

Page: 1 of 283

## ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

# INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 15 SUBPART E REQUIREMENT

**Product Name: Embedded wireless module** 

**Brand Name: Silex** 

SX-SDMAC-2832S, SX-SDMAC-2832S+ Model No.:

For market segmentation **Model Difference:** 

FCC ID: **N6C-PMACS** 

**Report No.:** ER/2017/70043

**Issue Date:** Jul. 28, 2017

**FCC Rule Part: §15.407** 

silex technology, Inc

2-3-1Hikaridai, Seika-cho, Souraku-gun, Kyoto **Prepared for:** 

619-0237

SGS Taiwan Ltd.

**Electronics & Communication Laboratory** 

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

al Park, Wuku District, New Taipei City, Tai-

wan 24803





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

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

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

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

SGS Taiwan Ltd.



Page: 2 of 283

## VERIFICATION OF COMPLIANCE

silex technology,Inc **Applicant:** 

2-3-1Hikaridai, Seika-cho, Souraku-gun, Kyoto 619-0237

**Product Name:** Embedded wireless module

**Brand Name:** Silex

SX-SDMAC-2832S, SX-SDMAC-2832S+ Model No.:

For market segmentation **Model Difference:** 

FCC ID: N6C-PMACS

File Number: ER/2017/70043

Date of Test: Jul. 20, 2017(Conducted), Jul. 04, 2017 ~ Jul. 19, 2017(Radiated)

Date of EUT Received: Jul. 04, 2017

# 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: 2013 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:	Cooper Hou	Date:	Jul. 28, 2017	
_	Cooper Hsu / Engineer			
Prepared By:	Allen Tsai	Date:	Jul. 28, 2017	
Approved By:	Allen Tsai / Engineer  Lang  Jim Chang / Asst. Manager	Date:	Jul. 28, 2017	

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

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

台灣檢驗科技股份有限公司 t (886-2) 2299-3279

SGS Taiwan Ltd.



Page: 3 of 283

# **Revision History**

Report Number	Revision	Description	Issue Date
ER/2017/70043	Rev.00	Initial creation of document	Jul. 28, 2017

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and 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 WukungRand.NewTaipeiIndustrialPark Wukupistrict.NewTaipeiCityTaiwan24803/新北市五股區新七產業園區五工路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

台灣檢驗科技股份有限公司

SGS Taiwan Ltd.



Page: 4 of 283

# **Contents**

1	GENERAL INFORMATION	5
2	SYSTEM TEST CONFIGURATION	7
3	SUMMARY OF TEST RESULT	3
4	DESCRIPTION OF TEST MODES	4
5	MEASUREMENT UNCERTAINTY	9
6	CONDUCTED EMISSION TEST	10
7	DUTY CYCLE TEST SIGNAL	15
8	26dB & 6dB EMISSION BANDWIDTH MEASUREMENT	18
9	MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT	28
10	PEAK POWER SPECTRAL DENSITY	32
11	UNDESIRABLE RADIATED EMISSION MEASUREMENT	42
12	TRANSMISSION IN THE ABSENCE OF DATA	195
13	FREQUENCY STABILITY	196
14	ANTENNA REQUIREMENT	202

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and 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 WukungRand.NewTaipeiIndustrialPark Wukupistrict.NewTaipeiCityTaiwan24803/新北市五股區新七產業園區五工路134 號



Page: 5 of 283

#### **GENERAL INFORMATION**

#### **Product Description**

#### General:

Product Name:	Embedded wireless module
Brand Name:	Silex
Model No.:	SX-SDMAC-2832S, SX-SDMAC-2832S+
Model Difference:	For market segmentation
Software version:	N/A
Hardware version:	N/A
Power Supply:	3.3V from DC Power Supply

#### WLAN 5GHz:

Wi-Fi 802.11	Frequency Range	Channels	Rated Power (Avg.) (dBm)	Modulation Technology	
	5150~5250	4	9.92		
	5250~5350	4	9.97	OFDM	
а	5470~5725	12	9.95	OFDIVI	
	5725-5850	5	9.92		
	5150~5250	4	HT: 11.00 (Worst Case)		
n_HT	5250~5350	4	HT: 11.00 (Worst Case)	OFDM	
ac_VHT 20M	5470~5725	11	HT: 11.00 (Worst Case)	OFDIVI	
	5725-5850	5	HT: 11.00 (Worst Case)		
	5150~5250	2	HT: 9.82 (Worst Case)		
n_HT	5250~5350	2	HT: 9.92 (Worst Case)	OFDM	
ac_VHT 40M	5470~5725	5	HT: 9.92 (Worst Case)		
5725-5850		2	HT: 9.76 (Worst Case)		
	5150~5250	50 1 9.05			
ac_VHT	5250~5350	1	9.05	)5 OFD14	
80M	5470~5725	2	8.77	OFDM	
	5725-5850	1	8.82		
Modulation type		64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 802.11ac only			
Transition Rate:		802.11 a: 6/9/12/18/24/36/48/54 Mbps 802.11 n_20MHz: 6.5 - 72.2Mbps 802.11 n_40MHz: 13.5 - 150.0Mbps 802.11 ac_20MHz: 6.5 -86.7Mbps 802.11 ac_40MHz: 13.5 -200.0Mbps 802.11 ac_80MHz: 29.3 - 433.3Mbps			

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and 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 WukungRand.NewTaipeiIndustrialPark Wukupistrict.NewTaipeiCityTaiwan24803/新北市五股區新七產業園區五工路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



Page: 6 of 283

Antenna Type	Supplier	Antenna Part No.	Freq.	Peak Antenna Gain (dBi)	Worst Antenna Gain
PCB type	Molex	146153	5GHz	5.0	V
di-pole	Unictron	AA258 (H2B1PC1A1C)	5GHz	4.4	
antenna	Unictron	AA222 (H2B1PD1A1C)	5GHz	4.2	
antenna	PFU	PA391-222	5GHz	3.0	

Note: Pre-scanned was done on the above 4 antennas, the 146153 results higher emission at 5GHz. Therefore, the completed set of measurement was done on the antenna to be presented on this test report.

## Test Methodology of Applied Standards

FCC Part 15, Subpart E §15.407

FCC KDB 789033 D02 General UNII Test Procedures New Rules

FCC KDB 662911 D01 Multiple Transmitter Output

FCC KDB 644545 D03 Guidance for IEEE 802.11ac

ANSI C63.10:2013

Note:

1. All test items have been performed and record as per the above standards.

#### 1.3 Test Facility

SGS Taiwan Ltd. Electronics & Communication Laboratory No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803 (TAF code 0513)

FCC Registration Numbers are: 509634

#### 1.4 Special Accessories

There are no special accessories used while test was conducted.

#### 1.5 Equipment Modifications

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

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



Page: 7 of 283

#### 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. For emissions testing at or below 1 GHz, the table height shall be 0.8 m above the reference ground plan. For emission measurements above 1 GHz, the table height shall be 1.5 m. 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 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 <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

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



Page: 8 of 283

#### 2.4 Measurement Results Explanation Example

#### For all conducted test items:

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

#### Note:

The spectrum analyzer offset is derived from RF cable loss and attenuator factor. Following shows an offset computation example with cable loss 3.6dB, and 10dB attenuator. MIMO mode offset

= RF cable loss (3.6dB)+ attenuation factor(10dB) =13.6(dB)

# 2.5 Configuration of Tested System

Fig. 2-1 Radiated Emission



Fig. 2-2 Conducted (Antenna Port) Configuration Emission



**Table 2-1 Equipment Used in Tested System** 

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Data Cable	<b>Power Cord</b>
1.	Notebook	Lenovo	L440	R9-007LAZ	Shielded	Unshielded
2.	WLAN Test Software	N/A	N/A	N/A	N/A	N/A

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

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

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



Page: 3 of 283

## 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 & 99% 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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and 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 WukungRand.NewTaipeiIndustrialPark Wukupistrict.NewTaipeiCityTaiwan24803/新北市五股區新七產業園區五工路134 號 SGS Taiwan Ltd.

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

t (886-2) 2299-3279



Page: 4 of 283

## **DESCRIPTION OF TEST MODES**

#### **Operated in U-NII Bands**

#### Operated band in 5150 MHz ~5250 MHz:

802.11a / n HT20 Mode, 802.11ac VHT20 Mode		
Channel	Frequency	
36	5180	
40	5200	
44	5220	
48	5240	

802.11 n HT40 Mode, 802.11ac VHT40 Mode		
channel	Frequency	
38	5190	
46	5230	

802.11ac VHT80 Mode		
channel	Frequency	
42	5210	

#### Operated band in 5250 MHz ~5350 MHz:

802.11a / n HT20 Mode, 802.11ac VHT20 Mode		
channel	Frequency	
52	5260	
56	5280	
60	5300	
64	5320	

802.11 n HT40 Mode, 802.11ac VHT40 Mode				
channel	Frequency			
54	5270			
62	5310			

802.11ac V	/HT80 Mode
Channel	Frequency
58	5290

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and 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 WukungRand.NewTaipeiIndustrialPark Wukupistrict.NewTaipeiCityTaiwan24803/新北市五股區新七產業園區五工路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

www.tw.sqs.com



Page: 5 of 283

#### Operated band in 5500 MHz ~5700 MHz:

802.11a / n HT20 Mode, 802.11ac VHT20 Mode				
Channel	Frequency			
100	5500			
104	5520			
108	5540			
112	5560			
116	5580			
120	5600			
124	5620			
128	5640			
132	5660			
136	5680			
140	5700			

802.11 n HT40 Mode, 802.11ac VHT40 Mode				
channel	Frequency			
102	5510			
110	5550			
118	5590			
126	5630			
134	5670			

802.11ac VHT80 Mode			
channel	Frequency		
106	5530		
122	5610		

#### Operated band in 5745 MHz ~5850 MHz:

802.11a / n HT20 Mode, 802.11ac VHT20 Mode				
Channel	Frequency			
149	5745			
153	5765			
157	5785			
161	5805			
165	5825			

802.11 n HT40 Mode, 802.11ac VHT40 Mode			
channel	Frequency		
151	5755		
159	5795		

802.11ac VHT80 Mode			
channel	Frequency		
155	5775		

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and 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 WukungRand.NewTaipeiIndustrialPark Wukupistrict.NewTaipeiCityTaiwan24803/新北市五股區新七產業園區五工路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



Page: 6 of 283

#### 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:**

RADIATED EMI	2210N 1E21:					
RADIATED EMISSION TEST (BELOW 1 GHz)						
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	SISO
802.11ac_VHT80	5210	42	42	OFDM	MCS8	SISO
802.11a	5260~5320	52 to 64	52,60,64	OFDM	6	SISO
802.11ac_VHT80	5290	58	58	OFDM	MCS8	SISO
802.11a	5500~5720	100 to 140	100,116,140	OFDM	6	SISO
802.11ac_VHT80	5530~5690	106 to 138	106,122,138	OFDM	MCS8	SISO
802.11a	5745~5825	149 to 165	149,157,165	OFDM	6	SISO
802.11ac_VHT80	5775	155	155	OFDM	MCS8	SISO
	RADI	ATED EMISS	ION TEST (A	BOVE 1 GHz)		
MODE	FREQUENCY BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)	ANTENNA PORT
802.11a	5400 5040	20.45.40	20.44.40	OFDM	6	SISO
802.11n_HT20	5180~5240	36 to 48	36,44,48	OFDM	MCS8	SISO
802.11n_HT40	5190~5230	38 to 46	38,46	OFDM	MCS8	SISO
802.11ac_VHT80	5210	42	42	OFDM	MCS8	SISO
802.11a	F260 F220	F2 to 64	50.00.04	OFDM	6	SISO
802.11n_HT20	5260~5320	52 to 64	52,60,64	OFDM	MCS8	SISO
802.11n_HT40	5270~5310	54 to 62	54,62	OFDM	MCS8	SISO
802.11ac_VHT80	5290	58	58	OFDM	MCS8	SISO

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



Page: 7 of 283

MODE	FREQUENCY BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)	ANTENNA PORT
802.11a	5500~5720	100 to 144	100 116 140	OFDM	6	SISO
802.11n_HT20	5500~5720	100 10 144	100,116,140	OFDM	MCS8	SISO
802.11n_HT40	5510~5710	102 to 142	102,110,134	OFDM	MCS8	SISO
802.11ac_VHT80	5530~5610	106 to 122	106,122	OFDM	MCS8	SISO
802.11a	5745 5005 440 to	140 to 165	149,157,165	OFDM	6	SISO
802.11n_HT20	5745~5825	149 to 165	49 10 105   149,157,105	OFDM	MCS8	SISO
802.11n_HT40	5755~5795	151 to 159	151,159	OFDM	MCS8	SISO
802.11ac_VHT80	5775	155	155	OFDM	MCS8	SISO

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



Page: 8 of 283

#### ANTENNA PORT CONDUCTED MEASUREMENT:

7.1.1.2.1.1.7.1.5	ANTENNA FORT CONDUCTED MEASUREMENT:					
			IDUCTED TEST	1		
MODE	FREQUENCY BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)	ANTENNA PORT
802.11a	,			OFDM	6	SISO
802.11n_HT20 802.11ac_VHT20	5180~5240	36 to 48	36,44,48	OFDM	MCS8	SISO
802.11n_HT40 802.11ac_VHT40	5190~5230	38 to 46	38,46	OFDM	MCS8	SISO
802.11ac_VHT80	5210	42	42	OFDM	MCS8	SISO
802.11a				OFDM	6	SISO
802.11n_HT20 802.11ac_VHT20	5260~5320	52 to 64	52,60,64	OFDM	MCS8	SISO
802.11n_HT40 802.11ac_VHT40	5270~5310	54 to 62	54,62	OFDM	MCS8	SISO
802.11ac_VHT80	5290	58	58	OFDM	MCS8	SISO
802.11a				OFDM	6	SISO
802.11n_HT20 802.11ac_VHT20	5500~5700	100 to 140	100,116,140	OFDM	MCS8	SISO
802.11n_HT40 802.11ac_VHT40	5510~5670	102 to 134	102,110,134	OFDM	MCS8	SISO
802.11ac_VHT80	5530~5610	106 to 122	106,122	OFDM	MCS8	SISO
802.11a				OFDM	6	SISO
802.11n_HT20 802.11ac_VHT20	5745~5825	149 to 165	149,157,165	OFDM	MCS8	SISO
802.11n_HT40 802.11ac_VHT40	5755~5795	151 to 159	151,159	OFDM	MCS8	SISO
802.11ac_VHT80	5775	155	155	OFDM	MCS8	SISO

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

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

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

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

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

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

t (886-2) 2299-3279



Page: 9 of 283

#### **MEASUREMENT UNCERTAINTY**

Test Items	Uncertainty
AC Power Line Conducted Emission	+/- 2.586 dB
26dB & 6dB 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:

radiated optimized Emission:						
	9kHz-30MHz: +/-2.87dB					
	30MHz - 180MHz: +/- 3.37dB					
Measurement uncertainty	180MHz -417MHz: +/- 3.19dB					
(Polarization : <b>Vertical</b> )	0.417GHz-1GHz: +/- 3.19dB					
	1GHz - 18GHz: +/- 4.04dB					
	18GHz - 40GHz: +/- 4.04dB					

	9kHz-30MHz: +/-2.87dB				
	30MHz - 167MHz: +/- 4.22dB				
Measurement uncertainty	167MHz -500MHz: +/- 3.44dB				
(Polarization : <b>Horizontal</b> )	0.5GHz-1GHz: +/- 3.39dB				
	1GHz - 18GHz: +/- 4.08dB				
	18GHz - 40GHz: +/- 4.08dB				

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

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery 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 WulkunRoand.NewTaipeiIndustrialPark. WulkunDistrict. NewTaipeiCity.Taiwan 24803/新 北市 五股區新北產業園區五工路 134 號

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

台灣檢驗科技股份有限公司 t (886-2) 2299-3279



Page: 10 of 283

#### CONDUCTED EMISSION TEST

#### **Standard Applicable** 6.1

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

#### 6.2 **Measurement Equipment Used**

Conducted Emission Test Site								
EQUIPMENT	·		SERIAL	LAST	CAL DUE.			
TYPE		NUMBER	NUMBER	CAL.				
EMI Test Receiver	R&S	ESCI7	100760	05/11/2017	05/10/2018			
LISN	SCHWARZBECK	NSLK 8127	8127-649	05/22/2017	05/21/2018			
LISN	MESS TEC	FCC-LISN-50/2 50-25-2-01	4034	03/19/2017	03/18/2018			
Coaxial Cables	N/A	WK CE Cable	N/A	11/26/2016	11/25/2017			

#### 6.3 **EUT Setup**

- 1. The conducted emission tests were performed in the test site, using the setup in accordance with the ANSI C63.10:2013.
- 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 <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

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

台灣檢驗科技股份有限公司 t (886-2) 2299-3279

SGS Taiwan Ltd.

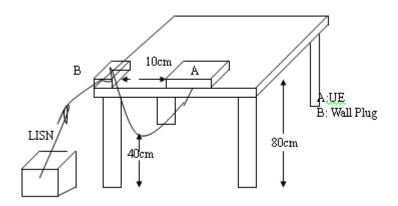
<sup>1.</sup> The lower limit shall apply at the transition frequencies

<sup>2.</sup> The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50



Page: 11 of 283

#### **Test SET-UP** 6.4



#### 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.

#### **Measurement Result** 6.6

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

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

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

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90天。本報告未經本公司書面許可,不可部份複製。

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



Page: 12 of 283

#### AC POWER LINE CONDUCTED EMISSION TEST DATA

Site Conduction Room

Limit: FCC Class B Conduction(QP)

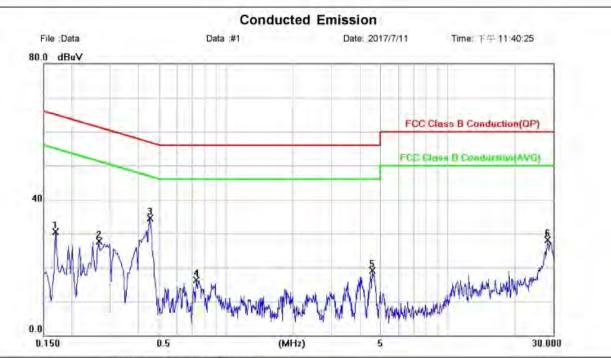
Mode: Operation

Note:

Phase: AC 110V/60Hz Power:

i emperature:

Humidity: 58 %



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
MH	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment	
1		0.1700	30.32	0.12	30.44	64.96	-34.52	peak	
2		0.2660	27.62	0.12	27.74	61.24	-33.50	peak	
3	*	0.4540	34.46	0.11	34.57	56.80	-22.23	peak	
4	+	0.7340	16.27	0.12	16.39	56.00	-39,61	peak	
5		4.5500	18.93	0.26	19.19	56.00	-36.81	peak	
6		28.3780	27.26	0.84	28.10	60.00	-31.90	peak	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 13 of 283

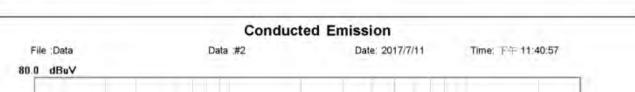
Site Conduction Room

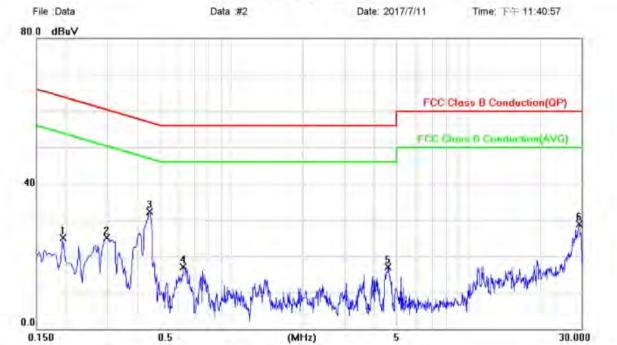
Limit: FCC Class B Conduction(QP)

Mode: Operation

Note:

l'emperature: 20 C Phase: AC 110V/60Hz Humidity: Power:





No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1940	25.08	0.12	25.20	63.86	-38.66	peak	
2		0.2980	25.03	0.12	25.15	60.30	-35.15	peak	
3		0.4500	32,28	0.11	32,39	56.88	-24,49	peak	
4		0.6260	17.05	0.11	17.16	56.00	-38.84	peak	
5		4.5820	16.76	0.27	17.03	56.00	-38.97	peak	
6		29.2900	28.00	0.86	28.86	60.00	-31.14	peak	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 14 of 283

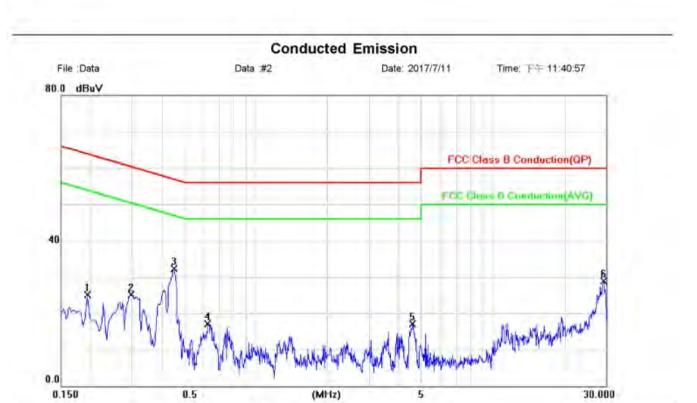
Site Conduction Room

Limit: FCC Class B Conduction(QP)

Mode: Operation

Note:

Phase: emperature: 20 C AC 110V/60Hz Humidity: Power:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1940	25.08	0.12	25.20	63.86	-38.66	peak	
2		0.2980	25.03	0.12	25.15	60.30	-35.15	peak	
3	*	0.4500	32,28	0.11	32,39	56.88	-24,49	peak	
4		0.6260	17.05	0.11	17.16	56.00	-38.84	peak	
5		4.5820	16.76	0.27	17.03	56.00	-38.97	peak	
6		29.2900	28.00	0.86	28.86	60.00	-31.14	peak	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 15 of 283

#### **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:**

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

#### **Duty Cycle:**

Mode	Duty Cycle (%)	Duty Factor (dB) =10*log ( 1/Duty Cycle )
802.11a	95.51	0.20
802.11n_20	95.45	0.20
802.11ac_20	95.00	0.22
802.11n_40	90.77	0.42
802.11ac_40	90.56	0.43
802.11ac_80	83.59	0.78

Duty Cycle Factor:  $10 * \log(1/0.9551) = 0.2$ Duty Cycle Factor:  $10 * \log(1/0.9545) = 0.2$ Duty Cycle Factor:  $10 * \log(1/0.95) = 0.22$ Duty Cycle Factor:  $10 * \log(1/0.9077) = 0.42$ Duty Cycle Factor:  $10 * \log(1/0.9056) = 0.43$ Duty Cycle Factor:  $10 * \log(1/0.8359) = 0.78$ 

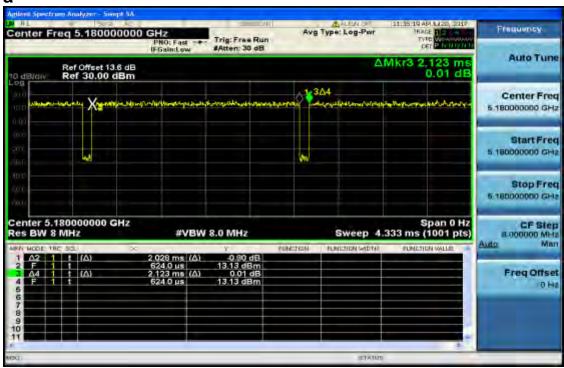
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

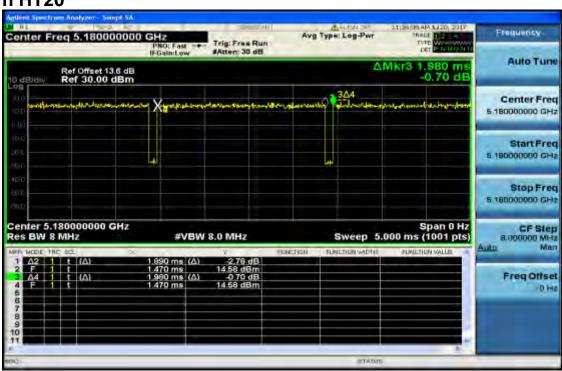


Page: 16 of 283

## **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.

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

Ref 另有說明,此報告結果僅對測試之樣品負責,同時止樣品僅保留到天。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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of this document is unquitable and effective previously the resource of this document. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

t (886-2) 2299-3279

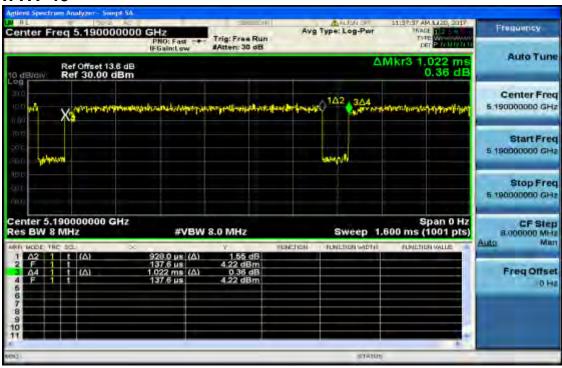
www.tw.sqs.com



Page: 17 of 283



### 802.11n HT 40



#### 802.11 ac VHT 80



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

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

Ref 另有說明,此報告結果僅對測試之樣品負責,同時止樣品僅保留到天。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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of this document is unquitable and effective previously the resource of this document. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

t (886-2) 2299-3279

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



Page: 18 of 283

#### 8 26DB & 6DB EMISSION BANDWIDTH MEASUREMENT

#### 8.1 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

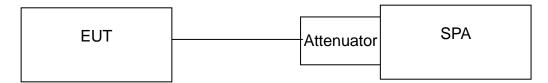
#### 8.2 Measurement Procedure

- 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.
- 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.

#### 8.3 Measurement Equipment Used

SGS Conducted Room								
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due			
Power Meter	Anritsu	ML2495A	1005007	12/15/2016	12/14/2017			
Power Sensor	Anritsu	MA2411B	917032	12/15/2016	12/14/2017			
DC Block	Mini-Circuits	BLK-18-S+	1	01/05/2017	01/04/2018			
Coaxial Cable	HUBER+SUHNER	SUCOFLEX 102	23670/2	01/05/2017	01/04/2018			
Attenuator	Mini-Circuit	BW-S10W2+	2	01/05/2017	01/04/2018			

#### 8.4 Test Set-up



#### 8.5 Measurement Result

#### 26dB Bandwidth

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

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

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



Page: 19 of 283

802.11a Main

802.11n\_HT20\_Main

Frequency (MHz)	26dB BW (MHz)	10 Log (B) (dB)	Frequency (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5180	19.49	12.897	5180	20.04	13.018
5220	19.83	12.973	5220	19.88	12.984
5240	19.46	12.891	5240	20.17	13.048
5260	19.62	12.927	5260	19.91	12.991
5300	19.69	12.942	5300	19.86	12.980
5320	19.17	12.826	5320	20.05	13.021
5500	19.60	12.923	5500	20.26	13.067
5580	19.27	12.849	5580	19.82	12.972
5700	19.50	12.901	5700	20.59	13.137

#### 802.11n HT40 Main

26dB BW (MHz)	10 Log (B) (dB)
41.70	16.202
43.09	16.344
40.92	16.119
40.56	16.081
40.51	16.076
41.03	16.131
40.91	16.118
	BW (MHz) 41.70 43.09 40.92 40.56 40.51 41.03

#### 802.11ac \_VHT80\_Main

Frequency (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5210	82.91	19.186
5290	82.21	19.149
5530	82.08	19.142
5610	82.27	19.152

#### 6dB Bandwidth (5725 MHz~ 5850 MHz) measure with Peak detector for FCC 802.11a\_Main 802.11n\_HT20\_Main

Frequency (MHz)	6dB BW (MHz)	10 Log (B) (dB)
5745	15.17	11.810
5785	15.33	11.856
5825	15.16	11.807

Frequency (MHz)	6dB BW (MHz)	10 Log (B) (dB)		
5745	15.16	11.806		
5785	15.14	11.802		
5825	15.12	11.796		

#### 802.11n\_HT40\_Main

Frequency (MHz)	6dB BW (MHz)	10 Log (B) (dB)		
5755	35.15	15.460		
5795	35.15	15.459		

#### 802.11ac \_VHT80\_Main

Frequency (MHz)	6dB BW (MHz)	10 Log (B) (dB)
5775	75.13	18.758

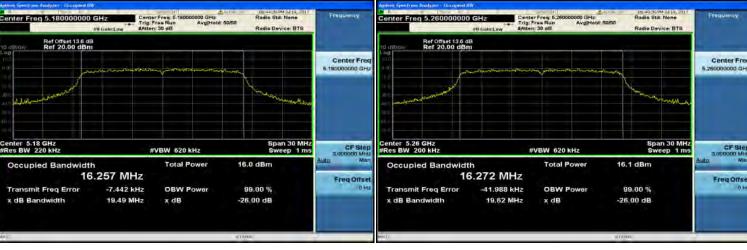
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未總本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf,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



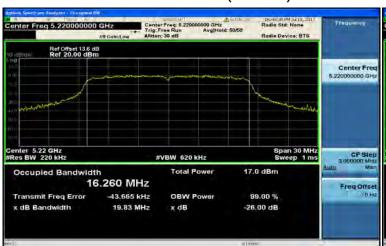
Page: 20 of 283

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

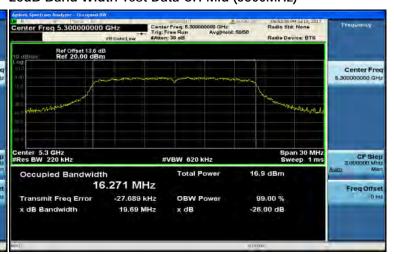
802.11a, 5250~5350 MHz 26dB Band Width Test Data CH-Low (5260MHz)



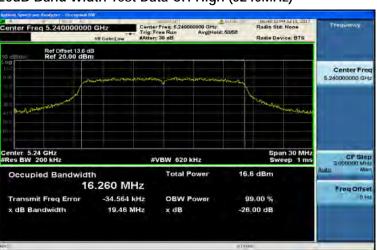
#### 26dB Band Width Test Data CH-Mid (5220MHz)



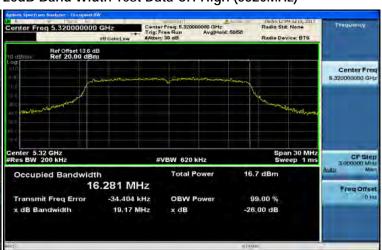
#### 26dB Band Width Test Data CH-Mid (5300MHz)



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



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



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

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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions for Electronic Documents at <a href="https sibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of

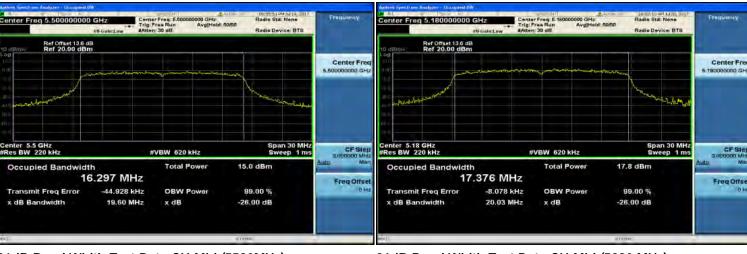
SGS Taiwan Ltd.



