					
5470-5725 Band Reject Filter	Micro-Tronics	BRM50704	1	01/02/2015	01/01/2016					
5725-5875 Band Reject Filter	Micro-Tronics	BRM50705	1	01/02/2015	01/01/2016					
1GHz High Pass Filter	Micro-Tronics	HPM50108	32	01/02/2015	01/01/2016					
2GHz High Pass Filter	Micro-Tronics	HPM50110	36	01/02/2015	01/01/2016					
Attenuator	Mini-Circuit	BW-S10W2+	002	01/02/2015	01/01/2016					
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	01/02/2015	01/01/2016					
3m Site NSA	SGS	966 chamber	N/A	07/15/2014	07/14/2015					

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

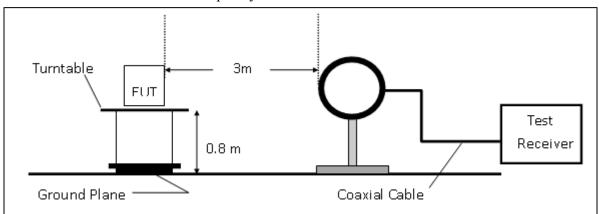
SGS Taiwan Ltd. No 134 WuKunRopad New TaipeiIndustrialPark WukupDistrict New TaipeiCity Taiwan 24803/新北市五股區新北春業園區五工路 134 赞

Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

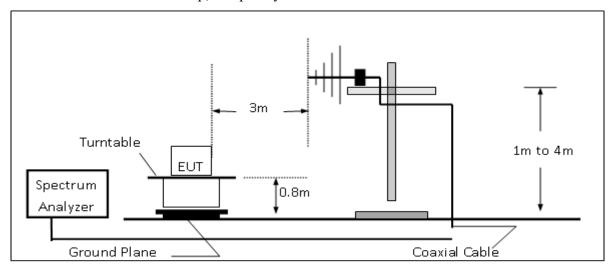
Page 96 of 195

Test SET-UP 11.3

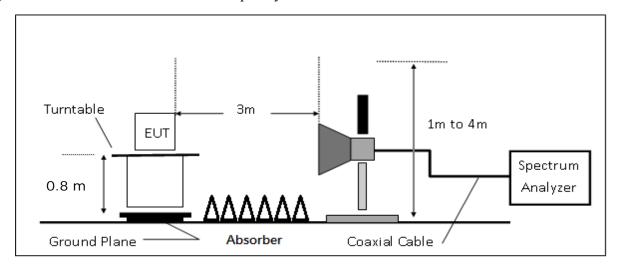
(A) Radiated Emission Test Set-UP Frequency Below 30MHz.



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



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



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,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

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



Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 97 of 195

11.4 Measurement Procedure

- The EUT was placed on a turn table which is 0.8m above ground plane.
- 2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.
- The EUT was placed on a turn table with 0.8m for frequency< 1GHz and 0.8m for frequency> 1GHz 3 above ground plane.
- The turn table shall rotate 360 degrees to determine the position of maximum emission level. 4.
- EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the high-5. est emissions.
- Set the spectrum analyzer as RBW=120 kHz and VBW=300 kHz for Peak Detector (PK) and Quasi-peak (QP) at frequency below 1 GHz.
- Set the spectrum analyzer as RBW=1 MHz, VBW=3 MHz for Peak Detector at frequency above 1 GHz.
- Set the spectrum analyzer as RBW=1 MHz, VBW=10 Hz (Duty cycle > 98%) or VBW > 1/T 8. (Duty cycle < 98%) for Average Detector at frequency above 1 GHz.
- Maximum procedure was performed on the six highest emissions to ensure EUT compliance. 9.
- 10. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 11. Repeat above procedures until all frequency measured were complete.

11.5 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	

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)

Note:

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

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

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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery 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.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 98 of 195

11.6 Test Results of Radiated Spurious Emissions form 9 kHz to 30 MHz

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit per 15.31(o) was not reported.

11.7 Measurement Result

Refer to attach tabular data sheets.

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 99 of 195

Radiated Spurious Emission Measurement Result

Below 1GHz Worst-Case Data:

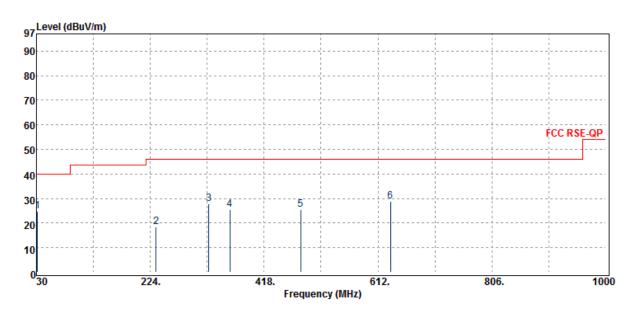
802.11a, 5150~5250 MHz

Operation Band :802.11 a Test Date :2015-06-25

Fundamental Frequency :5220 MHz Temp./Humi. :23 deg C / 58 RH

Operation Mode :TX MID Engineer :Curry

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



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
31.94	S	Peak	34.99	-10.22	24.77	40.00	-15.23
233.70	S	Peak	29.05	-10.69	18.36	46.00	-27.64
323.91	S	Peak	35.68	-7.67	28.01	46.00	-17.99
359.80	S	Peak	32.41	-7.03	25.38	46.00	-20.62
480.08	S	Peak	30.23	-4.59	25.64	46.00	-20.36
633.34	S	Peak	31.24	-2.44	28.80	46.00	-17.20

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. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 100 of 195

Operation Band Fundamental Frequency

Operation Mode EUT Pol.

:802.11 a :5220 MHz :TX MID :E1 Plan

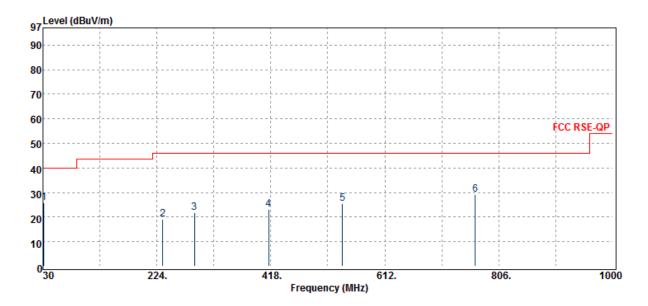
Test Date Temp./Humi. Engineer

Measurement Antenna Pol.

:2015-06-25

:23 deg_C / 58 RH :Curry

:HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
31.94	S	Peak	35.97	-10.22	25.75	40.00	-14.25
233.70	S	Peak	29.84	-10.69	19.15	46.00	-26.85
288.02	S	Peak	29.96	-8.24	21.72	46.00	-24.28
414.12	S	Peak	28.97	-5.75	23.22	46.00	-22.78
540.22	S	Peak	29.53	-4.01	25.52	46.00	-20.48
766.23	S	Peak	28.26	1.09	29.35	46.00	-16.65

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 101 of 195

802.11a, 5250~5350 MHz

Operation Band Fundamental Frequency Operation Mode

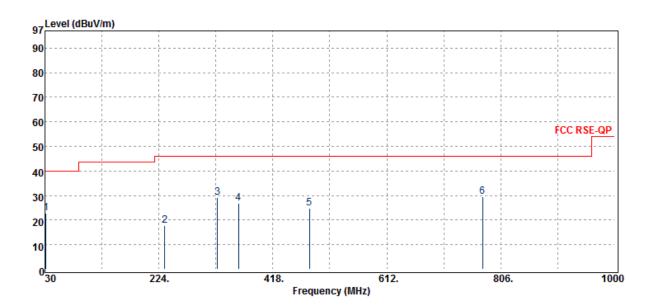
EUT Pol.

:802.11 a :5300 MHz :TX MID :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
31.94	S	Peak	32.91	-10.22	22.69	40.00	-17.31
233.70	S	Peak	28.32	-10.69	17.63	46.00	-28.37
323.91	S	Peak	36.90	-7.67	29.23	46.00	-16.77
359.80	S	Peak	33.72	-7.03	26.69	46.00	-19.31
480.08	S	Peak	29.34	-4.59	24.75	46.00	-21.25
774.96	S	Peak	28.72	0.73	29.45	46.00	-16.55

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 102 of 195

Operation Band Fundamental Frequency Operation Mode

EUT Pol.

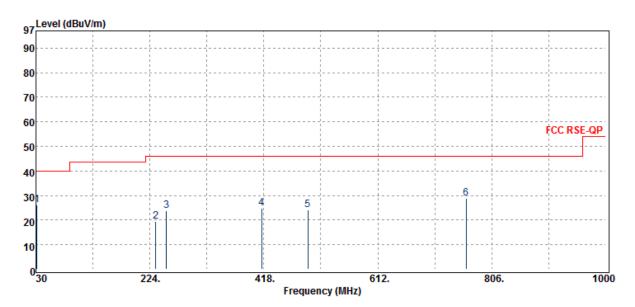
:802.11 a :5300 MHz :TX MID :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
31.94	S	Peak	36.36	-10.22	26.14	40.00	-13.86
233.70	S	Peak	30.23	-10.69	19.54	46.00	-26.46
252.13	S	Peak	33.58	-9.79	23.79	46.00	-22.21
414.12	S	Peak	30.72	-5.75	24.97	46.00	-21.03
492.69	S	Peak	28.41	-4.29	24.12	46.00	-21.88
762.35	S	Peak	27.78	1.14	28.92	46.00	-17.08

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 103 of 195

802.11a, 5470~5725 MHz

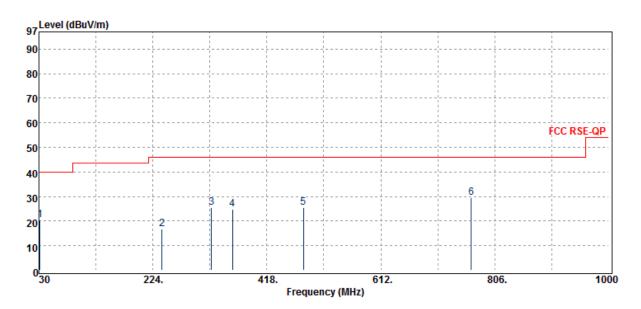
Operation Band Fundamental Frequency Operation Mode

EUT Pol.

:802.11 a :5580 MHz :TX MID :E1 Plan

Test Date Temp./Humi. :2015-06-25 :23 deg_C / 58 RH

Engineer :Curry Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
31.94	S	Peak	30.67	-10.22	20.45	40.00	-19.55
239.52	S	Peak	27.01	-10.28	16.73	46.00	-29.27
323.91	S	Peak	33.05	-7.67	25.38	46.00	-20.62
359.80	S	Peak	31.96	-7.03	24.93	46.00	-21.07
480.08	S	Peak	30.10	-4.59	25.51	46.00	-20.49
766.23	S	Peak	28.60	1.09	29.69	46.00	-16.31

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 104 of 195

Operation Band Fundamental Frequency Operation Mode

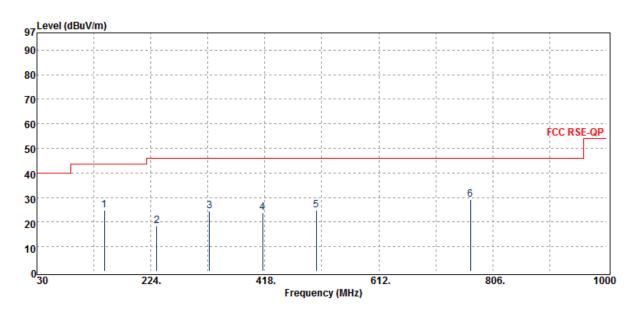
:802.11 a :5580 MHz :TX MID EUT Pol. :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
144.46	S	Peak	34.58	-9.69	24.89	43.50	-18.61
233.70	S	Peak	29.24	-10.69	18.55	46.00	-27.45
323.91	S	Peak	32.32	-7.67	24.65	46.00	-21.35
414.12	S	Peak	29.67	-5.75	23.92	46.00	-22.08
505.30	S	Peak	29.22	-4.43	24.79	46.00	-21.21
768.17	S	Peak	28.28	1.03	29.31	46.00	-16.69

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 105 of 195

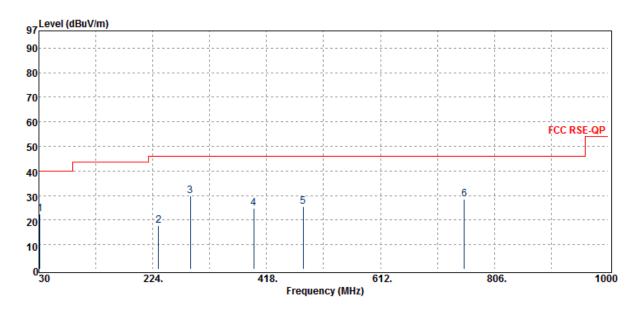
802.11a, 5725~5850 MHz

Operation Band :802.11 a Fundamental Frequency :5785 MHz Operation Mode :TX MID EUT Pol. :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
31.94	S	Peak	32.65	-10.22	22.43	40.00	-17.57
233.70	S	Peak	28.54	-10.69	17.85	46.00	-28.15
288.02	S	Peak	38.19	-8.24	29.95	46.00	-16.05
395.69	S	Peak	30.84	-6.07	24.77	46.00	-21.23
480.08	S	Peak	30.21	-4.59	25.62	46.00	-20.38
754.59	S	Peak	27.65	0.73	28.38	46.00	-17.62

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 106 of 195

Operation Band Fundamental Frequency Operation Mode

EUT Pol.

