

# ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT



**Applicant:** Axon Enterprise, Inc.  
17800 N 85th St, Scottsdale, AZ 85255, United States

**Manufacturer:** Axon Enterprise, Inc.  
17800 N 85th St, Scottsdale, AZ 85255, United States

**Product Name:** Fleet Hub

**Brand Name:** Axon

**Model No.:** AX1033

**Model Difference:** N/A

**Report Number:** ER/2021/20091

**FCC ID** X4GS01405

**IC:** 8803A-S01405

**FCC Rule Part:** §15.247, Cat: DTS

**IC RSS:** RSS-247 issue 2 Feb 2017

**Issue Date:** May 3, 2021

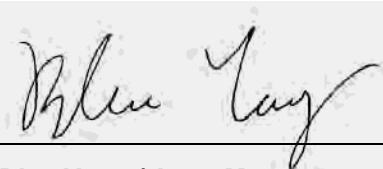
**Date of Test:** February 8, 2021 - April 6, 2021

**Date of EUT Received:** February 8, 2021

**We hereby certify that:**

The above equipment was tested by SGS Taiwan Ltd. Central RF Lab 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.

**Approved By:**  
**Blue Yang / Asst. Manager**

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

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

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

## Revision History

Report Number	Revision	Description	Issue Date	Revised By
ER/2021/20091	Rev.00	Original.	May 3, 2021	Ariel Chang

**Note:**

- 1、Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.

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

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

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

## Table of Contents

1	GENERAL INFORMATION.....	4
2	SYSTEM TEST CONFIGURATION.....	8
3	SUMMARY OF TEST RESULTS .....	11
4	DESCRIPTION OF TEST MODES .....	12
5	MEASUREMENT UNCERTAINTY .....	15
6	CONDUCTED EMISSION TEST .....	16
7	DUTY CYCLE OF TEST SIGNAL .....	18
8	PEAK OUTPUT POWER MEASUREMENT .....	22
9	EMISSION BANDWIDTH MEASUREMENT .....	47
10	CONDUCTED BAND EDGES AND SPURIOUS EMISSION MEASUREMENT .....	80
11	RADIATED BANEDGE AND SPURIOUS EMISSION MEASUREMENT .....	99
12	POWER SPECTRAL DENSITY .....	276
13	ANTENNA REQUIREMENT.....	297

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

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

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

# 1 GENERAL INFORMATION

## 1.1 Product description

Product Name	Fleet Hub
Brand Name	Axon
Model No.	AX1033
Model Difference	N/A
Hardware Version	X3
Firmware Version	IG2.DVT.1.2
EUT Series No.	X70322224
Power Supply	12Vdc

Wi-Fi 802.11	Frequency Range	Channels	Rated Power (dBm)	Modulation Technology
b	2412-2462	11	29.30	DSSS
g			29.21	OFDM
n_HT20			29.46	OFDM
ax_HE20			29.60	OFDMA
n_HT40	2422-2452	7	26.61	OFDM
ax_HE40			29.41	OFDMA
Modulation type		CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 802.11ac only 1024QAM for OFDMA in 802.11ax only		
Transission Rate		802.11 b: 1/2/5.5/11 Mbps 802.11 g: 6/9/12/18/24/36/48/54 Mbps 802.11 n_20MHz: 6.5 – 144.4Mbps 802.11 n_40MHz: 13.5 – 300.0Mbps 802.11 ax_HE20MHz: 7.3 –286.8 Mbps 802.11 ax_HE40MHz: 14.6 -573.6 Mbps		

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

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

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

## 1.2 Antenna Designation

Antenna Type	Supplier	Antenna Part No.	Main/ Aux	Freq. (MHz)	Peak Antenna Gain (dBi)	Directional Antenna Gain of Beamforming (dBi)
PIFA	Airgain	AP-AXONF3-MMF-Q-MS-BL-15	Main	2412-2462	2.3	5.30
Dipole	Airgain	AP-AXONF3-GL-WWG-BL-3M	Main		N/A	N/A
					N/A	
Note: The N/A represents that the Antenna does not available in the specified frequency.						

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

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

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

### 1.3 Test Methodology of Applied Standards

FCC Part 15, Subpart C §15.247

FCC KDB 558074 D01 15.247 Meas Guidance v05r02 ( Both FCC & ISCED)

RSS-247 issue 2 Feb. 2017

RSS-Gen. issue 5, Amendment 1, March 2019

ANSI C63.10:2013

### 1.4 Test Facility

Laboratory	Test Site Address	Test Site Name	FCC Designation number	IC CAB identifier
SGS Taiwan Ltd. Central RF Lab. (TAF code 3702)	No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan.	SAC 1	TW0027	TW3702
		SAC 3		
		Conduction 1		
		Conducted 1		
		Conducted 2		
		Conducted 3		
		Conducted 4		
		Conducted 5		
		Conducted 6		
	No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan 333	Conduction A	TW0028	
		SAC C		
		SAC D		
		SAC G		
		Conducted A		
		Conducted B		
		Conducted C		
		Conducted D		
		Conducted E		
		Conducted F		
		Conducted G		

**Note:** Test site name is remarked on the equipment list in each section of this report as an indication where measurements occurred in specific test site and address.

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

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

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

## 1.5 Special Accessories

There are no special accessories used while test was conducted.

## 1.6 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90天。本報告未經本公司書面許可，不可部份複製。

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

## 2 SYSTEM TEST CONFIGURATION

### 2.1 EUT Configuration

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

### 2.2 EUT Exercise

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 placed on a 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. The two LISNs provide 50uH/50 ohm 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 Conducted Test (RF)

The active antenna port of the unlicensed wireless device is connected to the spectrum analyzer with attenuator to protect the instrumentation. If a second antenna port is available, it is tested at one operating frequency, with other port(s) appropriately terminated, to verify it has similar output characteristics as the fully tested port.

#### 2.3.3 Radiated Emissions

The EUT is placed on a turn table. For emissions testing at or below 1 GHz, the table height shall be 0.8 m above the reference ground plane. 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90天。本報告未經本公司書面許可，不可部份複製。

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



## 2.4 Measurement Results Explanation Example

### 2.4.1 Radiated Emission Test Sites For Measurements From 9 kHz To 30 MHz

Radiated emission below 30MHz is measured in a 9m\*9m\*6m semi-anechoic chamber, the measurements correspond to those obtained at an open-field test site.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

### 2.4.2 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.

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

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

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

## 2.5 Configuration of Tested System

Fig. 2-1 Radiated Emission configuration



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

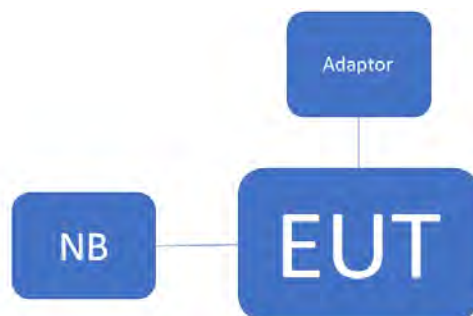


Table 2-1 Equipment Used in Tested System

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Data Cable	Power Cord
1.	WLAN Test Software	N/A	N/A	N/A	N/A	N/A
2.	Notebook	Lenovo	L430	R9-XFG0X	N/A	N/A
3.	Adapter	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

### 3 SUMMARY OF TEST RESULTS

FCC Rules	IC Rules	Description Of Test	Result
§15.207(a)	RSS-Gen §8.8	AC Power Line Conducted Emission	Non applicable
§15.247(b) (3)	RSS-247 §5.4 d	Peak Output Power	Compliant
§15.247(a)(2)	RSS-247 §5.2 a RSS-Gen §6.7	Emission Bandwidth	Compliant
§15.205 §15.209 §15.247(d)	RSS-247 §5.5 RSS-Gen §8.9 RSS-Gen §8.10 RSS-Gen §6.13	Radiated & Conducted Band Edge and Spurious Emission	Compliant
§15.247(e)	RSS-247 §5.2 b	Power Spectral Density	Compliant
§15.203 §15.247(b)	N/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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

## 4 DESCRIPTION OF TEST MODES

### 4.1 Operated in 2400 ~ 2483.5MHz Band

11 channels are provided for 802.11b/g/n/ax 20M.