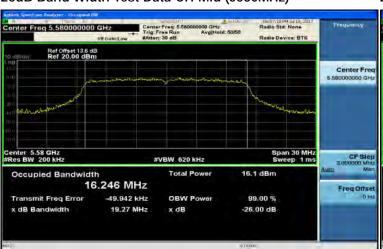
Page: 21 of 283

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

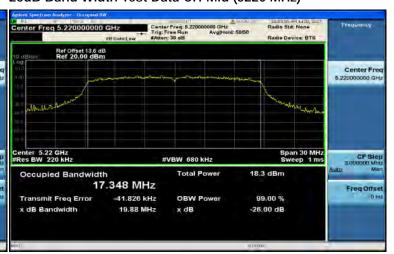
802.11n HT20, 5150~5250 MHz 26dB Band Width Test Data CH-Low (5180 MHz)



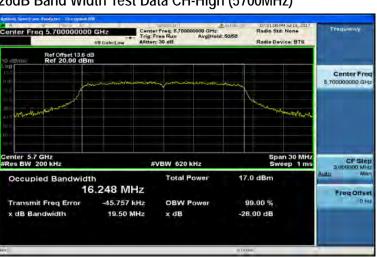
#### 26dB Band Width Test Data CH-Mid (5580MHz)



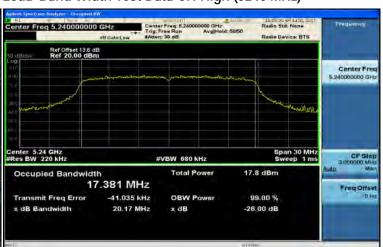
#### 26dB Band Width Test Data CH-Mid (5220 MHz)



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



#### 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 <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions for Electronic Documents at <a href="https sibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of

SGS Taiwan Ltd.

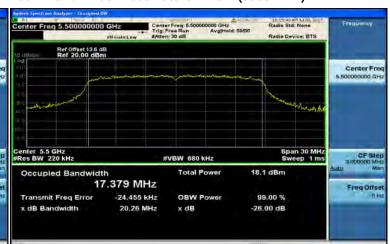


Page: 22 of 283

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

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

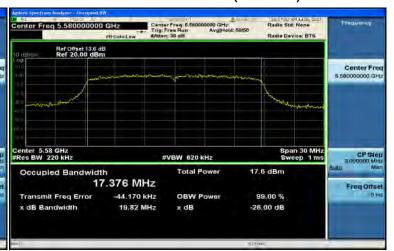




#### 26dB Band Width Test Data CH-Mid (5300 MHz)

## Radio Std: None Ref Offset 13.6 dB Ref 20.00 dBm Center Free CF Ste #VBW 680 kHz Occupied Bandwidth 17.365 MHz Freq Offse -22.167 kHz 19.86 MHz x dB -26.00 dB

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



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

# 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 <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions for Electronic Documents at <a href="https sibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of

f (886-2) 2298-0488

SGS Taiwan Ltd.

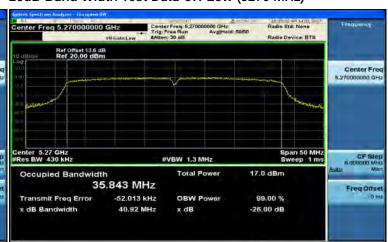


Page: 23 of 283

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

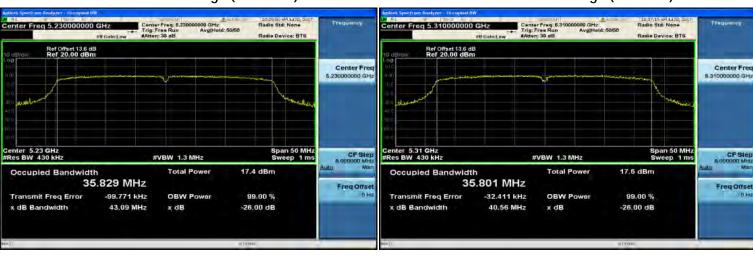
802.11n HT40, 5250~5350 MHz 26dB Band Width Test Data CH-Low (5270 MHz)





#### 26dB Band Width Test Data CH-High (5230 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.

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

解析方角 現明・近報告題未往野湖県之様命資質「同時起帳命貨体質別大。本教育未整本公司書面計引・不引命的複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms and conditions.htm">www.sgs.com/terms and conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms e-document.htm">www.sgs.com/terms e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This documents be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of

f (886-2) 2298-0488

SGS Taiwan Ltd.



Page: 24 of 283

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



802.11ac VHT80, 5150~5250 MHz 26dB Band Width Test Data CH-Mid (5210 MHz)



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

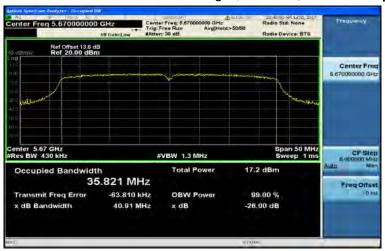


802.11ac VHT80, 5250~5350 MHz

26dB Band Width Test Data CH-Mid (5290 MHz)



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

SGS Taiwan Ltd.



Page: 25 of 283

## 802.11ac VHT80, 5470~5725 MHz 26dB Band Width Test Data CH-Low (5530 MHz)



# 802.11ac VHT80, 5470~5725 MHz 26dB Band Width Test Data CH-High (5610 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.

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

f (886-2) 2298-0488

SGS Taiwan Ltd.



Page: 26 of 283

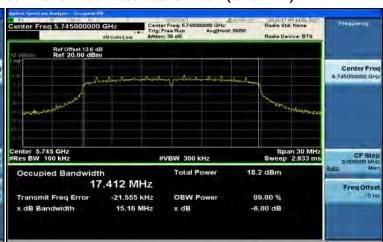
6dB Band Width measure with Peak detector for FCC

802.11a, 5725~5850 MHz

6dB Band Width Test Data CH-Low (5745 MHz)

802.11n\_HT20, 5725~5850 MHz 6dB Band Width Test Data CH-Low (5745 MHz)

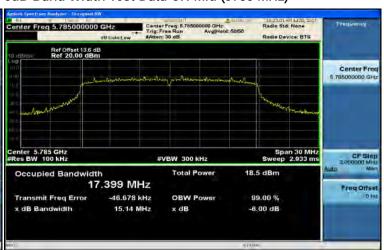




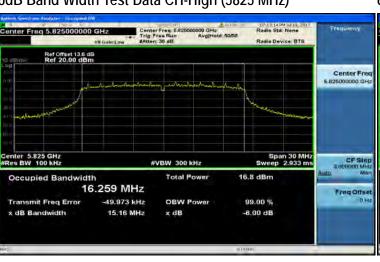
#### 6dB Band Width Test Data CH-Mid (5785 MHz)

# Radio Device: BTS Ref Offset 13.6 dB Ref 20.00 dBm Center Fre 5,785000000 GH nter 5.785 GHz 16.258 MHz Freq Offse OBW Pov 99.00 % mit Freq Erro

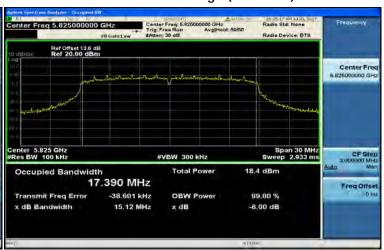
## 6dB Band Width Test Data CH-Mid (5785 MHz)



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



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

SGS Taiwan Ltd.



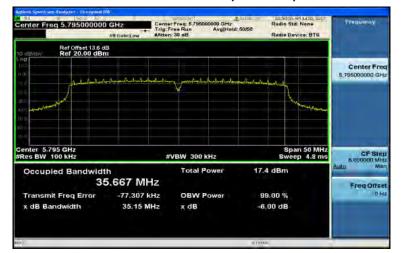
Page: 27 of 283

## 802.11n\_HT40, 5725~5850 MHz 6dB Band Width Test Data CH-Low (5755 MHz)

## 802.11ac VHT80, 5725~5850 MHz 6dB Band Width Test Data CH-Low (5775 MHz)



#### 6dB Band Width Test Data CH-Mid (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. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

解析方角 現明・近報告題未往野湖県之様命資質「同時起帳命貨体質別大。本教育未整本公司書面計引・不引命的複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms and conditions.htm">www.sgs.com/terms and conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms e-document.htm">www.sgs.com/terms e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This documents be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of

f (886-2) 2298-0488

SGS Taiwan Ltd.



Page: 28 of 283

#### MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

#### **Standard Applicable** 9.1

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

#### 9.2 Measurement Procedure

- Place the EUT on the table and set it in transmitting mode.
- The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules .
- Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the power meter
- 4. Power Meter is used as the auxiliary test equipment to conduct the output power meas-
- 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**

SGS Conducted Room									
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due				
EXA Spectrum Analyzer	Agilent	N9030A	MY53120760	03/21/2017	03/20/2018				
DC Block	Mini-Circuits	BLK-18-S+	1	01/05/2017	01/04/2018				
Coaxial Cable	HUBER+SUHNER	SUCOFLEX 102	23670/2	01/05/2017	01/04/2018				
Attenuator	Mini-Circuit	BW-S10W2+	2	01/05/2017	01/04/2018				

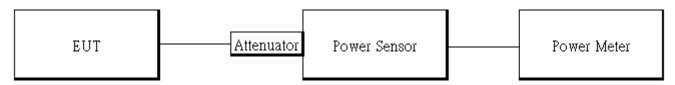
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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



Page: 29 of 283

#### 9.4 Test Set-up



## 9.5 Measurement Result **Conducted output power (FCC)**

### 802.11a Main

002.11a_	Frequency	Data	TOTAL		REQUIRED		
СН	(MHz)	Rate	POWER		LIMIT		RESULT
	(111112)	rtato	(dBm)		(dBm)		
36	5180	6	9.78		30		PASS
44	5220	6	9.92		30		PASS
48	5240	6	9.90		30		PASS
52	5260	6	9.93	23.98	or 11+10log(B) =	23.93	PASS
60	5300	6	9.97	23.98	or 11+10log(B) =	23.94	PASS
64	5320	6	9.94	23.98	or 11+10log(B) =	23.83	PASS
100	5500	6	9.81	23.98	or 11+10log(B) =	23.92	PASS
116	5580	6	9.95	23.98	or 11+10log(B) =	23.85	PASS
140	5700	6	9.94	23.98	or 11+10log(B) =	23.90	PASS
149	5745	6	9.92		30		PASS
157	5785	6	9.81		30		PASS
165	5825	6	9.87		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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

SGS Taiwan Ltd.



Page: 30 of 283

#### 802.11n\_HT20\_Main

СН	Frequency (MHz)	Data Rate	TOTAL POWER (dBm)		REQUIRED LIMIT (dBm)		RESULT
36	5180	MCS0	11.00		30		PASS
44	5220	MCS0	10.81		30		PASS
48	5240	MCS0	10.71		30		PASS
52	5260	MCS0	11.00	23.98	or 11+10log(B) =	23.99	PASS
60	5300	MCS0	10.94	23.98	or 11+10log(B) =	23.98	PASS
64	5320	MCS0	10.96	23.98	or 11+10log(B) =	24.02	PASS
100	5500	MCS0	11.00	23.98	or 11+10log(B) =	24.07	PASS
116	5580	MCS0	10.67	23.98	or 11+10log(B) =	23.97	PASS
140	5700	MCS0	10.83	23.98	or 11+10log(B) =	24.14	PASS
149	5745	MCS0	11.00		30		PASS
157	5785	MCS0	11.00		30		PASS
165	5825	MCS0	10.71		30		PASS

### 802.11ac\_VHT20\_Main

СН	Fre quency (MHz)	Data Rate	TOTAL POWER (dBm)		REQUIRED LIMIT (dBm)		RESULT
36	5180	MCS0	10.88		30		PASS
44	5220	MCS0	10.81		30		PASS
48	5240	MCS0	10.72		30		PASS
52	5260	MCS0	10.91	23.98	or 11+10log(B) =	23.99	PASS
60	5300	MCS0	10.90	23.98	or 11+10log(B) =	23.98	PASS
64	5320	MCS0	10.88	23.98	or 11+10log(B) =	24.02	PASS
100	5500	MCS0	10.92	23.98	or 11+10log(B) =	24.07	PASS
116	5580	MCS0	10.66	23.98	or 11+10log(B) =	23.97	PASS
140	5700	MCS0	10.81	23.98	or 11+10log(B) =	24.14	PASS
149	5745	MCS0	10.82		30		PASS
157	5785	MCS0	10.84		30		PASS
165	5825	MCS0	10.69		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 <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

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

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

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

\*\*No.134.\*\*WuKungRoad,NewTaipeilndustrialPark,WukungRoad,NewTaipeilndustrialPark,WukungRoad,NewTaipeilndustrialPark,WukungRoad,NewTaipeilndustrialPark,WukungRoad,NewTaipeilndustrialPark,WukungRoad,NewTaipeilndustrialPark,WukungRoad,NewTaipeil

t (886-2) 2299-3279



Page: 31 of 283

### 802.11n\_HT40\_Main

СН	Frequency (MHz)	Data Rate	TOTAL POWER (dBm)		REQUIRED LIMIT (dBm)		RESULT
38	5190	MCS0	9.76		30		PASS
46	5230	MCS0	9.82		30		PASS
54	5270	MCS0	9.85	23.98	or 11+10log(B) =	27.12	PASS
62	5310	MCS0	9.92	23.98	or 11+10log(B) =	27.08	PASS
102	5510	MCS0	9.88	23.98	or 11+10log(B) =	27.08	PASS
110	5550	MCS0	9.92	23.98	or 11+10log(B) =	27.13	PASS
134	5670	MCS0	9.78	23.98	or 11+10log(B) =	27.12	PASS
151	5755	MCS0	9.76		30		PASS
159	5795	MCS0	9.67		30		PASS

## 802.11ac\_VHT40\_Main

СН	Frequency (MHz)	Data Rate	TOTAL POWER (dBm)		REQUIRED LIMIT (dBm)		RESULT
38	5190	MCS0	9.64		30		PASS
46	5230	MCS0	9.72		30		PASS
54	5270	MCS0	9.74	23.98	or 11+10log(B) =	27.12	PASS
62	5310	MCS0	9.81	23.98	or 11+10log(B) =	27.08	PASS
102	5510	MCS0	9.75	23.98	or 11+10log(B) =	27.08	PASS
110	5550	MCS0	9.78	23.98	or $11+10\log(B) =$	27.13	PASS
134	5670	MCS0	9.63	23.98	or 11+10log(B) =	27.12	PASS
151	5755	MCS0	9.61		30		PASS
159	5795	MCS0	9.58		30		PASS

### 802.11ac\_VHT80\_Main

СН	Frequency (MHz)	Data Rate	TOTAL POWER (dBm)		REQUIRED LIMIT (dBm)		RESULT
42	5210	MCS0	9.05		30		PASS
58	5290	MCS0	9.05	23.98	or 11+10log(B) =	30.15	PASS
106	5530	MCS0	8.77	23.98	or 11+10log(B) =	30.14	PASS
122	5610	MCS0	8.72	23.98	or 11+10log(B) =	30.15	PASS
155	5775	MCS0	8.82		30		PASS

Note:

SISO offset=

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery 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.NewTaipeiIndustrialPark WulkupDistrict. NewTaipeiCity\_Taiwan24803/新北市五股區新北產業園區五工路 134 號

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

13.6 dB



Page: 32 of 283

#### 10 PEAK POWER SPECTRAL DENSITY

## 10.1 Standard Applicable

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

#### 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.
- 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=500 kHz, VBW≥ 3RBW, 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. 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 <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

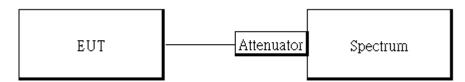


Page: 33 of 283

### 10.3 Measurement Equipment Used

SGS Conducted Room								
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due			
EXA Spectrum Analyzer	Agilent	N9030A	MY53120760	03/21/2017	03/20/2018			
DC Block	Mini-Circuits	BLK-18-S+	1	01/05/2017	01/04/2018			
Coaxial Cable	HUBER+SUHNER	SUCOFLEX 102	23670/2	01/05/2017	01/04/2018			
Attenuator	Mini-Circuit	BW-S10W2+	2	01/05/2017	01/04/2018			

## 10.4 Test Set-up



### 10.5 Measurement Result

POWER DENSITY 802.11a MODE							
Frequency (MHz)	PPSD W/O Duty Factor (dBm)	Duty Factor	PPSD With Duty Factor (dBm)	Limit (dBm)	Margin (dB)		
5180	-5.10	0.20	-4.90	17	-21.90		
5220	-4.40	0.20	-4.20	17	-21.20		
5240	-4.80	0.20	-4.60	17	-21.60		
5260	-4.50	0.20	-4.30	11	-15.30		
5300	-3.85	0.20	-3.65	11	-14.65		
5320	-3.73	0.20	-3.53	11	-14.53		
5500	-5.83	0.20	-5.63	11	-16.63		
5580	-4.64	0.20	-4.44	11	-15.44		
5700	-4.68	0.20	-4.48	11	-15.48		
5745	4.38	0.20	4.38	30	-25.62		
5785	5.06	0.20	5.06	30	-24.94		
5825	3.16	0.20	3.16	30	-26.84		

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90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery 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 WulkunRoand.NewTaipeiIndustrialPark. WulkunDistrict. NewTaipeiCity.Taiwan 24803/新 北市 五股區新北產業園區五工路 134 號



Page: 34 of 283

	POWER DENSITY 802.11n HT20 MODE							
Frequency (MHz)	PPSD W/O Duty Factor (dBm)	Duty Factor	PPSD With Duty Factor (dBm)	Limit (dBm)	Margin (dB)			
5180	-3.41	0.20	-3.21	17	-20.21			
5220	-3.22	0.20	-3.02	17	-20.02			
5240	-3.03	0.20	-2.83	17	-19.83			
5260	-3.55	0.20	-3.35	11	-14.35			
5300	-2.46	0.20	-2.26	11	-13.26			
5320	-3.20	0.20	-3.00	11	-14.00			
5500	-3.34	0.20	-3.14	11	-14.14			
5580	-3.58	0.20	-3.38	11	-14.38			
5700	-3.19	0.20	-2.99	11	-13.99			
5745	5.18	0.20	5.18	30	-24.82			
5785	5.58	0.20	5.58	30	-24.42			
5825	5.22	0.20	5.22	30	-24.78			

	POWER DENSITY 802.11n HT40 MODE							
Frequency (MHz)	PPSD W/O Duty Factor (dBm)	Duty Factor	PPSD With Duty Factor (dBm)	Limit (dBm)	Margin (dB)			
5190	-9.5	0.42	-9.08	17	-26.08			
5230	-8.09	0.42	-7.67	17	-24.67			
5270	-7.2	0.42	-6.78	11	-17.78			
5310	-8	0.42	-7.58	11	-18.58			
5510	-9.06	0.42	-8.64	11	-19.64			
5550	-7.93	0.42	-7.51	11	-18.51			
5670	-8.36	0.42	-7.94	11	-18.94			
5755	0.74	0.42	0.74	30	-29.26			
5795	0.46	0.42	0.46	30	-29.54			

POWER DENSITY 802.11ac VHT80 MODE								
Frequency (MHz) PPSD W/O Duty Factor (dBm) Duty Factor (dBm) Limit (dBm) Margin (dBm)								
5210	-14.77	0.78	-13.99	17	-30.99			
5290	-14.56	0.78	-13.78	11	-24.78			
5530	-14.82	0.78	-14.04	11	-25.04			
5610	-14.26	0.78	-13.48	11	-24.48			
5775	-2.59	0.78	-2.59	30	-32.59			

Note:

SISO offset=

13.6 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90天。本報告未經本公司書面許可,不可部份複製。

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

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

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

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

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

\*\*No.134.\*\*WuKungRoad,NewTaipeilndustrialPark,WukungRoad,NewTaipeilndustrialPark,WukungRoad,NewTaipeilndustrialPark,WukungRoad,NewTaipeilndustrialPark,WukungRoad,NewTaipeilndustrialPark,WukungRoad,NewTaipeilndustrialPark,WukungRoad,NewTaipeil



Page: 35 of 283

#### 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)



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



#### 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)



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

f (886-2) 2298-0488

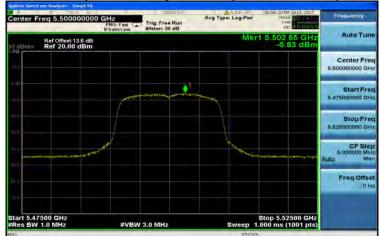
SGS Taiwan Ltd.



Page: 36 of 283

#### 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)



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



#### 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)



### 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90天。本報告未經本公司書面許可,不可部份複製。

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

f (886-2) 2298-0488

SGS Taiwan Ltd.



Page: 37 of 283

# 802.11n HT20, 5150~5250 MHz

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



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

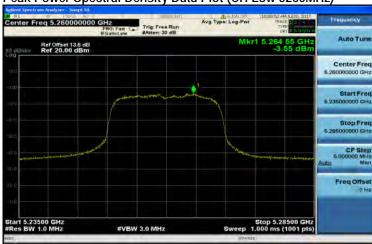


### Peak Power Spectral Density Data Plot (CH High 5240 MHz)

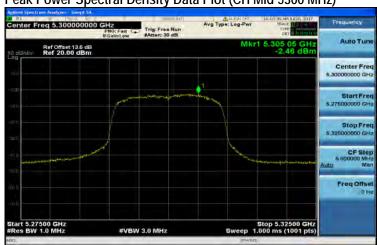


#### 802.11n HT20, 5250~5350 MHz

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



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



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

f (886-2) 2298-0488

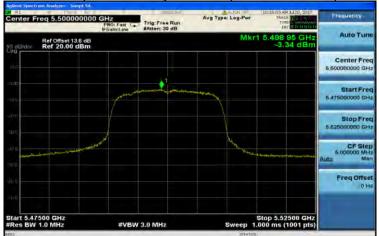
SGS Taiwan Ltd.



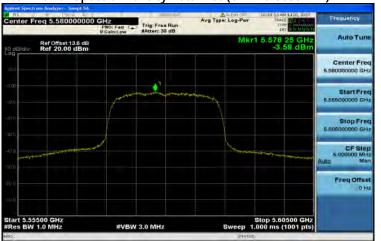
Page: 38 of 283

# 802.11n HT20, 5470~5725 MHz

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



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



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

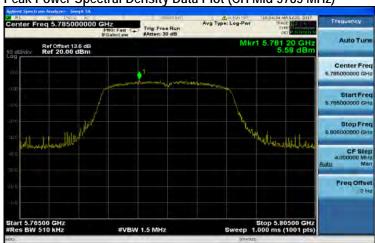


#### 802.11n HT20, 5725~5850 MHz

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



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



## 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90天。本報告未經本公司書面許可,不可部份複製。

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

f (886-2) 2298-0488

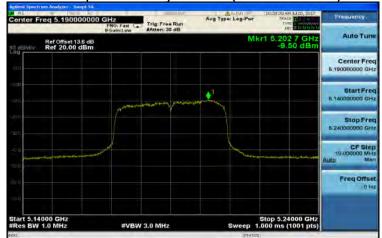
SGS Taiwan Ltd.



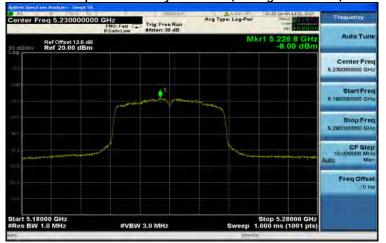
Page: 39 of 283

## 802.11n HT40, 5150~5250 MHz

Peak Power Spectral Density Data Plot (CH Low 5190 MHz)

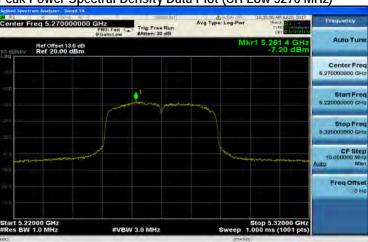


### Peak Power Spectral Density Data Plot (CH High 5230 MHz)

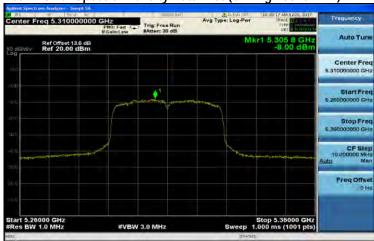


#### 802.11n HT40, 5250~5350 MHz

Peak Power Spectral Density Data Plot (CH Low 5270 MHz)



### Peak Power Spectral Density Data Plot (CH High 5310 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。

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

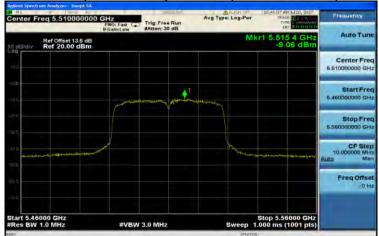
SGS Taiwan Ltd.



Page: 40 of 283

## 802.11n HT40, 5470~5725 MHz

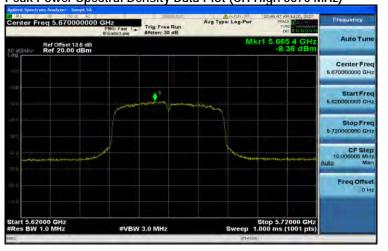
Peak Power Spectral Density Data Plot (CH Low 5510 MHz)



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

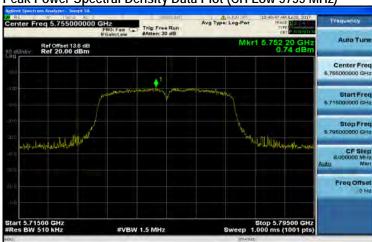


### Peak Power Spectral Density Data Plot (CH High 5670 MHz)

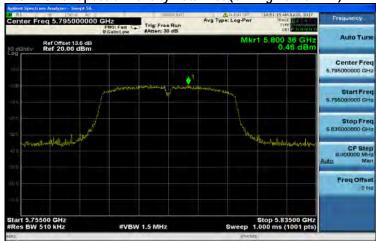


## 802.11n HT40, 5725~5850 MHz

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

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

f (886-2) 2298-0488

SGS Taiwan Ltd.



Page: 41 of 283

# 802.11ac VHT80, 5150~5250 MHz

Peak Power Spectral Density Data Plot (CH Mid 5210 MHz)



802.11ac VHT80, 5250~5350 MHz

Peak Power Spectral Density Data Plot (CH Mid 5290 MHz)



802.11ac VHT80, 5470~5725 MHz

Peak Power Spectral Density Data Plot (CH Low 5530 MHz)



802.11ac VHT80, 5470~5725 MHz

Peak Power Spectral Density Data Plot (CH High 5610 MHz)



802.11ac VHT80, 5725~5850 MHz

Peak Power Spectral Density Data Plot (CH Mid 5775 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。

除非另有說明,此報告結果僅對測試之株品負責,同時此樣品僅保留則天。本報告未經本公司著血許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms and conditions.htm">www.sgs.com/terms and conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms e-document.htm">www.sgs.com/terms and conditions.htm</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms e-document.htm">www.sgs.com/terms and conditions.htm</a> 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

f (886-2) 2298-0488

SGS Taiwan Ltd.



Page: 42 of 283

#### 11 UNDESIRABLE RADIATED EMISSION MEASUREMENT

#### 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 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

APPLICABLE TO	LI	MIT	
FCC KDB 789033 D02 General UNII Test Procedures New Rules	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)(i)	PK:-27 (dBm/MHz) *1 PK:10 (dBm/MHz) *2 PK:15.6 (dBm/MHz) *3 PK:27 (dBm/MHz) *4	PK: 68.2(dBµV/m) *1 PK:105.2 (dBµV/m) *2 PK: 110.8(dBµV/m) *3 PK:122.2 (dBµV/m) *4	

<sup>\*1</sup> beyond 75 MHz or more above of the bandedge.

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

<sup>\*2</sup> below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.

<sup>\*3</sup> below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

<sup>\*4</sup> from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.



Page: 43 of 283

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  $(dB\mu V/m) = 20 \log Emission level (dB\mu V/m)$

## 11.2 Measurement Equipment Used

SGS SAC-III								
Name of Equipment	Manufacturer	Model	Serial Num- ber	Calibration Date	Calibration Due			
EMI Test Receiver	R&S	ESCI7	100760	05/11/2017	05/10/2018			
Spectrum Analyzer	Agilent	E4446A	MY51100003	04/25/2017	04/24/2018			
Loop Antenna	ETS-Lindgren	6502	148045	09/20/2016	09/19/2017			
Bilog Antenna	SCHWAZBECK	VULB9168	378	12/19/2016	12/18/2017			
Horn Antenna	Schwarzbeck	BBHA9120D	1441	08/01/2016	07/31/2017			
Pre-Amplifier	Agilent	8447D	2944A07676	01/05/2017	01/04/2018			
Pre-Amplifier	EMC Instru- ments Corp.	EMC0126530	980038	01/05/2017	01/04/2018			
Turn Table	HD	DT420	N/A	N.C.R	N.C.R			
Antenna Tower	ChamPro	AM-BS-4500-B	060776-ABS	N.C.R	N.C.R			
Controller	ChamPro	EM1000	60776	N.C.R	N.C.R			
Low Loss Cable	Huber Suhner	966_RX	9	01/05/2017	01/04/2018			
3m Site NSA	SGS	966 chamber	N/A	07/01/2017	06/30/2018			
Low Loss Cable	Huber Suhner	966 TX	1	01/05/2017	01/04/2018			

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

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

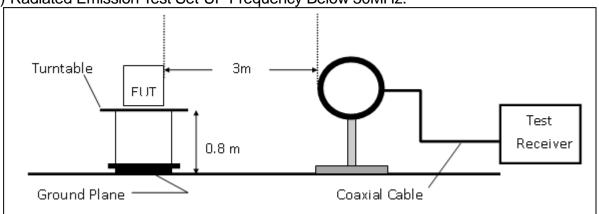
SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



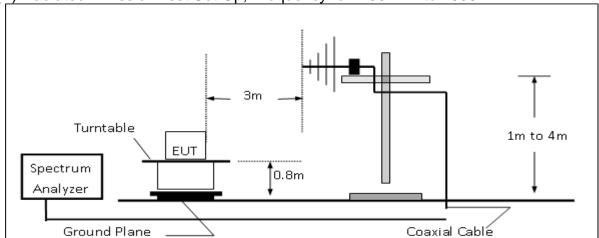
Page: 44 of 283

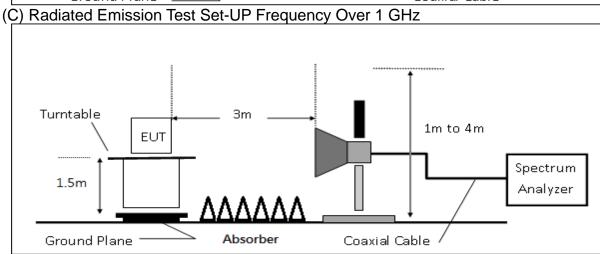
#### 11.3 Test SET-UP

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



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





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

Onless otherwise stated the results shown in this less report relear only to the samplets) tested and such carriagness are tellaned for 90 days only. 