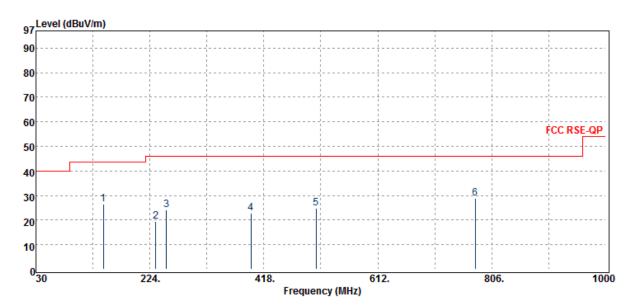
:802.11 a :5785 MHz :TX MID :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
144.46	S	Peak	36.30	-9.69	26.61	43.50	-16.89
233.70	S	Peak	30.31	-10.69	19.62	46.00	-26.38
252.13	S	Peak	33.90	-9.79	24.11	46.00	-21.89
395.69	S	Peak	28.80	-6.07	22.73	46.00	-23.27
507.24	S	Peak	29.30	-4.47	24.83	46.00	-21.17
777.87	S	Peak	28.40	0.50	28.90	46.00	-17.10

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 107 of 195

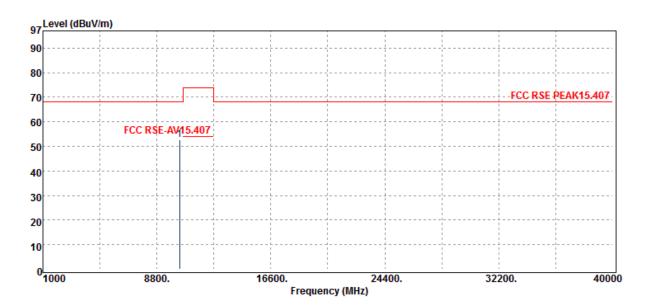
Above 1GHz Worst-Case Data:

802.11a, 5150~5250 MHz

Operation Band :802.11 a Test Date :2015-06-25

Fundamental Frequency :5180 MHz Temp./Humi. :23 deg C / 58 RH

Operation Mode :TX LOW Engineer :Curry EUT Pol. :E1 Plan Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} B \mu V$	dB	$dB\mu V/m$	dBμV/m	dB
10360.00	Н	Peak	34.89	17.65	52.54	68.30	-15.76

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



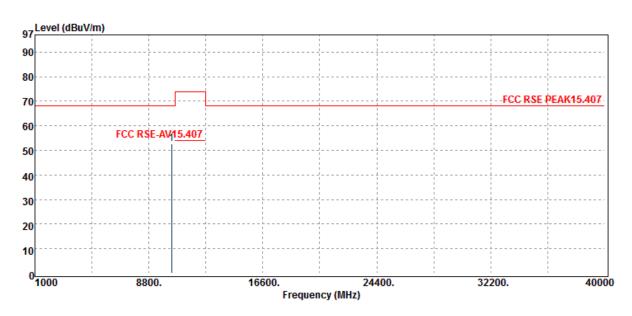
Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 108 of 195

Operation Band :802.11 a **Test Date** :2015-06-25

Fundamental Frequency :5180 MHz Temp./Humi. :23 deg_C / 58 RH Operation Mode :TX LOW Engineer :Curry

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



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
		Mode	Reading Level		FS	@3m		
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} B \mu V$	dB	dBμV/m	dBμV/m	dB	
10360.00	Н	Peak	35.07	17.65	52.72	68.30	-15.58	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



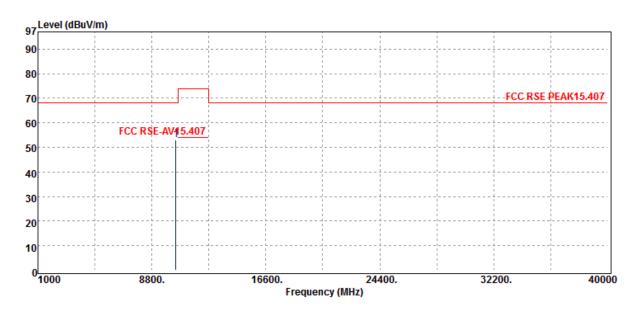
Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 109 of 195

Operation Band :802.11 a **Test Date** :2015-06-25

Fundamental Frequency :5220 MHz Temp./Humi. :23 deg_C / 58 RH

Operation Mode :TX MID Engineer :Curry :VERTICAL EUT Pol. :E1 Plan Measurement Antenna Pol.



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
10440.00	Н	Peak	34.43	18.47	52.90	68.30	-15.40

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



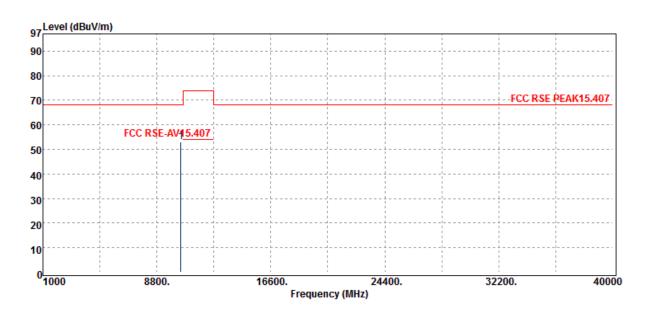
Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 110 of 195

Operation Band :802.11 a **Test Date** :2015-06-25

Fundamental Frequency :5220 MHz Temp./Humi. :23 deg_C / 58 RH

Operation Mode :TX MID Engineer :Curry EUT Pol. :E1 Plan Measurement Antenna Pol. :HORIZONTAL



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	
10440.00	Н	Peak	34.45	18.47	52.92	68.30	-15.38	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



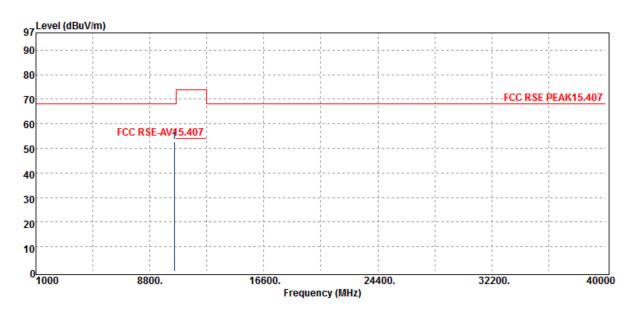
Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 111 of 195

Operation Band :802.11 a **Test Date** :2015-06-25

Fundamental Frequency :5240 MHz Temp./Humi. :23 deg_C / 58 RH

Operation Mode :TX HIGH Engineer :Curry :VERTICAL EUT Pol. :E1 Plan 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
10480.00	Н	Peak	34.62	18.23	52.85	68.30	-15.45

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



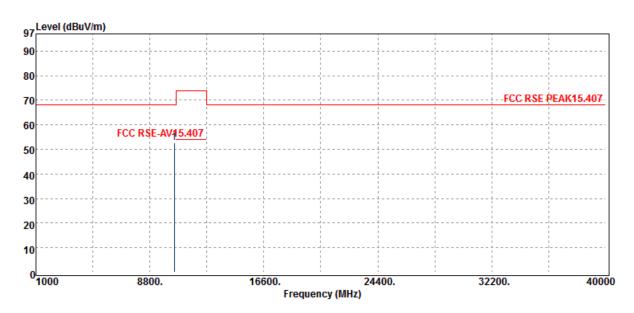
Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 112 of 195

Operation Band :802.11 a **Test Date** :2015-06-25

Fundamental Frequency :5240 MHz Temp./Humi. :23 deg_C / 58 RH Operation Mode :TX HIGH Engineer :Curry

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



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
		Mode	Reading Level		FS	@3m		
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} B \mu V$	dB	dBμV/m	dBμV/m	dB	
10480.00	Н	Peak	34.42	18.23	52.65	68.30	-15.65	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 113 of 195

Band edge falling to restricted band

Operation Band :802.11 a Test Date :2015-06-23

Fundamental Frequency :5180 MHz Temp./Humi. :23 deg_C / 58 RH Operation Mode :Band Edge LOW Engineer

:Curry :VERTICAL EUT Pol. :E1 Plan 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
5150.00	E	Average	40.61	9.74	50.35	54.00	-3.65
5150.00	E	Peak	61.37	9.74	71.11	74.00	-2.89

Operation Band :802.11 a Test Date :2015-06-23 Fundamental Frequency :5180 MHz Temp./Humi. :23 deg C / 58 RH

Operation Mode :Band Edge LOW Engineer :Curry

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

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
5150.00	E	Average	41.24	9.74	50.98	54.00	-3.02
5150.00	E	Peak	63.23	9.74	72.97	74.00	-1.03

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

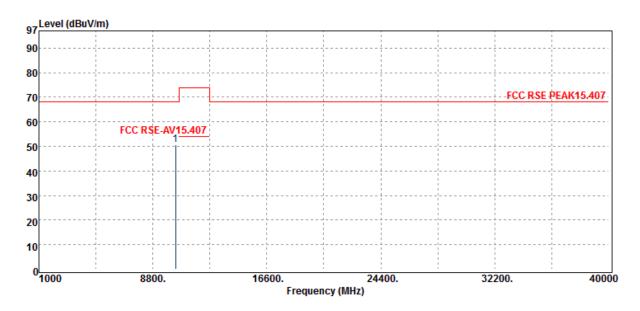
Page 114 of 195

Radiated Spurious Emission Measurement Result 802.11n HT20, 5150~5250 MHz (MIMO)

Operation Band :802.11 n20M **Test Date** :2015-06-25

Fundamental Frequency :5180 MHz Temp./Humi. :23 deg_C / 58 RH

Operation Mode :TX LOW Engineer :Curry :VERTICAL EUT Pol. :E1 Plan Measurement Antenna Pol.



	Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
			Mode	Reading Level		FS	@3m	
_	MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
	10360.00	Н	Peak	33.01	17.65	50.66	68.30	-17.64

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 115 of 195

Operation Band Fundamental Frequency

Operation Mode EUT Pol.

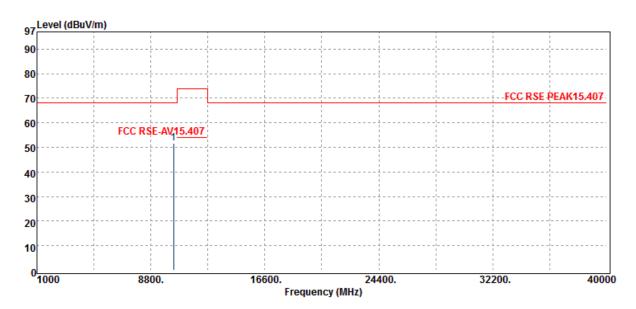
:802.11 n20M :5180 MHz :TX LOW :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
		Mode	Reading Level		FS	@3m		
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} B \mu V$	dB	dBμV/m	dBμV/m	dB	
10360.00	Н	Peak	34.13	17.65	51.78	68.30	-16.52	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 116 of 195

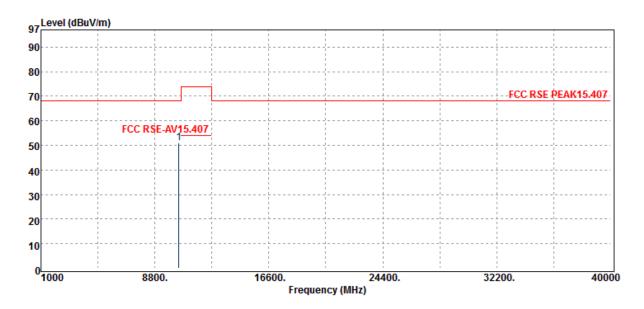
Operation Band Fundamental Frequency

Operation Mode EUT Pol.

:802.11 n20M :5220 MHz :TX MID :E1 Plan

Test Date Temp./Humi. :2015-06-25 :23 deg_C / 58 RH

Engineer :Curry :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} B \mu V$	dB	dBμV/m	dBµV/m	dB
10440.00	Н	Peak	32.63	18.47	51.10	68.30	-17.20

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. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 117 of 195

Operation Band Fundamental Frequency

Operation Mode EUT Pol.

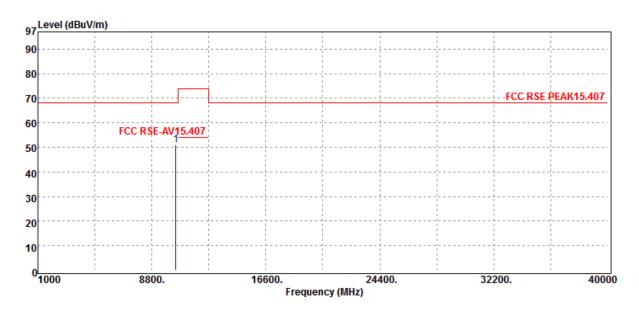
:802.11 n20M :5220 MHz :TX MID :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



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
10440.00	Н	Peak	32.64	18.47	51.11	68.30	-17.19

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 118 of 195

Operation Band Fundamental Frequency Operation Mode

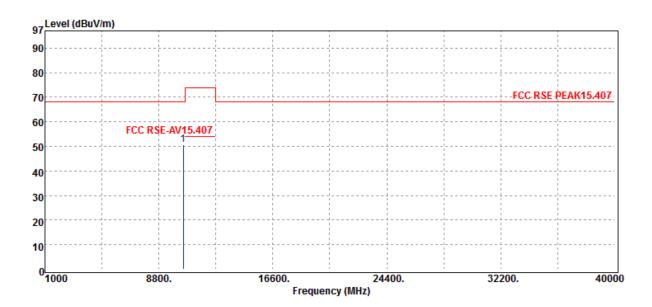
EUT Pol.