CHANNEL	FREQUENCY (MHz)
1	2412
2	2417
3	2422
4	2427
5	2432
6	2437
7	2442
8	2447
9	2452
10	2457
11	2462

9 channels are provided for 802.11n/ax 40M

CHANNEL	FREQUENCY (MHz)
3	2422
4	2427
5	2432
6	2437
7	2442
8	2447
9	2452

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

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

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

## 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 and receiving mode is programmed.
3. Investigation has been done on all the possible configurations for searching the worst case.

The gevin UE is pre-scanned among below modes.

Modulation	Transmission Chain				Single Transmission Spatial	Multiple Transmission Spatial
<input checked="" type="checkbox"/> 802.11 b	<input checked="" type="checkbox"/> Ch0	<input checked="" type="checkbox"/> Ch1	<input type="checkbox"/> Ch2	<input type="checkbox"/> Ch3	<input type="checkbox"/> 1TX	<input checked="" type="checkbox"/> 2TX
<input checked="" type="checkbox"/> 802.11 g	<input checked="" type="checkbox"/> Ch0	<input checked="" type="checkbox"/> Ch1	<input type="checkbox"/> Ch2	<input type="checkbox"/> Ch3	<input type="checkbox"/> 1TX	<input checked="" type="checkbox"/> 2TX
<input checked="" type="checkbox"/> 802.11 n	<input checked="" type="checkbox"/> Ch0	<input checked="" type="checkbox"/> Ch1	<input type="checkbox"/> Ch2	<input type="checkbox"/> Ch3	<input type="checkbox"/> SISO	<input checked="" type="checkbox"/> MIMO
<input checked="" type="checkbox"/> 802.11 ax	<input checked="" type="checkbox"/> Ch0	<input checked="" type="checkbox"/> Ch1	<input type="checkbox"/> Ch2	<input type="checkbox"/> Ch3	<input type="checkbox"/> SISO	<input checked="" type="checkbox"/> MIMO

4. Therefore, below summary is the modes of test configuration that yield the highest reading and generate the highest emission chosen to carry out the relevantly mandatory test items.

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

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

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

## 4.3 Radiated Emission Test:

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)	ANTENNA PORT
<b>RADIATED EMISSION TEST (BELOW 1 GHz)</b>					
802.11g	6	6	OFDM	6	Ch0/2TX
802.11ax40M	6	6	OFDMA	6	Ch0/2TX
<b>RADIATED EMISSION TEST (ABOVE 1 GHz)</b>					
802.11b	1 to 11	1, 6, 11	DSSS	1	Ch0/2TX
802.11g	1 to 11	1, 6, 11	OFDM	6	Ch0/2TX
802.11n20M	1 to 11	1, 6, 11	OFDM	MCS 8	MIMO
802.11n40M	3 to 9	3, 6, 9	OFDM	MCS 8	MIMO
802.11ax 20M	1 to 11	1, 6, 11	OFDMA	MCS 0	MIMO
802.11ax 40M	3 to 9	3, 6, 9	OFDMA	MCS 0	MIMO
<b>Note:</b> The field strength of radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for channel Low, Mid and High, the worst case position was reported.					

## 4.4 Antenna Port Conducted Measurement:

<b>CONDUCTED TEST</b>					
MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)	ANTENNA PORT
802.11b	1 to 11	1, 6, 11	DSSS	1	Ch0/2TX
802.11g	1 to 11	1, 6, 11	OFDM	6	Ch0/2TX
802.11n 20M	1 to 11	1, 6, 11	OFDM	MCS 8	MIMO
802.11n 40M	3 to 9	3, 6, 9	OFDM	MCS 8	MIMO

<b>CONDUCTED TEST</b>						
MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	RU CONFIGURATION	DATA RATE (Mbps)	ANTENNA PORT
802.11ax 20M	1 to 11	1, 6, 11	OFDMA	full 26/8 52/40 106/54	MCS 0	MIMO
802.11ax 40M	3 to 9	3, 6, 9		full 242/61	MCS 0	MIMO

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

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

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

## 5 MEASUREMENT UNCERTAINTY

Test Items	Uncertainty
AC Power Line Conducted Emission	+/- 2.34 dB
Peak Output Power	+/- 1 dB
6dB Bandwidth	+/- 1.54 Hz
100 KHz Bandwidth Of Frequency Band Edges	+/- 1.69 dB
Peak Power Density	+/- 1.54 dB
Temperature	+/- 0.4 °C
Humidity	+/- 3.5 %
DC / AC Power Source	DC= +/- 1%, AC= +/- 1%

Radiated Spurious Emission Measurement Uncertainty			
Polarization: Vertical	+/- 2.64 dB	9kHz~30MHz: +/-2.3dB	
	+/- 4.93 dB	30MHz - 1000MHz: +/- 3.37dB	
	+/- 4.81 dB	1GHz - 18GHz: +/- 4.04dB	
	+/- 4.52 dB	18GHz - 40GHz: +/- 4.04dB	
Polarization: Horizontal	+/- 2.64 dB	9kHz~30MHz: +/-2.3dB	
	+/- 4.45 dB	30MHz - 1000MHz: +/- 4.22dB	
	+/- 4.81 dB	1GHz - 18GHz: +/- 4.08dB	
	+/- 4.52 dB	18GHz - 40GHz: +/- 4.08dB	

### Note:

1. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.
2. The conformity assessment statement in this report is based solely on the test results, measurement uncertainty is excluded.

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

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

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

## 6 CONDUCTED EMISSION TEST

### 6.1 Standard Applicable

Frequency range within 150kHz to 30MHz shall not exceed the Limit table as below.

Frequency range MHz	Limits dB(uV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50
Note 1.The lower limit shall apply at the transition frequencies 2.The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.		

### 6.2 Measurement Equipment Used

Conducted Emission Test Site: Conducted 2					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Power Meter	Anritsu	ML2496A	1804001	03/02/2021	03/01/2022
Power Sensor	Anritsu	MA2411B	1726104	03/02/2021	03/01/2022
Power Sensor	Anritsu	MA2411B	1726107	03/02/2021	03/01/2022
Attenuator	Mini-Circuit	BW-S10W2+	2	12/16/2020	12/15/2021
EXA Spectrum Analyzer	KEYSIGHT	N9010B	MY60240503	12/11/2020	12/10/2021
DC Block	Mini-Circuits	BLK-18-S+	1	12/16/2020	12/15/2021

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

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

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



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 EUT was placed flushed with the rear of the table.
3. The LISN was connected with 120Vac/60Hz power source.

A: UE  
B: Wall Plug

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

N/A; Powered from AA battery.

Member of SGS Group

## 7 DUTY CYCLE OF 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.

### 7.1 Measurement Procedure:

1. Set span = Zero
2. RBW = 8MHz
3. VBW = 8MHz,
4. Detector = 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。本報告未經本公司書面許可，不可部份複製。

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

## 7.2 Duty Cycle:

### CDD

	Duty Cycle (%) = Ton / (Ton+Toff)	Duty Factor (dB) =10*log ( 1/Duty Cycle )	1/T (kHz)	VBW setting (kHz)
802.11b	75.00	1.25	1.54	2.00
802.11g	92.86	0.32	0.65	1.00
802.11n_20	95.79	0.19	0.19	1.00
802.11n_40	93.32	0.30	0.19	1.00
802.11ax_20	95.94	0.18	0.19	1.00
802.11ax_40	94.10	0.26	0.19	1.00

$b = 75\%$ ,  $g = 92.86\%$ ,  $n_{ht\_20} = 95.79\%$ ,  $n_{ht\_40} = 93.32\%$

Duty Cycle Factor:  $10 * \log(1/0.75) = 1.25$

Duty Cycle Factor:  $10 * \log(1/0.9286) = 0.32$

Duty Cycle Factor:  $10 * \log(1/0.9579) = 0.19$

Duty Cycle Factor:  $10 * \log(1/0.9332) = 0.3$

### Beamforming

	Duty Cycle (%) = Ton / (Ton+Toff)	Duty Factor (dB) =10*log ( 1/Duty Cycle )	1/T (kHz)	VBW setting (kHz)
802.11n_20	96.11	0.17	0.19	1.00
802.11n_40	95.47	0.20	0.19	1.00
802.11ax_20	93.02	0.31	0.19	1.00
802.11ax_40	95.82	0.19	0.19	1.00

$b = \%$ ,  $g = \%$ ,  $n_{ht\_20} = 96.11\%$ ,  $n_{ht\_40} = 95.47\%$

Duty Cycle Factor:  $10 * \log(1/0.9611) = 0.17$

Duty Cycle Factor:  $10 * \log(1/0.9547) = 0.2$

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.