Ref. 8月 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 <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 approval of this document is unquisited and effective provided to the full set extent of this document. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

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

t (886-2) 2299-3279



Page: 45 of 283

#### 11.4 Measurement Procedure

- The EUT was placed on a turn table which is 0.8m above ground plane.
- The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules . 2.
- 3. The EUT was placed on a turn table with 0.8m for frequency< 1GHz and 1.5m for frequency> 1GHz above ground plane.
- 4. The turn table shall rotate 360 degrees to determine the position of maximum emission
- EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emissions.
- Set the spectrum analyzer as RBW=120 kHz and VBW=300 kHz for Peak Detector (PK) 6. and Quasi-peak (QP) at frequency below 1 GHz.
- 7. 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 (Duty cycle < 98%) for Average Detector at frequency above 1 GHz.
- Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 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	•	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(dBµV/m) + Cable Loss(dB) - Pre\_Amplifier Gain(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,同時此樣品僅保留旬天。本報告未總本公司書面許可,不可都份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or ap-

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



Page: 46 of 283

#### Note:

"F": denotes Fundamental Frequency.; "H": denotes Harmonic Frequency. "E": denotes Band Edge Frequency.; "S": denotes Spurious Frequency.

## 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.

Unless otherwise stated the results snown in this test report refer only to the sample(s) lested and such sample(s) leste Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery 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



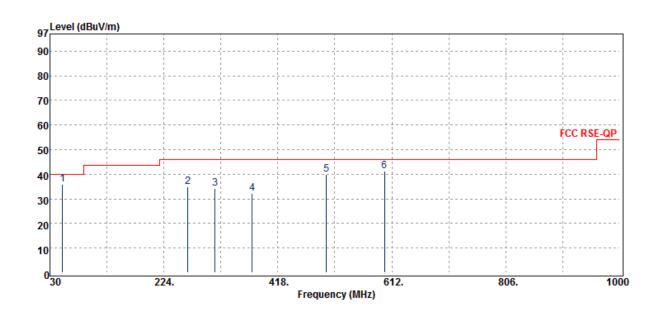
Page: 47 of 283

## **Radiated Spurious Emission Measurement Result Below 1GHz Worst-Case Data:**

**Operation Band** :802.11aB1 **Test Date** :2017-07-19 **Fundamental Frequency** :5220 MHz Temp./Humi. :22 deg\_C / 61 RH

**Operation Mode** :Tx CH MID Engineer :Mike

EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum	Factor	Actual FS	Limit @3m	Margin
			Reading Level			_	
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBµV∕m	dB
51.34	S	QP	43.83	-7.75	36.08	40.00	-3.92
264.74	S	Peak	41.93	-7.05	34.88	46.00	-11.12
311.30	S	Peak	39.80	-5.45	34.35	46.00	-11.65
374.35	S	Peak	36.88	-4.54	32.34	46.00	-13.66
500.45	S	Peak	42.46	-2.68	39.78	46.00	-6.22
599.39	S	Peak	41.46	-0.27	41.19	46.00	-4.81

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

Onless otherwise stated the results shown in this less report relear only to the samplets) tested and such carriagness are tellaned for 90 days only. 

Ref. 8月 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 <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 approval of this document is unquisited and effective provided to the full set extent of this document. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

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

t (886-2) 2299-3279

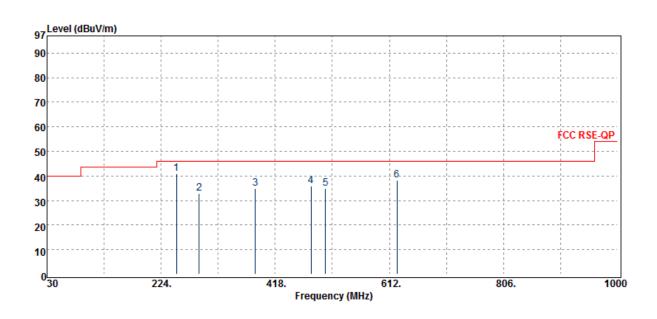


Page: 48 of 283

**Operation Band** :802.11aB1 **Test Date** :2017-07-19 Fundamental Frequency Temp./Humi. :5220 MHz :22 deg\_C / 61 RH

**Operation Mode** :Tx CH MID Engineer :Mike

EUT Pol. Measurement Antenna Pol. :E2 Plane :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
250.19	S	Peak	49.00	-7.93	41.07	46.00	-4.93
288.99	S	Peak	38.97	-6.09	32.88	46.00	-13.12
384.05	S	Peak	39.29	-4.35	34.94	46.00	-11.06
479.11	S	Peak	38.16	-2.39	35.77	46.00	-10.23
503.36	S	Peak	37.17	-2.40	34.77	46.00	-11.23
624.61	S	Peak	38.26	0.15	38.41	46.00	-7.59

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

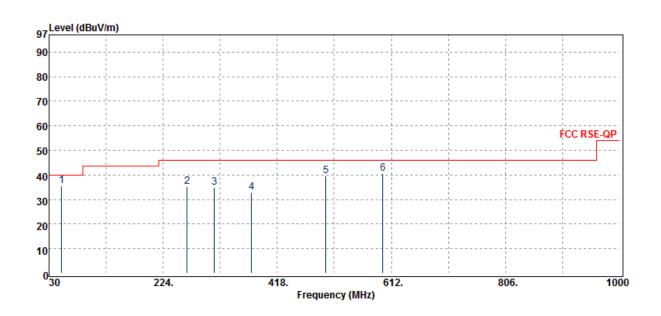


Page: 49 of 283

**Operation Band** :802.11aB2 **Test Date** :2017-07-19

Fundamental Frequency Temp./Humi. :5300 MHz :22 deg\_C / 61 RH

**Operation Mode** :Tx CH MID Engineer :Mike EUT Pol. :E2 Plane 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	$\mathrm{d} \mathrm{B} \mu \mathrm{V}$	dB	dBμV/m	dBμV/m	dB
							_
51.34	S	QP	43.17	-7.75	35.42	40.00	-4.58
264.74	S	Peak	42.31	-7.05	35.26	46.00	-10.74
311.30	S	Peak	40.31	-5.45	34.86	46.00	-11.14
374.35	S	Peak	37.30	-4.54	32.76	46.00	-13.24
500.45	S	Peak	42.31	-2.68	39.63	46.00	-6.37
597.45	S	Peak	40.68	-0.19	40.49	46.00	-5.51

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

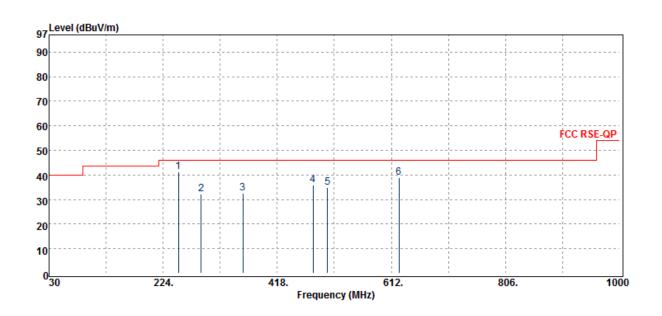


Page: 50 of 283

**Operation Band** :802.11aB2 **Test Date** :2017-07-19

Fundamental Frequency Temp./Humi. :5300 MHz :22 deg\_C / 61 RH **Operation Mode** :Tx CH MID Engineer :Mike

EUT Pol. :E2 Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
250.19	S	Peak	49.14	-7.93	41.21	46.00	-4.79
288.99	S	Peak	38.41	-6.09	32.32	46.00	-13.68
359.80	S	Peak	37.41	-4.79	32.62	46.00	-13.38
479.11	S	Peak	38.42	-2.39	36.03	46.00	-9.97
503.36	S	Peak	37.14	-2.40	34.74	46.00	-11.26
624.61	S	Peak	38.87	0.15	39.02	46.00	-6.98

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

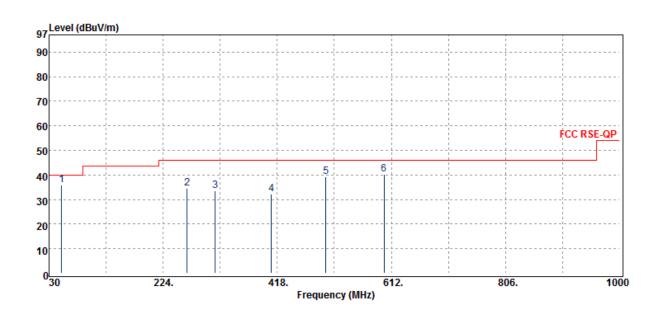


Page: 51 of 283

**Operation Band** :802.11aB3 **Test Date** :2017-07-19

Fundamental Frequency Temp./Humi. :5580 MHz :22 deg\_C / 61 RH

**Operation Mode** :Tx CH MID Engineer :Mike EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
51.34	S	QP	43.53	-7.75	35.78	40.00	-4.22
264.74	S	Peak	41.62	-7.05	34.57	46.00	-11.43
312.27	S	Peak	39.01	-5.51	33.50	46.00	-12.50
408.30	S	Peak	35.60	-3.53	32.07	46.00	-13.93
500.45	S	Peak	41.94	-2.68	39.26	46.00	-6.74
599.39	S	Peak	40.63	-0.27	40.36	46.00	-5.64

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

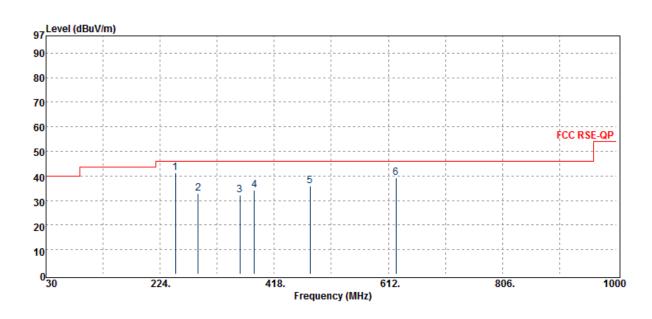


Page: 52 of 283

**Operation Band** :802.11aB3 **Test Date** :2017-07-19 Fundamental Frequency Temp./Humi. :5580 MHz :22 deg\_C / 61 RH

**Operation Mode** :Tx CH MID Engineer :Mike

EUT Pol. Measurement Antenna Pol. :E2 Plane :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
250.19	S	Peak	49.19	-7.93	41.26	46.00	-4.74
288.99	S	Peak	39.02	-6.09	32.93	46.00	-13.07
359.80	S	Peak	37.07	-4.79	32.28	46.00	-13.72
384.05	S	Peak	38.68	-4.35	34.33	46.00	-11.67
479.11	S	Peak	38.15	-2.39	35.76	46.00	-10.24
624.61	S	Peak	39.15	0.15	39.30	46.00	-6.70

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90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of this document is unquited and find the produced 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 full except of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

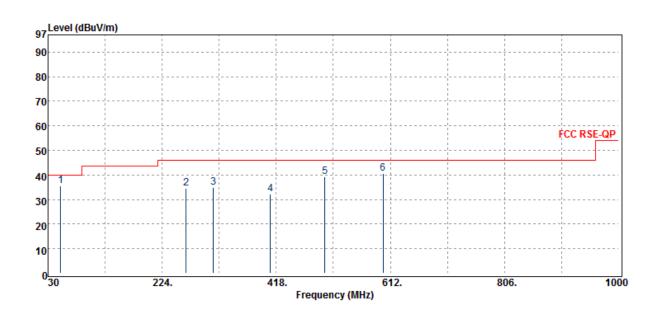


Page: 53 of 283

**Operation Band** :802.11aB4 **Test Date** :2017-07-19

Fundamental Frequency Temp./Humi. :5785 MHz :22 deg\_C / 61 RH

**Operation Mode** :Tx CH MID Engineer :Mike EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
51.34	S	QP	43.46	-7.75	35.71	40.00	-4.29
264.74	S	Peak	41.56	-7.05	34.51	46.00	-11.49
311.30	S	Peak	40.39	-5.45	34.94	46.00	-11.06
408.30	S	Peak	35.63	-3.53	32.10	46.00	-13.90
500.45	S	Peak	42.06	-2.68	39.38	46.00	-6.62
599.39	S	Peak	40.77	-0.27	40.50	46.00	-5.50

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

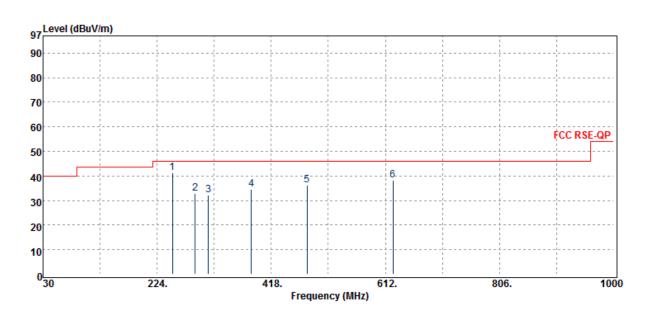


Page: 54 of 283

**Operation Band** :802.11aB4 **Test Date** :2017-07-19 Fundamental Frequency Temp./Humi. :5785 MHz :22 deg\_C / 61 RH

**Operation Mode** :Tx CH MID Engineer :Mike

EUT Pol. Measurement Antenna Pol. :E2 Plane :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
250.19	S	Peak	49.14	-7.93	41.21	46.00	-4.79
288.99	S	Peak	38.87	-6.09	32.78	46.00	-13.22
311.30	S	Peak	37.58	-5.45	32.13	46.00	-13.87
384.05	S	Peak	38.87	-4.35	34.52	46.00	-11.48
479.11	S	Peak	38.76	-2.39	36.37	46.00	-9.63
624.61	S	Peak	38.00	0.15	38.15	46.00	-7.85

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90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of this document is unquited and find the produced 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 full except 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



Page: 55 of 283

**Operation Band** Fundamental Frequency **Operation Mode** 

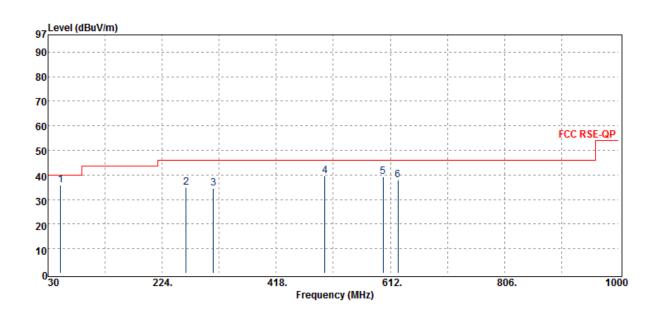
EUT Pol.

:802.11ac80B1 :5210 MHz :Tx CH LOW :E1 Plane

**Test Date** :2017-07-19

Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
51.34	S	QP	43.57	-7.75	35.82	40.00	-4.18
264.74	S	Peak	42.05	-7.05	35.00	46.00	-11.00
311.30	S	Peak	40.15	-5.45	34.70	46.00	-11.30
500.45	S	Peak	42.15	-2.68	39.47	46.00	-6.53
599.39	S	Peak	39.61	-0.27	39.34	46.00	-6.66
624.61	S	Peak	37.63	0.15	37.78	46.00	-8.22

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



Page: 56 of 283

**Operation Band** Fundamental Frequency **Operation Mode** 

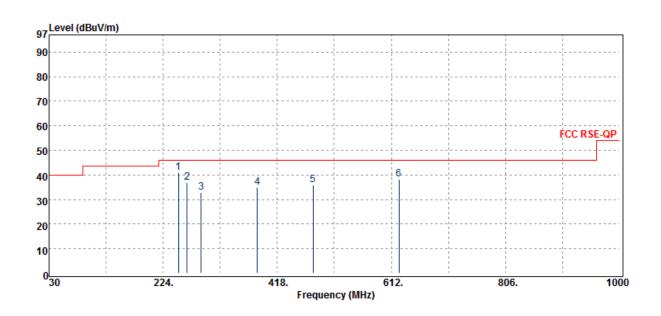
EUT Pol.

:802.11ac80B1 :5210 MHz :Tx CH LOW :E1 Plane

**Test Date** :2017-07-19 Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
250.19	S	Peak	48.91	-7.93	40.98	46.00	-5.02
264.74	S	Peak	43.88	-7.05	36.83	46.00	-9.17
288.99	S	Peak	38.93	-6.09	32.84	46.00	-13.16
384.05	S	Peak	39.28	-4.35	34.93	46.00	-11.07
479.11	S	Peak	38.43	-2.39	36.04	46.00	-9.96
624.61	S	Peak	37.97	0.15	38.12	46.00	-7.88

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



Page: 57 of 283

**Operation Band** Fundamental Frequency **Operation Mode** 

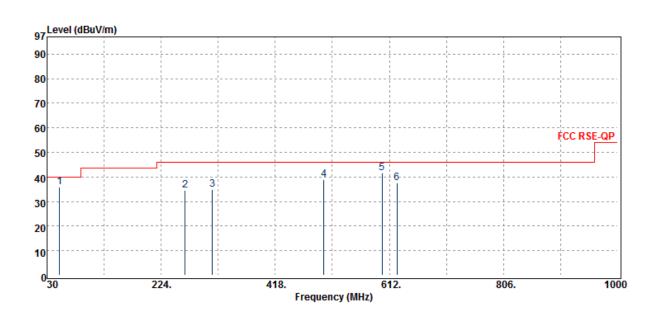
EUT Pol.

:802.11ac80B2 :5290 MHz :Tx CH HIGH :E1 Plane

**Test Date** :2017-07-19 Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} \mathrm{B} \mu \mathrm{V}$	dB	dBμV/m	dBμV/m	dB
51.34	S	QP	43.78	-7.75	36.03	40.00	-3.97
264.74	S	Peak	41.52	-7.05	34.47	46.00	-11.53
311.30	S	Peak	40.22	-5.45	34.77	46.00	-11.23
500.45	S	Peak	41.60	-2.68	38.92	46.00	-7.08
599.39	S	Peak	41.95	-0.27	41.68	46.00	-4.32
624.61	S	Peak	37.31	0.15	37.46	46.00	-8.54

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



Page: 58 of 283

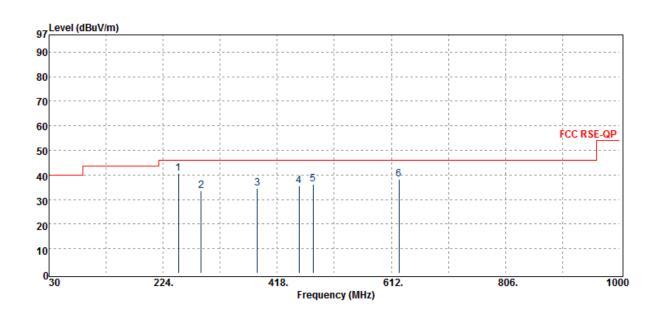
**Operation Band** Fundamental Frequency **Operation Mode** EUT Pol.

:802.11ac80B2 :5290 MHz :Tx CH HIGH :E1 Plane

**Test Date** :2017-07-19 Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
250.19	S	Peak	48.67	-7.93	40.74	46.00	-5.26
288.99	S	Peak	39.53	-6.09	33.44	46.00	-12.56
384.05	S	Peak	38.98	-4.35	34.63	46.00	-11.37
454.86	S	Peak	38.34	-2.65	35.69	46.00	-10.31
479.11	S	Peak	38.48	-2.39	36.09	46.00	-9.91
624.61	S	Peak	38.19	0.15	38.34	46.00	-7.66

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90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of this document is unquited and find the produced 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 full except of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 59 of 283

**Operation Band** Fundamental Frequency **Operation Mode** 

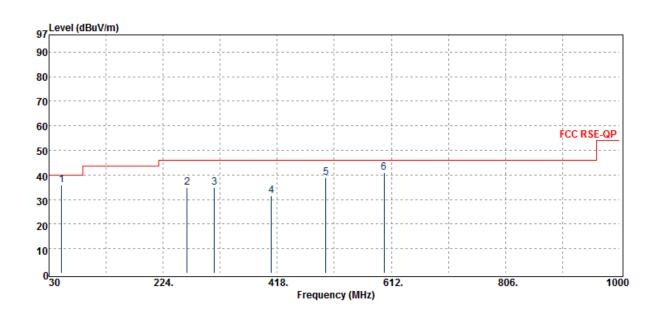
EUT Pol.

:802.11ac80B3 :5530 MHz :Tx CH LOW :E1 Plane

**Test Date** :2017-07-19

Temp./Humi. :23 deg\_C / 62 RH Engineer :Mike

Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
51.34	S	QP	43.59	-7.75	35.84	40.00	-4.16
264.74	S	Peak	41.90	-7.05	34.85	46.00	-11.15
311.30	S	Peak	40.48	-5.45	35.03	46.00	-10.97
408.30	S	Peak	35.19	-3.53	31.66	46.00	-14.34
500.45	S	Peak	41.75	-2.68	39.07	46.00	-6.93
599.39	S	Peak	41.28	-0.27	41.01	46.00	-4.99

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



Page: 60 of 283

**Operation Band** Fundamental Frequency **Operation Mode** 

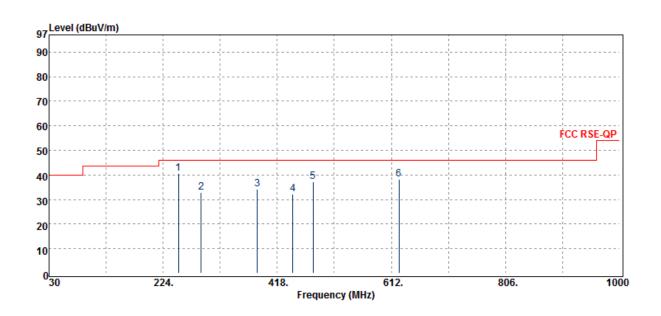
EUT Pol.

:802.11ac80B3 :5530 MHz :Tx CH LOW :E1 Plane

**Test Date** :2017-07-19 Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
250.19	S	Peak	48.64	-7.93	40.71	46.00	-5.29
288.99	S	Peak	38.89	-6.09	32.80	46.00	-13.20
384.05	S	Peak	38.71	-4.35	34.36	46.00	-11.64
444.19	S	Peak	35.52	-3.21	32.31	46.00	-13.69
479.11	S	Peak	39.53	-2.39	37.14	46.00	-8.86
624.61	S	Peak	37.96	0.15	38.11	46.00	-7.89

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90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of this document is unquited and find the produced 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 full except of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 61 of 283

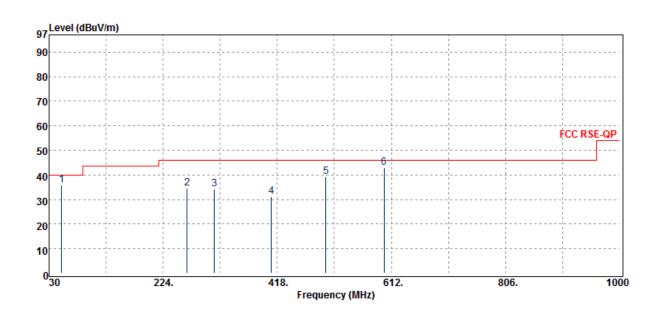
**Operation Band** Fundamental Frequency **Operation Mode** EUT Pol.

:802.11ac80B3 :5610 MHz :Tx CH HIGH :E1 Plane

**Test Date** :2017-07-19

Temp./Humi. :23 deg\_C / 62 RH Engineer :Mike

Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
51.34	S	QP	43.72	-7.75	35.97	40.00	-4.03
264.74	S	Peak	41.72	-7.05	34.67	46.00	-11.33
311.30	S	Peak	39.68	-5.45	34.23	46.00	-11.77
408.30	S	Peak	34.89	-3.53	31.36	46.00	-14.64
500.45	S	Peak	42.00	-2.68	39.32	46.00	-6.68
599.39	S	Peak	43.22	-0.27	42.95	46.00	-3.05

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



Page: 62 of 283

**Operation Band** Fundamental Frequency **Operation Mode** 

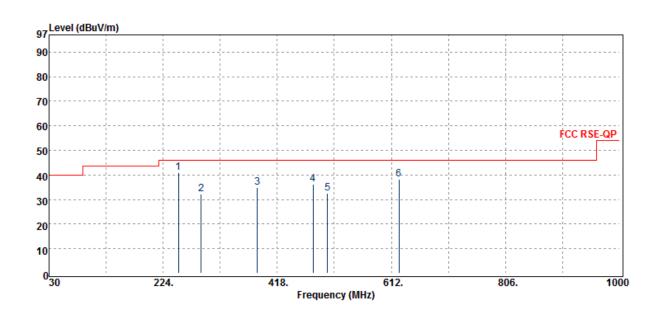
EUT Pol.

:802.11ac80B3 :5610 MHz :Tx CH HIGH :E1 Plane

**Test Date** :2017-07-19 Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
250.19	S	Peak	48.99	-7.93	41.06	46.00	-4.94
288.99	S	Peak	38.30	-6.09	32.21	46.00	-13.79
384.05	S	Peak	39.27	-4.35	34.92	46.00	-11.08
479.11	S	Peak	38.59	-2.39	36.20	46.00	-9.80
503.36	S	Peak	35.09	-2.40	32.69	46.00	-13.31
624.61	S	Peak	38.11	0.15	38.26	46.00	-7.74

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90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of this document is unquited and find the produced 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 full except of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 63 of 283

**Operation Band** Fundamental Frequency **Operation Mode** 

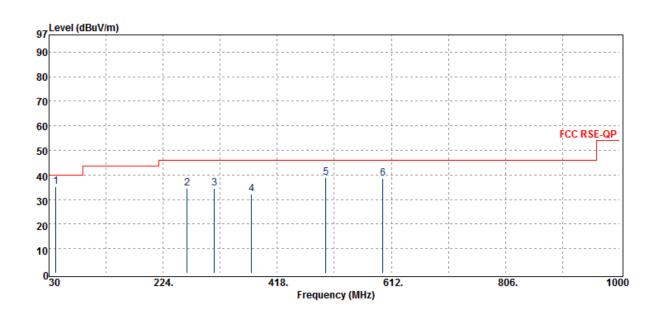
EUT Pol.

:802.11ac80B4 :5775 MHz :Tx CH LOW :E1 Plane

**Test Date** :2017-07-19

Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} \mathrm{B} \mu \mathrm{V}$	dB	dBμV/m	dBμV/m	dB
41.64	S	QP	43.53	-8.38	35.15	40.00	-4.85
264.74	S	Peak	41.57	-7.05	34.52	46.00	-11.48
311.30	S	Peak	39.95	-5.45	34.50	46.00	-11.50
374.35	S	Peak	36.77	-4.54	32.23	46.00	-13.77
500.45	S	Peak	41.74	-2.68	39.06	46.00	-6.94
597.45	S	Peak	38.87	-0.19	38.68	46.00	-7.32

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90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of this document is unquited and find the produced 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 full except of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 64 of 283

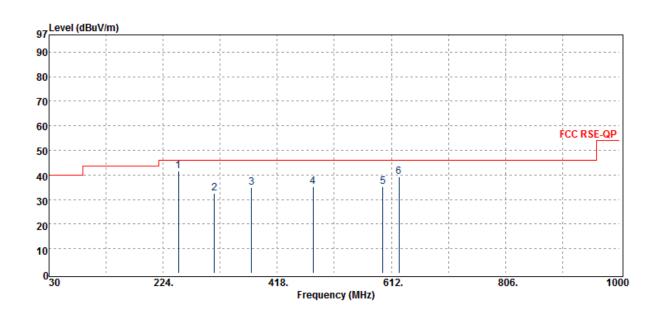
**Operation Band** Fundamental Frequency **Operation Mode** EUT Pol.