:802.11 n20M :5240 MHz :TX HIGH :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry :VERTICAL 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
10480.00	Н	Peak	32.59	18.23	50.82	68.30	-17.48

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



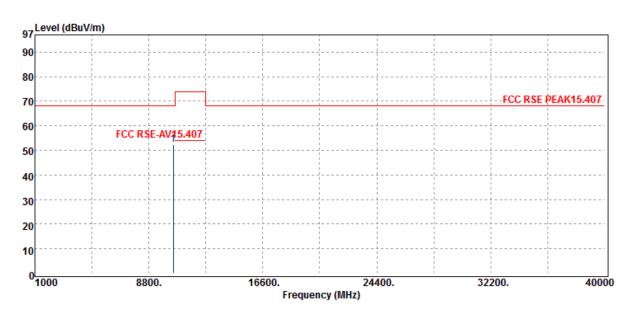
Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 119 of 195

Operation Band :802.11 n20M **Test Date** :2015-06-25 Fundamental Frequency :5240 MHz Temp./Humi. :23 deg_C / 58 RH

Operation Mode :TX HIGH Engineer :Curry

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



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	
10480.00	Н	Peak	34.29	18.23	52.52	68.30	-15.78	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 120 of 195

Band edge falling to restricted band

Operation Band :802.11 n20M Test Date :2015-06-24

Fundamental Frequency :5180 MHz Temp./Humi. :23 deg C / 58 RH

Operation Mode :Band Edge LOW Engineer :Curry EUT Pol. :E1 Plan Measurement Antenna Pol. :VERTICAL

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
5150.00	E	Average	40.93	10.32	51.25	54.00	-2.75
5150.00	E	Peak	58.49	10.32	68.81	74.00	-5.19

Operation Band :802.11 n20M Test Date :2015-06-24

Fundamental Frequency :5180 MHz Temp./Humi. :23 deg C / 58 RH

Operation Mode :Band Edge LOW Engineer :Curry

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

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.

"---": denotes Noise Floor.

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
5150.00	E	Average	41.22	10.32	51.54	54.00	-2.46
5150.00	E	Peak	60.07	10.32	70.39	74.00	-3.61

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

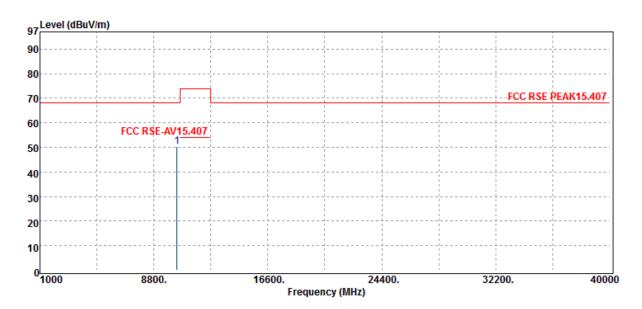
Page 121 of 195

Radiated Spurious Emission Measurement Result 802.11n HT40, 5150~5250 MHz (MIMO)

Operation Band :802.11 n40M **Test Date** :2015-06-25

Fundamental Frequency :5190 MHz Temp./Humi. :23 deg_C / 58 RH

Operation Mode :TX LOW Engineer :Curry :VERTICAL EUT Pol. :E1 Plan Measurement Antenna Pol.



	Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
			Mode	Reading Level		FS	@3m		
_	MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBµV/m	dBμV/m	dB	
	10380.00	Н	Peak	32.43	18.00	50.43	68.30	-17.87	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 122 of 195

Operation Band Fundamental Frequency

Operation Mode EUT Pol.

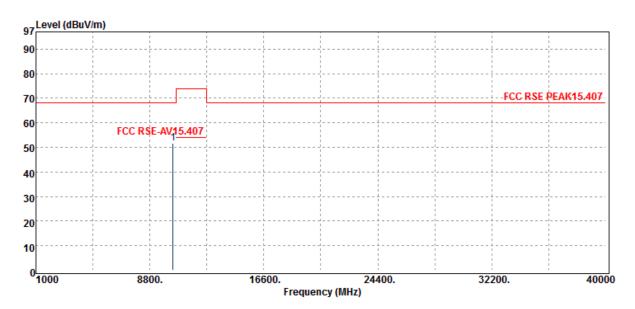
:802.11 n40M :5190 MHz :TX LOW :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
10380.00	Н	Peak	33.60	18.00	51.60	68.30	-16.70

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 123 of 195

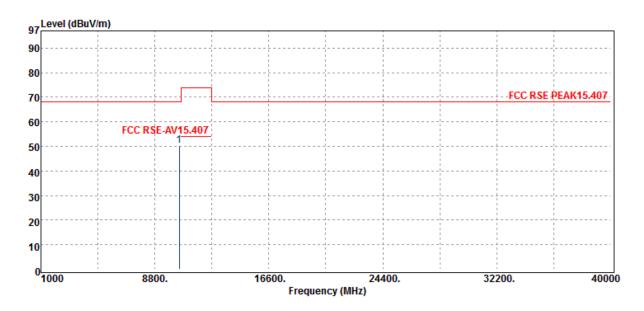
Operation Band :802.11 n40M Fundamental Frequency

Operation Mode EUT Pol.

:5230 MHz :TX HIGH :E1 Plan

Test Date Temp./Humi. :2015-06-25 :23 deg_C / 58 RH

Engineer :Curry :VERTICAL 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
10460.00	Н	Peak	32.10	18.36	50.46	68.30	-17.84

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 124 of 195

Operation Band Fundamental Frequency

Operation Mode EUT Pol.

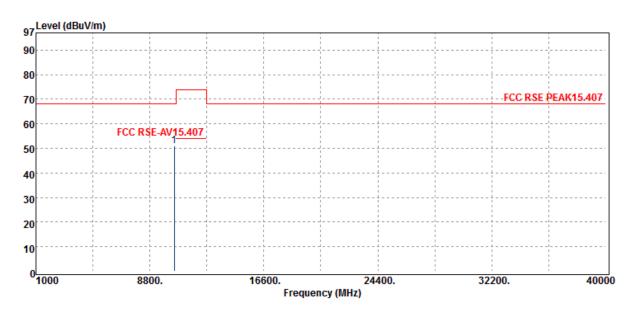
:802.11 n40M :5230 MHz :TX HIGH :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



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	
10460.00	Н	Peak	32.82	18.36	51.18	68.30	-17.12	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 125 of 195

Band edge falling to restricted band

Operation Band :802.11 n40M Test Date :2015-06-24

Fundamental Frequency :5190 MHz Temp./Humi. :23 deg_C / 58 RH Operation Mode :Band Edge LOW Engineer

:Curry :VERTICAL EUT Pol. :E1 Plan 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
5150.00	E	Average	42.79	10.32	53.11	54.00	-0.89
5150.00	E	Peak	60.18	10.32	70.50	74.00	-3.50

Operation Band :802.11 n40M Test Date :2015-06-24

Fundamental Frequency :5190 MHz Temp./Humi. :23 deg C / 58 RH

Operation Mode :Band Edge LOW Engineer :Curry

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

	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
5	150.00	E	Average	42.38	10.32	52.70	54.00	-1.30
5	150.00	E	Peak	61.15	10.32	71.47	74.00	-2.53

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

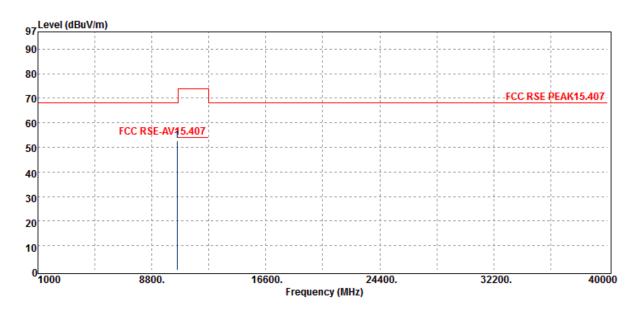
Page 126 of 195

Radiated Spurious Emission Measurement Result 802.11a, 5250MHz-5350MHz

Operation Band :802.11 a Test Date :2015-06-25

Fundamental Frequency :5260 MHz Temp./Humi. :23 deg_C / 58 RH Operation Mode :TX LOW Engineer :Curry

:VERTICAL EUT Pol. :E1 Plan 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
10520.00	Н	Peak	34.24	18.35	52.59	68.30	-15.71

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 127 of 195

Operation Band Fundamental Frequency

Operation Mode EUT Pol.

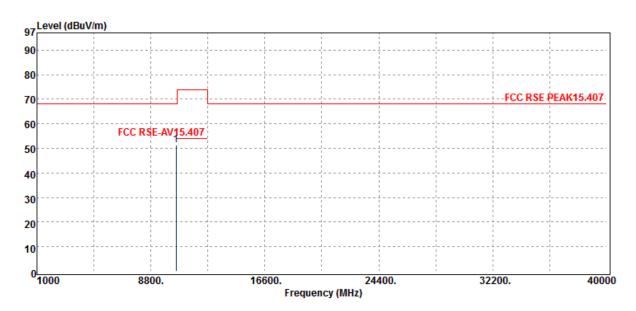
:802.11 a :5260 MHz :TX LOW :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
		Mode	Reading Level		FS	@3m		
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} B \mu V$	dB	dBμV/m	dBμV/m	dB	
10520.00	Н	Peak	33.03	18.35	51.38	68.30	-16.92	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

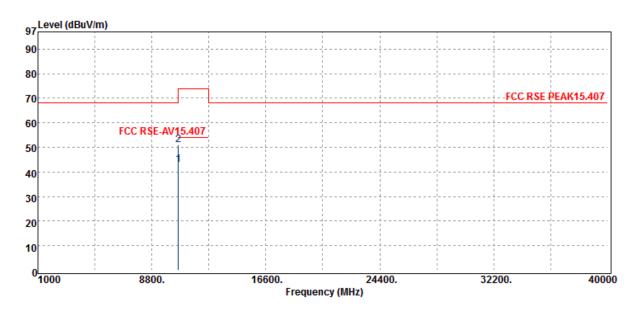
Page 128 of 195

Operation Band Fundamental Frequency

:802.11 a :5300 MHz Operation Mode :TX MID EUT Pol. :E1 Plan

Test Date Temp./Humi. :2015-06-25 :23 deg_C / 58 RH

Engineer :Curry :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	$dB\mu V/m$	dBμV/m	dB
10600.00	Н	Average	24.31	18.69	43.00	54.00	-11.00
10600.00	Н	Peak	32.36	18.69	51.05	74.00	-22.95

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



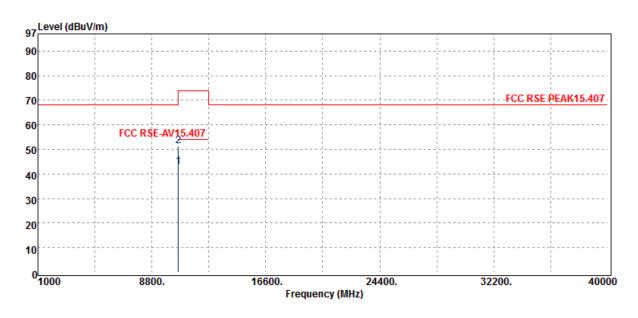
Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 129 of 195

Operation Band :802.11 a **Test Date** :2015-06-25

Fundamental Frequency :5300 MHz Temp./Humi. :23 deg_C / 58 RH Operation Mode :TX MID Engineer :Curry

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



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
10600.00	Н	Average	24.19	18.69	42.88	54.00	-11.12
10600.00	Н	Peak	32.69	18.69	51.38	74.00	-22.62

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 130 of 195

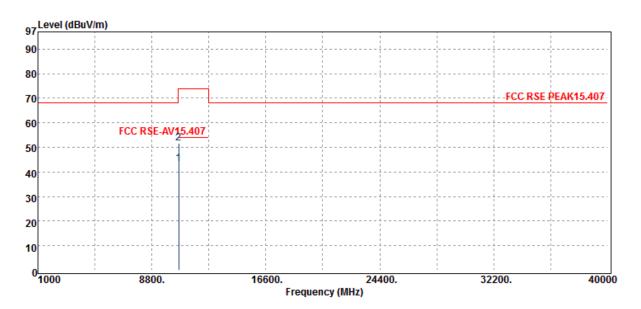
Operation Band Fundamental Frequency

Operation Mode EUT Pol.

:802.11 a :5320 MHz :TX HIGH :E1 Plan

Test Date Temp./Humi. :2015-06-25 :23 deg_C / 58 RH

Engineer :Curry :VERTICAL 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	
10640.00	Н	Average	24.42	19.02	43.44	54.00	-10.56	
10640.00	Н	Peak	32.58	19.02	51.60	74.00	-22.40	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

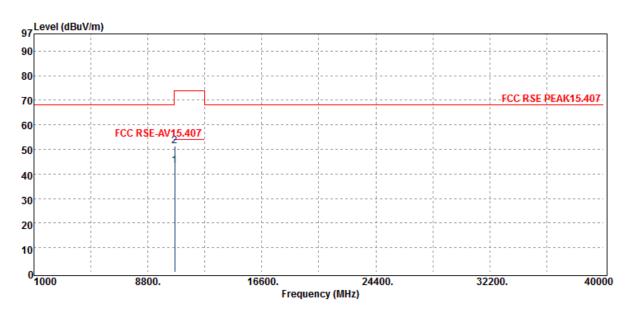
Page 131 of 195

:2015-06-25

Operation Band :802.11 a **Test Date** Fundamental Frequency :5320 MHz Temp./Humi.

:23 deg_C / 58 RH Operation Mode :TX HIGH Engineer :Curry

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



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
10640.00	Н	Average	24.39	19.02	43.41	54.00	-10.59
10640.00	Н	Peak	32.49	19.02	51.51	74.00	-22.49

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 132 of 195

Band edge falling to restricted band

Operation Band :802.11 a Test Date :2015-06-23 Fundamental Frequency :5320 MHz

Temp./Humi. :23 deg_C / 58 RH Operation Mode :Band Edge HIGH Engineer :Curry

:VERTICAL EUT Pol. :E1 Plan 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
	5350.00	E	Average	43.10	10.38	53.48	54.00	-0.52
	5350.00	E	Peak	61.95	10.38	72.33	74.00	-1.67

Operation Band Test Date :802.11 a :2015-06-23

Fundamental Frequency :5320 MHz Temp./Humi. :23 deg C / 58 RH

Operation Mode :Band Edge HIGH Engineer :Curry

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

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} B \mu V$	dB	dBμV/m	dBμV/m	dB
5350.00	E	Average	43.18	10.38	53.56	54.00	-0.44
5350.00	E	Peak	62.59	10.38	72.97	74.00	-1.03

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

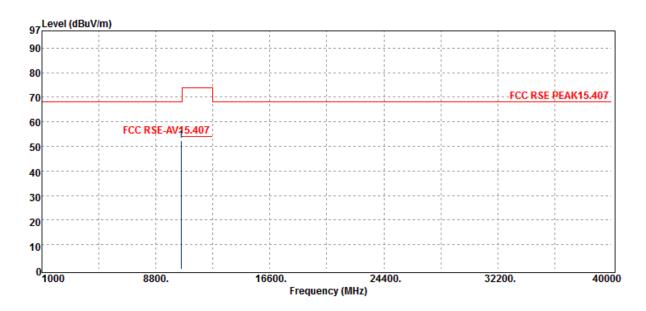
Page 133 of 195

Radiated Spurious Emission Measurement Result 802.11n HT20, 5250~5350 MHz (MIMO)

Operation Band :802.11 n20M **Test Date** :2015-06-25

Fundamental Frequency :5260 MHz Temp./Humi. :23 deg_C / 58 RH

Operation Mode :TX LOW Engineer :Curry :VERTICAL EUT Pol. :E1 Plan Measurement Antenna Pol.