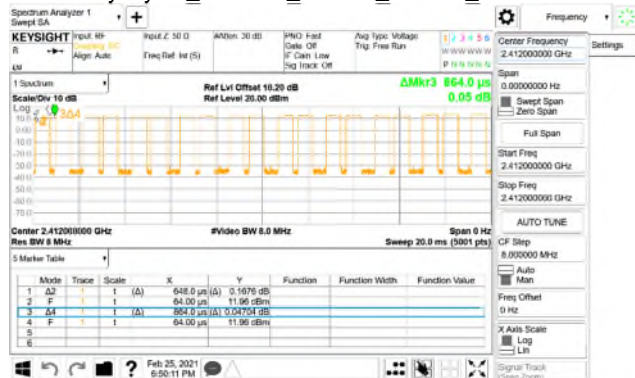
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

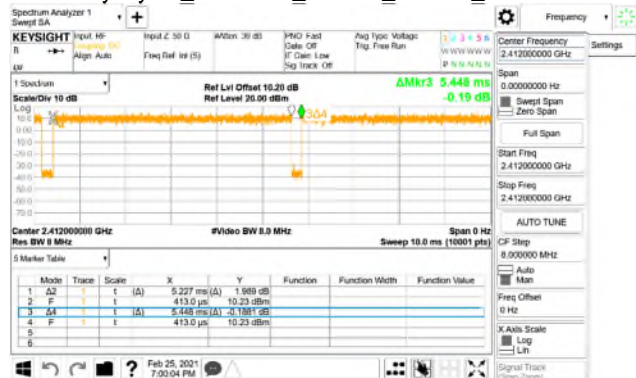
## 7.3 Duty Cycle test plots

### CDD

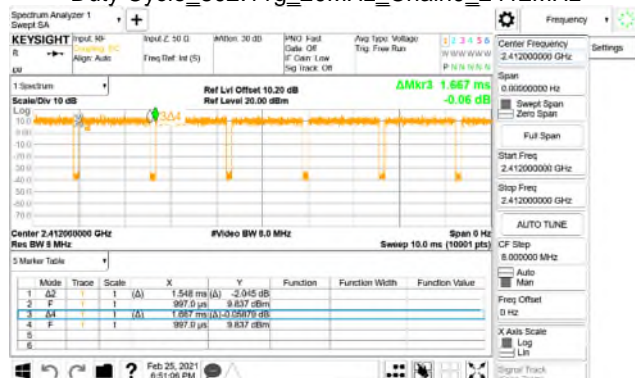
Duty Cycle\_802.11b\_20MHz\_Chain0\_2412MHz



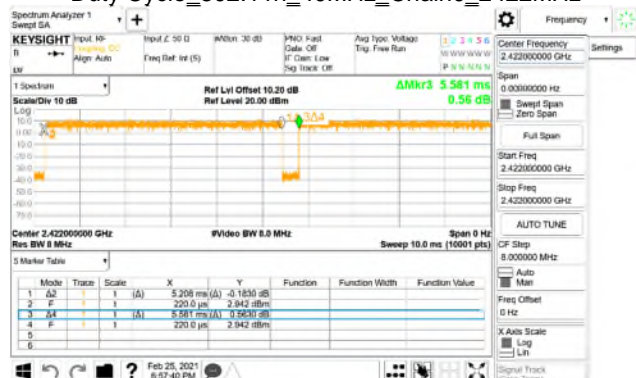
Duty Cycle\_802.11ax\_20MHz\_Chain0\_2412MHz



Duty Cycle\_802.11g\_20MHz\_Chain0\_2412MHz



Duty Cycle\_802.11n\_40MHz\_Chain0\_2422MHz



Duty Cycle\_802.11n\_20MHz\_Chain0\_2412MHz



Duty Cycle\_802.11ax\_40MHz\_Chain0\_2422MHz



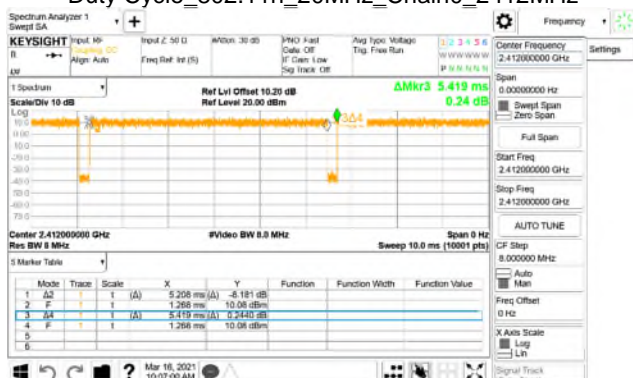
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

## Beamforming

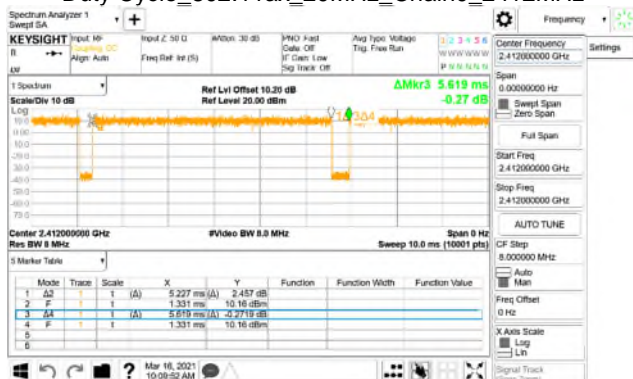
Duty Cycle\_802.11n\_20MHz\_Chain0\_2412MHz



Duty Cycle\_802.11n\_40MHz\_Chain0\_2422MHz



Duty Cycle\_802.11ax\_20MHz\_Chain0\_2412MHz



Duty Cycle\_802.11ax\_40MHz\_Chain0\_2422MHz



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

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

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



## 8 PEAK OUTPUT POWER MEASUREMENT

### 8.1 Standard Applicable

For systems using digital modulation in the 2400-2483.5 MHz bands, the limit for peak output power is 1Watt.

**Note:**

As per section F. 2). e). (ii) of FCC KDB 662911 D01

If antenna gains are not equal and each transmit antenna is driven by only one spatial stream, directional gain may be calculated by either of the following formulas.

$$DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

NSS = the number of independent spatial streams of data;

NANT = the total number of antennas

$g_{j,k}$  = / 20 10Gk if the kth antenna is being fed by spatial stream j, or zero if it is not;

$G_k$  is the gain in dBi of the kth antenna.

The antenna gain is not greater than 6 dBi. Therefore, reduction of power is not required.

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

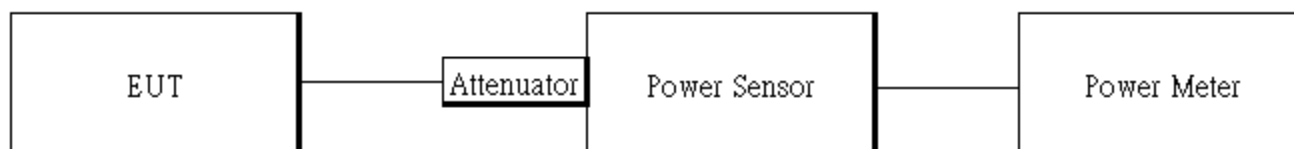
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>.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

## 8.2 Measurement Equipment Used

Conducted Emission Test Site: Conducted 2					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Power Meter	Anritsu	ML2496A	1804001	03/02/2021	03/01/2022
Power Sensor	Anritsu	MA2411B	1726104	03/02/2021	03/01/2022
Power Sensor	Anritsu	MA2411B	1726107	03/02/2021	03/01/2022
Attenuator	Mini-Circuit	BW-S10W2+	2	12/16/2020	12/15/2021

## 8.3 Test Set-up

Power Meter:



## 8.4 Measurement Procedure

1. Place the EUT on the table and set it in transmitting mode.
2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance .
3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the power meter.

### Power Meter:

It is used as the auxiliary test equipment to conduct the output power measurement.