:802.11ac80B4 :5775 MHz :Tx CH LOW :E1 Plane

**Test Date** :2017-07-19 Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
250.19	S	Peak	49.44	-7.93	41.51	46.00	-4.49
311.30	S	Peak	38.10	-5.45	32.65	46.00	-13.35
374.35	S	Peak	39.31	-4.54	34.77	46.00	-11.23
479.11	S	Peak	37.47	-2.39	35.08	46.00	-10.92
597.45	S	Peak	35.56	-0.19	35.37	46.00	-10.63
624.61	S	Peak	39.04	0.15	39.19	46.00	-6.81

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



Page: 65 of 283

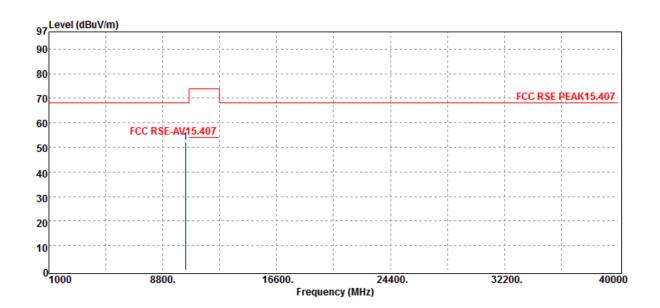
## **Radiated Spurious Emission Measurement Result Above 1GHz Worst-Case Data:**

**Operation Band** :802.11aB1 Test Date :2017-07-10

Fundamental Frequency :5180 MHz Temp./Humi. :23 deg C / 62 RH

Operation Mode :Tx CH LOW Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
10360.00	Н	Peak	33.67	18.29	51.96	68.30	-16.34

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

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

Ref 另有說明,此報告結果僅對測試之樣品負責,同時止樣品僅保留到天。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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of this document is unquitable and effective previously the resource of this document. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

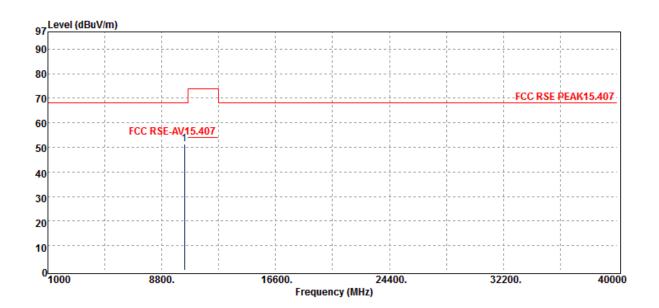


Page: 66 of 283

**Operation Band** :802.11aB1 **Test Date** :2017-07-10 Temp./Humi.

**Fundamental Frequency** :5180 MHz :23 deg\_C / 62 RH **Operation Mode** :Tx CH LOW Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10360.00	Н	Peak	33.18	18.29	51.47	68.30	-16.83

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

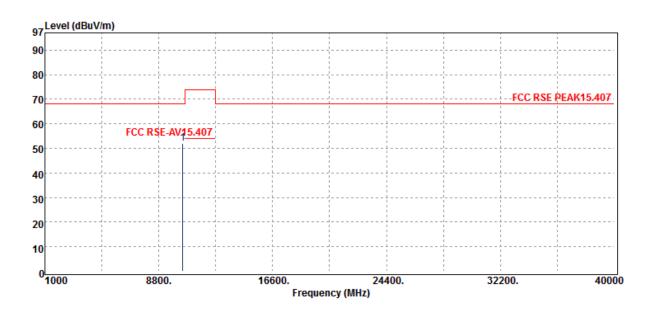


Page: 67 of 283

**Operation Band** :802.11aB1 **Test Date** :2017-07-10

Fundamental Frequency :5220 MHz Temp./Humi. :23 deg\_C / 62 RH

**Operation Mode** :Tx CH MID Engineer :Mike EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10440.00	Н	Peak	33.43	18.69	52.12	68.30	-16.18

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



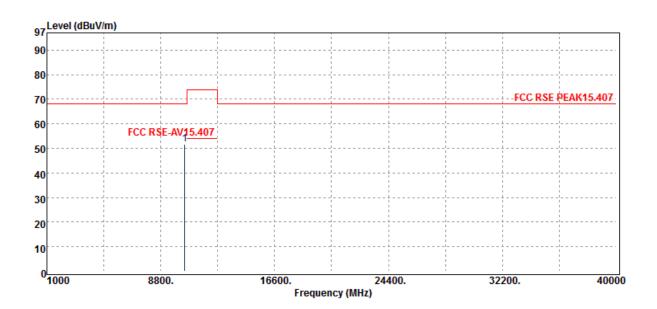
Page: 68 of 283

**Operation Band** :802.11aB1 **Test Date** :2017-07-10

**Fundamental Frequency** :5220 MHz Temp./Humi. :23 deg\_C / 62 RH

**Operation Mode** :Tx CH MID Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10440.00	Н	Peak	33.13	18.69	51.82	68.30	-16.48

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

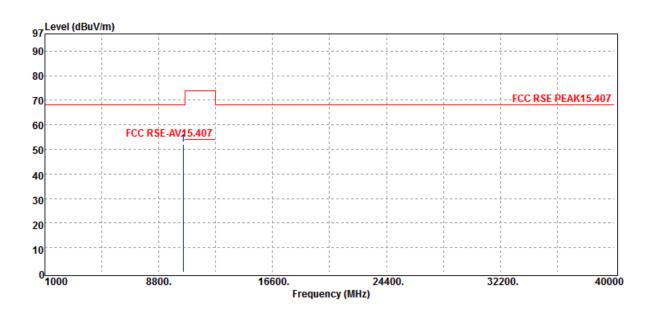


Page: 69 of 283

**Operation Band** :802.11aB1 **Test Date** :2017-07-10

**Fundamental Frequency** Temp./Humi. :5240 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH HIGH Engineer :Mike EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10480.00	Н	Peak	33.80	18.30	52.10	68.30	-16.20

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

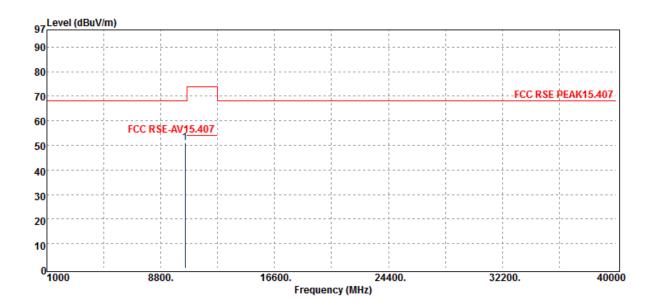


Page: 70 of 283

**Operation Band** :802.11aB1 **Test Date** :2017-07-10 Fundamental Frequency Temp./Humi. :5240 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH HIGH Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10480.00	Н	Peak	32.84	18.30	51.14	68.30	-17.16

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

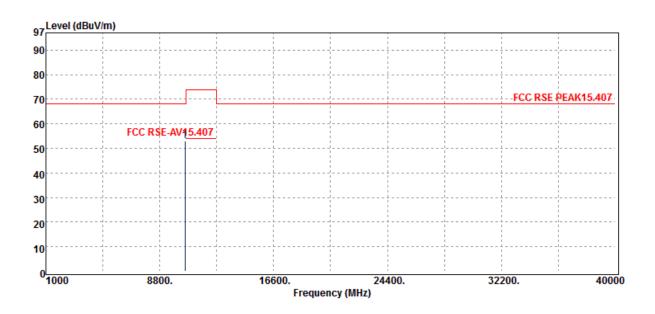


Page: 71 of 283

:2017-07-10 **Operation Band** :802.11aB2 **Test Date** 

Fundamental Frequency Temp./Humi. :5260 MHz :23 deg\_C / 62 RH **Operation Mode** :Tx CH LOW :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
10520.00	Н	Peak	33.52	19.38	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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 72 of 283

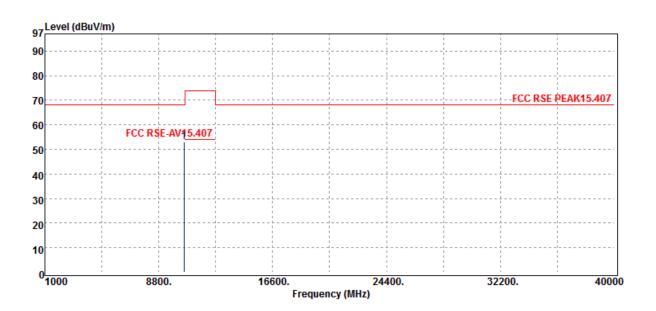
**Operation Band** :802.11aB2 Fundamental Frequency :5260 MHz

**Operation Mode** :Tx CH LOW EUT Pol. :E1 Plane

**Test Date** :2017-07-10 Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10520.00	Н	Peak	33.61	19.38	52.99	68.30	-15.31

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

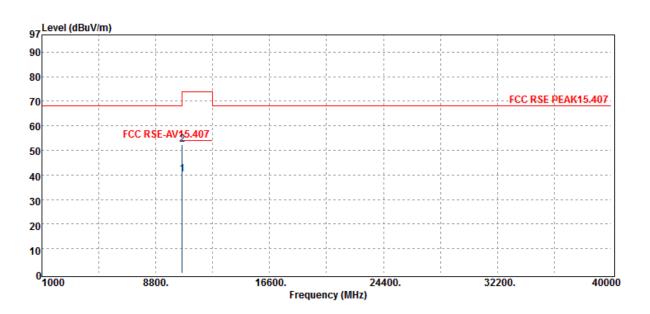


Page: 73 of 283

**Operation Band** :802.11aB2 **Test Date** :2017-07-10

Fundamental Frequency Temp./Humi. :5300 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH MID Engineer :Mike EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
10600.00	Н	Average	21.32	18.91	40.23	54.00	-13.77
10600.00	Н	Peak	33.43	18.91	52.34	74.00	-21.66

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

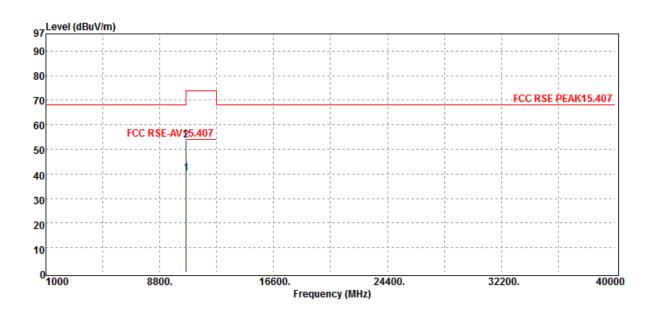


Page: 74 of 283

**Operation Band** :802.11aB2 **Test Date** :2017-07-10

Fundamental Frequency Temp./Humi. :5300 MHz :23 deg\_C / 62 RH **Operation Mode** :Tx CH MID Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{dB}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
							_
10600.00	Н	Average	21.45	18.91	40.36	54.00	-13.64
10600.00	Н	Peak	34.95	18.91	53.86	74.00	-20.14

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

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

t (886-2) 2299-3279

f (886-2) 2298-0488

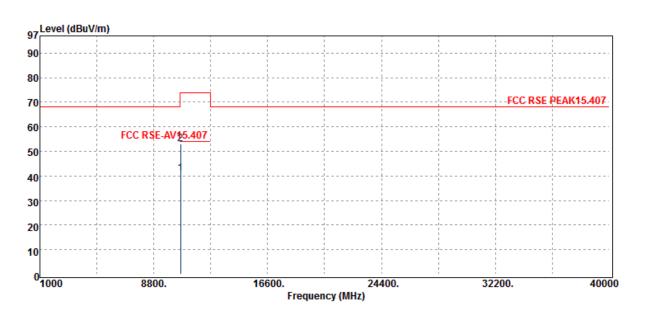


Page: 75 of 283

**Operation Band** :802.11aB2 **Test Date** :2017-07-10

Fundamental Frequency Temp./Humi. :5320 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH HIGH Engineer :Mike EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
10640.00	Н	Average	21.88	19.19	41.07	54.00	-12.93
10640.00	Н	Peak	33.86	19.19	53.05	74.00	-20.95

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

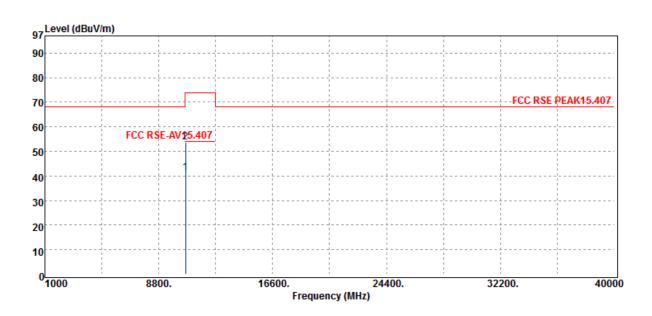


Page: 76 of 283

**Operation Band** :802.11aB2 **Test Date** :2017-07-10

Fundamental Frequency Temp./Humi. :5320 MHz :23 deg\_C / 62 RH **Operation Mode** :Tx CH HIGH Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
10640.00	Н	Average	21.95	19.19	41.14	54.00	-12.86
10640.00	Н	Peak	34.38	19.19	53.57	74.00	-20.43

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



Page: 77 of 283

**Operation Band** Fundamental Frequency :5500 MHz

**Operation Mode** EUT Pol.

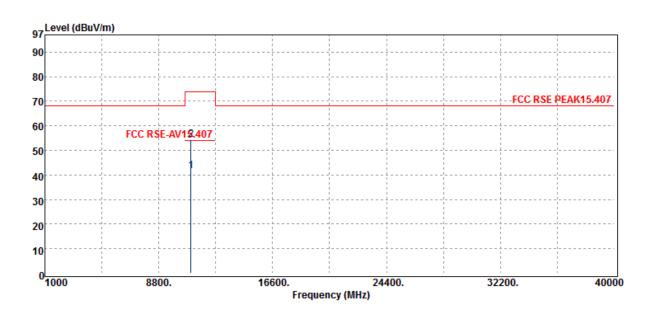
:802.11aB3 :Tx CH LOW :E1 Plane

:2017-07-10 **Test Date** 

Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

:VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{dB}\mu\mathrm{V}$	dB	dBμV/m	$dB\mu V/m$	dB
							_
11000.00	Н	Average	21.62	20.16	41.78	54.00	-12.22
11000.00	Н	Peak	34.14	20.16	54.30	74.00	-19.70

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



Page: 78 of 283

**Operation Band** :802.11aB3 Fundamental Frequency :5500 MHz

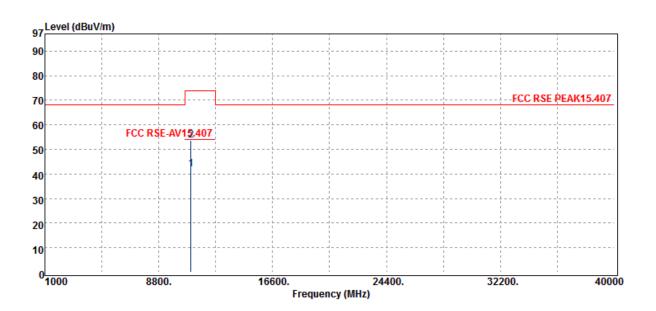
**Operation Mode** :Tx CH LOW EUT Pol. :E1 Plane

**Test Date** :2017-07-10

Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	$dB\mu V/m$	dB
							_
11000.00	Н	Average	21.75	20.16	41.91	54.00	-12.09
11000.00	Н	Peak	33.46	20.16	53.62	74.00	-20.38

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

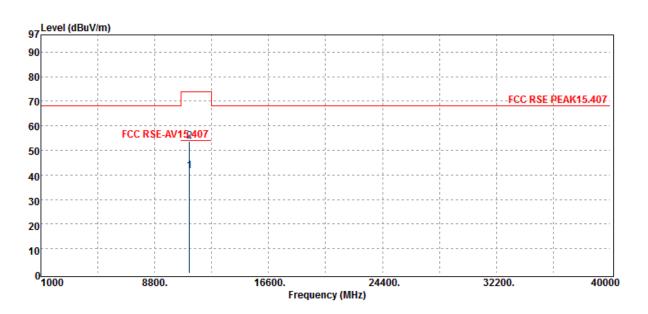


Page: 79 of 283

:2017-07-10 **Operation Band** :802.11aB3 **Test Date** 

Fundamental Frequency Temp./Humi. :5580 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH MID Engineer :Mike EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
11160.00	Н	Average	21.17	20.44	41.61	54.00	-12.39
11160.00	Н	Peak	33.39	20.44	53.83	74.00	-20.17

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

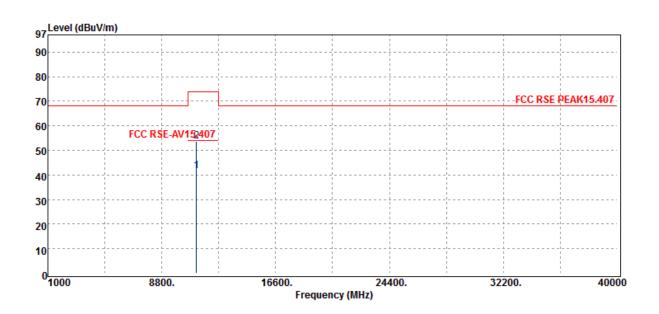


Page: 80 of 283

**Operation Band** :802.11aB3 **Test Date** :2017-07-10

Fundamental Frequency Temp./Humi. :5580 MHz :23 deg\_C / 62 RH **Operation Mode** :Tx CH MID Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
11160.00	Н	Average	21.18	20.44	41.62	54.00	-12.38
11160.00	Н	Peak	33.26	20.44	53.70	74.00	-20.30

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

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

f (886-2) 2298-0488



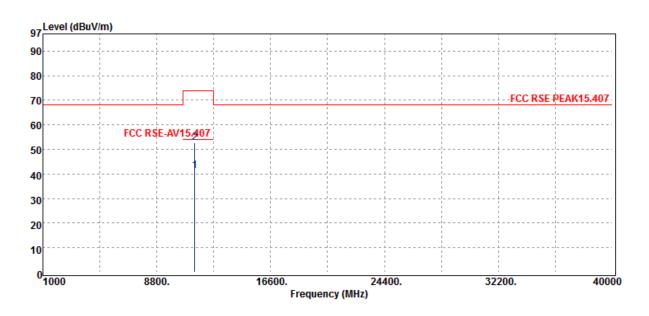
:2017-07-10

Page: 81 of 283

**Operation Band** :802.11aB3 **Test Date** 

Fundamental Frequency Temp./Humi. :5700 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH HIGH Engineer :Mike EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
11400.00	Н	Average	20.79	20.56	41.35	54.00	-12.65
11400.00	Н	Peak	32.10	20.56	52.66	74.00	-21.34

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

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

f (886-2) 2298-0488



Page: 82 of 283

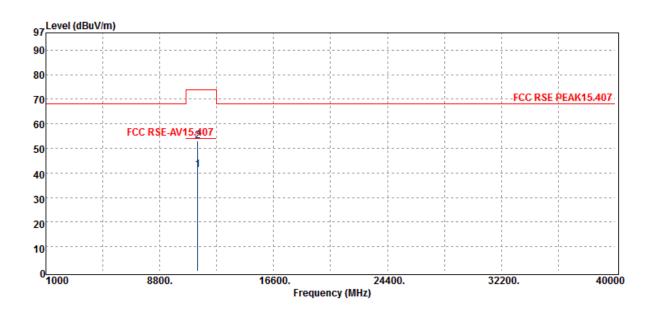
**Operation Band** :802.11aB3 Fundamental Frequency :5700 MHz

**Operation Mode** :Tx CH HIGH EUT Pol. :E1 Plane

**Test Date** :2017-07-10 Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
11400.00	Н	Average	20.85	20.56	41.41	54.00	-12.59
11400.00	Н	Peak	32.52	20.56	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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

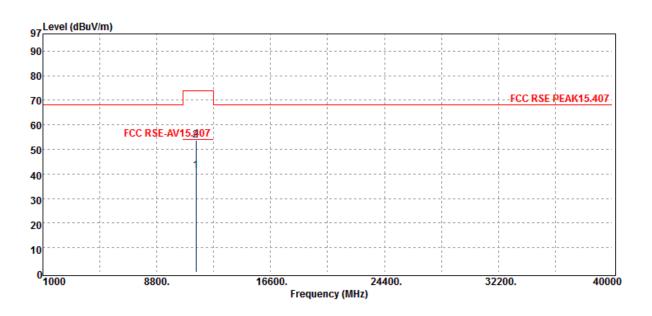


Page: 83 of 283

**Operation Band** :802.11aB4 **Test Date** :2017-07-10

**Fundamental Frequency** Temp./Humi. :5745 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH LOW Engineer :Mike EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
11490.00	Н	Average	20.79	20.42	41.21	54.00	-12.79
11490.00	Н	Peak	33.19	20.42	53.61	74.00	-20.39

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

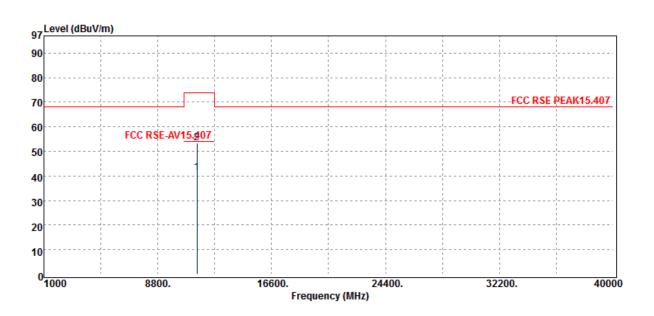


Page: 84 of 283

**Operation Band** :802.11aB4 **Test Date** :2017-07-10

**Fundamental Frequency** Temp./Humi. :5745 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH LOW Engineer :Mike EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	$dB\mu V/m$	dB
							_
11490.00	Н	Average	20.86	20.42	41.28	54.00	-12.72
11490.00	Н	Peak	32.86	20.42	53.28	74.00	-20.72

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

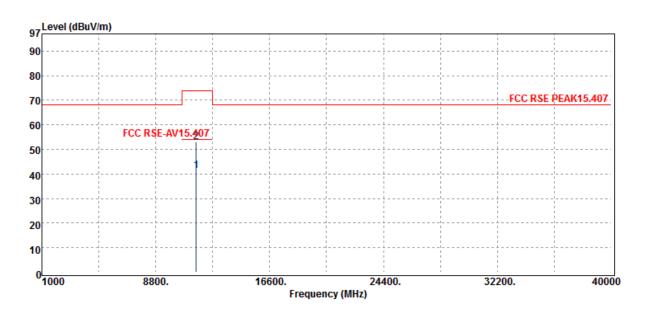


Page: 85 of 283

**Operation Band** :802.11aB4 **Test Date** :2017-07-10

Fundamental Frequency Temp./Humi. :5785 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH MID Engineer :Mike EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
11570.00	Н	Average	20.82	20.58	41.40	54.00	-12.60
11570.00	Н	Peak	32.43	20.58	53.01	74.00	-20.99

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

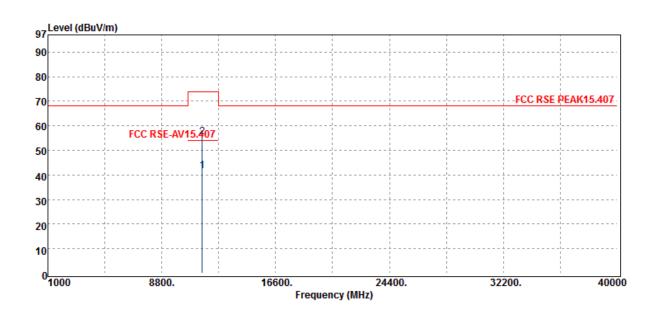


Page: 86 of 283

**Operation Band** :802.11aB4 **Test Date** :2017-07-10

Fundamental Frequency Temp./Humi. :5785 MHz :23 deg\_C / 62 RH **Operation Mode** :Tx CH MID Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBuV	dB	rS dBµV/m	dBuV/m	Margin dB
1011 12	1711/2/0	I IVQI /AV	αυμν	<u>ub</u>	αρμν/ ΙΙΙ	αρμν/π	<u> </u>
11570.00	Н	Average	20.95	20.58	41.53	54.00	-12.47
11570.00	Н	Peak	34.70	20.58	55.28	74.00	-18.72

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



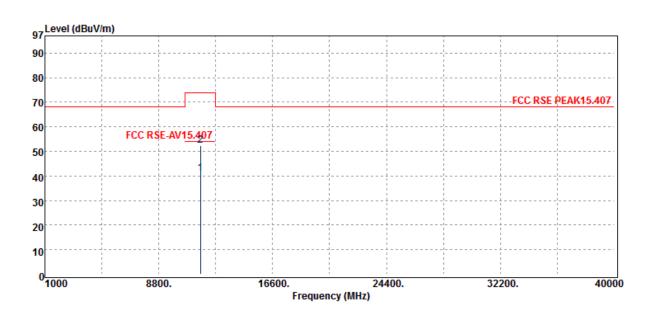
:2017-07-10

Page: 87 of 283

**Operation Band** :802.11aB4 **Test Date** 

Fundamental Frequency Temp./Humi. :5825 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH HIGH Engineer :Mike EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
11650.00	Н	Average	20.54	20.43	40.97	54.00	-13.03
11650.00	Н	Peak	31.88	20.43	52.31	74.00	-21.69

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



:2017-07-10

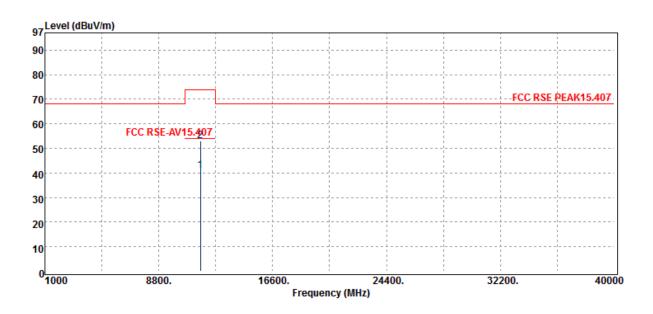
:23 deg\_C / 62 RH

Page: 88 of 283

**Operation Band** :802.11aB4 **Test Date** Fundamental Frequency Temp./Humi. :5825 MHz

**Operation Mode** :Tx CH HIGH Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
11650.00	Н	Average	20.63	20.43	41.06	54.00	-12.94
11650.00	Н	Peak	32.50	20.43	52.93	74.00	-21.07

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



Page: 89 of 283

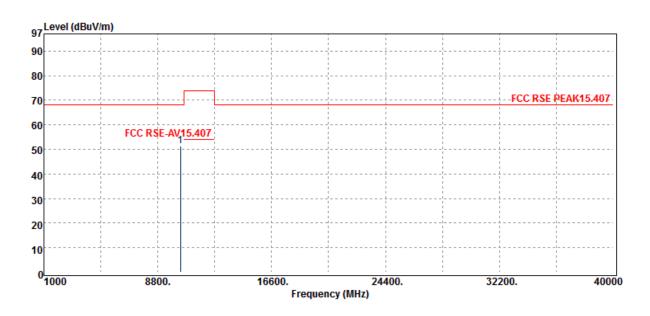
**Operation Band** :802.11n20B1 **Fundamental Frequency** :5180 MHz

**Operation Mode** :Tx CH LOW EUT Pol. :E1 Plane

**Test Date** :2017-07-10

Temp./Humi. :23 deg\_C / 62 RH Engineer :Mike

:VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10360.00	Н	Peak	33.05	18.29	51.34	68.30	-16.96

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 90 of 283

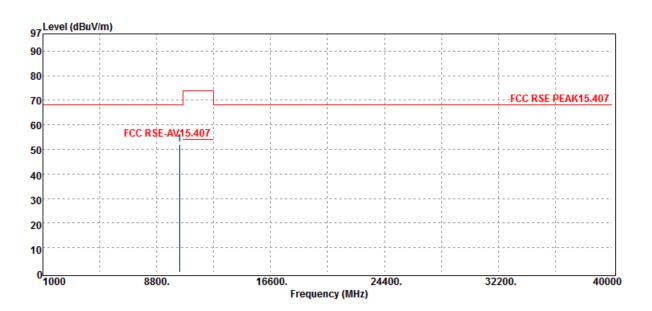
**Operation Band** :802.11n20B1 **Fundamental Frequency** :5180 MHz **Operation Mode** :Tx CH LOW

EUT Pol. :E1 Plane **Test Date** :2017-07-10

Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10360.00	Н	Peak	33.67	18.29	51.96	68.30	-16.34

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 91 of 283

**Operation Band** :802.11n20B1 **Fundamental Frequency** :5220 MHz **Operation Mode** 

EUT Pol.