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
10520.00	Н	Peak	34.12	18.35	52.47	68.30	-15.83

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 134 of 195

:2015-06-25

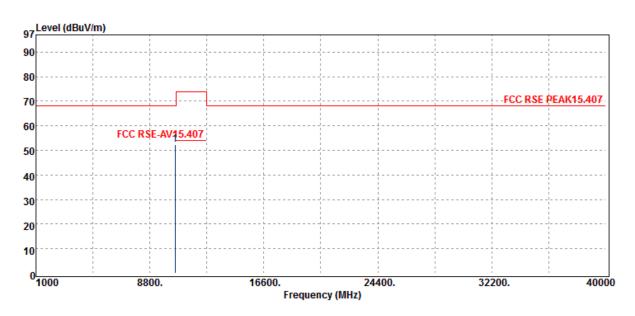
:Curry

:23 deg_C / 58 RH

Operation Band :802.11 n20M **Test Date**

Fundamental Frequency Temp./Humi. :5260 MHz Operation Mode :TX LOW Engineer

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



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
10520.00	Н	Peak	34.09	18.35	52.44	68.30	-15.86

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 135 of 195

Operation Band Fundamental Frequency Operation Mode

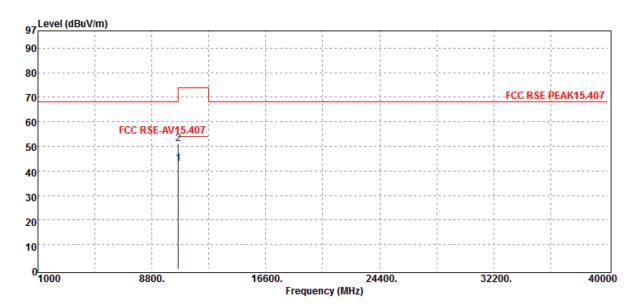
EUT Pol.

:802.11 n20M :5300 MHz :TX MID :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
10600.00	Н	Average	24.41	18.69	43.10	54.00	-10.90
10600.00	Н	Peak	32.20	18.69	50.89	74.00	-23.11

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 136 of 195

Operation Band Fundamental Frequency Operation Mode

EUT Pol.

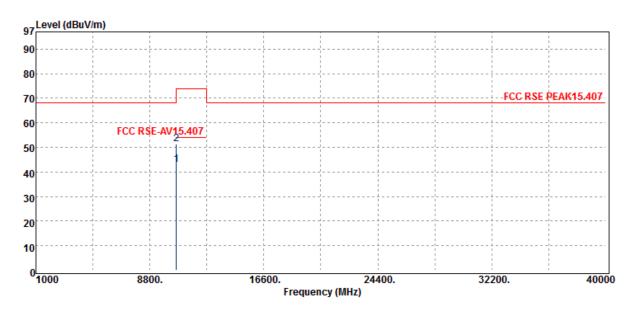
:802.11 n20M :5300 MHz :TX MID :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



	Margin
@3m	
dBμV/m	dB
54.00 -	10.95
74.00	22.63
	dBμV/m 54.00 -

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 137 of 195

Operation Band Fundamental Frequency Operation Mode

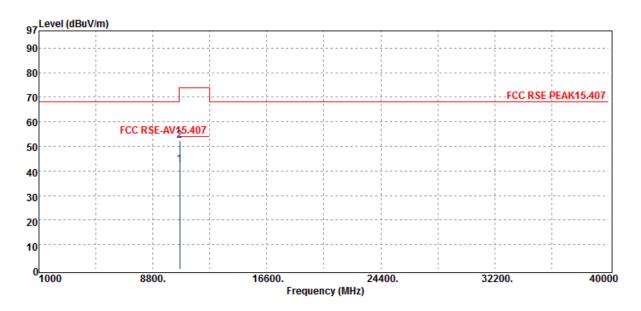
EUT Pol.

:802.11 n20M :5320 MHz :TX HIGH :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry :VERTICAL 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	
10640.00	Н	Average	23.46	19.02	42.48	54.00	-11.52	
10640.00	Н	Peak	33.38	19.02	52.40	74.00	-21.60	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low.

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 138 of 195

Operation Band Fundamental Frequency Operation Mode

EUT Pol.

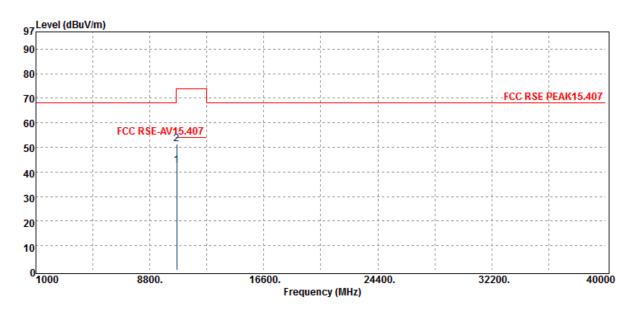
:802.11 n20M :5320 MHz :TX HIGH :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



	Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
			Mode	Reading Level		FS	@3m		
_	MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} B \mu V$	dB	dBμV/m	dBμV/m	dB	
	10640.00	Н	Average	23.55	19.02	42.57	54.00	-11.43	
	10640.00	Н	Peak	32.23	19.02	51.25	74.00	-22.75	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 139 of 195

Band edge falling to restricted band

Operation Band :802.11 n20M Test Date :2015-06-24

Fundamental Frequency :5320 MHz Temp./Humi. :23 deg C / 58 RH Operation Mode :Band Edge HIGH Engineer

:Curry :VERTICAL EUT Pol. :E1 Plan 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
5350.00	E	Average	40.99	10.97	51.96	54.00	-2.04
5350.00	E	Peak	56.81	10.97	67.78	74.00	-6.22

Operation Band :802.11 n20M Test Date :2015-06-24

Fundamental Frequency :5320 MHz Temp./Humi. :23 deg C / 58 RH

Operation Mode :Band Edge HIGH Engineer :Curry

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

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
5350.00	E	Average	41.20	10.97	52.17	54.00	-1.83
5350.00	E	Peak	58.47	10.97	69.44	74.00	-4.56

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

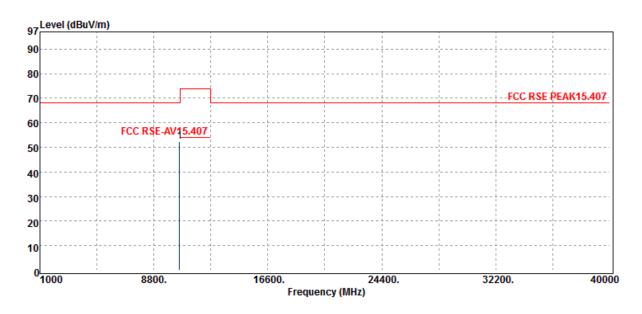
Page 140 of 195

Radiated Spurious Emission Measurement Result 802.11n HT40, 5250~5350 MHz (MIMO)

Operation Band :802.11 n40M **Test Date** :2015-06-25

Fundamental Frequency :5270 MHz Temp./Humi. :23deg_C / 58 RH

Operation Mode :TX LOW Engineer :Curry EUT Pol. :E1 Plan Measurement Antenna Pol. :VERTICAL



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	
10540.00	Н	Peak	34.06	18.45	52.51	68.30	-15.79	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 141 of 195

Operation Band Fundamental Frequency Operation Mode EUT Pol.

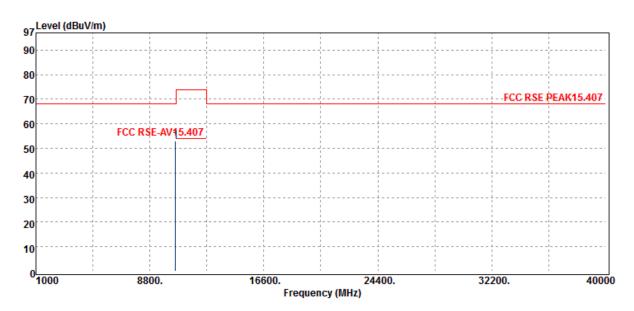
:802.11 n40M :5270 MHz :TX LOW :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



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	
10540.00	Н	Peak	34.61	18.45	53.06	68.30	-15.24	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 142 of 195

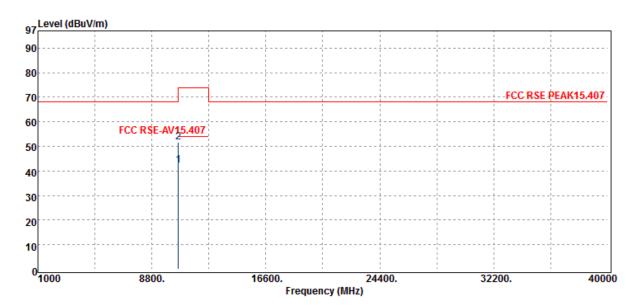
Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11 n40M :5310 MHz :TX HIGH :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23deg_C / 58 RH

:Curry Measurement Antenna Pol. :VERTICAL



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	
10620.00	Н	Average	23.60	18.86	42.46	54.00	-11.54	
10620.00	Н	Peak	32.77	18.86	51.63	74.00	-22.37	
10620.00	П	Peak	32.77	18.80	31.03	/4.00		-22.37

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 143 of 195

Operation Band Fundamental Frequency Operation Mode EUT Pol.

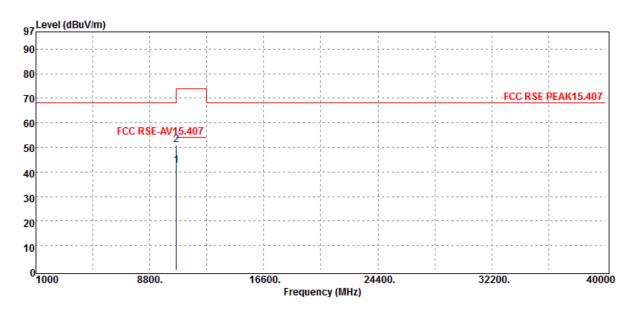
:802.11 n40M :5310 MHz :TX HIGH :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



	Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
			Mode	Reading Level		FS	@3m		
_	MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} B \mu V$	dB	dBµV/m	$dB\mu V/m$	dB	
	10620.00	Н	Average	23.84	18.86	42.70	54.00	-11.30	
	10620.00	Н	Peak	32.11	18.86	50.97	74.00	-23.03	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 144 of 195

Band edge falling to restricted band

Operation Band :802.11 n40M Test Date :2015-06-24

Fundamental Frequency :5310 MHz Temp./Humi. :23deg_C / 58 RH

Operation Mode :Band Edge HIGH Engineer :Curry :VERTICAL EUT Pol. :E1 Plan 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
5350.00	E	Average	42.43	10.97	53.40	54.00	-0.60
5350.00	E	Peak	59.83	10.97	70.80	74.00	-3.20

Operation Band :802.11 n40M Test Date :2015-06-24

Fundamental Frequency :5310 MHz Temp./Humi. :23deg C / 58 RH Operation Mode :Band Edge HIGH Engineer :Curry

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

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
5350.00	E	Average	42.07	10.97	53.04	54.00	-0.96
5350.00	E	Peak	59.97	10.97	70.94	74.00	-3.06

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

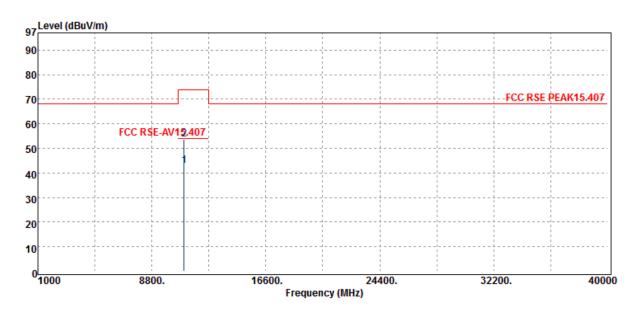
Page 145 of 195

Radiated Spurious Emission Measurement Result 802.11a, 5470~5725 MHz

Operation Band :802.11 a Test Date :2015-06-25

Fundamental Frequency :5500 MHz Temp./Humi. :23 deg_C / 58 RH Operation Mode :TX LOW Engineer :Curry

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



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} B \mu V$	dB	dBμV/m	dBμV/m	dB
11000.00	Н	Average	23.16	19.82	42.98	54.00	-11.02
11000.00	Н	Peak	33.87	19.82	53.69	74.00	-20.31

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 146 of 195

Operation Band Fundamental Frequency Operation Mode

EUT Pol.