4. Record the max. Reading as observed from Spectrum or Power Meter.

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

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

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

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

## 8.5 Measurement Result

### CDD

802.11b Ch0						
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	1	24	26.67	30.00	PASS
6	2437	1	24	26.61	30.00	PASS
11	2462	1	24	26.77	30.00	PASS
802.11b Ch0						
CH	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
1	2412	1	24	23.27	30.00	PASS
6	2437	1	24	23.11	30.00	PASS
11	2462	1	24	23.40	30.00	PASS
802.11b Ch1						
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	1	24	25.88	30.00	PASS
6	2437	1	24	26.14	30.00	PASS
11	2462	1	24	26.07	30.00	PASS
802.11b Ch1						
CH	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
1	2412	1	24	23.27	30.00	PASS
6	2437	1	24	23.11	30.00	PASS
11	2462	1	24	23.40	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



802.11b_2TX								
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power		Total Peak Output Power (dBm)	Limit (dBm)	RESULT
				CH 0	CH 1			
1	2412	1	24	26.60	25.85	29.25	30.00	PASS
6	2437	1	24	26.60	25.85	29.25	30.00	PASS
11	2462	1	24	26.52	26.05	29.30	30.00	PASS

802.11b_2TX								
CH	Freq. (MHz)	Data Rate	Power set	Avg. Output Power (dBm)		Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
				CH 0	CH 1			
1	2412	1	24	22.02	21.30	25.93	30.00	PASS
6	2437	1	24	22.04	21.45	26.01	30.00	PASS
11	2462	1	24	22.05	21.58	26.08	30.00	PASS

802.11g Ch0						
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	6	19	26.22	30.00	PASS
6	2437	6	19	26.19	30.00	PASS
11	2462	6	19	26.68	30.00	PASS

802.11g Ch0						
CH	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
1	2412	6	19	19.01	30.00	PASS
6	2437	6	19	18.96	30.00	PASS
11	2462	6	19	19.22	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

802.11g Ch1								
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT		
1	2412	6	19	25.65	30.00	PASS		
6	2437	6	19	25.56	30.00	PASS		
11	2462	6	19	25.85	30.00	PASS		
802.11g Ch1								
CH	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT		
1	2412	6	19	19.01	30.00	PASS		
6	2437	6	19	18.96	30.00	PASS		
11	2462	6	19	19.22	30.00	PASS		
802.11g_2TX								
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power		Total Peak Output Power (dBm)	Limit (dBm)	RESULT
				CH 0	CH 1			
1	2412	6	19	26.34	25.33	28.87	30.00	PASS
6	2437	6	19	26.48	25.66	29.10	30.00	PASS
11	2462	6	19	26.53	25.84	29.21	30.00	PASS
802.11g_2TX								
CH	Freq. (MHz)	Data Rate	Power set	Avg. Output Power (dBm)		Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
				CH 0	CH 1			
1	2412	6	19	18.58	17.79	21.53	30.00	PASS
6	2437	6	19	18.76	17.96	21.71	30.00	PASS
11	2462	6	19	18.86	18.34	21.94	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

802.11n_HT20M Ch0						
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	19.5	27.15	30.00	PASS
6	2437	MCS0	19	26.37	30.00	PASS
11	2462	MCS0	19	26.67	30.00	PASS
802.11n_HT20M Ch0						
CH	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	19.5	19.26	30.00	PASS
6	2437	MCS0	19	18.79	30.00	PASS
11	2462	MCS0	19	19.04	30.00	PASS
802.11n_HT20M Ch1						
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	19.5	25.95	30.00	PASS
6	2437	MCS0	19	25.71	30.00	PASS
11	2462	MCS0	19	26.01	30.00	PASS
802.11n_HT20M Ch1						
CH	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	19.5	19.26	30.00	PASS
6	2437	MCS0	19	18.79	30.00	PASS
11	2462	MCS0	19	19.04	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

## 802.11n\_HT20M MIMO

CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power		Total Peak Output Power (dBm)	Limit (dBm)	RESULT
				CH 0	CH 1			
1	2412	MCS8	19.5	26.87	25.98	29.46	30.00	PASS
6	2437	MCS8	19	26.11	25.78	28.96	30.00	PASS
11	2462	MCS8	19	26.62	25.98	29.32	30.00	PASS

## 802.11n\_HT20M MIMO

CH	Freq. (MHz)	Data Rate	Power set	Avg. Output Power (dBm)		Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
				CH 0	CH 1			
1	2412	MCS8	19.5	19.05	18.30	21.89	30.00	PASS
6	2437	MCS8	19	18.55	18.02	21.49	30.00	PASS
11	2462	MCS8	19	19.07	18.39	21.94	30.00	PASS

## 802.11n\_HT40M Ch0

CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
3	2422	MCS0	19	26.43	30.00	PASS
4	2427	MCS0	19.5	26.92	30.00	PASS
5	2432	MCS0	19.5	27.06	30.00	PASS
6	2437	MCS0	19.5	26.93	30.00	PASS
7	2442	MCS0	19.5	27.05	30.00	PASS
8	2447	MCS0	16.5	23.94	30.00	PASS
9	2452	MCS0	16	22.97	30.00	PASS

## 802.11n\_HT40M Ch0

CH	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
3	2422	MCS0	19	19.05	30.00	PASS
4	2427	MCS0	19.5	19.49	30.00	PASS
5	2432	MCS0	19.5	19.65	30.00	PASS
6	2437	MCS0	19.5	19.39	30.00	PASS
7	2442	MCS0	19.5	19.66	30.00	PASS
8	2447	MCS0	16.5	16.44	30.00	PASS
9	2452	MCS0	16	15.71	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

## 802.11n\_HT40M Ch1

CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
3	2422	MCS0	19	25.71	30.00	PASS
4	2427	MCS0	19.5	26.49	30.00	PASS
5	2432	MCS0	19.5	26.14	30.00	PASS
6	2437	MCS0	19.5	26.20	30.00	PASS
7	2442	MCS0	19.5	26.39	30.00	PASS
8	2447	MCS0	16.5	23.08	30.00	PASS
9	2452	MCS0	16	22.65	30.00	PASS

## 802.11n\_HT40M Ch1

CH	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
3	2422	MCS0	19	19.05	30.00	PASS
4	2427	MCS0	19.5	19.49	30.00	PASS
5	2432	MCS0	19.5	19.65	30.00	PASS
6	2437	MCS0	19.5	19.39	30.00	PASS
7	2442	MCS0	19.5	19.66	30.00	PASS
8	2447	MCS0	16.5	16.44	30.00	PASS
9	2452	MCS0	16	15.71	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

## 802.11n\_HT40M MIMO

CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power		Total Peak Output Power (dBm)	Limit (dBm)	RESULT
				CH 0	CH 1			
3	2422	MCS8	19	26.22	25.72	28.99	30.00	PASS
4	2427	MCS8	19.5	26.46	26.43	29.46	30.00	PASS
5	2432	MCS8	19.5	26.73	26.47	<b>29.61</b>	30.00	PASS
6	2437	MCS8	19.5	26.62	26.01	29.34	30.00	PASS
7	2442	MCS8	18.5	25.65	25.23	28.46	30.00	PASS
8	2447	MCS8	15.5	22.60	22.21	25.42	30.00	PASS
9	2452	MCS8	15.5	22.39	22.22	25.32	30.00	PASS

## 802.11n\_HT40M MIMO

CH	Freq. (MHz)	Data Rate	Power set	Avg. Output Power (dBm)		Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
				CH 0	CH 1			
3	2422	MCS8	19	18.76	18.05	21.73	30.00	PASS
4	2427	MCS8	19.5	19.04	18.86	22.26	30.00	PASS
5	2432	MCS8	19.5	19.09	18.78	22.25	30.00	PASS
6	2437	MCS8	19.5	19.49	18.65	<b>22.40</b>	30.00	PASS
7	2442	MCS8	18.5	18.08	17.79	21.25	30.00	PASS
8	2447	MCS8	15.5	15.11	14.97	18.35	30.00	PASS
9	2452	MCS8	15.5	14.78	14.54	17.97	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