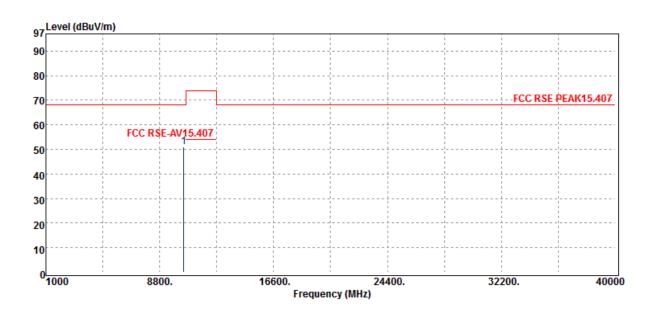
:Tx CH MID :E1 Plane

:2017-07-10 **Test Date** 

Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

:VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10440.00	Н	Peak	32.46	18.69	51.15	68.30	-17.15

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

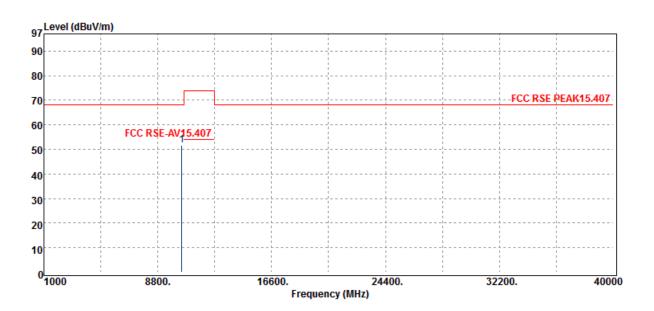


Page: 92 of 283

**Operation Band** :802.11n20B1 **Test Date** :2017-07-10

**Fundamental Frequency** :5220 MHz Temp./Humi. :23 deg\_C / 62 RH **Operation Mode** :Tx CH MID Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10440.00	Н	Peak	32.84	18.69	51.53	68.30	-16.77

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



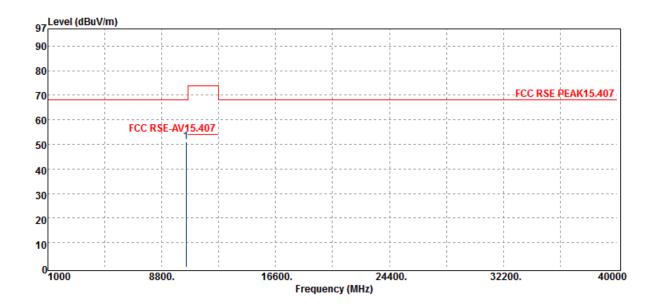
Page: 93 of 283

**Operation Band** :802.11n20B1 **Fundamental Frequency** :5240 MHz **Operation Mode** :Tx CH HIGH

EUT Pol. :E1 Plane **Test Date** :2017-07-10

Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10480.00	Н	Peak	32.88	18.30	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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

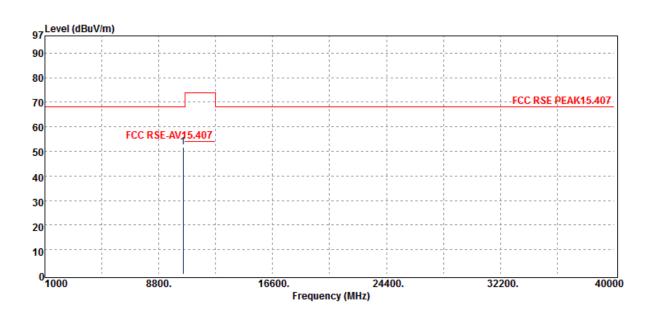


Page: 94 of 283

**Operation Band** :802.11n20B1 **Test Date** :2017-07-10

**Fundamental Frequency** Temp./Humi. :5240 MHz :23 deg\_C / 62 RH **Operation Mode** :Tx CH HIGH Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10480.00	Н	Peak	33.34	18.30	51.64	68.30	-16.66

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



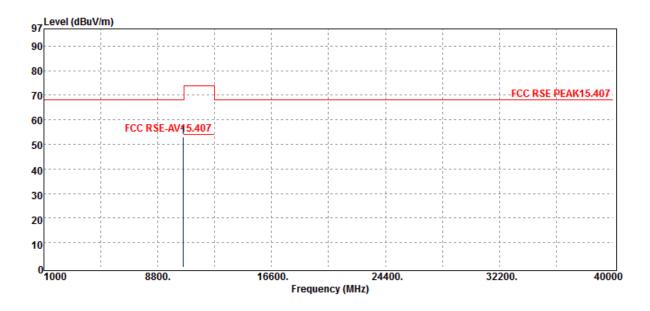
Page: 95 of 283

:2017-07-10 **Operation Band** :802.11n20B2 **Test Date** 

**Fundamental Frequency** Temp./Humi. :5260 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH LOW Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10520.00	Н	Peak	33.49	19.38	52.87	68.30	-15.43

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



Page: 96 of 283

**Operation Band** :802.11n20B2 **Fundamental Frequency** :5260 MHz

**Operation Mode** EUT Pol.

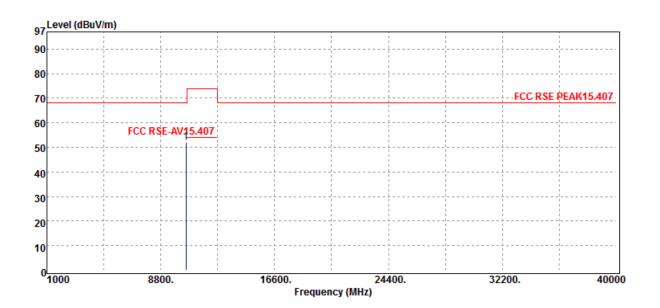
:Tx CH LOW :E1 Plane

**Test Date** :2017-07-10

Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10520.00	Н	Peak	32.75	19.38	52.13	68.30	-16.17

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



Page: 97 of 283

**Operation Band Fundamental Frequency** 

**Operation Mode** EUT Pol.

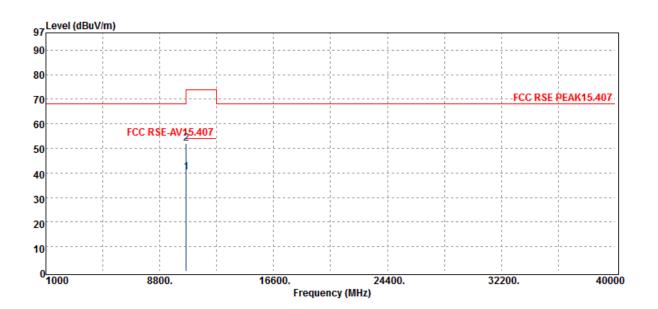
:802.11n20B2 :5300 MHz :Tx CH MID :E1 Plane

:2017-07-10 **Test Date** 

Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

:VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	$dB\mu V/m$	dB
							_
10600.00	Н	Average	21.46	18.91	40.37	54.00	-13.63
10600.00	Н	Peak	32.96	18.91	51.87	74.00	-22.13

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

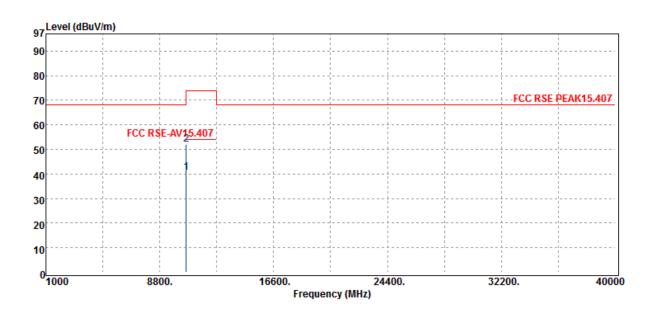


Page: 98 of 283

**Operation Band** :802.11n20B2 **Test Date** :2017-07-10 **Fundamental Frequency** :5300 MHz Temp./Humi. :23 deg\_C / 62 RH

**Operation Mode** :Tx CH MID Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
10600.00	Н	Average	21.57	18.91	40.48	54.00	-13.52
10600.00	Н	Peak	33.00	18.91	51.91	74.00	-22.09

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

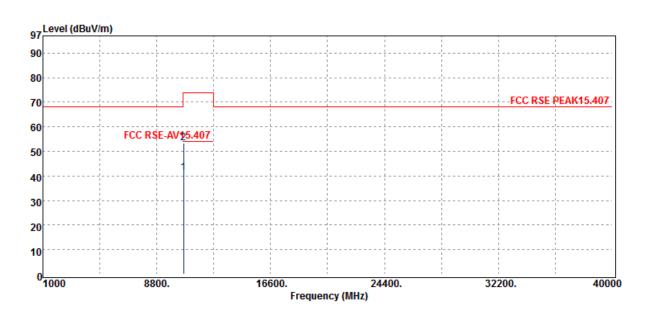


Page: 99 of 283

:2017-07-10 **Operation Band** :802.11n20B2 **Test Date** 

:5320 MHz **Fundamental Frequency** Temp./Humi. :23 deg\_C / 62 RH **Operation Mode** :Tx CH HIGH Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
10640.00	Н	Average	22.02	19.19	41.21	54.00	-12.79
10640.00	Н	Peak	34.29	19.19	53.48	74.00	-20.52

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

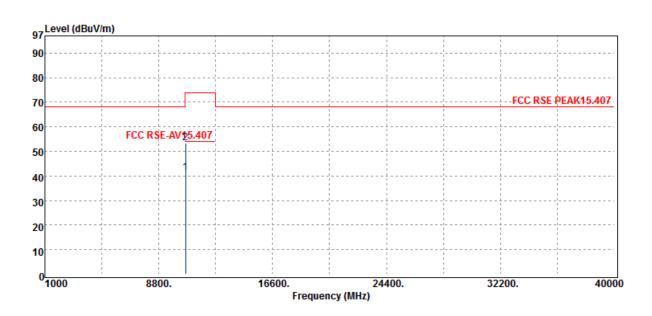


Page: 100 of 283

**Operation Band** :802.11n20B2 **Test Date** :2017-07-10

Fundamental Frequency :5320 MHz Temp./Humi. :23 deg\_C / 62 RH **Operation Mode** :Tx CH HIGH Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
10640.00	Н	Average	22.09	19.19	41.28	54.00	-12.72
10640.00	Н	Peak	34.19	19.19	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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

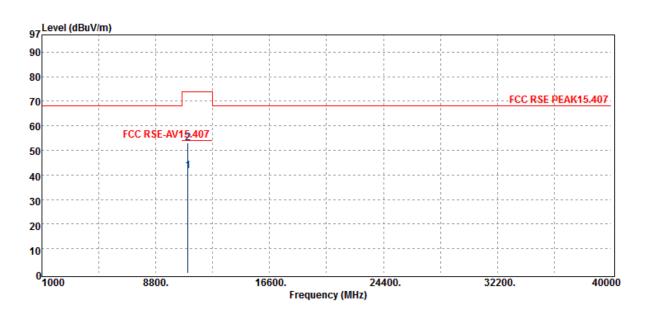


Page: 101 of 283

:2017-07-10 **Operation Band** :802.11n20B3 **Test Date** 

**Fundamental Frequency** Temp./Humi. :5500 MHz :23 deg\_C / 62 RH **Operation Mode** :Tx CH LOW :Mike

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



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Safe
		Mode	Reading Level		FS	@3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d} \mathrm{B} \mu \mathrm{V}$	dB	dBμV/m	dBμV/m	dB
							_
11000.00	Н	Average	21.62	20.16	41.78	54.00	-12.22
11000.00	Н	Peak	32.99	20.16	53.15	74.00	-20.85

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

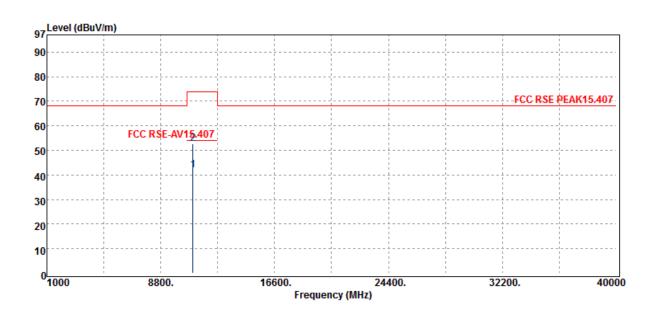


Page: 102 of 283

**Operation Band** :802.11n20B3 **Test Date** :2017-07-10

**Fundamental Frequency** Temp./Humi. :5500 MHz :23 deg\_C / 62 RH **Operation Mode** :Tx CH LOW Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	$dB\mu V/m$	dB
							_
11000.00	Н	Average	21.80	20.16	41.96	54.00	-12.04
11000.00	Н	Peak	32.57	20.16	52.73	74.00	-21.27

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

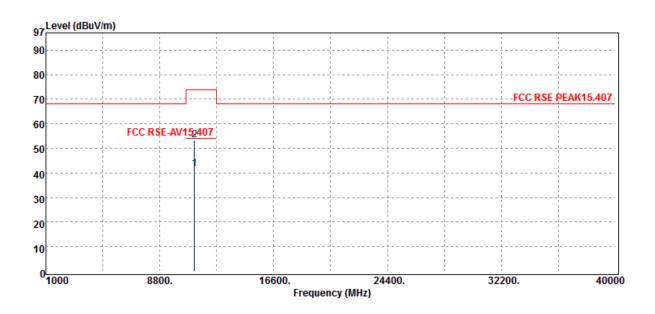


Page: 103 of 283

:2017-07-10 **Operation Band** :802.11n20B3 **Test Date** 

Fundamental Frequency :5580 MHz Temp./Humi. :23 deg\_C / 62 RH

**Operation Mode** :Tx CH MID Engineer :Mike EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
11160.00	Н	Average	21.20	20.44	41.64	54.00	-12.36
11160.00	Н	Peak	32.82	20.44	53.26	74.00	-20.74

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

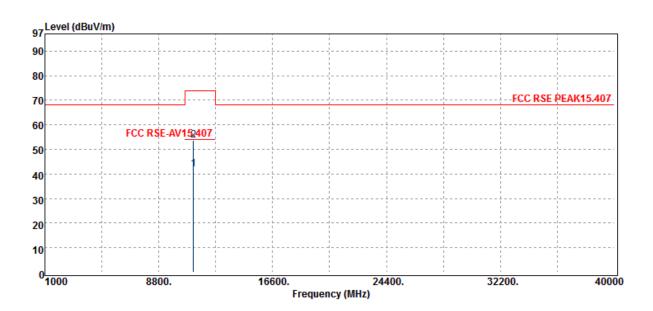


Page: 104 of 283

:2017-07-10 **Operation Band** :802.11n20B3 **Test Date** Fundamental Frequency :5580 MHz Temp./Humi. :23 deg\_C / 62 RH

**Operation Mode** :Tx CH MID Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
11160.00	Н	Average	21.39	20.44	41.83	54.00	-12.17
11160.00	Н	Peak	33.21	20.44	53.65	74.00	-20.35

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

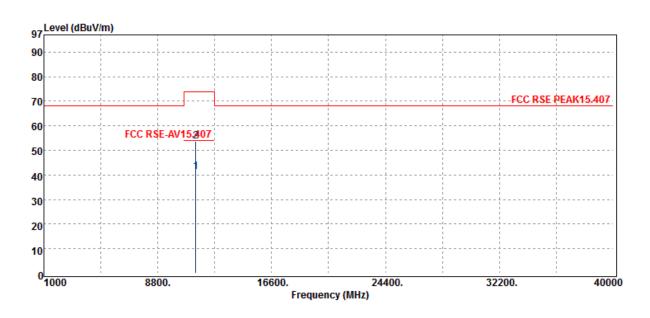


Page: 105 of 283

:2017-07-10 **Operation Band** :802.11n20B3 **Test Date** Fundamental Frequency Temp./Humi. :5700 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH HIGH Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
11400.00	Н	Average	20.87	20.56	41.43	54.00	-12.57
11400.00	Н	Peak	32.98	20.56	53.54	74.00	-20.46

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 106 of 283

**Operation Band** :802.11n20B3 Fundamental Frequency **Operation Mode** 

EUT Pol.

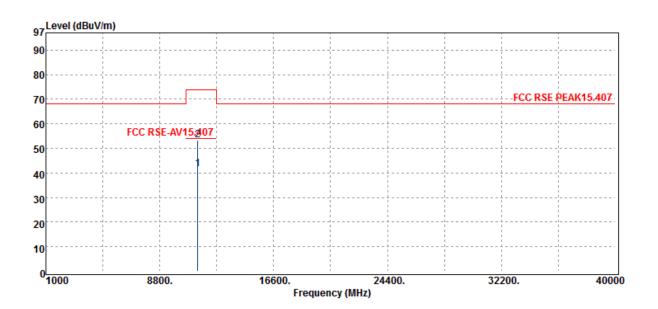
:5700 MHz :Tx CH HIGH :E1 Plane

**Test Date** :2017-07-10

Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
							_
11400.00	Н	Average	20.96	20.56	41.52	54.00	-12.48
11400.00	Н	Peak	32.77	20.56	53.33	74.00	-20.67

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

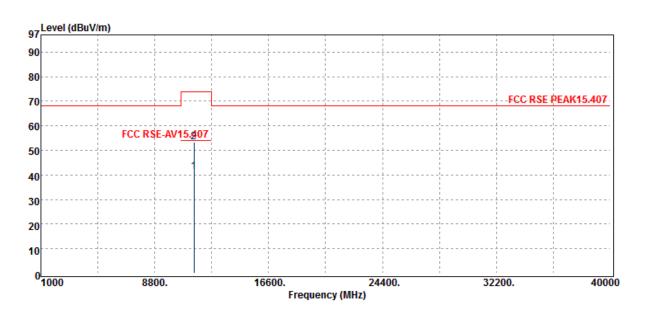


Page: 107 of 283

:2017-07-10 **Operation Band** :802.11n20B4 **Test Date** 

Fundamental Frequency Temp./Humi. :5745 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH LOW Engineer :Mike EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
11490.00	Н	Average	20.98	20.42	41.40	54.00	-12.60
11490.00	Н	Peak	32.81	20.42	53.23	74.00	-20.77

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

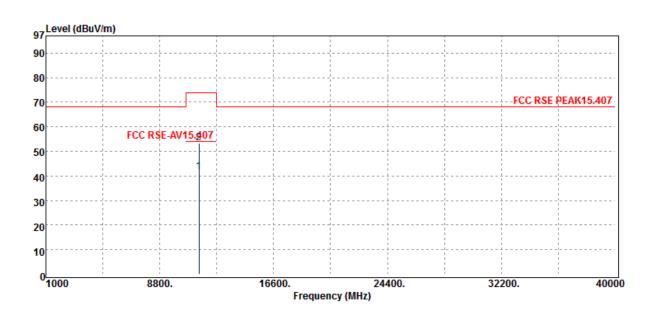


Page: 108 of 283

**Operation Band** :802.11n20B4 **Test Date** :2017-07-10

Fundamental Frequency Temp./Humi. :5745 MHz :23 deg\_C / 62 RH **Operation Mode** :Tx CH LOW Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	$dB\mu V/m$	dB
							_
11490.00	Н	Average	21.08	20.42	41.50	54.00	-12.50
11490.00	Н	Peak	32.96	20.42	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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

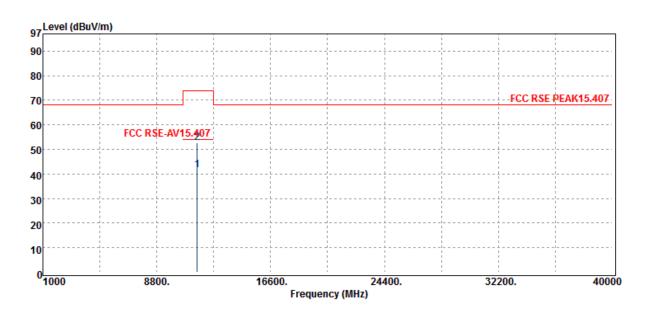


Page: 109 of 283

:2017-07-10 **Operation Band** :802.11n20B4 **Test Date** 

Fundamental Frequency Temp./Humi. :5785 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH MID Engineer :Mike EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
11570.00	Н	Average	20.92	20.58	41.50	54.00	-12.50
11570.00	Н	Peak	32.12	20.58	52.70	74.00	-21.30

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

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

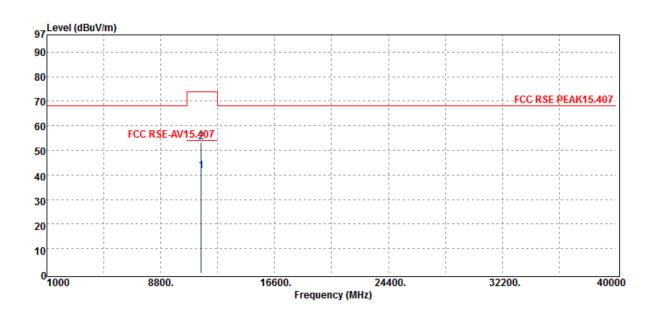


Page: 110 of 283

**Operation Band** :802.11n20B4 **Test Date** :2017-07-10

Fundamental Frequency Temp./Humi. :5785 MHz :23 deg\_C / 62 RH **Operation Mode** :Tx CH MID Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
11570.00	Н	Average	21.14	20.58	41.72	54.00	-12.28
11570.00	Н	Peak	32.95	20.58	53.53	74.00	-20.47

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

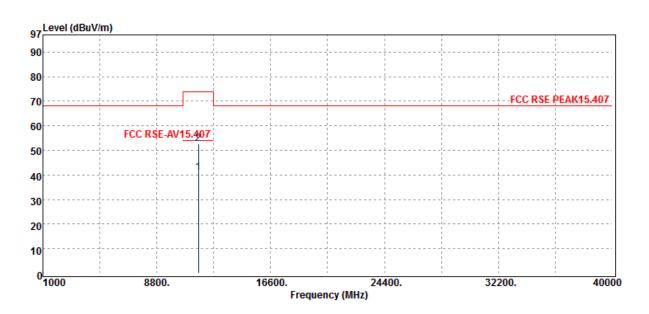


Page: 111 of 283

:2017-07-10 **Operation Band** :802.11n20B4 **Test Date** 

Fundamental Frequency Temp./Humi. :5825 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH HIGH Engineer :Mike EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
11650.00	Н	Average	20.62	20.43	41.05	54.00	-12.95
11650.00	Н	Peak	32.42	20.43	52.85	74.00	-21.15

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



Page: 112 of 283

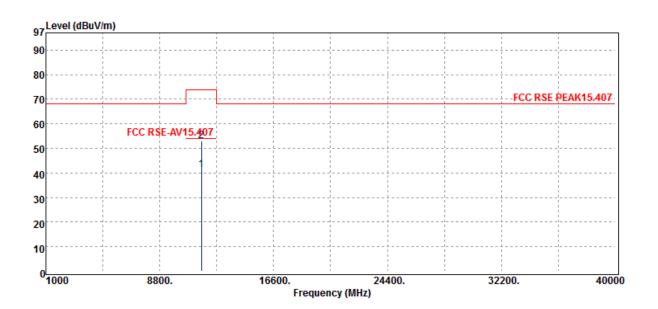
**Operation Band** :802.11n20B4 **Test Date** Fundamental Frequency Temp./Humi. :5825 MHz

**Operation Mode** :Tx CH HIGH EUT Pol. :E1 Plane

:2017-07-10 :23 deg\_C / 62 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
11650.00	Н	Average	20.74	20.43	41.17	54.00	-12.83
11650.00	Н	Peak	32.56	20.43	52.99	74.00	-21.01

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

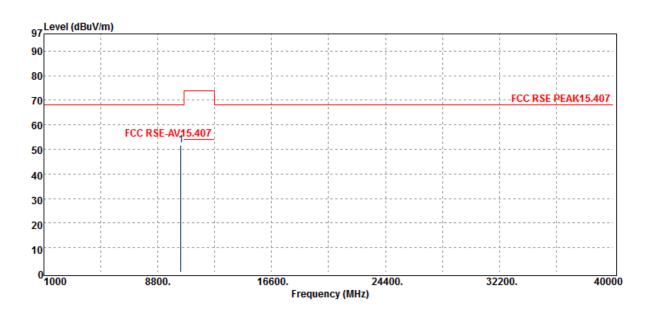


Page: 113 of 283

:2017-07-10 **Operation Band** :802.11n40B1 **Test Date** Fundamental Frequency Temp./Humi. :5190 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH LOW Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10380.00	Н	Peak	33.59	18.12	51.71	68.30	-16.59

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

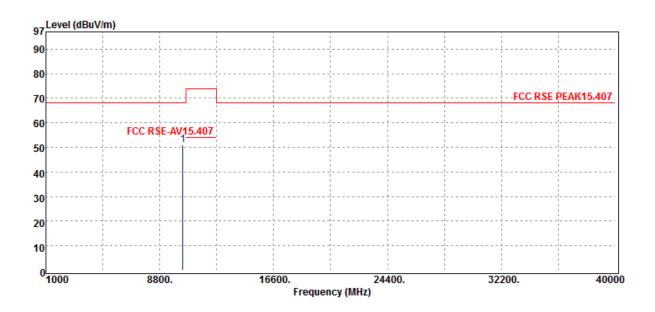


Page: 114 of 283

**Operation Band** :802.11n40B1 **Test Date** :2017-07-10 Fundamental Frequency Temp./Humi. :5190 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH LOW Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
10380.00	Н	Peak	32.79	18.12	50.91	68.30	-17.39

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

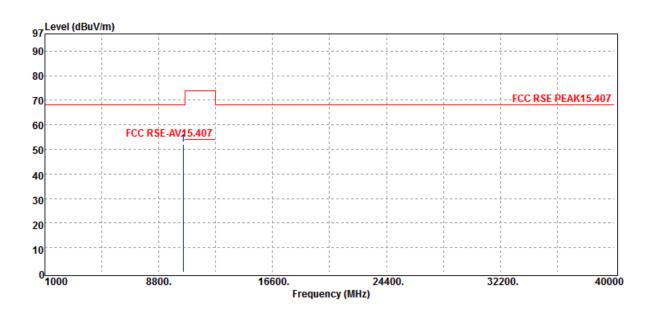


Page: 115 of 283

:2017-07-10 **Operation Band** :802.11n40B1 **Test Date** 

Fundamental Frequency Temp./Humi. :5230 MHz :23 deg\_C / 62 RH **Operation Mode** :Tx CH HIGH Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10460.00	Н	Peak	33.34	18.55	51.89	68.30	-16.41

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

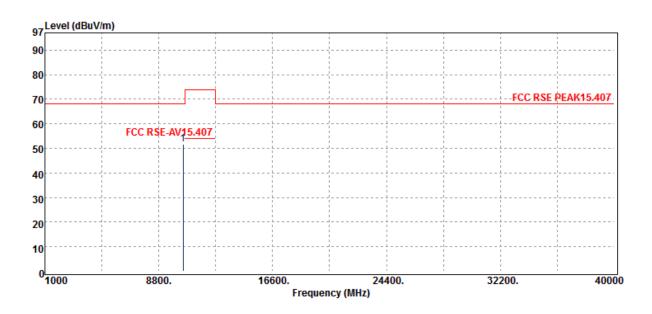


Page: 116 of 283

**Operation Band** :802.11n40B1 **Test Date** :2017-07-10 Fundamental Frequency Temp./Humi. :5230 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH HIGH Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10460.00	Н	Peak	33.19	18.55	51.74	68.30	-16.56

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

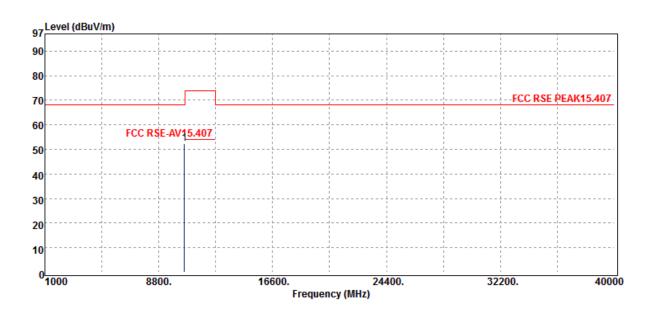


Page: 117 of 283

:2017-07-10 **Operation Band** :802.11n40B2 **Test Date** 

Fundamental Frequency Temp./Humi. :5270 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH LOW Engineer :Mike EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
10540.00	Н	Peak	33.22	19.17	52.39	68.30	-15.91

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

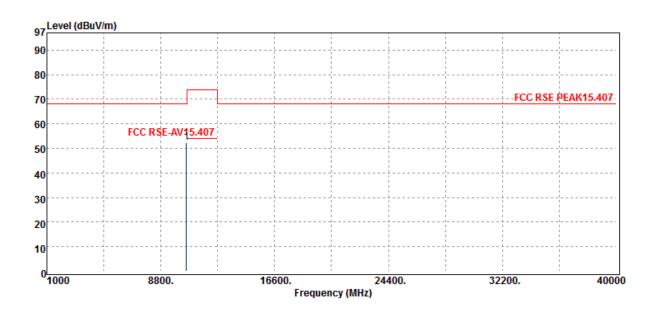


Page: 118 of 283

**Operation Band** :802.11n40B2 **Test Date** :2017-07-10 **Fundamental Frequency** Temp./Humi.

:5270 MHz :23 deg\_C / 62 RH **Operation Mode** :Tx CH LOW Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10540.00	Н	Peak	33.04	19.17	52.21	68.30	-16.09

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

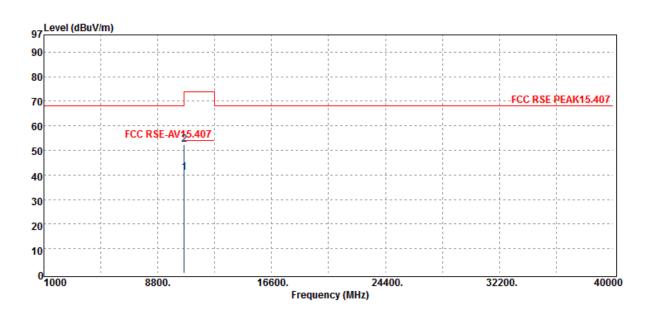


Page: 119 of 283

**Operation Band** :802.11n40B2 **Test Date** :2017-07-10

Fundamental Frequency Temp./Humi. :5310 MHz :23 deg\_C / 62 RH **Operation Mode** :Tx CH HIGH Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
10620.00	Н	Average	21.73	19.11	40.84	54.00	-13.16
10620.00	Н	Peak	33.18	19.11	52.29	74.00	-21.71

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

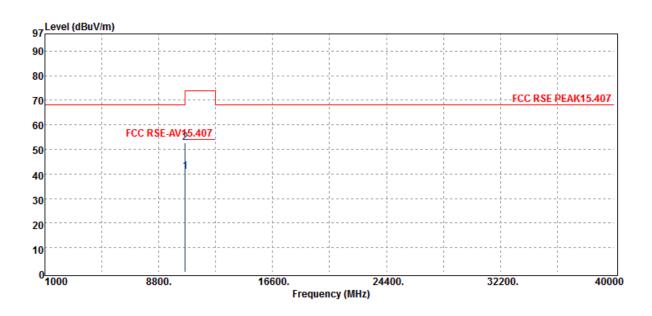


Page: 120 of 283

**Operation Band** :802.11n40B2 **Test Date** :2017-07-10

Fundamental Frequency Temp./Humi. :5310 MHz :23 deg\_C / 62 RH **Operation Mode** :Tx CH HIGH Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
10620.00	Н	Average	21.88	19.11	40.99	54.00	-13.01
10620.00	Н	Peak	33.46	19.11	52.57	74.00	-21.43

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

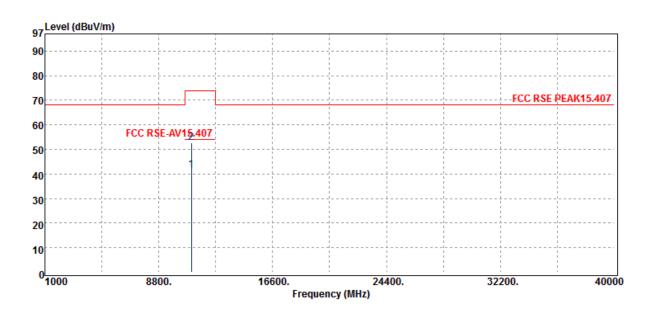


Page: 121 of 283

:2017-07-10 **Operation Band** :802.11n40B3 **Test Date** 

Fundamental Frequency Temp./Humi. :5510 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH LOW Engineer :Mike EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
11020.00	Н	Average	21.54	20.16	41.70	54.00	-12.30
11020.00	Н	Peak	32.59	20.16	52.75	74.00	-21.25

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



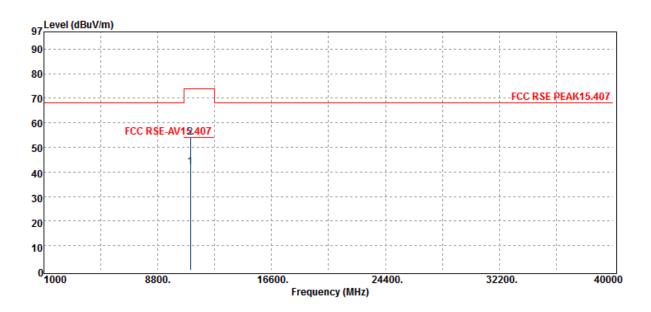
Page: 122 of 283

**Operation Band** :802.11n40B3 **Test Date** :2017-07-10

Fundamental Frequency Temp./Humi. :5510 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH LOW Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
11020.00	Н	Average	21.67	20.16	41.83	54.00	-12.17
11020.00	Н	Peak	34.04	20.16	54.20	74.00	-19.80

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

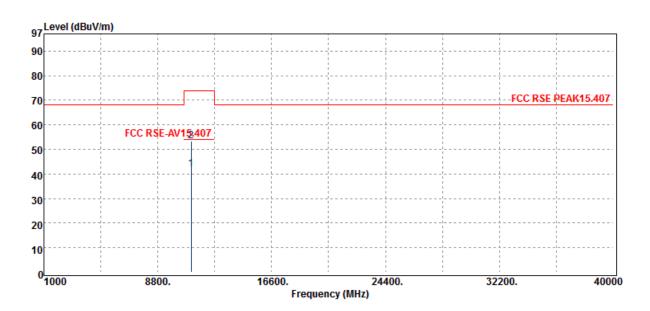


Page: 123 of 283

:2017-07-10 **Operation Band** :802.11n40B3 **Test Date** 

Fundamental Frequency Temp./Humi. :5550 MHz :23 deg\_C / 62 RH **Operation Mode** :Tx CH MID :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
11100.00	Н	Average	21.57	20.32	41.89	54.00	-12.11
11100.00	Н	Peak	33.13	20.32	53.45	74.00	-20.55