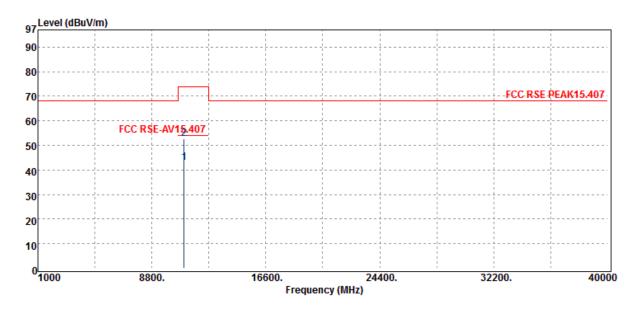
:802.11 a :5500 MHz :TX LOW :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
		Mode	Reading Level	Reading Level		@3m		
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB	
11000.00	Н	Average	23.24	19.82	43.06	54.00	-10.94	
11000.00	Н	Peak	32.79	19.82	52.61	74.00	-21.39	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 147 of 195

Operation Band Fundamental Frequency Operation Mode

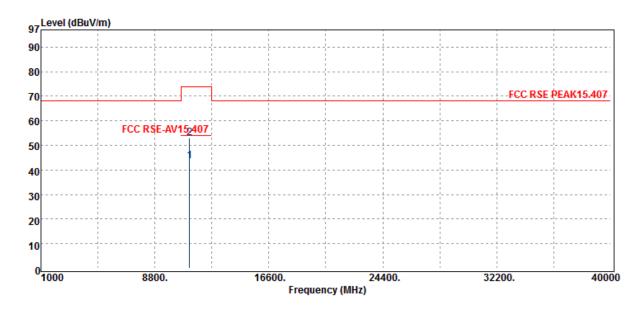
EUT Pol.

:802.11 a :5580 MHz :TX MID :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
		Mode	Reading Level	nding Level		@3m		
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB	
11160.00	Н	Average	23.55	20.21	43.76	54.00	-10.24	
11160.00	Н	Peak	32.96	20.21	53.17	74.00	-20.83	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 148 of 195

Operation Band Fundamental Frequency

Operation Mode EUT Pol.

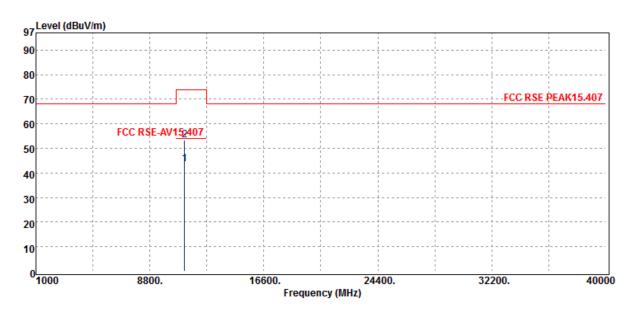
:802.11 a :5580 MHz :TX MID :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
		Mode	Reading Level	Reading Level		@3m		
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB	
11160.00	Н	Average	23.47	20.21	43.68	54.00	-10.32	
11160.00	Н	Peak	33.17	20.21	53.38	74.00	-20.62	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 149 of 195

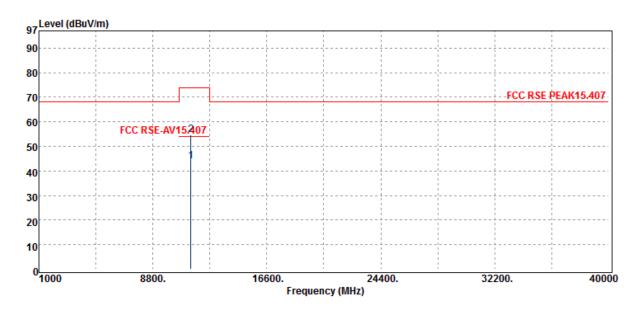
Operation Band Fundamental Frequency

:5700 MHz Operation Mode :TX HIGH EUT Pol. :E1 Plan

:802.11 a

Test Date Temp./Humi. :2015-06-25 :23 deg_C / 58 RH

Engineer :Curry :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector	Spectrum	Factor	Factor Actual		Margin	
		Mode	Reading Level	Reading Level		@3m		
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB	
11400.00	Н	Average	23.48	20.65	44.13	54.00	-9.87	
11400.00	Н	Peak	34.10	20.65	54.75	74.00	-19.25	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 150 of 195

Operation Band Fundamental Frequency Operation Mode

EUT Pol.

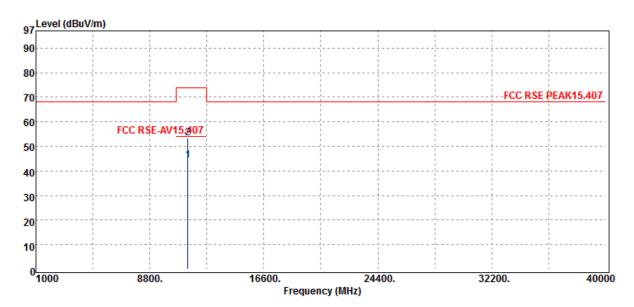
:802.11 a :5700 MHz :TX HIGH :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	$dB\mu V/m$	dB
11400.00	Н	Average	23.57	20.65	44.22	54.00	-9.78
11400.00	Н	Peak	32.69	20.65	53.34	74.00	-20.66

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 151 of 195

Band edge falling to restricted band

Operation Band :802.11 a Test Date :2015-06-24 Fundamental Frequency :5500 MHz Temp./Humi. :23 deg_C / 58 RH

Operation Mode :Band Edge LOW Engineer :Curry

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

Freq.	Note	Detector Mode	Spectrum Reading Leve		Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
5460.00 5460.00	E E	Average Peak	37.88 52.59	10.89 10.89	48.77 63.48	54.00 74.00	-5.23 -10.52
5470.00	Е	Peak	54.27	10.91	65.18	68.30	-3.12
Operation Band Fundamental Frequency Operation Mode EUT Pol.		:802.11 a :5500 MHz :Band Edge I :E1 Plan	LOW 1	Гest Date Геmp./Humi. Engineer Measurement Ant	enna Pol.	:2015-06-24 :23 deg_C / 5 :Curry :HORIZONT	
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
5460.00 5460.00 5470.00	E E E	Average Peak Peak	37.88 52.92 55.42	10.89 10.89 10.91	48.77 63.81 66.33	54.00 74.00 68.30	-5.23 -10.19 -1.97

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 152 of 195

Operation Band :802.11 a Test Date :2015-06-25

Fundamental Frequency :5700 MHz Temp./Humi. :23 deg_C / 58 RH

Operation Mode :Band Edge HIGH Engineer :Curry :VERTICAL EUT Pol. :E1 Plan 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
5725.00	Е	Peak	55.85	11.04	66.89	68.30	-1.41

Operation Band Test Date :802.11 a :2015-06-25

Fundamental Frequency :5700 MHz Temp./Humi. :23 deg C / 58 RH

Operation Mode :Band Edge HIGH Engineer :Curry

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

Freq.	Note	Detector	Spectrum	ctrum Factor Actual		Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	$\mathrm{dB}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
5725.00	E	Peak	56.10	11.04	67.14	68.30	-1.16

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. SGS Taiwan Ltd.



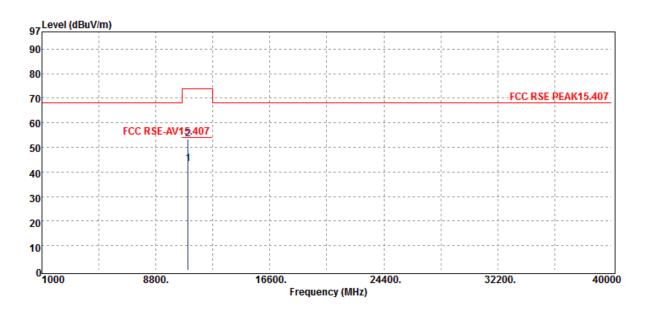
Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 153 of 195

Radiated Spurious Emission Measurement Result 802.11n HT20, 5470~5725 MHz (MIMO)

Operation Band :802.11 n20M **Test Date** :2015-06-25 Fundamental Frequency :5500 MHz Temp./Humi. :23 deg_C / 58 RH

Operation Mode :TX LOW Engineer :Curry :VERTICAL EUT Pol. :E1 Plan Measurement Antenna Pol.



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
11000.00	Н	Average	23.61	19.82	43.43	54.00	-10.57
11000.00	Н	Peak	33.69	19.82	53.51	74.00	-20.49

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 154 of 195

Operation Band Fundamental Frequency Operation Mode EUT Pol.

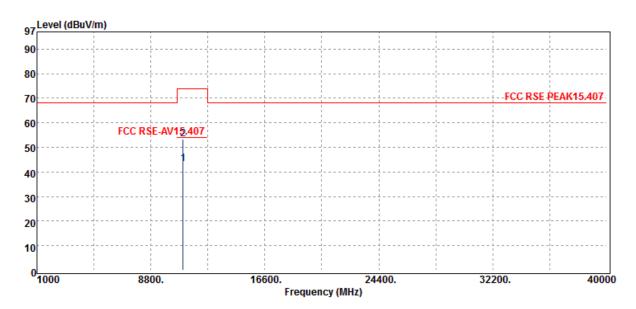
:802.11 n20M :5500 MHz :TX LOW :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



Spectrum Factor Actual Limit	tor Act	m	Spectrum	Detector	Note	Freq.	
Reading Level FS @3m	F	evel	Reading Lev	Mode			
$dB\mu V$ dB $dB\mu V/m$ $dB\mu V/m$	3 dBµV		dΒμV	PK/QP/AV	F/H/E/S	MHz	
23.51 19.82 43.33 54.00	82 43.		23.51	Average	Н	11000.00	
33.65 19.82 53.47 74.00	82 53.		33.65	Peak	Н	11000.00	
				Č			

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 155 of 195

Operation Band Fundamental Frequency Operation Mode

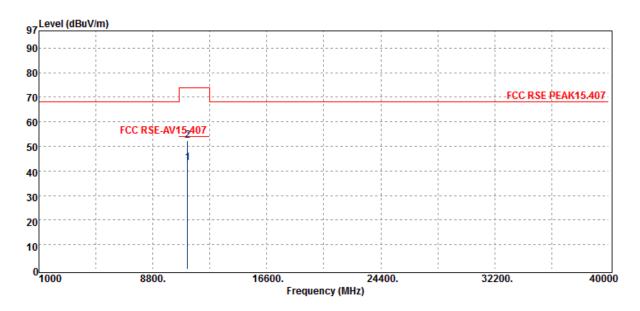
EUT Pol.

:802.11 n20M :5580 MHz :TX MID :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
		Mode	Reading Level	ading Level		@3m		
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB	
11160.00	Н	Average	23.17	20.21	43.38	54.00	-10.62	
11160.00	Н	Peak	32.21	20.21	52.42	74.00	-21.58	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 156 of 195

Operation Band Fundamental Frequency Operation Mode

EUT Pol.

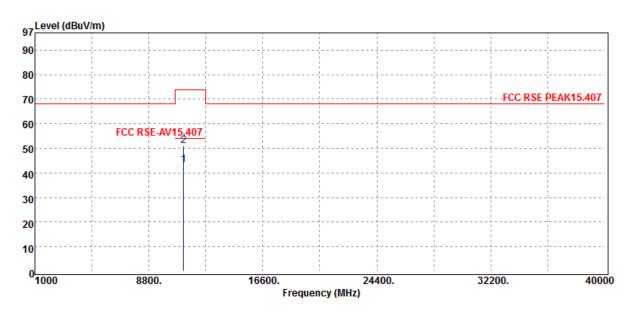
:802.11 n20M :5580 MHz :TX MID :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
		Mode	Reading Level		FS	@3m		
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} B \mu V$	dB	dBμV/m	dBμV/m	dB	
11160.00	Н	Average	23.24	20.21	43.45	54.00	-10.55	
11160.00	Н	Peak	30.87	20.21	51.08	74.00	-22.92	
11160.00	Н	Peak	30.87	20.21	51.08	74.00		-22.92

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 157 of 195

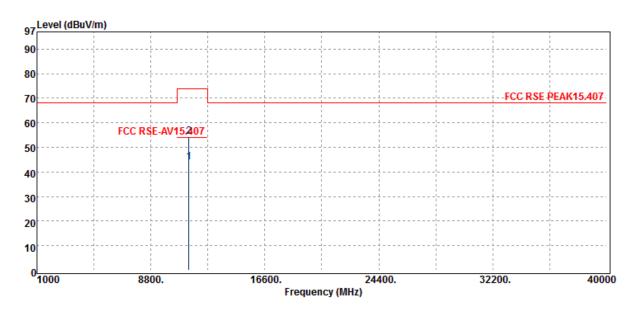
Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11 n20M :5700 MHz :TX HIGH :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry Measurement Antenna Pol. :VERTICAL



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	
11400.00	Н	Average	23.48	20.65	44.13	54.00	-9.87	
11400.00	Н	Peak	33.63	20.65	54.28	74.00	-19.72	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 158 of 195

Operation Band Fundamental Frequency Operation Mode EUT Pol.

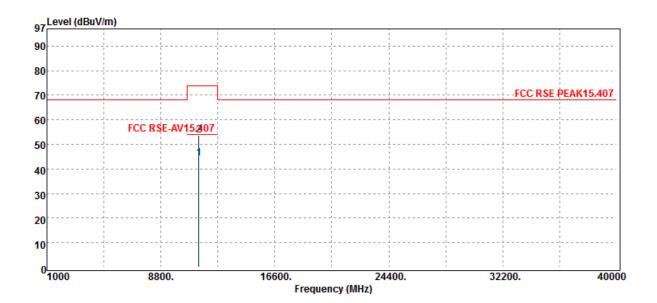
:802.11 n20M :5700 MHz :TX HIGH :E1 Plan

Test Date Temp./Humi. Engineer

Measurement Antenna Pol.