802.11ax_HE20M Ch0							
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	full	18.5	26.47	30.00	PASS
			26/0	15	26.03	30.00	PASS
			52/37	15	26.39	30.00	PASS
			106/53	14.5	26.26	30.00	PASS
6	2437	MCS0	full	18.5	26.45	30.00	PASS
11	2462	MCS0	full	18.5	26.81	30.00	PASS
			26/8	15	26.20	30.00	PASS
			52/40	14.5	26.26	30.00	PASS
			106/54	14	25.64	30.00	PASS
802.11ax_HE20M Ch0							
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	full	18.5	18.53	30.00	PASS
			26/0	15	14.73	30.00	PASS
			52/37	15	14.98	30.00	PASS
			106/53	14.5	14.09	30.00	PASS
6	2437	MCS0	full	18.5	18.44	30.00	PASS
11	2462	MCS0	full	18.5	18.81	30.00	PASS
			26/8	15	15.13	30.00	PASS
			52/40	14.5	15.05	30.00	PASS
			106/54	14	14.24	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

802.11ax_HE20M Ch1							
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	full	18.5	25.85	30.00	PASS
			26/0	15	25.75	30.00	PASS
			52/37	15	25.77	30.00	PASS
			106/53	14.5	24.99	30.00	PASS
6	2437	MCS0	full	18.5	25.63	30.00	PASS
11	2462	MCS0	full	18.5	26.04	30.00	PASS
			26/8	15	25.31	30.00	PASS
			52/40	14.5	25.46	30.00	PASS
			106/54	14	25.32	30.00	PASS
802.11ax_HE20M Ch1							
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	full	18.5	18.53	30.00	PASS
			26/0	15	14.73	30.00	PASS
			52/37	15	14.98	30.00	PASS
			106/53	14.5	14.09	30.00	PASS
6	2437	MCS0	full	18.5	18.44	30.00	PASS
11	2462	MCS0	full	18.5	18.81	30.00	PASS
			26/8	15	15.13	30.00	PASS
			52/40	14.5	15.05	30.00	PASS
			106/54	14	14.24	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



802.11ax_HE20M MIMO									
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Peak Output Power		Total Peak Output Power (dBm)	Limit (dBm)	RESULT
					CH 0	CH 1			
1	2412	MCS0	full	18.5	26.36	25.67	29.04	30.00	PASS
			26/0	15	26.23	25.72	28.99	30.00	PASS
			52/37	15	26.25	25.74	29.01	30.00	PASS
			106/53	14.5	26.61	25.44	29.07	30.00	PASS
6	2437	MCS0	full	18.5	26.84	26.32	29.60	30.00	PASS
11	2462	MCS0	full	18.5	26.98	26.01	29.53	30.00	PASS
			26/8	15	26.15	25.38	28.79	30.00	PASS
			52/40	14.5	26.20	25.32	28.79	30.00	PASS
			106/54	14	26.46	25.02	28.81	30.00	PASS
802.11ax_HE20M MIMO									
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Avg. Output Power (dBm)		Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
					CH 0	CH 1			
1	2412	MCS0	full	18.5	18.24	17.85	21.24	30.00	PASS
			26/0	15	14.52	13.69	17.32	30.00	PASS
			52/37	15	14.83	13.93	17.59	30.00	PASS
			106/53	14.5	13.92	13.07	16.71	30.00	PASS
6	2437	MCS0	full	18.5	18.42	17.68	21.26	30.00	PASS
11	2462	MCS0	full	18.5	18.73	18.18	21.65	30.00	PASS
			26/8	15	14.96	14.13	17.76	30.00	PASS
			52/40	14.5	14.82	13.98	17.61	30.00	PASS
			106/54	14	13.97	13.26	16.82	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

802.11ax_HE40M Ch0							
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
3	2422	MCS0	full	18.5	26.45	30.00	PASS
			242/61	15.5	26.26	30.00	PASS
6	2437	MCS0	full	18.5	26.62	30.00	PASS
7	2442	MCS0	full	18.5	26.64	30.00	PASS
8	2447	MCS0	full	16	24.98	30.00	PASS
9	2452	MCS0	full	16	23.84	30.00	PASS
			242/62	16	26.64	30.00	PASS
802.11ax_HE40M Ch0							
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
3	2422	MCS0	full	18.5	18.55	30.00	PASS
			242/61	15.5	15.06	30.00	PASS
6	2437	MCS0	full	18.5	18.75	30.00	PASS
7	2442	MCS0	full	18.5	18.78	30.00	PASS
8	2447	MCS0	full	16	16.19	30.00	PASS
9	2452	MCS0	full	16	15.75	30.00	PASS
			242/62	16	15.51	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

802.11ax_HE40M Ch1							
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
3	2422	MCS0	full	18.5	26.18	30.00	PASS
			242/61	15.5	25.79	30.00	PASS
6	2437	MCS0	full	18.5	25.96	30.00	PASS
7	2442	MCS0	full	18.5	25.76	30.00	PASS
8	2447	MCS0	full	16	23.22	30.00	PASS
9	2452	MCS0	full	16	23.42	30.00	PASS
			242/62	16	26.12	30.00	PASS
802.11ax_HE40M Ch1							
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
3	2422	MCS0	full	18.5	18.55	30.00	PASS
			242/61	15.5	15.06	30.00	PASS
6	2437	MCS0	full	18.5	18.75	30.00	PASS
7	2442	MCS0	full	18.5	18.78	30.00	PASS
8	2447	MCS0	full	16	16.19	30.00	PASS
9	2452	MCS0	full	16	15.75	30.00	PASS
			242/62	16	15.51	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction of this document. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

802.11ax_HE40M MIMO									
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Peak Output Power		Total Peak Output Power (dBm)	Limit (dBm)	RESULT
					CH 0	CH 1			
3	2422	MCS0	full	18.5	26.11	25.95	29.04	30.00	PASS
			242/6	15.5	26.15	25.79	28.98	30.00	PASS
6	2437	MCS0	full	18.5	26.89	25.84	29.41	30.00	PASS
7	2442	MCS0	full	17	25.27	24.32	27.83	30.00	PASS
8	2447	MCS0	full	14.5	22.61	21.50	25.10	30.00	PASS
9	2452	MCS0	full	15	22.75	22.53	25.65	30.00	PASS
			242/6	16	26.33	26.25	29.30	30.00	PASS
802.11ax_HE40M MIMO									
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Avg. Output Power (dBm)		Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
					CH 0	CH 1			
3	2422	MCS0	full	18.5	18.23	18.17	21.47	30.00	PASS
			242/6	15.5	14.57	13.94	17.54	30.00	PASS
6	2437	MCS0	full	18.5	18.52	17.79	21.44	30.00	PASS
7	2442	MCS0	full	17	17.08	16.44	20.05	30.00	PASS
8	2447	MCS0	full	14.5	14.53	13.86	17.48	30.00	PASS
9	2452	MCS0	full	15	14.72	14.29	17.78	30.00	PASS
			242/6	16	15.24	15.13	18.46	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

## Beamforming

802.11n_HT20M Ch0						
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	16.5	24.14	30.00	PASS
6	2437	MCS0	16	24.63	30.00	PASS
11	2462	MCS0	16	23.98	30.00	PASS

802.11n_HT20M Ch0						
CH	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	16.5	16.23	30.00	PASS
6	2437	MCS0	16	15.95	30.00	PASS
11	2462	MCS0	16	16.09	30.00	PASS

802.11n_HT20M Ch1						
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	16.5	23.56	30.00	PASS
6	2437	MCS0	16	23.06	30.00	PASS
11	2462	MCS0	16	23.36	30.00	PASS

802.11n_HT20M Ch1						
CH	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	16.5	15.78	30.00	PASS
6	2437	MCS0	16	15.28	30.00	PASS
11	2462	MCS0	16	15.62	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

## 802.11n\_HT20M MIMO

CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power		Total Peak Output Power (dBm)	Limit (dBm)	RESULT
				CH 0	CH 1			
1	2412	MCS8	16.5	24.23	23.21	26.76	30.00	PASS
6	2437	MCS8	16	24.34	23.27	<b>26.85</b>	30.00	PASS
11	2462	MCS8	16	23.69	23.53	26.62	30.00	PASS

## 802.11n\_HT20M MIMO

CH	Freq. (MHz)	Data Rate	Power set	Avg. Output Power (dBm)		Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
				CH 0	CH 1			
1	2412	MCS8	16.5	15.96	15.55	<b>18.94</b>	30.00	PASS
6	2437	MCS8	16	15.98	15.01	18.70	30.00	PASS
11	2462	MCS8	16	15.84	15.35	18.78	30.00	PASS