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

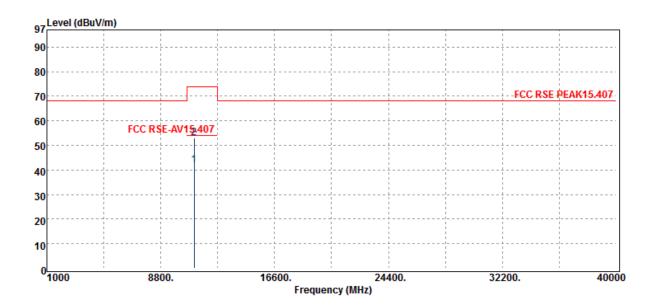


Page: 124 of 283

:2017-07-10 **Operation Band** :802.11n40B3 **Test Date** Fundamental Frequency Temp./Humi. :5550 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH MID Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	$dB\mu V/m$	dB
							_
11100.00	Н	Average	21.68	20.32	42.00	54.00	-12.00
11100.00	Н	Peak	32.82	20.32	53.14	74.00	-20.86

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279



Page: 125 of 283

**Operation Band** Fundamental Frequency

**Operation Mode** EUT Pol.

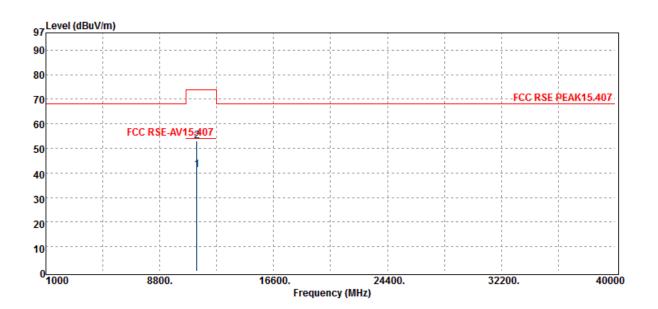
:802.11n40B3 :5670 MHz :Tx CH HIGH

:E1 Plane

:2017-07-10 **Test Date** Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

:VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
11340.00	Н	Average	21.06	20.38	41.44	54.00	-12.56
11340.00	Н	Peak	32.63	20.38	53.01	74.00	-20.99

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 126 of 283

**Operation Band** Fundamental Frequency

**Operation Mode** EUT Pol.

:802.11n40B3 :5670 MHz :Tx CH HIGH

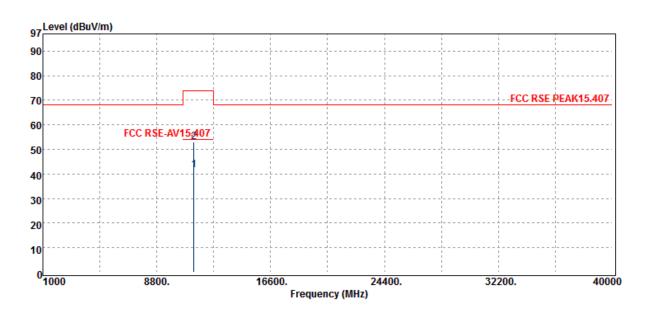
:E1 Plane

**Test Date** Temp./Humi. :2017-07-10

:23 deg\_C / 62 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{dB}\mu\mathrm{V}$	dB	dBμV/m	$dB\mu V/m$	dB
							_
11340.00	Н	Average	21.18	20.38	41.56	54.00	-12.44
11340.00	Н	Peak	32.60	20.38	52.98	74.00	-21.02

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



Page: 127 of 283

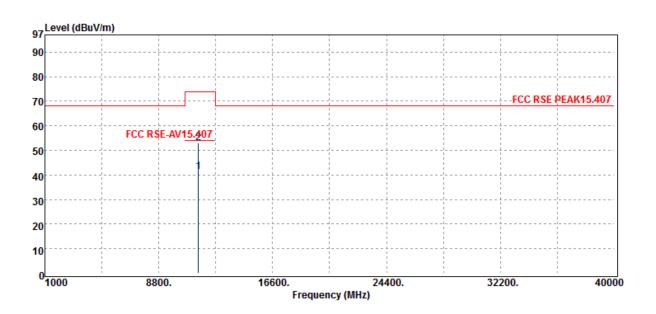
**Operation Band** :802.11n40B4 Fundamental Frequency :5755 MHz

**Operation Mode** :Tx CH LOW EUT Pol. :E1 Plane

:2017-07-10 **Test Date** 

Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
11510.00	Н	Average	20.87	20.38	41.25	54.00	-12.75
11510.00	Н	Peak	32.79	20.38	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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

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

t (886-2) 2299-3279



Page: 128 of 283

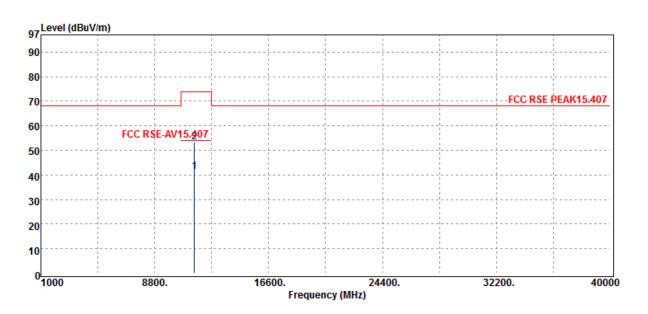
**Operation Band** :802.11n40B4 Fundamental Frequency :5755 MHz **Operation Mode** :Tx CH LOW

EUT Pol. :E1 Plane **Test Date** :2017-07-10

Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	$dB\mu V/m$	dB
							_
11510.00	Н	Average	21.00	20.38	41.38	54.00	-12.62
11510.00	Н	Peak	32.99	20.38	53.37	74.00	-20.63

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

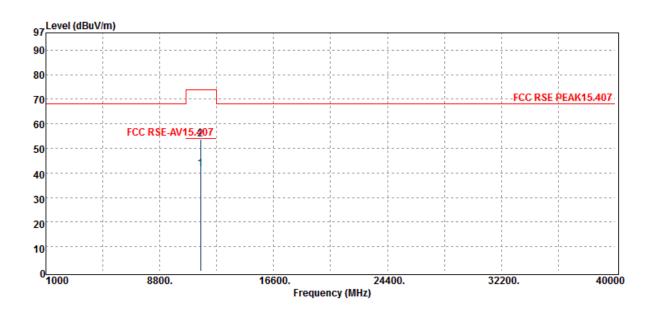


Page: 129 of 283

:2017-07-10 **Operation Band** :802.11n40B4 **Test Date** 

Fundamental Frequency Temp./Humi. :5795 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH HIGH Engineer :Mike EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
11590.00	Н	Average	21.14	20.43	41.57	54.00	-12.43
11590.00	Н	Peak	33.19	20.43	53.62	74.00	-20.38

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

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

t (886-2) 2299-3279

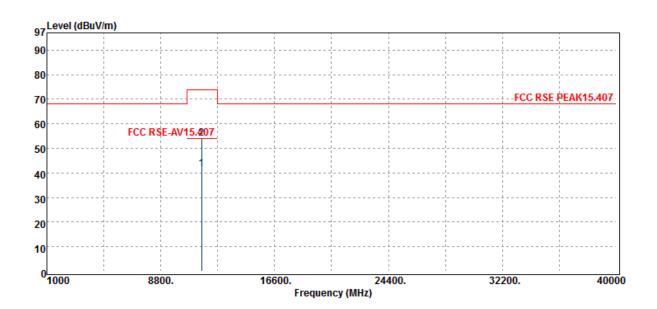


Page: 130 of 283

**Operation Band** :802.11n40B4 **Test Date** :2017-07-10 Fundamental Frequency Temp./Humi. :5795 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH HIGH Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
							_
11590.00	Н	Average	21.32	20.43	41.75	54.00	-12.25
11590.00	Н	Peak	33.54	20.43	53.97	74.00	-20.03

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



Page: 131 of 283

**Operation Band** :802.11ac80B1 Fundamental Frequency :5210 MHz

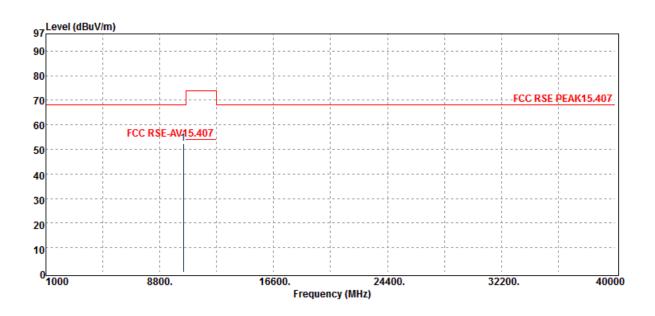
**Operation Mode** :Tx CH LOW EUT Pol. :E1 Plane

**Test Date** :2017-07-10

Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

:VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
10420.00	Н	Peak	33.58	18.71	52.29	68.30	-16.01

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 132 of 283

**Operation Band** Fundamental Frequency

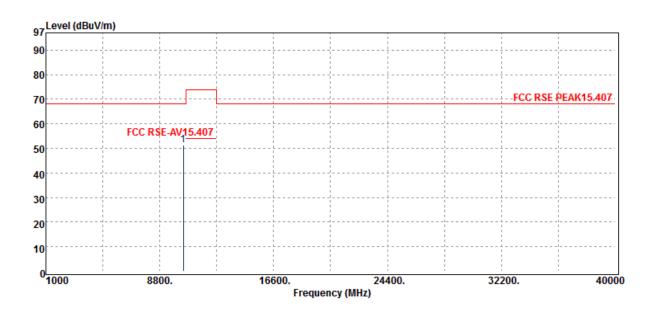
**Operation Mode** EUT Pol.

:802.11ac80B1 :5210 MHz :Tx CH LOW :E1 Plane

**Test Date** :2017-07-10 Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10420.00	Н	Peak	32.58	18.71	51.29	68.30	-17.01

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 133 of 283

**Operation Band** Fundamental Frequency

**Operation Mode** EUT Pol.

:802.11ac80B2 :5290 MHz :Tx CH HIGH

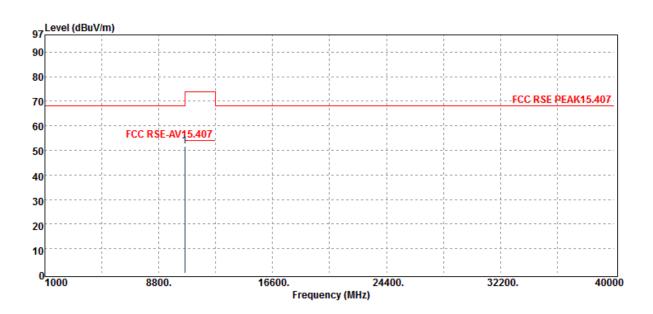
:E1 Plane

**Test Date** :2017-07-10

Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

:VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
							_
10580.00	Н	Peak	32.72	18.88	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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

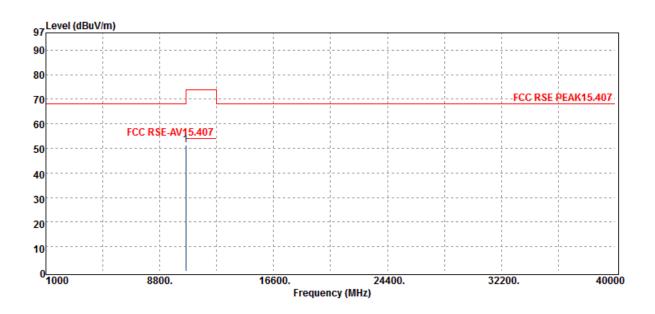


Page: 134 of 283

**Operation Band** :802.11ac80B2 **Test Date** :2017-07-10 Fundamental Frequency Temp./Humi. :5290 MHz :23 deg\_C / 62 RH

**Operation Mode** :Tx CH HIGH Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
10580.00	Н	Peak	32.62	18.88	51.50	68.30	-16.80

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

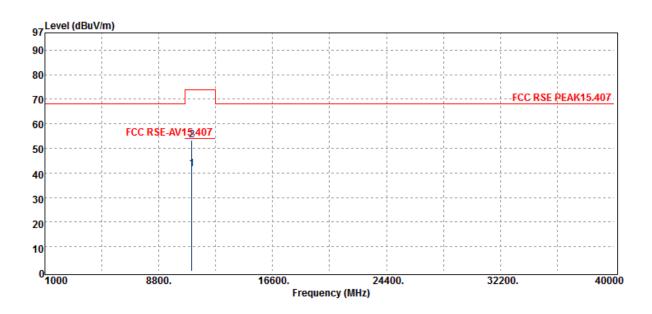


Page: 135 of 283

**Operation Band** :802.11ac80B3 **Test Date** :2017-07-10

Fundamental Frequency Temp./Humi. :5530 MHz :23 deg\_C / 62 RH **Operation Mode** :Tx CH LOW Engineer :Mike

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



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	$dB\mu V/m$	dB
							_
11060.00	Н	Average	21.32	20.27	41.59	54.00	-12.41
11060.00	Н	Peak	32.96	20.27	53.23	74.00	-20.77

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



Page: 136 of 283

**Operation Band** Fundamental Frequency **Operation Mode** 

EUT Pol.

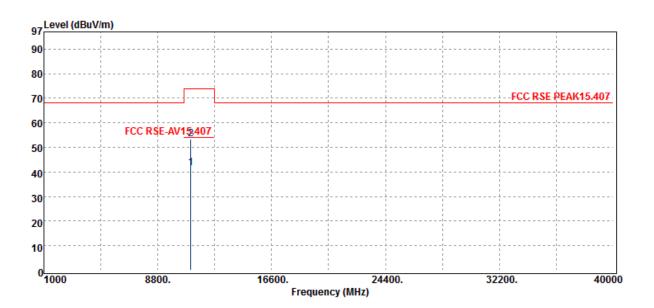
:802.11ac80B3 :5530 MHz :Tx CH LOW :E1 Plane

**Test Date** :2017-07-10

Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
11060.00	Н	Average	21.46	20.27	41.73	54.00	-12.27
11060.00	Н	Peak	33.09	20.27	53.36	74.00	-20.64

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



Page: 137 of 283

**Operation Band** Fundamental Frequency

**Operation Mode** EUT Pol.

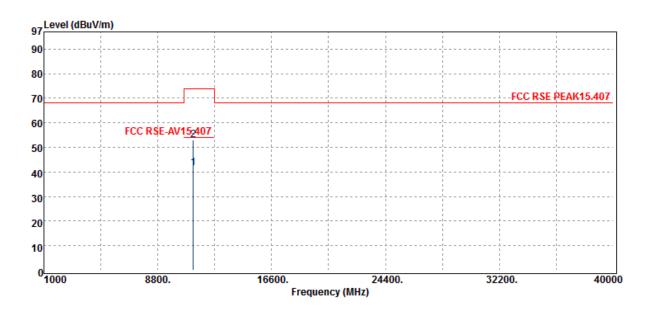
:802.11ac80B3 :5610 MHz :Tx CH HIGH

:E1 Plane

**Test Date** :2017-07-10

Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{dB}\mu\mathrm{V}$	dB	dBμV/m	$dB\mu V/m$	dB
							_
11220.00	Н	Average	21.20	20.47	41.67	54.00	-12.33
11220.00	Н	Peak	32.51	20.47	52.98	74.00	-21.02

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



Page: 138 of 283

**Operation Band** Fundamental Frequency

**Operation Mode** EUT Pol.

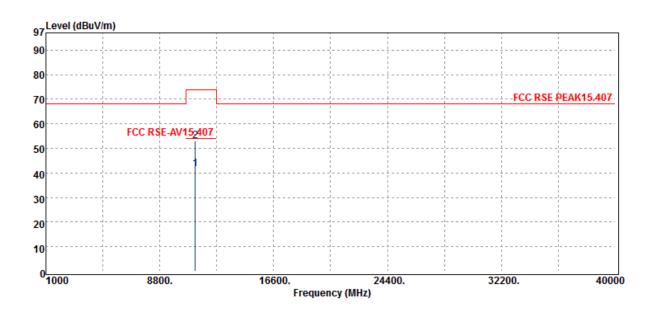
:802.11ac80B3 :5610 MHz :Tx CH HIGH :E1 Plane

**Test Date** :2017-07-10

Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
							_
11220.00	Н	Average	21.32	20.47	41.79	54.00	-12.21
11220.00	Н	Peak	32.59	20.47	53.06	74.00	-20.94

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



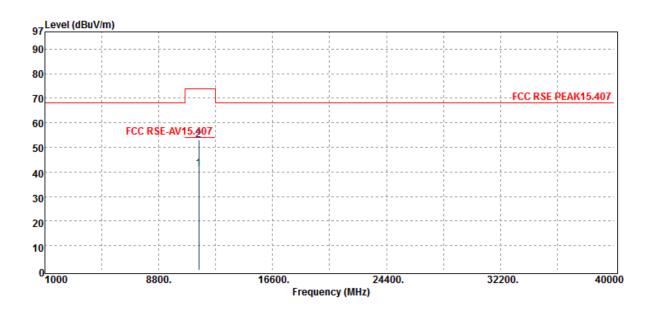
Page: 139 of 283

**Operation Band** :802.11ac80B4 **Test Date** 

Fundamental Frequency :5775 MHz **Operation Mode** :Tx CH LOW EUT Pol. :E1 Plane

:2017-07-10 Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
11550.00	Н	Average	20.85	20.51	41.36	54.00	-12.64
11550.00	Н	Peak	32.69	20.51	53.20	74.00	-20.80

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



Page: 140 of 283

**Operation Band** :802.11ac80B4

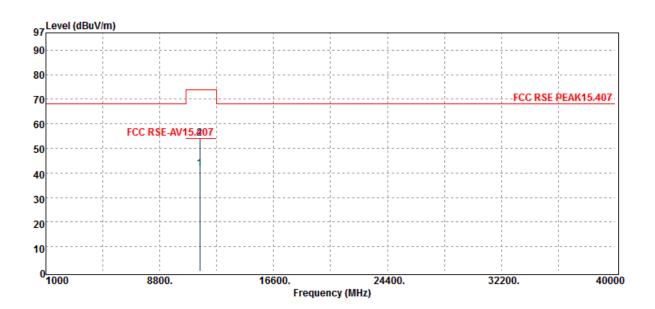
Fundamental Frequency :5775 MHz **Operation Mode** :Tx CH LOW

EUT Pol. :E1 Plane **Test Date** :2017-07-10

Temp./Humi. :23 deg\_C / 62 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
11550.00	Н	Average	20.96	20.51	41.47	54.00	-12.53
11550.00	Н	Peak	33.49	20.51	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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 141 of 283

## Band edge falling to restricted band

Operation Band :802.11aB1 **Fundamental Frequency** :5180 MHz

**Operation Mode** :Bandedge CH LOW

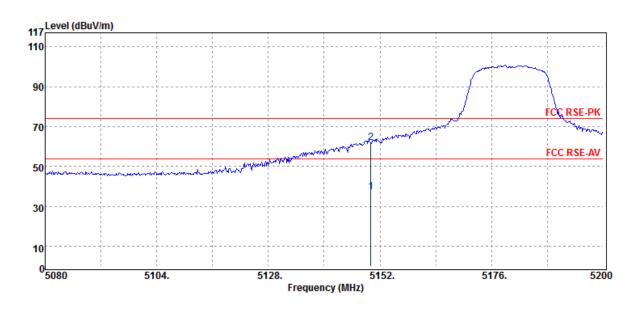
EUT Pol. :E1 Plane

:2017-07-04 **Test Date** 

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

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	Е	Average	31.43	5.88	37.31	54.00	-16.69
5150.00	Е	Peak	56.14	5.88	62.02	74.00	-11.98

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

Onless otherwise stated the results shown in this less report relear only to the samplets) tested and such carriagness are tellaned for 90 days only. 

Ref. 8月 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 <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of this document is unquitable and effective members. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

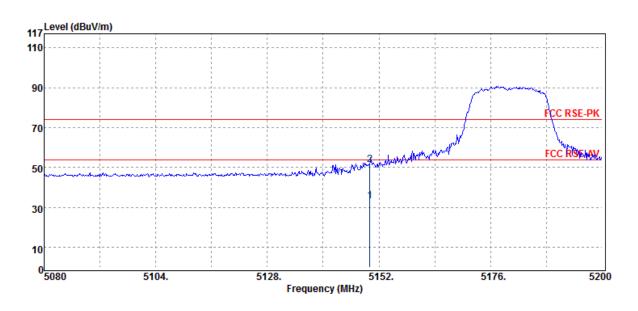


Page: 142 of 283

**Operation Band** :802.11aB1 **Test Date** :2017-07-04

Fundamental Frequency Temp./Humi. :5180 MHz :22 deg\_C / 61 RH

Operation Mode :Bandedge CH LOW Engineer :Mike EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
5150.00	Е	Average	27.39	5.88	33.27	54.00	-20.73
5150.00	Е	Peak	45.39	5.88	51.27	74.00	-22.73

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 143 of 283

**Operation Band Fundamental Frequency** Operation Mode

EUT Pol.

:802.11aB2 :5320 MHz

:Bandedge CH HIGH

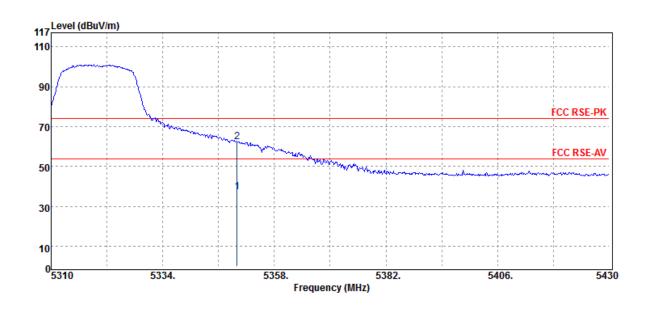
:E1 Plane

:2017-07-04 **Test Date** 

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

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	$dB\mu V$	dB	dBμV/m	dBμV/m	dB
5350.00	Е	Average	31.11	6.16	37.27	54.00	-16.73
5350.00	Е	Peak	56.10	6.16	62.26	74.00	-11.74

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



Page: 144 of 283

**Operation Band** Fundamental Frequency

Operation Mode EUT Pol.

:802.11aB2 :5320 MHz

:Bandedge CH HIGH

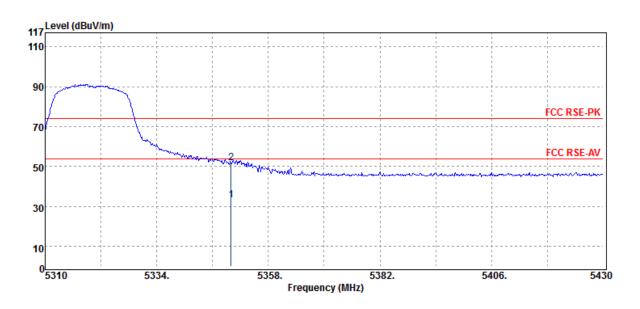
:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
5350.00	Е	Average	27.21	6.16	33.37	54.00	-20.63
5350.00	Е	Peak	45.58	6.16	51.74	74.00	-22.26

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



Page: 145 of 283

**Operation Band** :802.11aB3

Fundamental Frequency :5500 MHz Operation Mode :Bandedge CH LOW

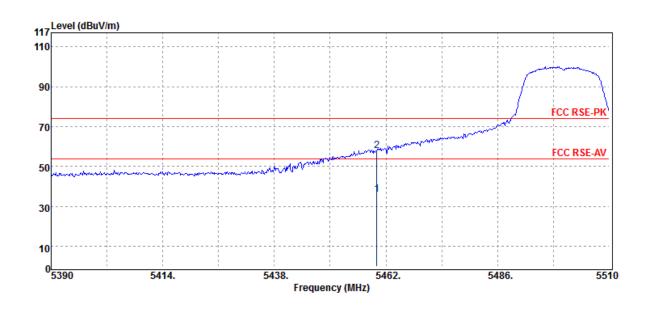
EUT Pol. :E1 Plane

:2017-07-04 **Test Date** 

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

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	Е	Average	29.83	6.23	36.06	54.00	-17.94
5460.00	Ε	Peak	51.73	6.23	57.96	74.00	-16.04

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



Page: 146 of 283

**Operation Band** Fundamental Frequency Operation Mode

:802.11aB3 :5500 MHz

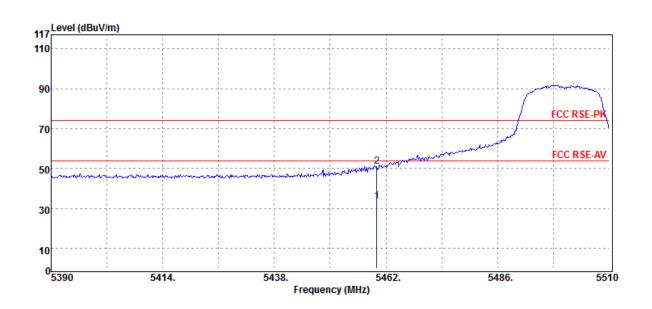
:Bandedge CH LOW

EUT Pol. :E1 Plane **Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

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
5460.00	E	Average	27.30	6.23	33.53	54.00	-20.47
5460.00	E	Peak	44.76	6.23	50.99	74.00	-23.01

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 147 of 283

**Operation Band** Fundamental Frequency

Operation Mode

EUT Pol.

:802.11aB3 :5500 MHz

:Bandedge CH LOW

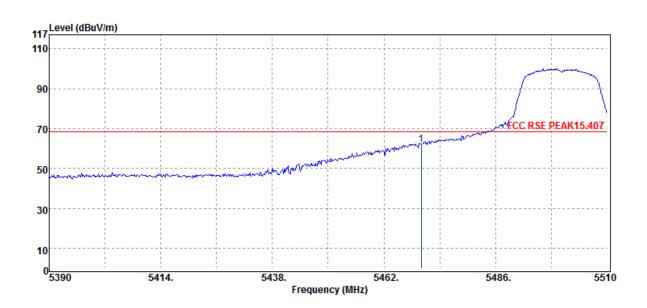
:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :VERTICAL



	Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin	
	MHz	F/H/E/S	PK/QP/AV	$dB\mu V$	dB	$dB\mu V/m$	$\mathrm{dB}\mu\mathrm{V/m}$	dB	
-	5470.00	E	Peak	55.74	6.26	62.00	68.30	-6.30	•

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 148 of 283

**Operation Band** Fundamental Frequency

Operation Mode EUT Pol.

:802.11aB3 :5500 MHz

:Bandedge CH LOW

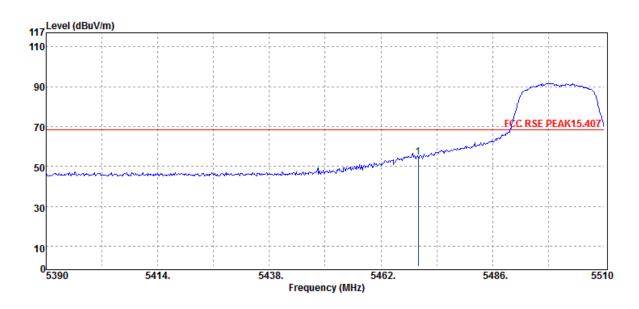
:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$dB\mu V$	dB	$dB\mu V/m$	$dB\mu V/m$	dB
5470.00	E	Peak	48.57	6.26	54.83	68.30	-13.47

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



Page: 149 of 283

**Operation Band** Fundamental Frequency

Operation Mode EUT Pol.

:802.11aB3 :5700 MHz

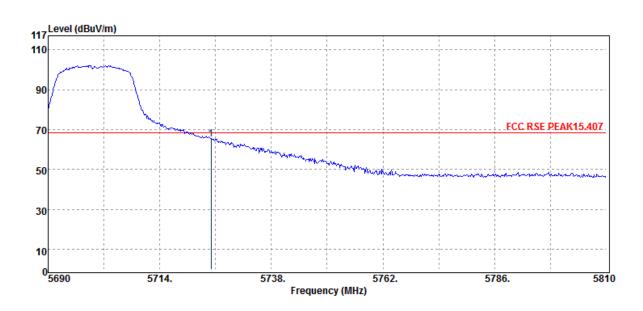
:Bandedge CH HIGH

:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH Engineer :Mike

Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$dB\mu V$	dB	dBμV/m	$\mathrm{dB}\mu\mathrm{V/m}$	dB
5725.00	Е	Peak	58.79	6.59	65.38	68.30	-2.92

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



Page: 150 of 283

**Operation Band** Fundamental Frequency

Operation Mode EUT Pol.

:802.11aB3 :5700 MHz

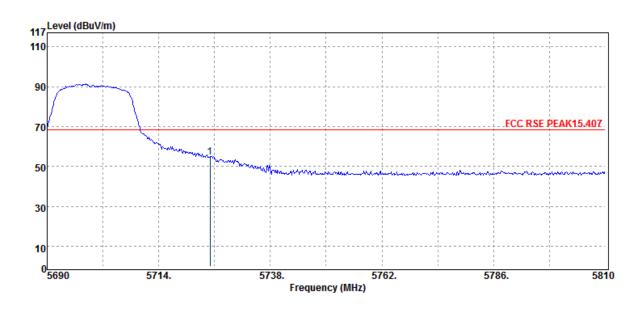
:Bandedge CH HIGH

:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike :HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$dB\mu V$	dB	dBμV/m	$\mathrm{dB}\mu\mathrm{V/m}$	dB
5725.00	Е	Peak	48.10	6.59	54.69	68.30	-13.61

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



Page: 151 of 283

**Operation Band** Fundamental Frequency Operation Mode

:802.11aB4 :5745 MHz

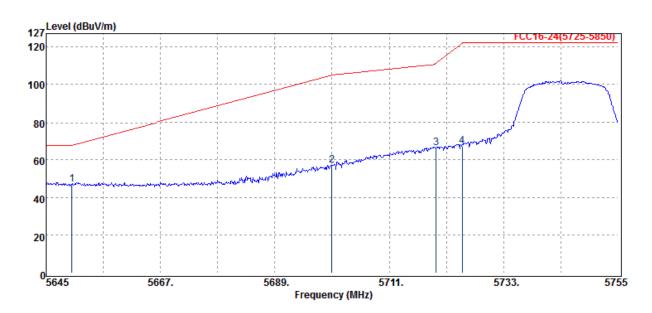
:Bandedge CH LOW

EUT Pol. :E1 Plane **Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	$dB\mu V/m$	dB
5650.00	Е	Peak	40.75	6.48	47.23	68.23	-21.00
5700.00	Е	Peak	50.25	6.67	56.92	105.23	-48.31
5720.00	Е	Peak	59.86	6.60	66.46	110.83	-44.37
5725.00	E	Peak	60.73	6.59	67.32	122.23	-54.91

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



Page: 152 of 283

**Operation Band** Fundamental Frequency

Operation Mode

EUT Pol.