:2015-06-25 :23 deg_C / 58 RH

:Curry :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	$dB\mu V/m$	dB
11400.00	Н	Average	23.52	20.65	44.17	54.00	-9.83
11400.00	Н	Peak	33.20	20.65	53.85	74.00	-20.15

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 159 of 195

Band edge falling to restricted band

:802.11 n20M Operation Band Test Date :2015-06-24

Fundamental Frequency :5500 MHz Temp./Humi. :23 deg C / 58 RH

Operation Mode :Band Edge LOW Engineer :Curry :VERTICAL EUT Pol. :E1 Plan 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
5460.00	E	Average	39.61	10.89	50.50	54.00	-3.50
5460.00	E	Peak	52.03	10.89	62.92	74.00	-11.08
5470.00	E	Peak	51.85	10.91	62.76	68.30	-5.54

:2015-06-24 Operation Band :802.11 n20M Test Date

Fundamental Frequency :5500 MHz Temp./Humi. :23 deg C / 58 RH

Operation Mode :Band Edge LOW Engineer :Curry

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

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
5460.00	E	Average	39.84	10.89	50.73	54.00	-3.27
5460.00	E	Peak	53.59	10.89	64.48	74.00	-9.52
5470.00	E	Peak	54.53	10.91	65.44	68.30	-2.86

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 160 of 195

Operation Band :802.11 n20M Test Date :2015-06-24

Fundamental Frequency :5700 MHz Temp./Humi. :23 deg_C / 58 RH

Operation Mode :Band Edge HIGH Engineer :Curry

:VERTICAL EUT Pol. :E1 Plan 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
5725.00	E	Peak	55.06	11.04	66.10	68.30	-2.20

Operation Band **Test Date** :802.11 n20M :2015-06-24

Fundamental Frequency :5700 MHz Temp./Humi. :23 deg C / 58 RH

Operation Mode :Band Edge HIGH Engineer :Curry

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

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	$\mathrm{dB}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
5725.00	E	Peak	55.50	11.04	66.54	68.30	-1.76

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

Member of SGS Group

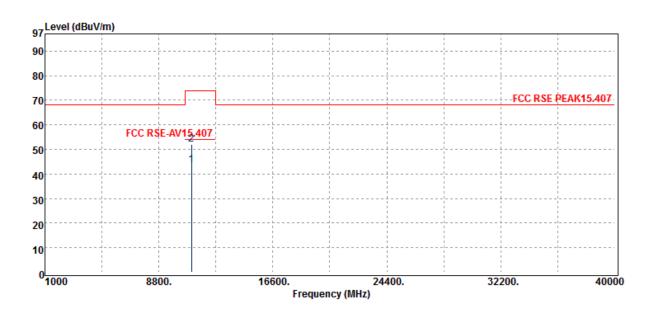


Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 161 of 195

Radiated Spurious Emission Measurement Result 802.11n HT40, 5470~5725 MHz (MIMO)

Operation Band :802.11 n40M **Test Date** :2015-06-25 Fundamental Frequency :5510 MHz Temp./Humi. :23deg_C / 58 RH Operation Mode :TX LOW Engineer :Curry :VERTICAL EUT Pol. :E1 Plan Measurement Antenna Pol.



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
11020.00	Н	Average	23.67	19.81	43.48	54.00	-10.52
11020.00	Н	Peak	32.34	19.81	52.15	74.00	-21.85

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 162 of 195

Operation Band Fundamental Frequency Operation Mode EUT Pol.

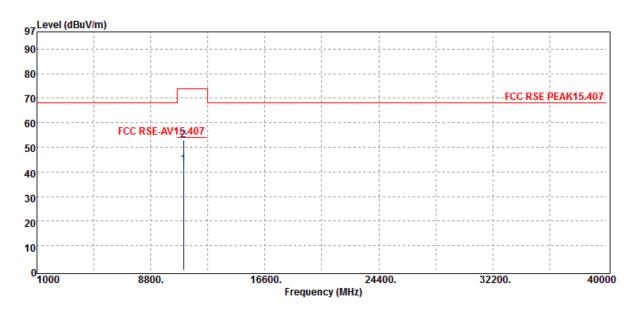
:802.11 n40M :5510 MHz :TX LOW :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
		Mode	Reading Level		FS	@3m		
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBµV/m	dBμV/m	dB	
11020.00	Н	Average	23.13	19.81	42.94	54.00	-11.06	
11020.00	Н	Peak	33.27	19.81	53.08	74.00	-20.92	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 163 of 195

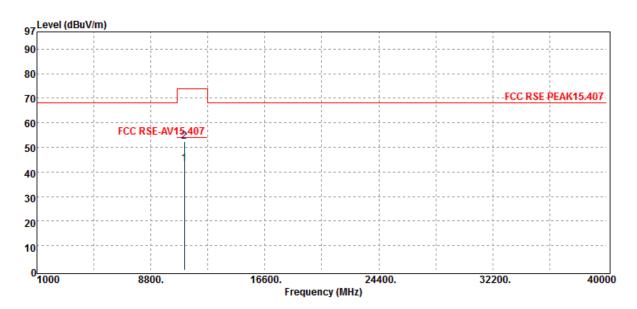
Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11 n40M :5550 MHz :TX MID :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23deg_C / 58 RH

:Curry Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
		Mode	Reading Level		FS	@3m		
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} B \mu V$	dB	dBμV/m	dBμV/m	dB	
11100.00	Н	Average	23.23	20.23	43.46	54.00	-10.54	
11100.00	Н	Peak	32.03	20.23	52.26	74.00	-21.74	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 164 of 195

Operation Band Fundamental Frequency Operation Mode EUT Pol.

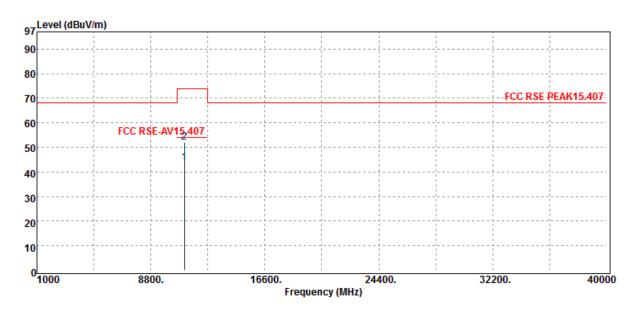
:802.11 n40M :5550 MHz :TX MID :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



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	
11100.00	Н	Average	23.42	20.23	43.65	54.00	-10.35	
11100.00	Н	Peak	31.77	20.23	52.00	74.00	-22.00	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 165 of 195

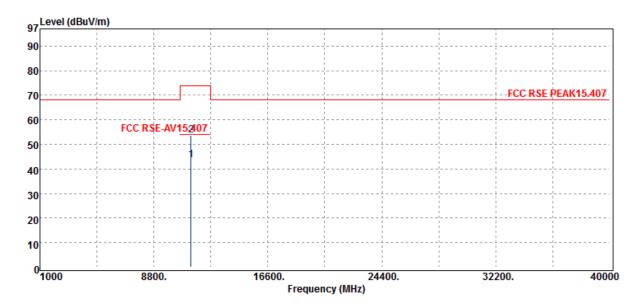
Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11 n40M :5670 MHz :TX HIGH :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23deg_C / 58 RH

:Curry Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
		Mode	Reading Level		FS	@3m		
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} B \mu V$	dB	dBμV/m	dBμV/m	dB	
11340.00	Н	Average	23.11	20.64	43.75	54.00	-10.25	
11340.00	Н	Peak	33.07	20.64	53.71	74.00	-20.29	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low.

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 166 of 195

Operation Band Fundamental Frequency Operation Mode EUT Pol.

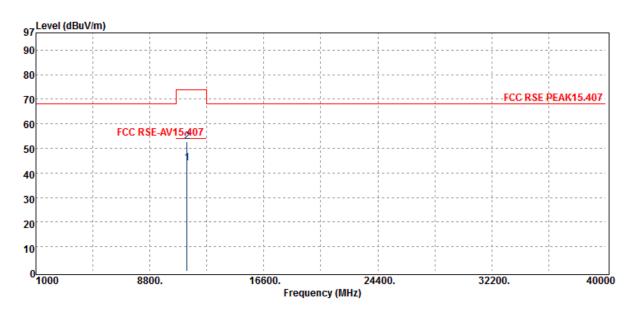
:802.11 n40M :5670 MHz :TX HIGH :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} \mathrm{B} \mu \mathrm{V}$	dB	dBμV/m	dBμV/m	dB
11340.00	Н	Average	23.24	20.64	43.88	54.00	-10.12
11340.00	Н	Peak	32.04	20.64	52.68	74.00	-21.32

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 **Issue Date: Jul. 09, 2015**

Page 167 of 195

Band edge falling to restricted band

Operation Band :802.11 n40M Test Date :2015-06-24 Fundamental Frequency :5510 MHz Temp./Humi. :23deg C / 58 RH

Operation Mode :Band Edge LOW Engineer :Curry EUT Pol. :E1 Plan Measurement Antenna Pol. :VERTICAL

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
5460.00	E	Average	39.49	10.89	50.38	54.00	-3.62
5460.00	E	Peak	52.54	10.89	63.43	74.00	-10.57
5470.00	E	Peak	55.83	10.91	66.74	68.30	-1.56

Test Date :2015-06-24 **Operation Band** :802.11 n40M Fundamental Frequency :5510 MHz Temp./Humi. :23deg C / 58 RH

Operation Mode :Band Edge LOW Engineer :Curry

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

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.

"---": denotes Noise Floor.

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
5460.00	E	Average	39.94	10.89	50.83	54.00	-3.17
5460.00	E	Peak	52.35	10.89	63.24	74.00	-10.76
5470.00	E	Peak	55.91	10.91	66.82	68.30	-1.48

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

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

台灣檢驗科技股份有限公司

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 168 of 195

Operation Band :802.11 n40M Test Date :2015-06-24

Fundamental Frequency :5670 MHz Temp./Humi. :23deg C / 58 RH

Operation Mode :Band Edge HIGH Engineer :Curry EUT Pol. :E1 Plan Measurement Antenna Pol. :VERTICAL

Freq. Note Detector Spectrum Factor Actual Limit Margin FS Reading Level Mode @3m $dB\mu V/m$ MHz F/H/E/S PK/OP/AV dBμV dBµV/m dΒ dΒ 5725.00 Е 53.91 11.04 64.95 68.30 -3.35 Peak

Operation Band :802.11 n40M Test Date :2015-06-24

Fundamental Frequency :23deg_C / 58 RH Temp./Humi. :5670 MHz

:Curry Operation Mode :Band Edge HIGH Engineer

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

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
5725.00	Е	Peak	53.71	11.04	64.75	68.30	-3.55

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

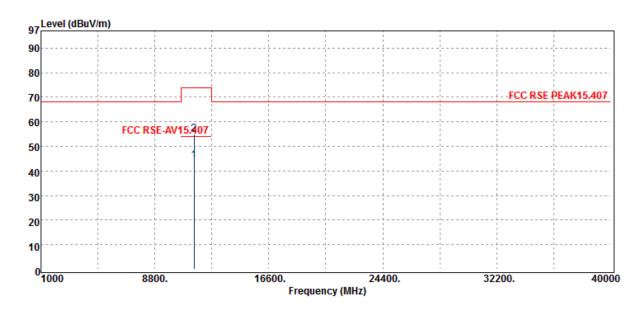
Page 169 of 195

Radiated Spurious Emission Measurement Result 802.11a, 5725~5850 MHz

Operation Band Test Date :802.11 a :2015-06-25

Fundamental Frequency :5745 MHz Temp./Humi. :23 deg_C / 58 RH Operation Mode :TX LOW Engineer :Curry

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



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
		Mode	Reading Level		FS	@3m		
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} B \mu V$	dB	dBμV/m	dBμV/m	dB	
11490.00	Н	Average	23.61	20.81	44.42	54.00	-9.58	
11490.00	Н	Peak	34.18	20.81	54.99	74.00	-19.01	
	MHz 11490.00	MHz F/H/E/S 11490.00 H	Mode MHz F/H/E/S PK/QP/AV 11490.00 H Average	MHz F/H/E/S PK/QP/AV dBμV 11490.00 H Average 23.61	Mode Reading Level MHz F/H/E/S PK/QP/AV dBμV dB 11490.00 H Average 23.61 20.81	MHz Mode F/H/E/S Reading Level PK/QP/AV FS dBμV FS dBμV/m 11490.00 H Average 23.61 20.81 44.42	MHz F/H/E/S Mode PK/QP/AV Reading Level dBμV FS @3m dBμV/m 11490.00 H Average 23.61 20.81 44.42 54.00	Mode MHz Reading Level PK/QP/AV FS @3m MHz F/H/E/S PK/QP/AV dBμV dB dBμV/m dBμV/m dBμV/m dB 11490.00 H Average 23.61 20.81 44.42 54.00 -9.58

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 170 of 195

Operation Band Fundamental Frequency

Operation Mode EUT Pol.

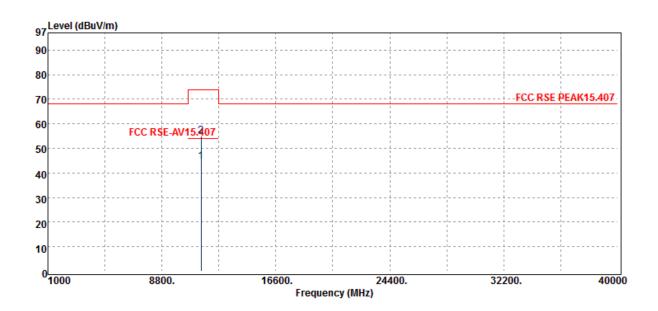
:802.11 a :5745 MHz :TX LOW :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



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
11490.00	Н	Average	23.72	20.81	44.53	54.00	-9.47
11490.00	Н	Peak	34.30	20.81	55.11	74.00	-18.89

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 171 of 195

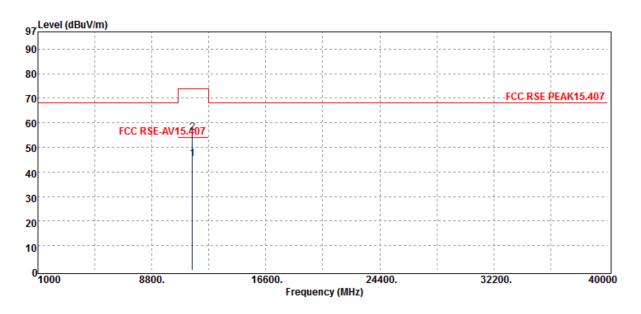
Operation Band Fundamental Frequency

Operation Mode EUT Pol.