## 802.11n\_HT40M Ch0

CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
3	2422	MCS0	16	23.69	30.00	PASS
4	2427	MCS0	16.5	24.01	30.00	PASS
5	2432	MCS0	16.5	24.29	30.00	PASS
6	2437	MCS0	16.5	24.36	30.00	PASS
7	2442	MCS0	16.5	23.94	30.00	PASS
8	2447	MCS0	13.5	21.06	30.00	PASS
9	2452	MCS0	13	20.12	30.00	PASS

## 802.11n\_HT40M Ch0

CH	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
3	2422	MCS0	16	15.94	30.00	PASS
4	2427	MCS0	16.5	16.39	30.00	PASS
5	2432	MCS0	16.5	16.52	30.00	PASS
6	2437	MCS0	16.5	16.56	30.00	PASS
7	2442	MCS0	16.5	16.47	30.00	PASS
8	2447	MCS0	13.5	13.39	30.00	PASS
9	2452	MCS0	13	12.72	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

802.11n_HT40M Ch1						
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
3	2422	MCS0	16	22.75	30.00	PASS
4	2427	MCS0	16.5	23.49	30.00	PASS
5	2432	MCS0	16.5	23.48	30.00	PASS
6	2437	MCS0	16.5	23.46	30.00	PASS
7	2442	MCS0	16.5	23.22	30.00	PASS
8	2447	MCS0	13.5	20.15	30.00	PASS
9	2452	MCS0	13	19.66	30.00	PASS
802.11n_HT40M Ch1						
CH	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
3	2422	MCS0	16	15.43	30.00	PASS
4	2427	MCS0	16.5	15.88	30.00	PASS
5	2432	MCS0	16.5	15.97	30.00	PASS
6	2437	MCS0	16.5	15.98	30.00	PASS
7	2442	MCS0	16.5	15.83	30.00	PASS
8	2447	MCS0	13.5	12.98	30.00	PASS
9	2452	MCS0	13	12.40	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

802.11n_HT40M MIMO								
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power		Total Peak Output Power (dBm)	Limit (dBm)	RESULT
				CH 0	CH 1			
3	2422	MCS8	16	23.81	23.12	26.49	30.00	PASS
4	2427	MCS8	16.5	23.94	23.34	26.66	30.00	PASS
5	2432	MCS8	16.5	24.22	23.36	26.82	30.00	PASS
6	2437	MCS8	16.5	24.26	23.44	<b>26.88</b>	30.00	PASS
7	2442	MCS8	15.5	22.81	22.21	25.53	30.00	PASS
8	2447	MCS8	12.5	19.82	19.11	22.49	30.00	PASS
9	2452	MCS8	12.5	19.64	19.18	22.43	30.00	PASS
802.11n_HT40M MIMO								
CH	Freq. (MHz)	Data Rate	Power set	Avg. Output Power (dBm)		Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
				CH 0	CH 1			
3	2422	MCS8	16	15.69	15.44	18.78	30.00	PASS
4	2427	MCS8	16.5	16.08	15.58	19.05	30.00	PASS
5	2432	MCS8	16.5	16.37	15.96	<b>19.38</b>	30.00	PASS
6	2437	MCS8	16.5	16.42	15.88	19.37	30.00	PASS
7	2442	MCS8	15.5	15.22	14.72	18.19	30.00	PASS
8	2447	MCS8	12.5	12.18	11.74	15.18	30.00	PASS
9	2452	MCS8	12.5	11.96	11.78	15.08	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



802.11ax_HE20M Ch0							
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	full	15.5	24.14	30.00	PASS
			26/0	12	23.73	30.00	PASS
			52/37	12	23.96	30.00	PASS
			106/53	11.5	23.95	30.00	PASS
6	2437	MCS0	full	15.5	23.73	30.00	PASS
11	2462	MCS0	full	15.5	24.28	30.00	PASS
			26/8	12	23.61	30.00	PASS
			52/40	11.5	23.54	30.00	PASS
			106/54	11	23.33	30.00	PASS
802.11ax_HE20M Ch0							
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	full	15.5	15.60	30.00	PASS
			26/0	12	12.17	30.00	PASS
			52/37	12	12.41	30.00	PASS
			106/53	11.5	11.57	30.00	PASS
6	2437	MCS0	full	15.5	15.98	30.00	PASS
11	2462	MCS0	full	15.5	16.19	30.00	PASS
			26/8	12	12.37	30.00	PASS
			52/40	11.5	12.43	30.00	PASS
			106/54	11	11.60	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

802.11ax_HE20M Ch1							
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	full	15.5	22.87	30.00	PASS
			26/0	12	23.14	30.00	PASS
			52/37	12	23.15	30.00	PASS
			106/53	11.5	22.75	30.00	PASS
6	2437	MCS0	full	15.5	23.28	30.00	PASS
11	2462	MCS0	full	15.5	23.26	30.00	PASS
			26/8	12	23.29	30.00	PASS
			52/40	11.5	22.75	30.00	PASS
			106/54	11	22.61	30.00	PASS
802.11ax_HE20M Ch1							
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	full	15.5	15.07	30.00	PASS
			26/0	12	11.17	30.00	PASS
			52/37	12	11.26	30.00	PASS
			106/53	11.5	10.43	30.00	PASS
6	2437	MCS0	full	15.5	15.14	30.00	PASS
11	2462	MCS0	full	15.5	15.37	30.00	PASS
			26/8	12	11.87	30.00	PASS
			52/40	11.5	11.67	30.00	PASS
			106/54	11	11.04	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

802.11ax_HE20M MIMO									
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Peak Output Power		Total Peak Output Power (dBm)	Limit (dBm)	RESULT
					CH 0	CH 1			
1	2412	MCS0	full	15.5	23.58	22.92	26.27	30.00	PASS
			26/0	12	23.96	22.55	26.32	30.00	PASS
			52/37	12	24.05	22.97	26.55	30.00	PASS
			106/53	11.5	24.23	22.76	26.57	30.00	PASS
6	2437	MCS0	full	15.5	23.81	23.19	26.52	30.00	PASS
11	2462	MCS0	full	15.5	24.20	23.70	<b>26.97</b>	30.00	PASS
			26/8	12	23.78	23.15	26.49	30.00	PASS
			52/40	11.5	23.81	22.77	26.33	30.00	PASS
			106/54	11	24.15	22.52	26.42	30.00	PASS
802.11ax_HE20M MIMO									
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Avg. Output Power (dBm)		Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
					CH 0	CH 1			
1	2412	MCS0	full	15.5	15.36	14.78	18.40	30.00	PASS
			26/0	12	11.83	10.95	14.74	30.00	PASS
			52/37	12	12.08	11.06	14.92	30.00	PASS
			106/53	11.5	11.18	10.08	13.99	30.00	PASS
6	2437	MCS0	full	15.5	15.45	14.87	18.49	30.00	PASS
11	2462	MCS0	full	15.5	15.82	15.03	<b>18.77</b>	30.00	PASS
			26/8	12	12.05	11.48	15.10	30.00	PASS
			52/40	11.5	12.15	11.26	15.05	30.00	PASS
			106/54	11	11.11	10.66	14.22	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

802.11ax_HE40M Ch0							
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
3	2422	MCS0	full	15.5	23.78	30.00	PASS
			242/61	12.5	23.55	30.00	PASS
6	2437	MCS0	full	15.5	23.84	30.00	PASS
7	2442	MCS0	full	15.5	23.75	30.00	PASS
8	2447	MCS0	full	13	21.19	30.00	PASS
9	2452	MCS0	full	13	20.82	30.00	PASS
			242/62	13	23.77	30.00	PASS
802.11ax_HE40M Ch0							
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
3	2422	MCS0	full	15.5	15.64	30.00	PASS
			242/61	12.5	11.96	30.00	PASS
6	2437	MCS0	full	15.5	15.77	30.00	PASS
7	2442	MCS0	full	15.5	15.65	30.00	PASS
8	2447	MCS0	full	13	13.14	30.00	PASS
9	2452	MCS0	full	13	12.94	30.00	PASS
			242/62	13	12.09	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