:802.11aB4 :5745 MHz

:Bandedge CH LOW

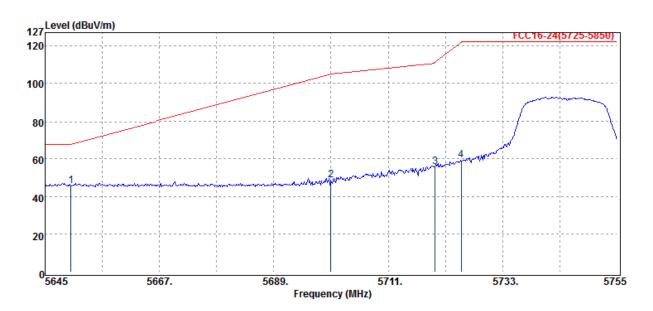
:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$dB\mu V$	dB	$dB\mu V/m$	$dB\mu V/m$	dB
5650.00	Е	Peak	39.31	6.48	45.79	68.23	-22.44
5700.00	Е	Peak	42.30	6.67	48.97	105.23	-56.26
5720.00	Е	Peak	49.06	6.60	55.66	110.83	-55.17
5725.00	E	Peak	52.65	6.59	59.24	122.23	-62.99

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

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

Ref 另有說明,此報告結果僅對測試之樣品負責,同時止樣品僅保留到天。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 <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appropriate in valuations and the produced except in full, without prior within any contents. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 153 of 283

**Operation Band** Fundamental Frequency Operation Mode

EUT Pol.

:802.11aB4 :5825 MHz

:Bandedge CH HIGH

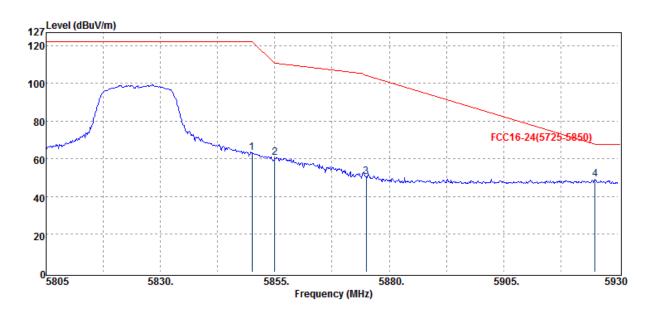
:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	$dB\mu V/m$	dB
5850.00	Е	Peak	55.86	7.28	63.14	122.23	-59.09
5855.00	Е	Peak	53.23	7.32	60.55	110.83	-50.28
5875.00	Е	Peak	42.95	7.37	50.32	105.23	-54.91
5925.00	E	Peak	41.61	7.39	49.00	68.23	-19.23

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



Page: 154 of 283

**Operation Band** Fundamental Frequency

Operation Mode EUT Pol.

:802.11aB4 :5825 MHz

:Bandedge CH HIGH

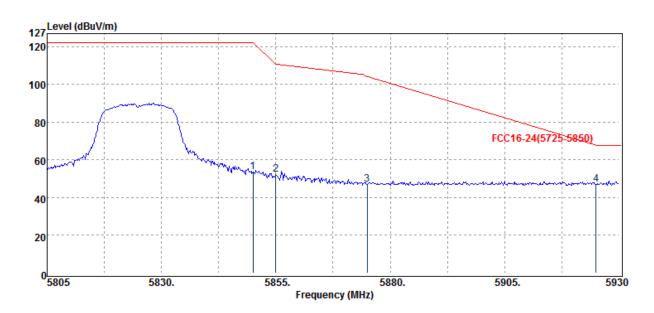
:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	$dB\mu V/m$	dB
5850.00	Е	Peak	46.16	7.28	53.44	122.23	-68.79
5855.00	Е	Peak	45.09	7.32	52.41	110.83	-58.42
5875.00	Е	Peak	39.83	7.37	47.20	105.23	-58.03
5925.00	E	Peak	39.54	7.39	46.93	68.23	-21.30

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



Page: 155 of 283

**Operation Band Fundamental Frequency** 

Operation Mode EUT Pol.

:802.11n20B1 :5180 MHz

:Bandedge CH LOW

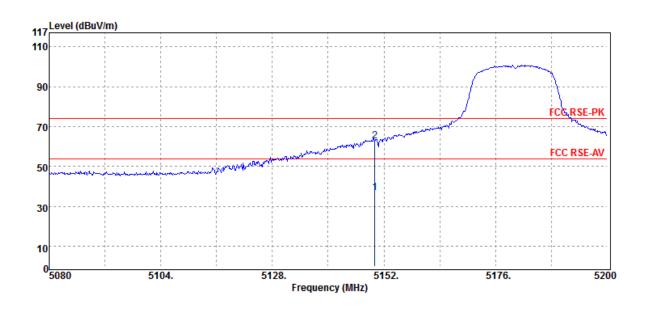
:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

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	$\mathrm{d} \mathrm{B} \mu \mathrm{V}$	dB	dBμV/m	dBμV/m	dB
5150.00	Е	Average	30.88	5.88	36.76	54.00	-17.24
5150.00	E	Peak	56.72	5.88	62.60	74.00	-11.40

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

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

t (886-2) 2299-3279

f (886-2) 2298-0488



:2017-07-04

Page: 156 of 283

**Operation Band** Fundamental Frequency Operation Mode

EUT Pol.

:802.11n20B1 :5180 MHz :Bandedge CH LOW

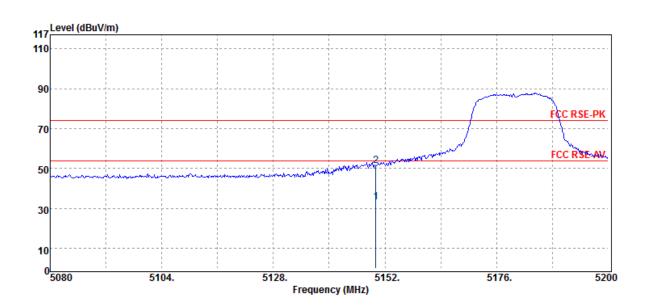
:E1 Plane

**Test Date** 

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



	Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
	MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
•	5150.00	Е	Average	27.33	5.88	33.21	54.00	-20.79
	5150.00	E	Peak	45.46	5.88	51.34	74.00	-22.66

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



Page: 157 of 283

**Operation Band** Fundamental Frequency **Operation Mode** EUT Pol.

:802.11n20B2 :5320 MHz

:Bandedge CH HIGH

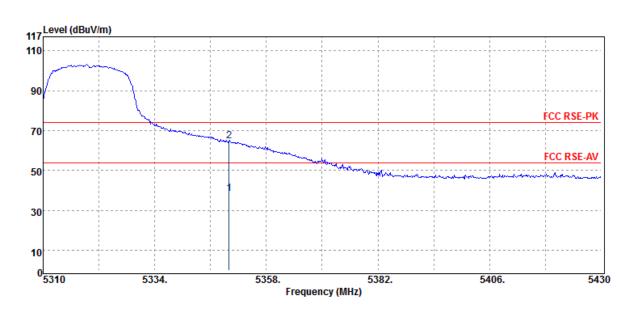
:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
5350.00	) E	Average	32.26	6.16	38.42	54.00	-15.58
5350.00	) E	Peak	58.73	6.16	64.89	74.00	-9.11

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

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

t (886-2) 2299-3279

f (886-2) 2298-0488



Page: 158 of 283

**Operation Band** Fundamental Frequency **Operation Mode** EUT Pol.

:802.11n20B2 :5320 MHz

:Bandedge CH HIGH

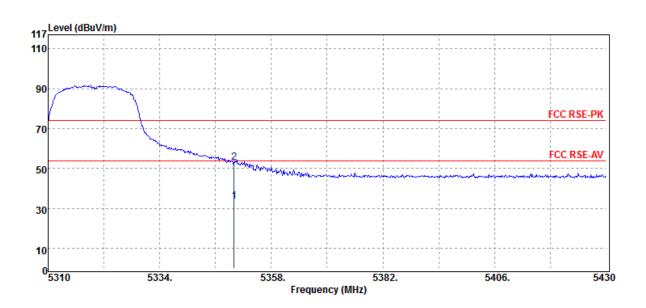
:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$dB\mu V$	dB	dBμV/m	dBμV/m	dB
5350.00	Е	Average	27.43	6.16	33.59	54.00	-20.41
5350.00	Ε	Peak	46.87	6.16	53.03	74.00	-20.97

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



Page: 159 of 283

**Operation Band Fundamental Frequency** 

Operation Mode EUT Pol.

:802.11n20B3 :5500 MHz

:Bandedge CH LOW

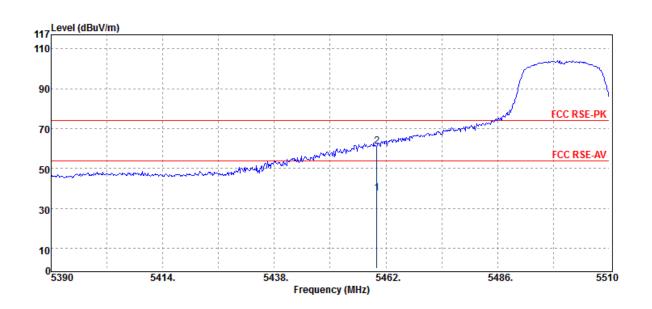
:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

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	Е	Average	31.26	6.23	37.49	54.00	-16.51
5460.00	E	Peak	54.91	6.23	61.14	74.00	-12.86

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

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

f (886-2) 2298-0488



Page: 160 of 283

**Operation Band** Fundamental Frequency Operation Mode

EUT Pol.

:802.11n20B3 :5500 MHz

:Bandedge CH LOW

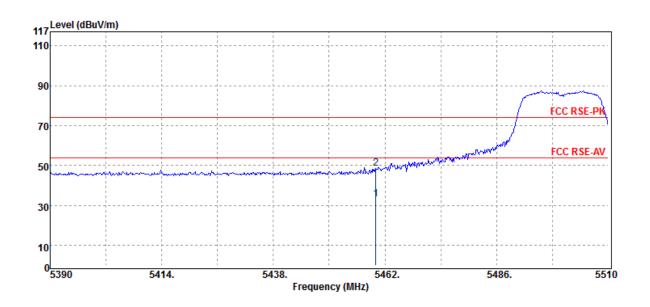
:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

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
5460.00	Е	Average	26.89	6.23	33.12	54.00	-20.88
5460.00	Е	Peak	42.23	6.23	48.46	74.00	-25.54

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



Page: 161 of 283

**Operation Band Fundamental Frequency Operation Mode** 

EUT Pol.

:802.11n20B3 :5500 MHz

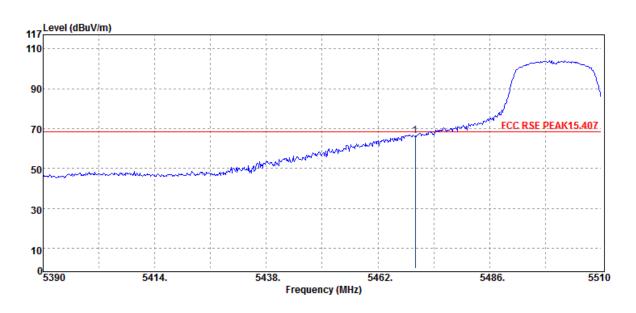
:Bandedge CH LOW

:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH Engineer :Mike

Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	$dB\mu V/m$	$dB\mu V/m$	dB
5470.00	Е	Peak	59.95	6.26	66.21	68.30	-2.09

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without price within approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of the indexented to the full set extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 162 of 283

**Operation Band** Fundamental Frequency Operation Mode

EUT Pol.

:802.11n20B3 :5500 MHz

:Bandedge CH LOW

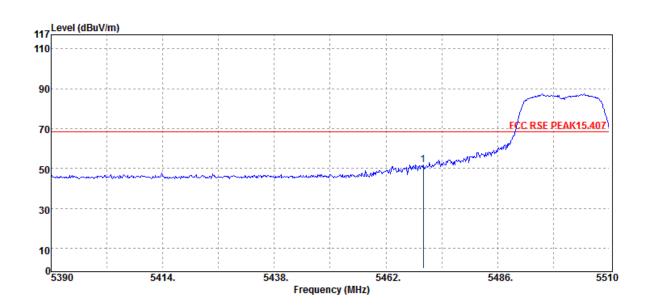
:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



	Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin	
_	MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB	
	5470.00	E	Peak	45.43	6.26	51.69	68.30	-16.61	_

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



Page: 163 of 283

**Operation Band** Fundamental Frequency Operation Mode EUT Pol.

:802.11n20B3 :5700 MHz

:Bandedge CH HIGH

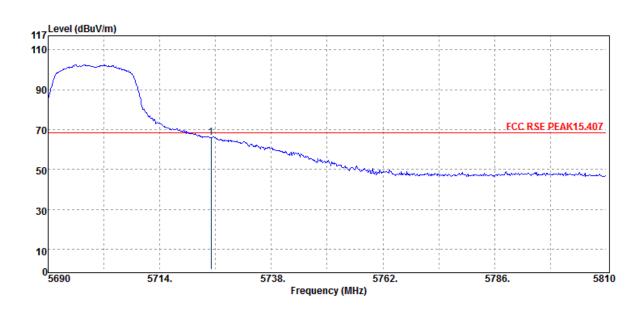
:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$dB\mu V$	dB	dBμV/m	$\mathrm{dB}\mu\mathrm{V/m}$	dB
5725.00	Е	Peak	59.53	6.59	66.12	68.30	-2.18

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



Page: 164 of 283

**Operation Band** Fundamental Frequency Operation Mode EUT Pol.

:802.11n20B3 :5700 MHz

:Bandedge CH HIGH

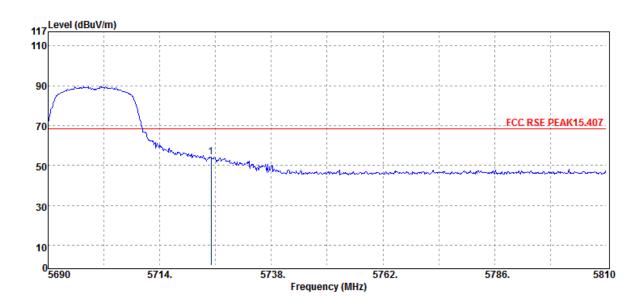
:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$dB\mu V$	dB	$dB\mu V/m$	$dB\mu V/m$	dB
5725.00	Е	Peak	47.59	6.59	54.18	68.30	-14.12

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



Page: 165 of 283

**Operation Band** Fundamental Frequency Operation Mode

EUT Pol.

:802.11n20B4 :5745 MHz

:Bandedge CH LOW

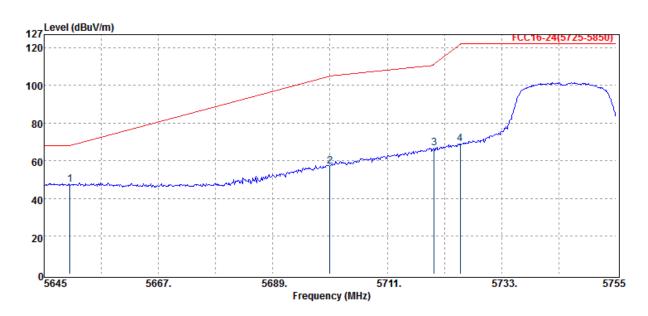
:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$dB\mu V$	dB	dBμV/m	$dB\mu V/m$	dB
5650.00	Е	Peak	40.87	6.48	47.35	68.23	-20.88
5700.00	Е	Peak	50.28	6.67	56.95	105.23	-48.28
5720.00	Е	Peak	60.28	6.60	66.88	110.83	-43.95
5725.00	E	Peak	62.42	6.59	69.01	122.23	-53.22

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



Page: 166 of 283

**Operation Band** Fundamental Frequency Operation Mode

EUT Pol.

:802.11n20B4 :5745 MHz

:Bandedge CH LOW

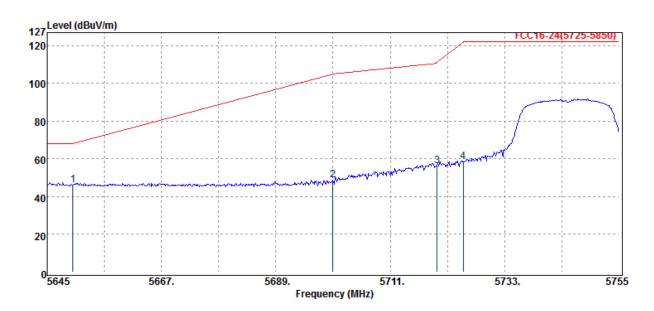
:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	$dB\mu V/m$	dB
5650.00	Е	Peak	39.72	6.48	46.20	68.23	-22.03
5700.00	Е	Peak	42.05	6.67	48.72	105.23	-56.51
5720.00	Е	Peak	49.64	6.60	56.24	110.83	-54.59
5725.00	Ε	Peak	52.06	6.59	58.65	122.23	-63.58

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



Page: 167 of 283

**Operation Band** Fundamental Frequency Operation Mode EUT Pol.

:802.11n20B4 :5825 MHz

:Bandedge CH HIGH

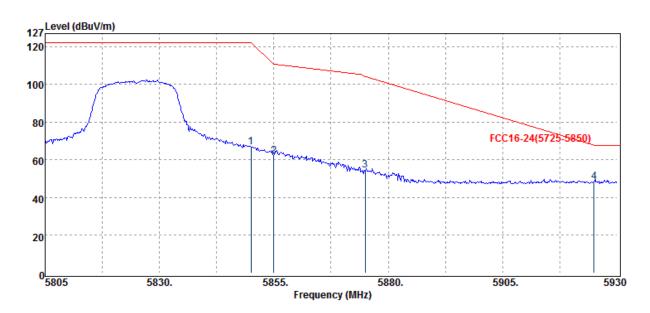
:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	$dB\mu V/m$	dB
5850.00	Е	Peak	59.48	7.28	66.76	122.23	-55.47
5855.00	Е	Peak	54.85	7.32	62.17	110.83	-48.66
5875.00	Е	Peak	47.17	7.37	54.54	105.23	-50.69
5925.00	Ε	Peak	41.03	7.39	48.42	68.23	-19.81

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



Page: 168 of 283

**Operation Band** Fundamental Frequency Operation Mode EUT Pol.

:802.11n20B4 :5825 MHz

:Bandedge CH HIGH

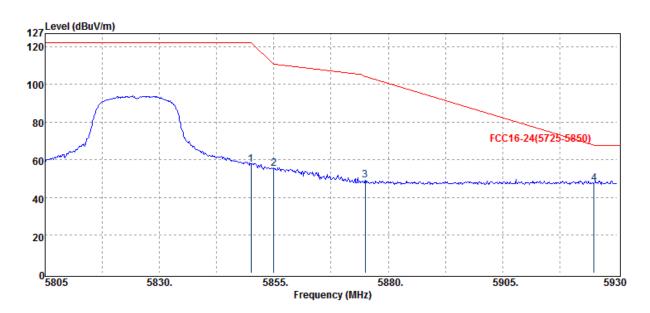
:E1 Plane

**Test Date** :2017-07-04

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	$dB\mu V/m$	dB
5850.00	Е	Peak	50.41	7.28	57.69	122.23	-64.54
5855.00	Е	Peak	48.17	7.32	55.49	110.83	-55.34
5875.00	Е	Peak	42.04	7.37	49.41	105.23	-55.82
5925.00	E	Peak	40.21	7.39	47.60	68.23	-20.63

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



Page: 169 of 283

**Operation Band Fundamental Frequency** Operation Mode

EUT Pol.

:802.11n40B1 :5190 MHz

:Bandedge CH LOW

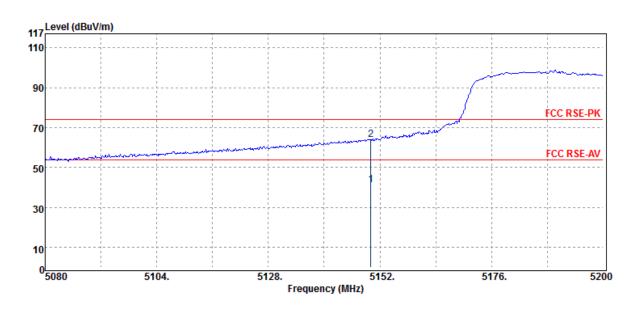
:E1 Plane

**Test Date** :2017-07-05

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
5150.00	Е	Average	35.48	5.88	41.36	54.00	-12.64
5150.00	E	Peak	57.99	5.88	63.87	74.00	-10.13

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



Page: 170 of 283

**Operation Band** Fundamental Frequency Operation Mode

EUT Pol.

:802.11n40B1 :5190 MHz

:Bandedge CH LOW

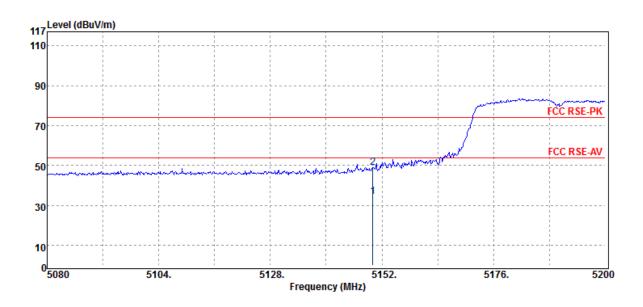
:E1 Plane

**Test Date** :2017-07-05

Temp./Humi. :22 deg C / 61 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



	Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
	MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
•	5150.00	Е	Average	28.68	5.88	34.56	54.00	-19.44
	5150.00	Ε	Peak	43.15	5.88	49.03	74.00	-24.97

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



Page: 171 of 283

**Operation Band Fundamental Frequency** Operation Mode EUT Pol.

:802.11n40B2 :5310 MHz

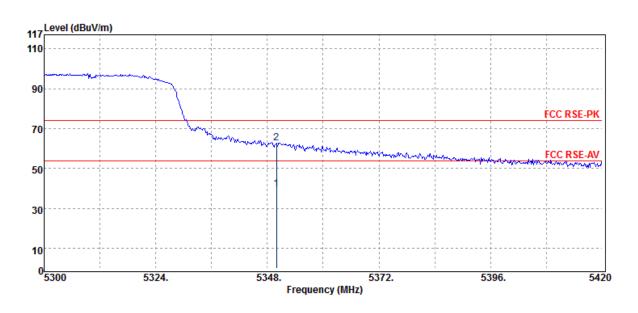
:Bandedge CH HIGH

:E1 Plane

:2017-07-05 **Test Date** 

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
5350.00	Е	Average	33.67	6.16	39.83	54.00	-14.17
5350.00	E	Peak	56.63	6.16	62.79	74.00	-11.21

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



Page: 172 of 283

**Operation Band Fundamental Frequency** Operation Mode EUT Pol.

:802.11n40B2 :5310 MHz

:Bandedge CH HIGH

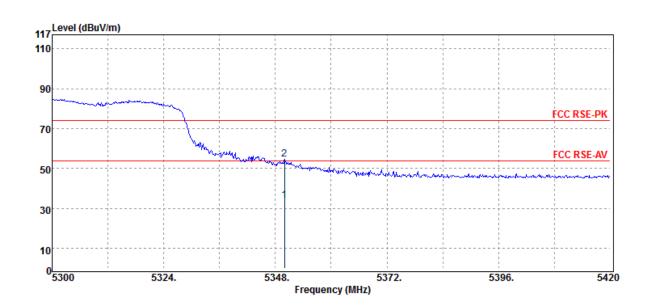
:E1 Plane

**Test Date** :2017-07-05

Temp./Humi. :22 deg C / 61 RH

Engineer :Mike

:HORIZONTAL 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	Е	Average	27.98	6.16	34.14	54.00	-19.86
5350.00	Ε	Peak	48.68	6.16	54.84	74.00	-19.16

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



Page: 173 of 283

**Operation Band Fundamental Frequency** 

**Operation Mode** EUT Pol.

:802.11n40B3 :5510 MHz

:Bandedge CH LOW

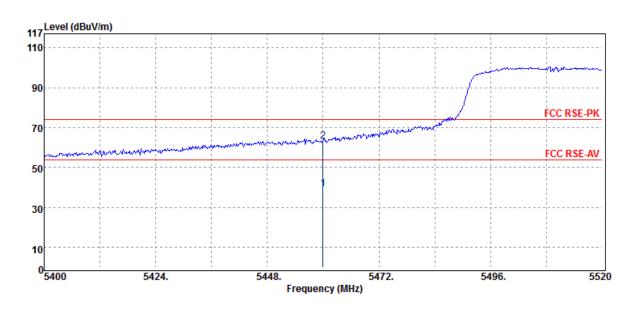
:E1 Plane

:2017-07-05 **Test Date** 

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
5460.00	Е	Average	32.96	6.23	39.19	54.00	-14.81
5460.00	E	Peak	56.93	6.23	63.16	74.00	-10.84

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



Page: 174 of 283

**Operation Band** Fundamental Frequency Operation Mode

EUT Pol.

:802.11n40B3 :5510 MHz

:Bandedge CH LOW

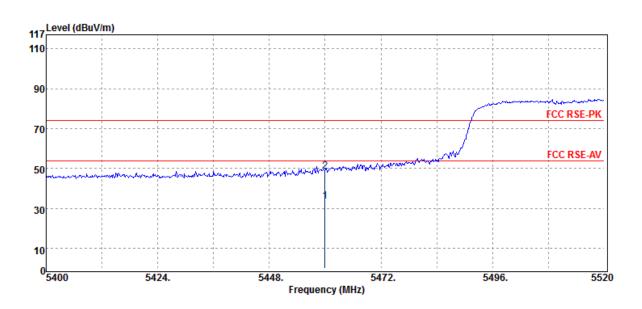
:E1 Plane

**Test Date** :2017-07-05

Temp./Humi. :22 deg C / 61 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



	Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
	MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
Ī	5460.00	Е	Average	27.23	6.23	33.46	54.00	-20.54
	5460.00	Ε	Peak	42.44	6.23	48.67	74.00	-25.33

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



Page: 175 of 283

**Operation Band** Fundamental Frequency

Operation Mode EUT Pol.

:802.11n40B3 :5510 MHz

:Bandedge CH LOW

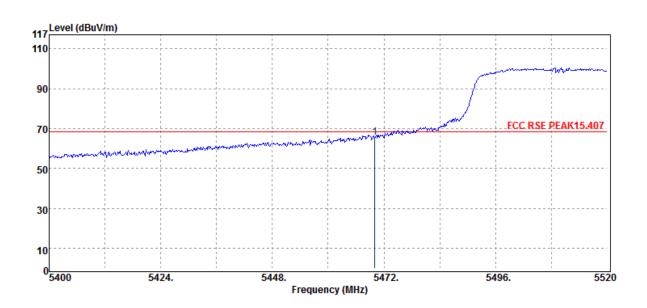
:E1 Plane

:2017-07-05 **Test Date** 

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :VERTICAL



	Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin	
	MHz	F/H/E/S	PK/QP/AV	$dB\mu V$	dB	$dB\mu V/m$	$\mathrm{dB}\mu\mathrm{V/m}$	dB	
•	5470.00	E	Peak	59.14	6.26	65.40	68.30	-2.90	•

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



Page: 176 of 283

**Operation Band** Fundamental Frequency Operation Mode

EUT Pol.

:802.11n40B3 :5510 MHz

:Bandedge CH LOW

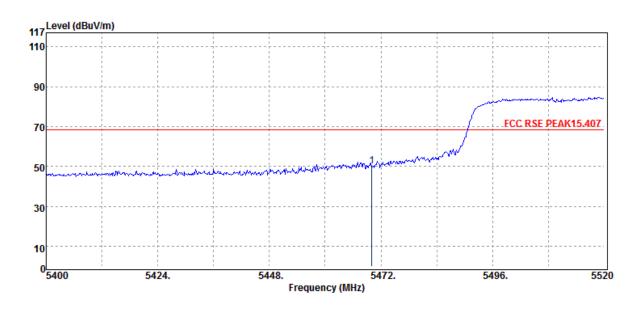
:E1 Plane

**Test Date** :2017-07-05

Temp./Humi. :22 deg C / 61 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



	Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin	
	MHz	F/H/E/S	PK/QP/AV	$dB\mu V$	dB	dBμV/m	$dB\mu V/m$	dB	
•	5470.00	E	Peak	43.80	6.26	50.06	68.30	-18.24	

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.

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

Ref 另有說明,此報告結果僅對測試之樣品負責,同時止樣品僅保留到天。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 <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of this document is unquitable and effective previously the resource of this document. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 177 of 283

**Operation Band** Fundamental Frequency Operation Mode

EUT Pol.

:802.11n40B3 :5670 MHz

:Bandedge CH HIGH

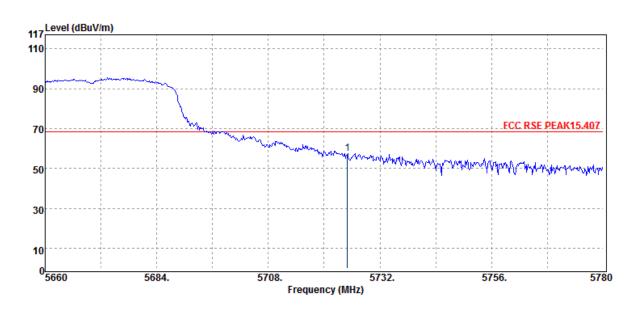
:E1 Plane

:2017-07-05 **Test Date** 

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :VERTICAL



	Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
_	MHz	F/H/E/S	PK/QP/AV	$dB\mu V$	dB	dBμV/m	$dB\mu V/m$	dB
-	5725.00	E	Peak	50.74	6.59	57.33	68.30	-10.97

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



Page: 178 of 283

**Operation Band** Fundamental Frequency Operation Mode

EUT Pol.