:802.11 a :5785 MHz :TX MID :E1 Plan

Test Date Temp./Humi. :2015-06-25 :23 deg_C / 58 RH

Engineer :Curry :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	$dB\mu V/m$	dBμV/m	dB
11570.00	Н	Average	24.26	21.16	45.42	54.00	-8.58
11570.00	Н	Peak	34.90	21.16	56.06	74.00	-17.94

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

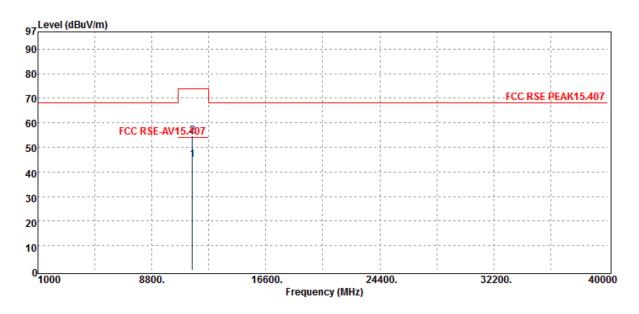
Page 172 of 195

Operation Band :802.11 a **Test Date** :2015-06-25

Fundamental Frequency :5785 MHz Temp./Humi. :23 deg_C / 58 RH

Operation Mode :TX MID Engineer :Curry

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



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	
11570.00	Н	Average	23.90	21.16	45.06	54.00	-8.94	
11570.00	Н	Peak	33.63	21.16	54.79	74.00	-19.21	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 173 of 195

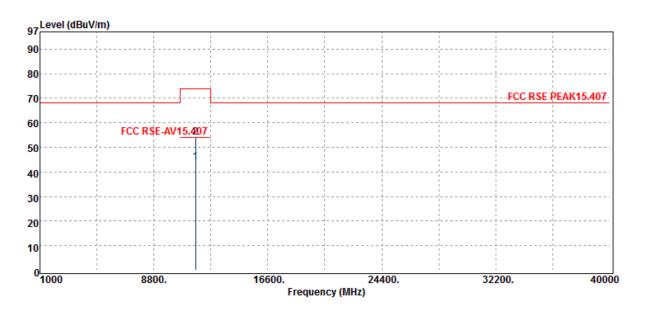
Operation Band Fundamental Frequency

Operation Mode EUT Pol.

:802.11 a :5825 MHz :TX HIGH :E1 Plan

Test Date Temp./Humi. :2015-06-25 :23 deg_C / 58 RH

Engineer :Curry Measurement Antenna Pol. :VERTICAL



F	req.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
			Mode	Reading Level		FS	@3m	
N	ИHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
116	550.00	Н	Average	23.12	20.93	44.05	54.00	-9.95
116	550.00	Н	Peak	33.05	20.93	53.98	74.00	-20.02

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 174 of 195

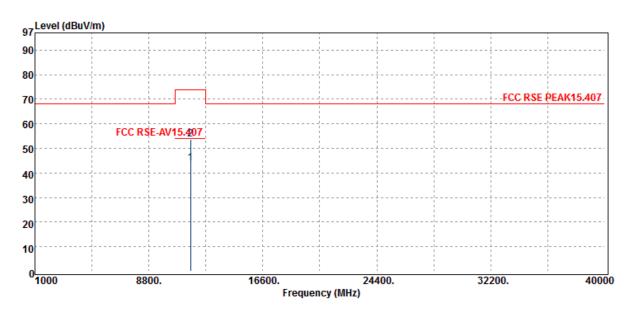
:2015-06-25

Operation Band :802.11 a **Test Date**

Fundamental Frequency :5825 MHz Temp./Humi. :23 deg_C / 58 RH

Operation Mode :TX HIGH Engineer :Curry

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



Limit Margin
@3m
μV/m dB
54.00 -9.90
74.00 -20.33

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 175 of 195

Band edge falling to restricted band

Operation Band :802.11 a Test Date :2015-06-24

Fundamental Frequency :5745 MHz Temp./Humi. :23 deg_C / 58 RH Operation Mode :Band Edge LOW Engineer

:Curry EUT Pol. :E1 Plan Measurement Antenna Pol. :VERTICAL

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
5725.00	F	Peak	63 37	11.04	74 41	78 20	-3 79

Operation Band :802.11 a Test Date :2015-06-24

Fundamental Frequency Temp./Humi. :5745 MHz :23 deg C / 58 RH

Operation Mode :Band Edge LOW Engineer :Curry

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

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
5725.00	Е	Peak	64.72	11.04	75.76	78.20	-2.44

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 176 of 195

Operation Band :802.11 a Test Date :2015-06-24

Fundamental Frequency :5825 MHz Temp./Humi. :23 deg_C / 58 RH

Operation Mode :Band Edge HIGH Engineer :Curry

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

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
5850.00	Е	Peak	58.09	11.50	69.59	78.20	-8.61

Operation Band :802.11 a Test Date :2015-06-24

Fundamental Frequency Temp./Humi. :5825 MHz :23 deg C / 58 RH

Operation Mode :Band Edge HIGH Engineer :Curry

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

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
5850.00	E	Peak	55.50	11.50	67.00	78.20	-11.20

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. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

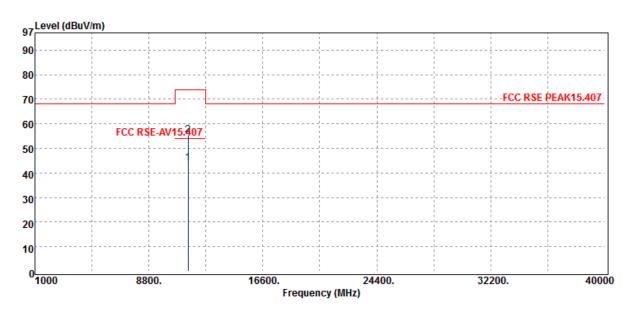
Page 177 of 195

Radiated Spurious Emission Measurement Result 802.11n HT20, 5725~5850 MHz (MIMO)

Operation Band :802.11 n20M **Test Date** :2015-06-25

Fundamental Frequency :5745 MHz Temp./Humi. :23 deg_C / 58 RH

Operation Mode :TX LOW Engineer :Curry :VERTICAL EUT Pol. :E1 Plan Measurement Antenna Pol.



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	$\mathrm{dB}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
11490.00	Н	Average	23.22	20.81	44.03	54.00	-9.97
11490.00	Н	Peak	34.58	20.81	55.39	74.00	-18.61

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 178 of 195

Operation Band Fundamental Frequency Operation Mode

EUT Pol.

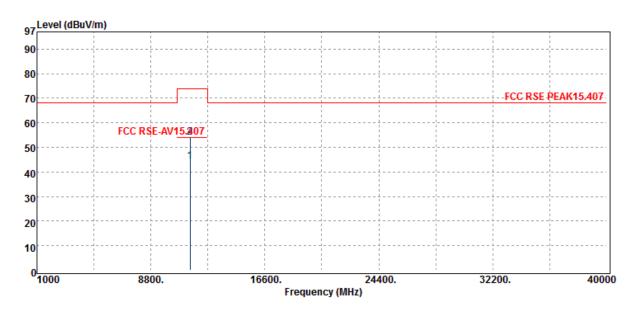
:802.11 n20M :5745 MHz :TX LOW :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



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	
11490.00	Н	Average	23.47	20.81	44.28	54.00	-9.72	
11490.00	Н	Peak	33.19	20.81	54.00	74.00	-20.00	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 179 of 195

Operation Band Fundamental Frequency Operation Mode

EUT Pol.

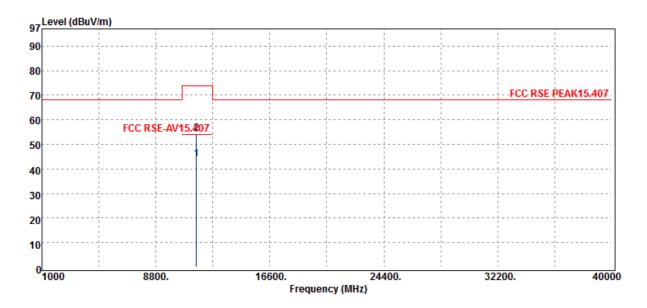
:802.11 n20M :5785 MHz :TX MID :E1 Plan

Test Date Temp./Humi. Engineer

Measurement Antenna Pol.

:2015-06-25 :23 deg_C / 58 RH

:Curry :VERTICAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	$dB\mu V/m$	dBμV/m	dB
11570.00	Н	Average	22.95	21.16	44.11	54.00	-9.89
11570.00	Н	Peak	33.09	21.16	54.25	74.00	-19.75

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 180 of 195

Operation Band Fundamental Frequency Operation Mode

EUT Pol.

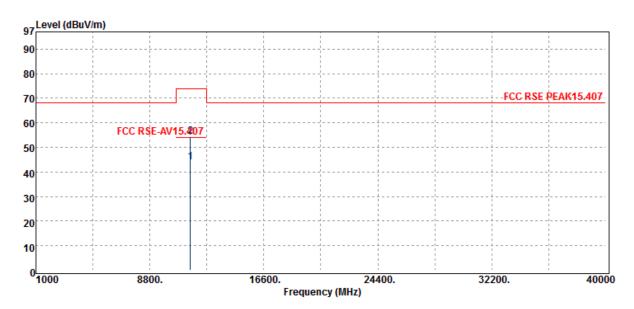
:802.11 n20M :5785 MHz :TX MID :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



Actual	Limit	Margin
FS	@3m	
dBμV/m	dBμV/m	dB
44.05	54.00	-9.95
54.33	74.00	-19.67
	FS dBμV/m 44.05	FS @3m dBμV/m dBμV/m 44.05 54.00

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 181 of 195

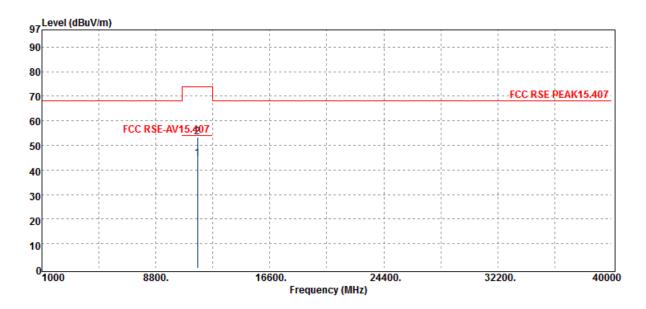
Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11 n20M :5825 MHz :TX HIGH :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry Measurement Antenna Pol. :VERTICAL



-	Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
			Mode	Reading Level		FS	@3m	
	MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} B \mu V$	dB	dBμV/m	dBμV/m	dB
11	650.00	Н	Average	23.66	20.93	44.59	54.00	-9.41
11	650.00	Н	Peak	32.49	20.93	53.42	74.00	-20.58

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low.

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 182 of 195

Operation Band Fundamental Frequency Operation Mode

EUT Pol.

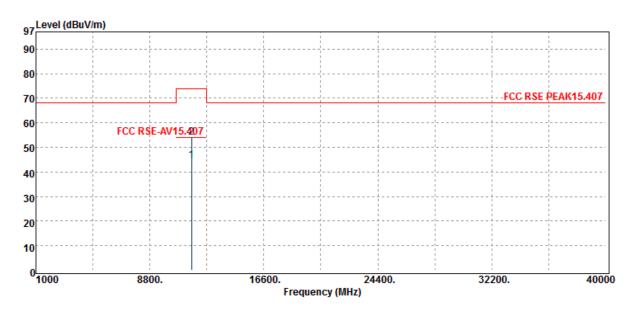
:802.11 n20M :5825 MHz :TX HIGH :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23 deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
		Mode	Reading Level		FS	@3m		
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} B \mu V$	dB	dBμV/m	dBμV/m	dB	
650.00	Н	Average	23.71	20.93	44.64	54.00	-9.36	
650.00	Н	Peak	33.11	20.93	54.04	74.00	-19.96	
1	MHz 1650.00 1650.00	MHz F/H/E/S 1650.00 H	Mode MHz F/H/E/S PK/QP/AV 1650.00 H Average	Mode Reading Level MHz F/H/E/S PK/QP/AV dBμV	Mode Reading Level MHz F/H/E/S PK/QP/AV dBμV dB 1650.00 H Average 23.71 20.93	Mode Reading Level FS MHz F/H/E/S PK/QP/AV dBμV dB dBμV/m 1650.00 H Average 23.71 20.93 44.64	Mode MHz Reading Level FS @3m MHz F/H/E/S PK/QP/AV dBμV dB dBμV/m dBμV/m 1650.00 H Average 23.71 20.93 44.64 54.00	Mode Reading Level FS @3m MHz F/H/E/S PK/QP/AV dBμV dB dBμV/m dBμV/m dB 1650.00 H Average 23.71 20.93 44.64 54.00 -9.36

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 183 of 195

Band edge falling to restricted band

Operation Band :802.11 n20M Test Date :2015-06-24

Fundamental Frequency :5745 MHz Temp./Humi. :23 deg_C / 58 RH

Operation Mode :Band Edge LOW Engineer :Curry EUT Pol. :E1 Plan Measurement Antenna Pol. :VERTICAL

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} B \mu V$	dB	dBμV/m	dBμV/m	dB
5725.00	Е	Peak	57.86	11.04	68.90	78.20	-9.30

Operation Band :802.11 n20M Test Date :2015-06-24

Fundamental Frequency Temp./Humi. :5745 MHz :23 deg C / 58 RH

Operation Mode :Band Edge LOW Engineer :Curry

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

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
5725.00	Е	Peak	63.23	11.04	74.27	78.20	-3.93

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. SGS Taiwan Ltd.