802.11ax_HE40M Ch1							
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
3	2422	MCS0	full	15.5	22.93	30.00	PASS
			242/61	12.5	23.37	30.00	PASS
6	2437	MCS0	full	15.5	23.27	30.00	PASS
7	2442	MCS0	full	15.5	23.13	30.00	PASS
8	2447	MCS0	full	13	20.23	30.00	PASS
9	2452	MCS0	full	13	20.67	30.00	PASS
			242/62	13	23.23	30.00	PASS
802.11ax_HE40M Ch1							
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
3	2422	MCS0	full	15.5	15.02	30.00	PASS
			242/61	12.5	11.45	30.00	PASS
6	2437	MCS0	full	15.5	15.15	30.00	PASS
7	2442	MCS0	full	15.5	15.03	30.00	PASS
8	2447	MCS0	full	13	12.56	30.00	PASS
9	2452	MCS0	full	13	12.62	30.00	PASS
			242/62	13	11.97	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

802.11ax_HE40M MIMO									
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Peak Output Power		Total Peak Output Power (dBm)	Limit (dBm)	RESULT
					CH 0	CH 1			
3	2422	MCS0	full	15.5	23.66	23.11	26.40	30.00	PASS
			242/6	12.5	11.77	11.12	14.47	30.00	PASS
6	2437	MCS0	full	15.5	23.72	23.26	<b>26.51</b>	30.00	PASS
7	2442	MCS0	full	14	22.14	21.71	24.94	30.00	PASS
8	2447	MCS0	full	11.5	19.27	18.55	21.94	30.00	PASS
9	2452	MCS0	full	12	19.86	19.56	22.72	30.00	PASS
			242/6	13	23.37	23.36	26.38	30.00	PASS
802.11ax_HE40M MIMO									
CH	Freq. (MHz)	Data Rate	RU Config	Power set	Avg. Output Power (dBm)		Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
					CH 0	CH 1			
3	2422	MCS0	full	15.5	15.43	14.83	18.34	30.00	PASS
			242/6	12.5	11.73	11.08	14.61	30.00	PASS
6	2437	MCS0	full	15.5	15.66	14.95	<b>18.52</b>	30.00	PASS
7	2442	MCS0	full	14	14.05	13.44	16.95	30.00	PASS
8	2447	MCS0	full	11.5	11.26	10.84	14.25	30.00	PASS
9	2452	MCS0	full	12	11.85	11.37	14.81	30.00	PASS
			242/6	13	11.98	11.96	15.17	30.00	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

## 9 EMISSION BANDWIDTH MEASUREMENT

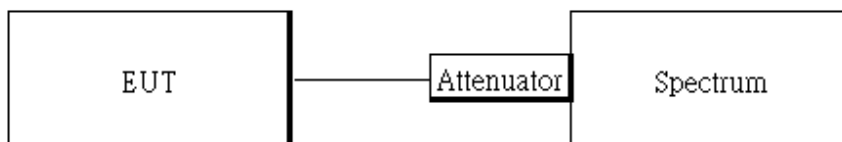
### 9.1 Standard Applicable

The minimum 6 dB bandwidth shall be at least 500 kHz.

### 9.2 Measurement Equipment Used

Conducted Emission Test Site: Conducted 2					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
EXA Spectrum Analyzer	KEYSIGHT	N9010B	MY60240503	12/11/2020	12/10/2021
Attenuator	Mini-Circuit	BW-S10W2+	2	12/16/2020	12/15/2021
DC Block	Mini-Circuits	BLK-18-S+	1	12/16/2020	12/15/2021

### 9.3 Test Set-up



### 9.4 Measurement Procedure

1. Place the EUT on the table and set it in transmitting mode.
2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance .
3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
4. Set the spectrum analyzer as  
 RBW= 100kHz ,  
 VBW = 3 X RBW,  
 Span= 2 to 5 times of the OBW,  
 Sweep=auto,  
 Detector = Peak, and Max hold for -6dB Bandwidth test.
5. Set the spectrum analyzer as  
 RBW= 1 % to 5% of 99% Bandwidth ,  
 VBW  $\geq$  3 X RBW,  
 Span= large enough to capture all products of the modulation process,  
 Sweep=auto,  
 Detector = Peak, and Max hold for 99% Bandwidth test.
6. Turn on the 99% bandwidth function, max reading.
7. Repeat above procedures until all test default channel is completed

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

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

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

## 9.5 6dB Bandwidth

## CDD

## 802.11b Ch0

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	<b>8075.00</b>	> 500	PASS
2437	7578.00	> 500	PASS
2462	8070.00	> 500	PASS

## 802.11b Ch1

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	7594.00	> 500	PASS
2437	<b>8078.00</b>	> 500	PASS
2462	<b>8078.00</b>	> 500	PASS

## 802.11g Ch0

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	<b>16340.00</b>	> 500	PASS
2437	16130.00	> 500	PASS
2462	15840.00	> 500	PASS

## 802.11g Ch1

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	<b>16370.00</b>	> 500	PASS
2437	16350.00	> 500	PASS
2462	16340.00	> 500	PASS

## 802.11\_n\_HT20 Ch0

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	<b>17340.00</b>	> 500	PASS
2437	17230.00	> 500	PASS
2462	16670.00	> 500	PASS

## 802.11\_n\_HT20 Ch1

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	<b>17610.00</b>	> 500	PASS
2437	17570.00	> 500	PASS
2462	17590.00	> 500	PASS

## 802.11\_ax\_HE20 Ch0

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	<b>18880.00</b>	> 500	PASS
2437	18680.00	> 500	PASS
2462	18420.00	> 500	PASS

## 802.11\_ax\_HE20 Ch1

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	<b>18940.00</b>	> 500	PASS
2437	18790.00	> 500	PASS
2462	18800.00	> 500	PASS

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

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

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



## 802.11\_n\_HT40 Ch0

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2422	35380.00	> 500	PASS
2437	35180.00	> 500	PASS
2452	<b>35780.00</b>	> 500	PASS

## 802.11\_n\_HT40 Ch1

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2422	35920.00	> 500	PASS
2437	35500.00	> 500	PASS
2452	<b>36390.00</b>	> 500	PASS

## 802.11\_ax\_HE40 Ch0

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2422	37330.00	> 500	PASS
2437	36620.00	> 500	PASS
2452	<b>37980.00</b>	> 500	PASS

## 802.11\_ax\_HE40 Ch1

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2422	37910.00	> 500	PASS
2437	37230.00	> 500	PASS
2452	<b>38090.00</b>	> 500	PASS

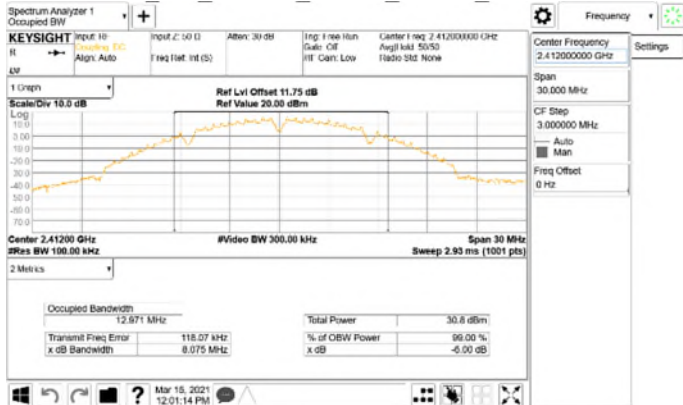
*\*Refer to next page for plots*

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

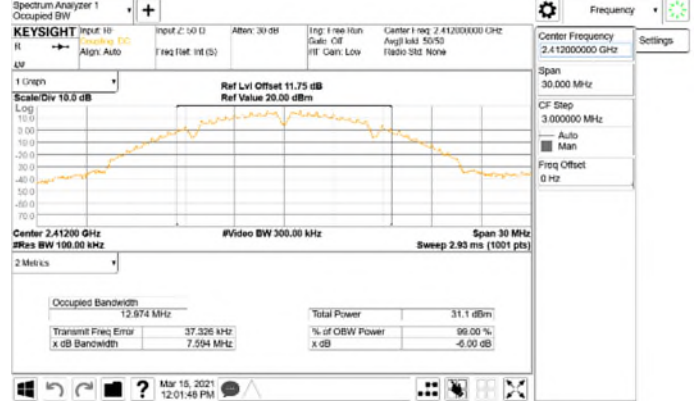
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