:802.11n40B3 :5670 MHz

:Bandedge CH HIGH

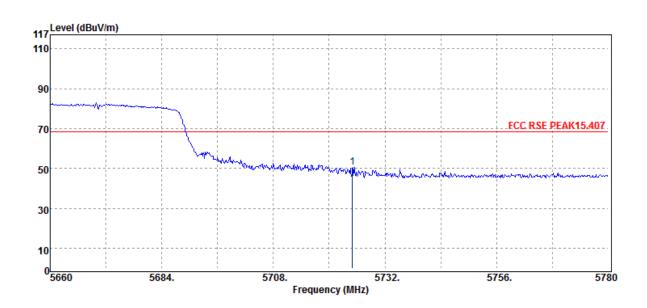
:E1 Plane

**Test Date** :2017-07-05

Temp./Humi. :22 deg C / 61 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$dB\mu V$	dB	$dB\mu V/m$	dBμV/m	dB
5725.00	Е	Peak	43.89	6.59	50.48	68.30	-17.82

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



Page: 179 of 283

**Operation Band Fundamental Frequency** Operation Mode

EUT Pol.

:802.11n40B4 :5755 MHz

:Bandedge CH LOW

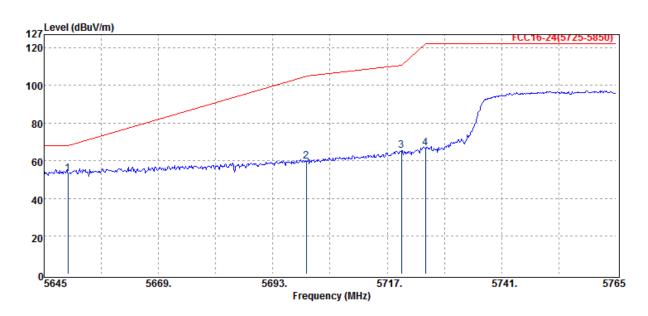
:E1 Plane

**Test Date** :2017-07-05

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$dB\mu V$	dB	dBμV/m	$dB\mu V/m$	dB
5650.00	E	Peak	46.51	6.48	52.99	68.23	-15.24
5700.00	Е	Peak	53.04	6.67	59.71	105.23	-45.52
5720.00	Е	Peak	58.95	6.60	65.55	110.83	-45.28
5725.00	E	Peak	60.17	6.59	66.76	122.23	-55.47

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

Onless otherwise stated the results shown in this less report relear only to the samplets) tested and such carriagness are tellaned for 90 days only. 

Ref. 8月 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 <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 approval of this document is unquisited and effective provided to the full set extent of this document. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 180 of 283

**Operation Band** Fundamental Frequency Operation Mode EUT Pol.

:802.11n40B4 :5755 MHz

:Bandedge CH LOW

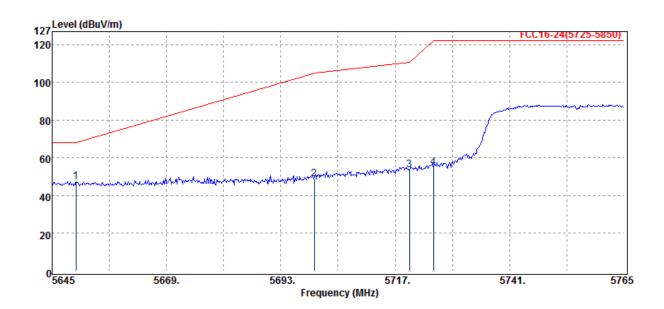
:E1 Plane

**Test Date** :2017-07-05

Temp./Humi. :22 deg C / 61 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$dB\mu V$	dB	dBμV/m	$dB\mu V/m$	dB
5650.00	E	Peak	41.18	6.48	47.66	68.23	-20.57
5700.00	Е	Peak	42.15	6.67	48.82	105.23	-56.41
5720.00	Е	Peak	46.89	6.60	53.49	110.83	-57.34
5725.00	E	Peak	48.13	6.59	54.72	122.23	-67.51

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

Onless otherwise stated the results shown in this less report relear only to the samplets) tested and such carriagness are tellaned for 90 days only. 

Ref. 8月 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 <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 approval of this document is unquisited and effective provided to the full set extent of this document. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 181 of 283

**Operation Band Fundamental Frequency** Operation Mode

EUT Pol.

:802.11n40B4 :5795 MHz

:Bandedge CH HIGH

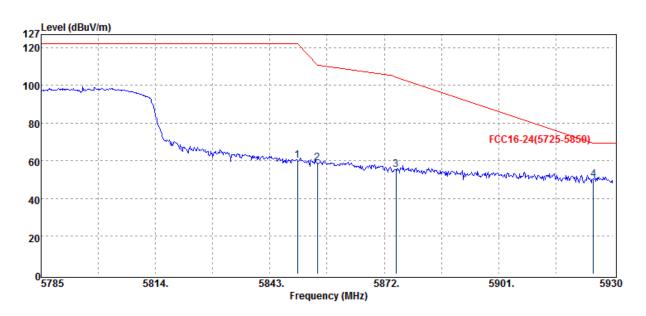
:E1 Plane

**Test Date** :2017-07-05

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
5850.00	Е	Peak	52.75	7.28	60.03	122.23	-62.20
5855.00	Е	Peak	51.39	7.32	58.71	110.83	-52.12
5875.00	Е	Peak	47.79	7.37	55.16	105.23	-50.07
5925.00	Е	Peak	42.87	7.39	50.26	68.23	-17.97

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90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of this document is unquited and find the produced 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 full extent of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 182 of 283

**Operation Band** Fundamental Frequency Operation Mode EUT Pol.

:802.11n40B4 :5795 MHz

:Bandedge CH HIGH

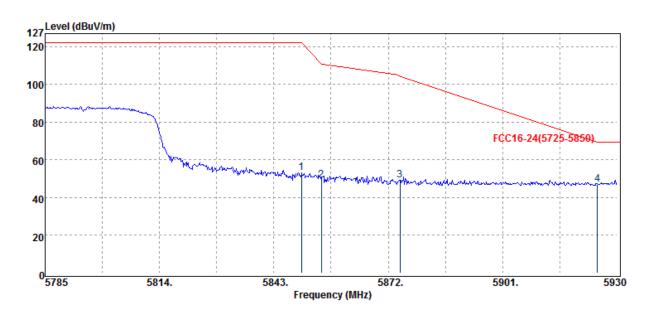
:E1 Plane

**Test Date** :2017-07-05

Temp./Humi. :22 deg C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$dB\mu V$	dB	dBμV/m	$\mathrm{dB}\mu\mathrm{V/m}$	dB
5850.00	Е	Peak	45.85	7.28	53.13	122.23	-69.10
5855.00	Е	Peak	41.82	7.32	49.14	110.83	-61.69
5875.00	Е	Peak	41.84	7.37	49.21	105.23	-56.02
5925.00	Ε	Peak	39.72	7.39	47.11	68.23	-21.12

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90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of this document is unquited and find the produced 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 full extent of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 183 of 283

**Operation Band Fundamental Frequency** 

:802.11ac80B1 :5210 MHz

Temp./Humi.

**Test Date** 

:2017-07-05 :22 deg\_C / 61 RH

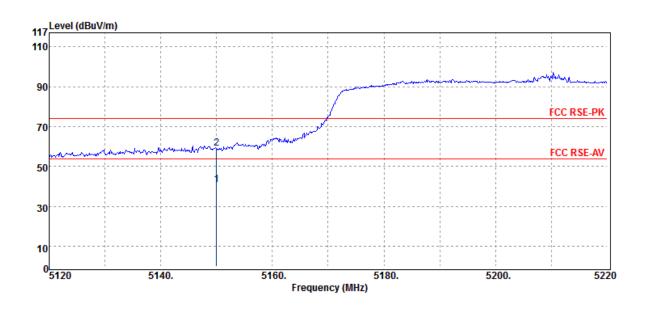
Operation Mode EUT Pol.

:Bandedge CH LOW

Engineer :Mike

:E1 Plane

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	$\mathrm{d} \mathrm{B} \mu \mathrm{V}$	dB	dBμV/m	dBμV/m	dB
5150.00	Е	Average	35.15	5.88	41.03	54.00	-12.97
5150.00	E	Peak	53.20	5.88	59.08	74.00	-14.92

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



Page: 184 of 283

**Operation Band** Fundamental Frequency Operation Mode

EUT Pol.

:802.11ac80B1 :5210 MHz

:Bandedge CH LOW

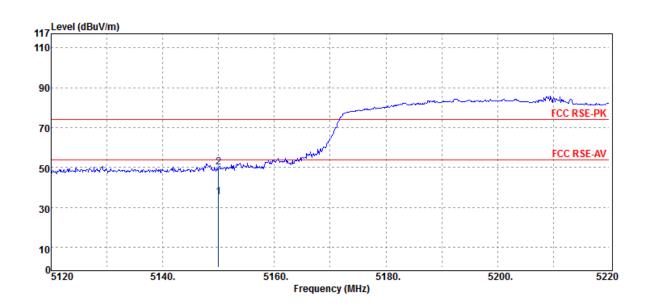
:E1 Plane

**Test Date** :2017-07-05

Temp./Humi. :22 deg C / 61 RH

Engineer :Mike

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	29.34	5.88	35.22	54.00	-18.78
5150.00	E	Peak	44.50	5.88	50.38	74.00	-23.62

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



Page: 185 of 283

**Operation Band Fundamental Frequency** Operation Mode EUT Pol.

:802.11ac80B2 :5290 MHz

:Bandedge CH HIGH

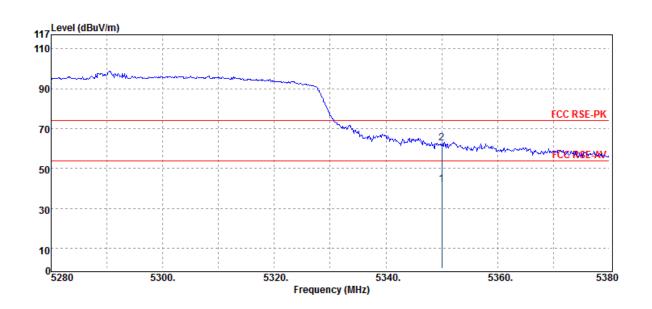
:E1 Plane

**Test Date** :2017-07-05

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

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	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
5350.00	Е	Average	35.88	6.16	42.04	54.00	-11.96
5350.00	Ε	Peak	56.50	6.16	62.66	74.00	-11.34

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



Page: 186 of 283

**Operation Band Fundamental Frequency** Operation Mode EUT Pol.

:802.11ac80B2 :5290 MHz

:Bandedge CH HIGH

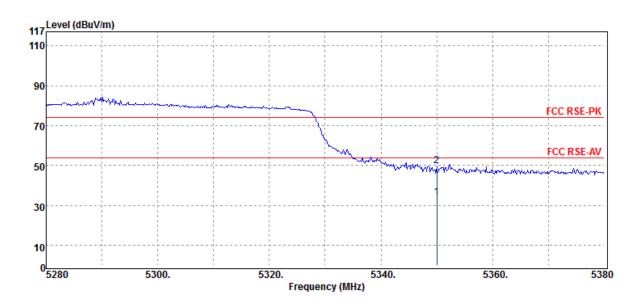
:E1 Plane

**Test Date** :2017-07-05

Temp./Humi. :22 deg C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	dBμV/m	dB
5350.00	Е	Average	27.79	6.16	33.95	54.00	-20.05
5350.00	Ε	Peak	43.81	6.16	49.97	74.00	-24.03

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90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of this document is unquited and find the produced 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 full extent of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 187 of 283

**Operation Band Fundamental Frequency** Operation Mode EUT Pol.

:802.11ac80B3 :5530 MHz

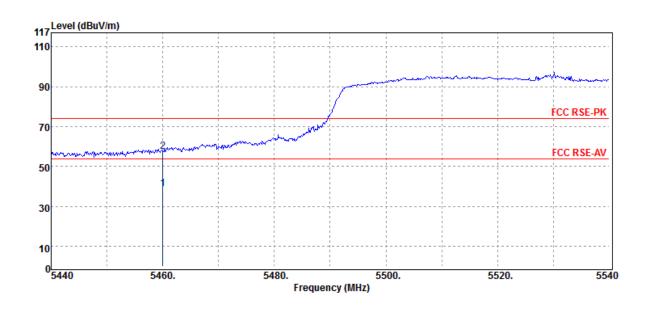
:Bandedge CH LOW

:E1 Plane

:2017-07-05 **Test Date** 

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike 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	$\mathrm{d} \mathrm{B} \mu \mathrm{V}$	dB	dBμV/m	dBμV/m	dB
5460.00	E	Average	32.58	6.23	38.81	54.00	-15.19
5460.00	E	Peak	51.27	6.23	57.50	74.00	-16.50

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



Page: 188 of 283

**Operation Band** Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B3 :5530 MHz

:Bandedge CH LOW

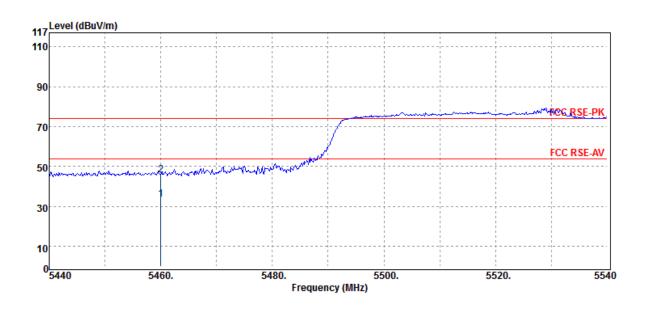
:E1 Plane

**Test Date** :2017-07-05

Temp./Humi. :22 deg C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBμV/m	dBμV/m	dB
5460.00	Е	Average	27.27	6.23	33.50	54.00	-20.50
5460.00	Е	Peak	39.68	6.23	45.91	74.00	-28.09

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



Page: 189 of 283

**Operation Band** Fundamental Frequency Operation Mode

EUT Pol.

:802.11ac80B3 :5530 MHz

:Bandedge CH LOW

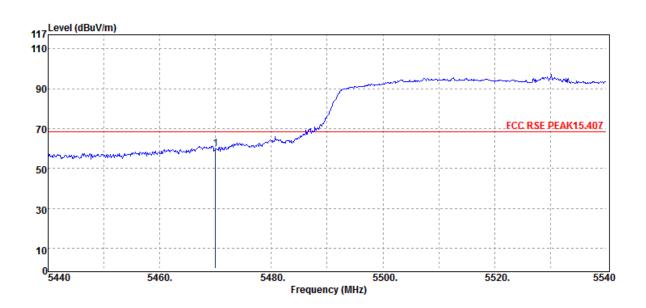
:E1 Plane

:2017-07-05 **Test Date** 

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	$dB\mu V/m$	$dB\mu V/m$	dB
5470.00	E	Peak	53.77	6.26	60.03	68.30	-8.27

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



Page: 190 of 283

**Operation Band** Fundamental Frequency Operation Mode

EUT Pol.

:802.11ac80B3 :5530 MHz

:Bandedge CH LOW

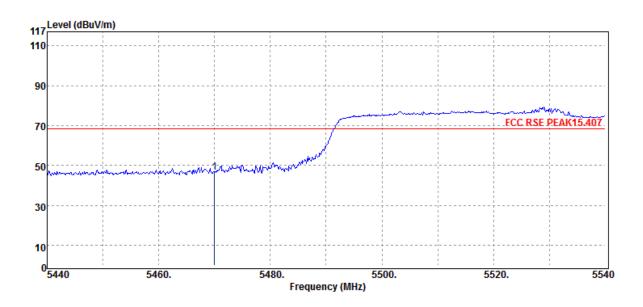
:E1 Plane

**Test Date** :2017-07-05

Temp./Humi. :22 deg C / 61 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin	
MHz	F/H/E/S	PK/QP/AV	$dB\mu V$	dB	$dB\mu V/m$	$\mathrm{dB}\mu\mathrm{V/m}$	dB	
5470.00	Е	Peak	40.39	6.26	46.65	68.30	-21.65	

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



Page: 191 of 283

**Operation Band** Fundamental Frequency Operation Mode

EUT Pol.

:802.11ac80B4 :5775 MHz

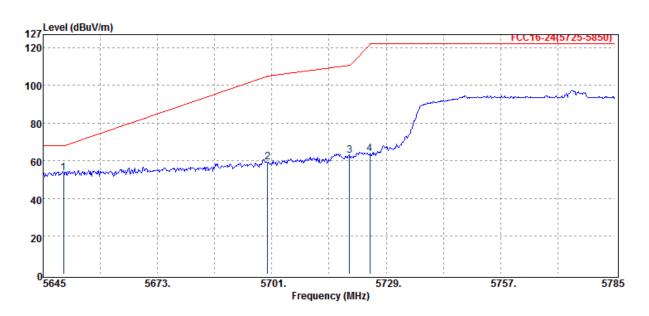
:Bandedge CH LOW

:E1 Plane

**Test Date** :2017-07-05

Temp./Humi. :22 deg\_C / 61 RH Engineer :Mike

Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$dB\mu V$	dB	dBμV/m	$dB\mu V/m$	dB
5650.00	Е	Peak	47.01	6.48	53.49	68.23	-14.74
5700.00	Е	Peak	52.61	6.67	59.28	105.23	-45.95
5720.00	Е	Peak	56.18	6.60	62.78	110.83	-48.05
5725.00	E	Peak	57.08	6.59	63.67	122.23	-58.56

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



Page: 192 of 283

**Operation Band** Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B4 :5775 MHz

:Bandedge CH LOW

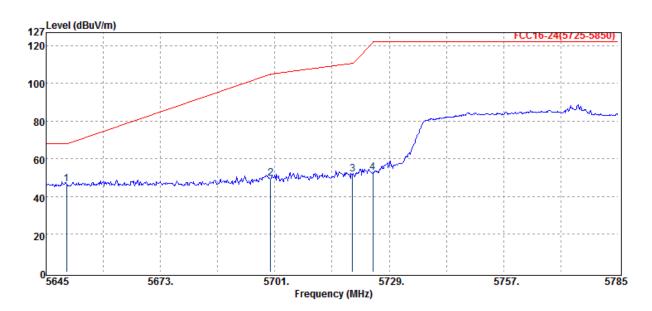
:E1 Plane

**Test Date** :2017-07-05

Temp./Humi. :22 deg C / 61 RH

Engineer :Mike

:HORIZONTAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	$dB\mu V/m$	dB
5650.00	Е	Peak	40.18	6.48	46.66	68.23	-21.57
5700.00	Е	Peak	43.19	6.67	49.86	105.23	-55.37
5720.00	Е	Peak	45.39	6.60	51.99	110.83	-58.84
5725.00	E	Peak	46.04	6.59	52.63	122.23	-69.60

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



Page: 193 of 283

**Operation Band Fundamental Frequency** Operation Mode EUT Pol.

:802.11ac80B4 :5775 MHz

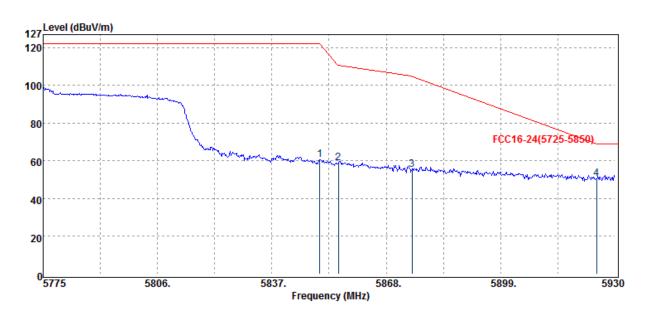
:Bandedge CH HIGH

:E1 Plane

:2017-07-05 **Test Date** 

Temp./Humi. :22 deg\_C / 61 RH

Engineer :Mike Measurement Antenna Pol. :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$dB\mu V$	dB	dBμV/m	$dB\mu V/m$	dB
5850.00	E	Peak	53.49	7.28	60.77	122.23	-61.46
5855.00	Е	Peak	51.52	7.32	58.84	110.83	-51.99
5875.00	Е	Peak	48.16	7.37	55.53	105.23	-49.70
5925.00	E	Peak	43.09	7.39	50.48	68.23	-17.75

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90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or approval of this document is unquited and find the produced 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 full extent of the low. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 194 of 283

**Operation Band Fundamental Frequency** Operation Mode EUT Pol.

:802.11ac80B4 :5775 MHz

:Bandedge CH HIGH

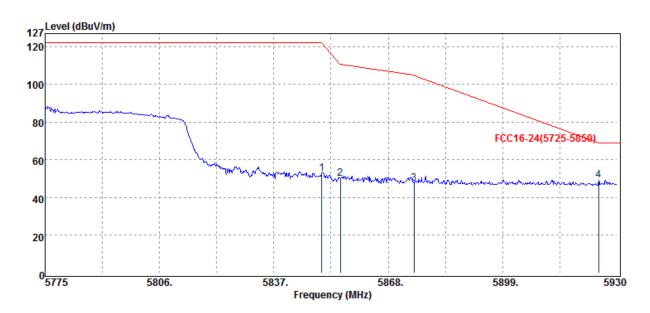
:E1 Plane

**Test Date** :2017-07-05

Temp./Humi. :22 deg C / 61 RH

Engineer :Mike

Measurement Antenna Pol. :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	$\mathrm{d}\mathrm{B}\mu\mathrm{V}$	dB	dBμV/m	$dB\mu V/m$	dB
5850.00	E	Peak	45.67	7.28	52.95	122.23	-69.28
5855.00	Е	Peak	42.67	7.32	49.99	110.83	-60.84
5875.00	Е	Peak	40.26	7.37	47.63	105.23	-57.60
5925.00	E	Peak	41.85	7.39	49.24	68.23	-18.99

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

Onless otherwise stated the results shown in this less report relear only to the samplets) tested and such carriagness are tellaned for 90 days only. 

Ref. 8月 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 <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 approval of this document is unquisited and effective provided to the full set extent of this document. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page: 195 of 283

## 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

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ASK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

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

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

SGS Taiwan Ltd. No.134,WuKungRoad,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



Page: 196 of 283

# 13 FREQUENCY STABILITY

## 13.1 Standard Applicable

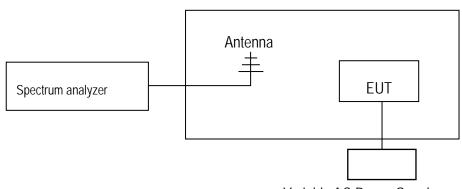
Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

### 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

#### Temperature Chamber



Variable AC Power Supply

### 13.4 Measurement Equipment Used:

SGS Conducted Room								
Name of Equipment	Manufacturer	Model Serial Number		Calibration Date	Calibration Due			
EXA Spectrum Analyzer	Agilent	N9030A	MY53120760	03/21/2017	03/20/2018			
DC Block	Mini-Circuits	BLK-18-S+	1	01/05/2017	01/04/2018			
Coaxial Cable	HUBER+SUHNER	SUCOFLEX 102	23670/2	01/05/2017	01/04/2018			
Attenuator	Mini-Circuit	BW-S10W2+	2	01/05/2017	01/04/2018			

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

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

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



Page: 197 of 283

### 13.5 Measurement Result

Operation Mode	802.11 a	Test Date	2017.07.20
Temperature	:17	Test By	Cooper
Humidity	:65 %	-	

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		36	5180	5,179.98486	0.00000292
		44	5220	5,219.95508	0.00000861
		48	5240	5,239.95508	0.00000857
		52	5260	5,259.96997	0.00000571
		60	5300	5,299.96997	0.00000567
	3.63V	64	5320	5,319.95508	0.00000844
		100	5500	5,499.95483	0.00000821
		116	5580	5,579.95508	0.00000805
		140	5700	5,699.93994	0.00001054
		149	5745	5,744.96997	0.00000523
		157	5785	5,784.95508	0.00000777
		165	5825	5,824.97022	0.00000511
-10		36	5180	5,179.98511	0.00000288
		44	5220	5,219.96997	0.00000575
		48	5240	5,239.95508	0.00000857
		52	5260	5,259.96997	0.00000571
		60	5300	5,299.96997	0.00000567
	2.97V	64	5320	5,319.95508	0.00000844
		100	5500	5,499.98511	0.00000271
		116	5580	5,579.93994	0.00001076
		140	5700	5,699.93994	0.00001054
		149	5745	5,744.96997	0.00000523
		157	5785	5,784.95508	0.00000777
		165	5825	5,824.96997	0.00000516

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery 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.NewTaipeiIndustrialPark WulkupDistrict. NewTaipeiCity\_Taiwan24803/新北市五股區新北產業園區五工路 134 號

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

t (886-2) 2299-3279

www.tw.sgs.com



Page: 198 of 283

		36	5180	5,179.98486	0.00000292
		44	5220	5,219.95508	0.00000861
		48	5240	5,239.94019	0.00001141
		52	5260	5,259.93994	0.00001142
		60	5300	5,299.96997	0.00000567
25	3.3V	64	5320	5,319.95508	0.00000844
		100	5500	5,499.95508	0.00000817
		116	5580	5,579.93994	0.00001076
		140	5700	5,699.94019	0.00001049
		149	5745	5,744.96997	0.00000523
		157	5785	5,784.94019	0.00001034
		165	5825	5,824.95508	0.00000771
		36	5180	5,179.96997	0.00000580
		44	5220	5,219.95508	0.00000861
		48	5240	5,239.95508	0.00000857
		52	5260	5,259.96997	0.00000571
		60	5300	5,299.98511	0.00000281
		64	5320	5,319.96997	0.00000564
	3.63V	100	5500	5,499.95508	0.00000817
		116	5580	5,579.95508	0.00000805
		140	5700	5,699.95508	0.00000788
		149	5745	5,744.95508	0.00000782
		157	5785	5,784.96997	0.00000519
		165	5825	5,824.93994	0.00001031
55		36	5180	5,179.96997	0.00000580
		44	5220	5,219.95483	0.00000865
		48	5240	5,239.94019	0.00001141
		52	5260	5,259.96997	0.00000571
		60	5300	5,299.98486	0.00000286
	2.97V	64	5320	5,319.96997	0.00000564
		100	5500	5,499.95508	0.00000817
		116	5580	5,579.93994	0.00001076
		140	5700	5,699.95508	0.0000788
		149	5745	5,744.98486	0.00000263
		157	5785	5,784.93994	0.00001038
		165	5825	5,824.94019	0.00001027

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery 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.NewTaipeiIndustrialPark WulkupDistrict. NewTaipeiCity\_Taiwan24803/新北市五股區新北產業園區五工路 134 號



Page: 199 of 283

Operation Mode	802.11 n_HT40	Test Date	2017.07.20
Temperature	:17	Test By	Cooper
Humidity	:65 %		

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		38	5190	5,189.97485	0.00000485
		46	5230	5,229.92505	0.00001433
		54	5270	5,269.97485	0.00000477
		62	5310	5,309.97485	0.00000474
	3.63V	102	5510	5,509.97485	0.00000456
-10		110	5550	5,549.94995	0.00000902
		134	5670	5,669.94995	0.00000883
		151	5755	5,754.97485	0.00000437
		159	5795	5,794.94995	0.00000864
	2.97V	38	5190	5,189.97485	0.00000485
		46	5230	5,229.97485	0.00000481
		54	5270	5,269.97485	0.00000477
		62	5310	5,309.97485	0.00000474
		102	5510	5,509.97485	0.00000456
		110	5550	5,549.94995	0.00000902
		134	5670	5,669.97485	0.00000443
		151	5755	5,754.97485	0.00000437
		159	5795	5,794.92505	0.00001293

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery 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.NewTaipeiIndustrialPark WulkupDistrict. NewTaipeiCity\_Taiwan24803/新北市五股區新北產業園區五工路 134 號

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

t (886-2) 2299-3279

f (886-2) 2298-0488



Page: 200 of 283

25	3.3V	38	5190	5,189.97485	0.00000485
		46	5230	5,229.94995	0.00000957
		54	5270	5,269.97485	0.00000477
		62	5310	5,309.94995	0.00000943
		102	5510	5,509.97485	0.00000456
		110	5550	5,549.94995	0.00000902
		134	5670	5,669.97485	0.00000443
		151	5755	5,754.97485	0.00000437
		159	5795	5,794.94995	0.00000864
	3.63V	38	5190	5,189.97485	0.00000485
		46	5230	5,229.94995	0.00000957
		54	5270	5,269.97485	0.00000477
		62	5310	5,309.97485	0.00000474
		102	5510	5,509.97485	0.00000456
		110	5550	5,549.94995	0.00000902
		134	5670	5,669.97485	0.00000443
		151	5755	5,754.97485	0.00000437
		159	5795	5,794.94995	0.00000864
55	2.97V	38	5190	5,189.97485	0.00000485
		46	5230	5,229.97485	0.00000481
		54	5270	5,269.94995	0.00000950
		62	5310	5,309.97485	0.00000474
		102	5510	5,509.97485	0.00000456
		110	5550	5,549.94995	0.00000902
		134	5670	5,669.94995	0.00000883
		151	5755	5,754.97485	0.00000437
		159	5795	5,794.94995	0.00000864

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery 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.NewTaipeiIndustrialPark WulkupDistrict. NewTaipeiCity\_Taiwan24803/新北市五股區新北產業園區五工路 134 號



Page: 201 of 283

Operation Mode	802.11 ac_VHT80	Test Date	2015.12.21
Temperature	:17	Test By	Cooper
Humidity	:65 %		

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		42	5210	5,209.75000	0.00004798
		58	5290	5,289.94995	0.00000946
	3.63V	106	5530	5,529.94995	0.0000905
		122	5610	5,609.94995	0.00000892
-10		155	5775	5,774.79981	0.00003467
		42	5210	5,209.94995	0.00000961
		58	5290	5,289.94995	0.00000946
	2.97V	106	5530	5,529.94995	0.0000905
		122	5610	5,609.94995	0.00000892
		155	5775	5,774.79981	0.00003467
	3.3V	42	5210	5,209.79981	0.00003843
		58	5290	5,289.94995	0.00000946
25		106	5530	5,529.94995	0.0000905
		122	5610	5,609.94995	0.0000892
		155	5775	5,774.64990	0.00006062
	3.63V	42	5210	5,209.75000	0.00004798
		58	5290	5,289.94995	0.00000946
		106	5530	5,529.94995	0.00000905
		122	5610	5,609.94995	0.00000892
55		155	5775	5,774.75000	0.00004329
	2.97V	42	5210	5,209.84985	0.00002882
		58	5290	5,289.94995	0.00000946
		106	5530	5,529.94995	0.00000905
		122	5610	5,609.94995	0.00000892
		155	5775	5,774.64990	0.00006062

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. Attention is drawn to the limitation of liability, indemnification and client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery 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.NewTaipeiIndustrialPark WulkupDistrict. NewTaipeiCity\_Taiwan24803/新北市五股區新北產業園區五工路 134 號

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

t (886-2) 2299-3279

f (886-2) 2298-0488



Page: 202 of 283

# 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

PCB antenna designs are used.

The antenna is designed with permanent attached and no consideration of replacement. Please see EUT photo and antenna spec. for details.

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

SGS Taiwan Ltd. No.134,WuKungRoad,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