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 184 of 195

Operation Band :802.11 n20M Test Date :2015-06-24

Fundamental Frequency :5825 MHz Temp./Humi. :23 deg_C / 58 RH

Operation Mode :Band Edge HIGH Engineer :Curry

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

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
5850 00	E	Peak	59 48	11.50	70.98	78 20	-7 22

Operation Band :802.11 n20M Test Date :2015-06-24

Fundamental Frequency Temp./Humi. :5825 MHz :23 deg C / 58 RH

Operation Mode :Band Edge HIGH Engineer :Curry

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

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} \mathrm{B} \mu \mathrm{V}$	dB	dBµV/m	dBμV/m	dB
5850.00	Е	Peak	53.01	11.50	64.51	78.20	-13.69

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



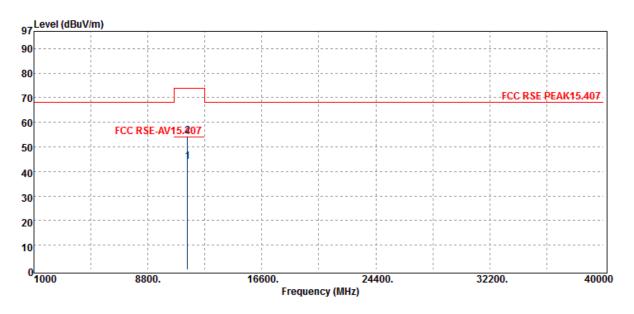
Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 185 of 195

Radiated Spurious Emission Measurement Result 802.11n HT40, 5725~5850 MHz (MIMO)

Operation Band :802.11 n40M **Test Date** :2015-06-25 Fundamental Frequency :5755 MHz Temp./Humi. :23deg_C / 58 RH Operation Mode Engineer :TX LOW :Curry

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



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
11510.00	Н	Average	22.99	21.03	44.02	54.00	-9.98
11510.00	Н	Peak	33.37	21.03	54.40	74.00	-19.60

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 186 of 195

Operation Band Fundamental Frequency Operation Mode EUT Pol.

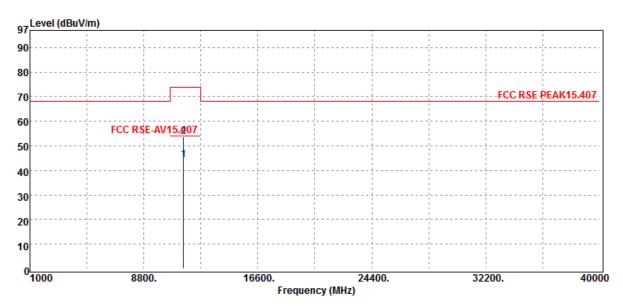
:802.11 n40M :5755 MHz :TX LOW :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



	Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margın	
			Mode	Reading Level		FS	@3m		
_	MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} B \mu V$	dB	dBμV/m	dBμV/m	dB	
	11510.00	Н	Average	23.11	21.03	44.14	54.00	-9.86	
	11510.00	Н	Peak	32.55	21.03	53.58	74.00	-20.42	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 187 of 195

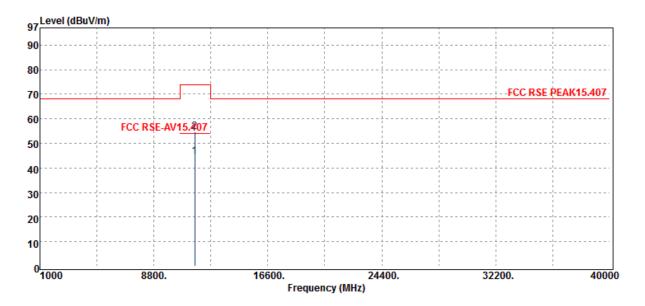
Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11 n40M :5795 MHz :TX HIGH :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23deg_C / 58 RH

:Curry Measurement Antenna Pol. :VERTICAL



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
11590.00	Н	Average	23.69	21.11	44.80	54.00	-9.20
11590.00	Н	Peak	33.57	21.11	54.68	74.00	-19.32
	MHz 11590.00	MHz F/H/E/S 11590.00 H	Mode MHz F/H/E/S PK/QP/AV 11590.00 H Average	Mode Reading Level MHz F/H/E/S PK/QP/AV dBμV 11590.00 H Average 23.69	Mode Reading Level MHz F/H/E/S PK/QP/AV dBμV dB 11590.00 H Average 23.69 21.11	MHz F/H/E/S Mode PK/QP/AV Reading Level dBμV FS dBμV/m 11590.00 H Average 23.69 21.11 44.80	Mode MHz Mode PK/QP/AV Reading Level dBμV FS @3m dBμV/m 11590.00 H Average 23.69 21.11 44.80 54.00

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low.

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 188 of 195

Operation Band Fundamental Frequency Operation Mode EUT Pol.

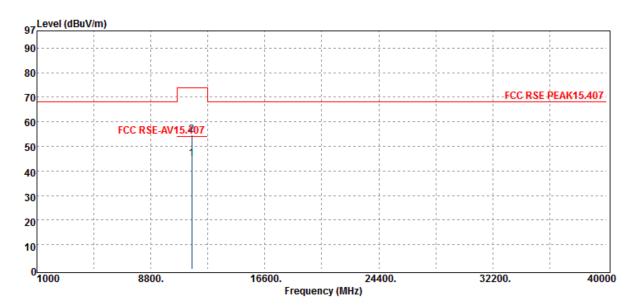
:802.11 n40M :5795 MHz :TX HIGH :E1 Plan

Test Date Temp./Humi. Engineer

:2015-06-25 :23deg_C / 58 RH

:Curry

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
		Mode	Reading Level		FS	@3m		
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} B \mu V$	dB	dBμV/m	dBμV/m	dB	
11590.00	Н	Average	23.71	21.11	44.82	54.00	-9.18	
11590.00	Н	Peak	33.70	21.11	54.81	74.00	-19.19	
	MHz 11590.00	MHz F/H/E/S 11590.00 H	Mode MHz F/H/E/S PK/QP/AV 11590.00 H Average	Mode Reading Level MHz F/H/E/S PK/QP/AV dBμV 11590.00 H Average 23.71	Mode Reading Level MHz F/H/E/S PK/QP/AV dBμV dB 11590.00 H Average 23.71 21.11	Mode Reading Level FS MHz F/H/E/S PK/QP/AV dBμV dB dBμV/m 11590.00 H Average 23.71 21.11 44.82	Mode Mode Meading Level FS @3m MHz F/H/E/S PK/QP/AV dBμV dB dBμV/m dBμV/m 11590.00 H Average 23.71 21.11 44.82 54.00	Mode Reading Level FS @3m MHz F/H/E/S PK/QP/AV dBμV dB dBμV/m dBμV/m dB 11590.00 H Average 23.71 21.11 44.82 54.00 -9.18

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 189 of 195

Band edge falling to restricted band

Operation Band :802.11 n40M Test Date :2015-06-24 Fundamental Frequency :5755 MHz Temp./Humi. :23deg_C / 58 RH

Operation Mode :Band Edge LOW Engineer :Curry

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

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	${ m d} B \mu V$	dB	dBμV/m	dBμV/m	dB
5725 00	E	Peak	60.73	11.04	71 77	78 20	-6 43

Operation Band :802.11 n40M Test Date :2015-06-24

Fundamental Frequency :5755 MHz Temp./Humi. :23deg C / 58 RH

Operation Mode :Band Edge LOW Engineer :Curry

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

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	$\mathrm{dB}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
5725.00	E	Peak	60.06	11.04	71.10	78.20	-7.10

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 190 of 195

Operation Band :802.11 n40M Test Date :2015-06-24

Fundamental Frequency :5795 MHz Temp./Humi. :23deg_C / 58 RH

Operation Mode :Band Edge HIGH Engineer :Curry EUT Pol. :E1 Plan Measurement Antenna Pol. :VERTICAL

Note Detector Spectrum Factor Actual Limit Margin Freq. FS Mode Reading Level @3mdBμV dBµV/m dBµV/m MHz F/H/E/S PK/QP/AV dΒ dΒ Е 52.91 11.50 64.41 78.20 -13.79 5850.00 Peak

:2015-06-24 Operation Band :802.11 n40M Test Date

Fundamental Frequency Temp./Humi. :5795 MHz :23deg C / 58 RH

Operation Mode :Band Edge HIGH Engineer :Curry

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

Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} \mathrm{B} \mu \mathrm{V}$	dB	dBμV/m	dBμV/m	dB
5850.00	Е	Peak	53.44	11.50	64.94	78.20	-13.26

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卯天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This 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 unquited and find the prior that the full terms of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 191 of 195

12. TRANSMISSION IN THE ABSENCE OF DATA

12.1 Standard Applicable

According to §15.407(c)

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

12.2 Result

No non-compliance noted:

Refer to the theory of operation.

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

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 192 of 195

13. FREQUENCY STABILITY

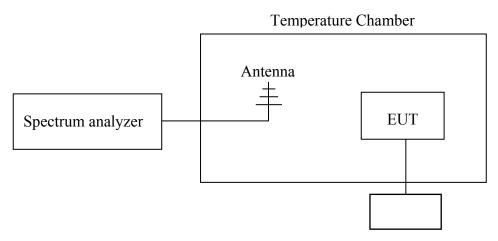
13.1 Standard Applicable

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

13.2 Measurement Procedure

- 1. The EUT was placed inside temperature chamber and powered and powered by nominal DC voltage.
- 2. Set EUT as normal operation.
- 3. Turn the EUT on and couple its output to spectrum.
- 4. Turn the EUT off and set the chamber to the highest temperature specified.
- 5. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT and measure the operating frequency.
- 6. Repeat step with the temperature chamber set to the lowest temperature.

13.3 Test SET-UP



Variable AC Power Supply

13.4 Measurement Equipment Used

Conducted Emission Test Site						
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.	
TYPE	WIFIX	NUMBER	NUMBER	CAL.	CAL DUE.	
Spectrum Analyzer	Agilent	E4446A	MY51100003	01/29/2015	01/28/2016	
Temperature Chamber	TERCHY	MHG-120LF	911009	05/06/2015	05/05/2016	
AC Power Supply	APW-105N	887592	All Power	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.

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

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



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 193 of 195

Measurement Result 13.5

Operation Mode	TX	Test Date	2015.07.01
Temperature	25	Test By	Cooper
Humidity	62 %		

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		36	5180.0000	5,180.012431	-0.0124
		44	5220.0000	5,220.012516	-0.0125
		48	5240.0000	5,240.012364	-0.0124
		52	5260.0000	5,260.012451	-0.0125
		60	5300.0000	5,300.012396	-0.0124
25	7.437	64	5320.0000	5,320.012357	-0.0124
23	7.4V	100	5500.0000	5,500.012422	-0.0124
		116	5580.0000	5,580.012412	-0.0124
		140	5700.0000	5,700.012461	-0.0125
		149	5745.0000	5,745.012511	-0.0125
		157	5785.0000	5,785.012486	-0.0125
		165	5825.0000	5,825.012400	-0.0124
	8.14V	36	5180.0000	5,180.012431	-0.0124
		44	5220.0000	5,220.012516	-0.0125
		48	5240.0000	5,240.012364	-0.0124
		52	5260.0000	5,260.012451	-0.0125
-20		60	5300.0000	5,300.012396	-0.0124
		64	5320.0000	5,320.012357	-0.0124
		100	5500.0000	5,500.012422	-0.0124
		116	5580.0000	5,580.012412	-0.0124
		140	5700.0000	5,700.012461	-0.0125
		149	5745.0000	5,745.012511	-0.0125
		157	5785.0000	5,785.012486	-0.0125
		165	5825.0000	5,825.012400	-0.0124

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 194 of 195

50		36	5180.0000	5,180.012431	-0.0124
		44	5220.0000	5,220.012516	-0.0125
		48	5240.0000	5,240.012364	-0.0124
		52	5260.0000	5,260.012451	-0.0125
		60	5300.0000	5,300.012396	-0.0124
	8.14V	64	5320.0000	5,320.012357	-0.0124
		100	5500.0000	5,500.012422	-0.0124
		116	5580.0000	5,580.012412	-0.0124
		140	5700.0000	5,700.012461	-0.0125
		149	5745.0000	5,745.012511	-0.0125
		157	5785.0000	5,785.012486	-0.0125
		165	5825.0000	5,825.012400	-0.0124
		36	5180.0000	5,180.012431	-0.0124
		44	5220.0000	5,220.012516	-0.0125
		48	5240.0000	5,240.012364	-0.0124
		52	5260.0000	5,260.012451	-0.0125
		60	5300.0000	5,300.012396	-0.0124
20		64	5320.0000	5,320.012357	-0.0124
-20	6.66V	100	5500.0000	5,500.012422	-0.0124
		116	5580.0000	5,580.012412	-0.0124
		140	5700.0000	5,700.012461	-0.0125
		149	5745.0000	5,745.012511	-0.0125
		157	5785.0000	5,785.012486	-0.0125
		165	5825.0000	5,825.012400	-0.0124
50	6.66V	36	5180.0000	5,180.012431	-0.0124
		44	5220.0000	5,220.012516	-0.0125
		48	5240.0000	5,240.012364	-0.0124
		52	5260.0000	5,260.012451	-0.0125
		60	5300.0000	5,300.012396	-0.0124
		64	5320.0000	5,320.012357	-0.0124
		100	5500.0000	5,500.012422	-0.0124
		116	5580.0000	5,580.012412	-0.0124
		140	5700.0000	5,700.012461	-0.0125
		149	5745.0000	5,745.012511	-0.0125
		157	5785.0000	5,785.012486	-0.0125
		165	5825.0000	5,825.012400	-0.0124

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

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery 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 WulkfunRoad.NewTaipeilindustrialPark WukuDistrict NewTaipeilindustrialPark WukuDistrict NewTaipeilindustria

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

台灣檢驗科技股份有限公司

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

www.tw.sqs.com



Report No.: ER/2015/40012 Issue Date: Jul. 09, 2015

Page 195 of 195

14. ANTENNA REQUIREMENT

14.1 Standard Applicable

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.

According to §15.407, If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

14.2 Antenna Connected Construction

An embedded-in antenna design is used.

The antenna connector is designed with unique type RF connector and no consideration of replacement. Please see EUT photo and antenna spec. for details.

The antenna gain is less than 6dBi. Therefore, it is not necessary to reduce maximum output power power limit.

~ End of Report ~

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

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