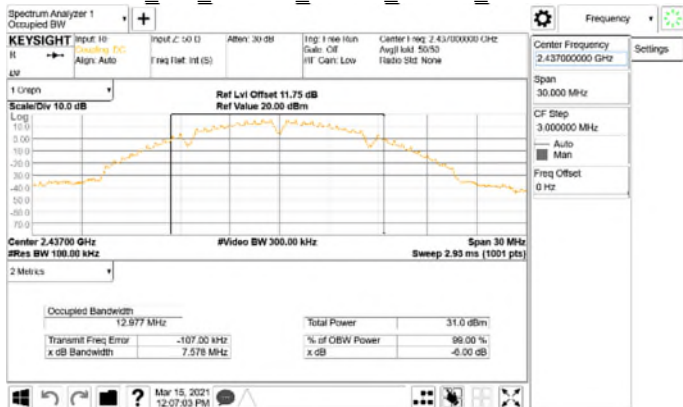
6dB\_BW\_802.11b\_20MHz\_Chain0\_2412MHz



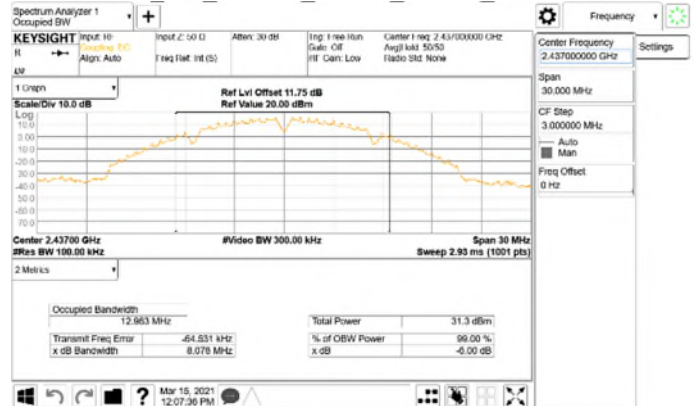
6dB BW 802.11b 20MHz Chain1 2412MHz



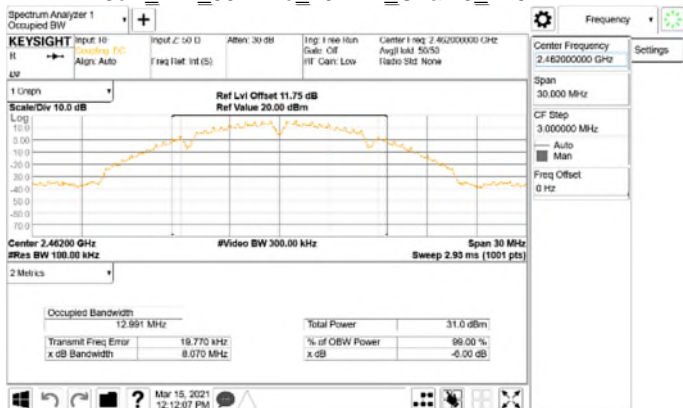
6dB\_BW\_802.11b\_20MHz\_Chain0\_2437MHz



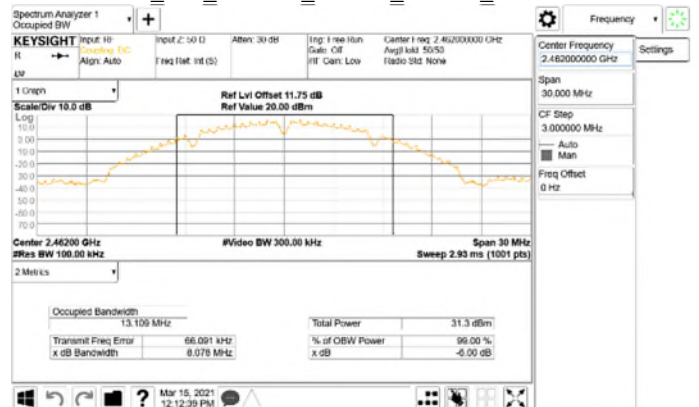
6dB\_BW\_802.11b\_20MHz\_Chain1\_2437MHz



6dB\_BW\_802.11b\_20MHz\_Chain0\_2462MHz



6dB\_BW\_802.11b\_20MHz\_Chain1\_2462MHz



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

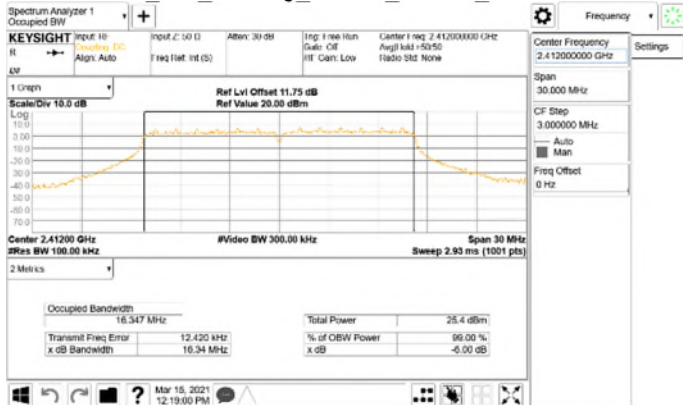
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

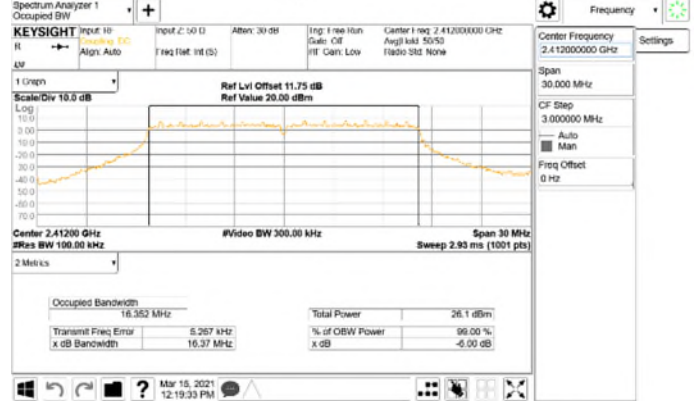
SGS Taiwan Ltd. No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號  
台灣檢驗科技股份有限公司 t (886-2) 2299-3279 f (886-2) 2298-0488 www.sgs.com.tw

Member of SGS Group

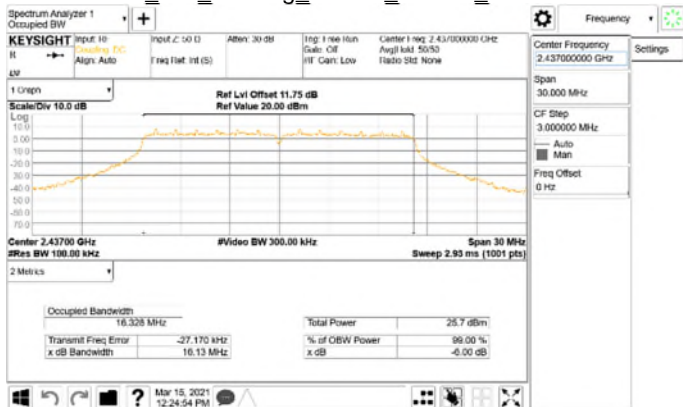
6dB\_BW\_802.11g\_20MHz\_Chain0\_2412MHz



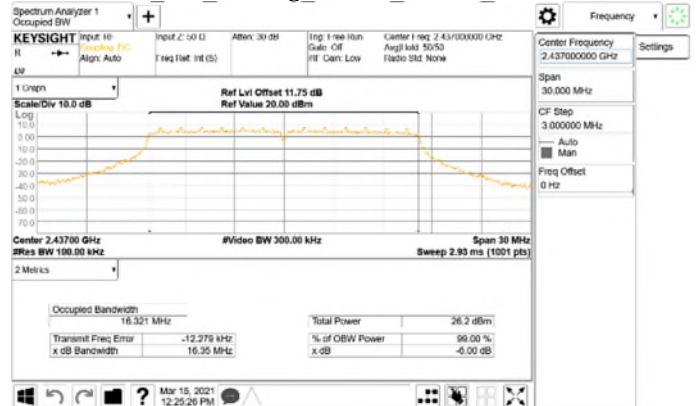
6dB BW 802.11g 20MHz Chain1 2412MHz



6dB\_BW\_802.11g\_20MHz\_Chain0\_2437MHz



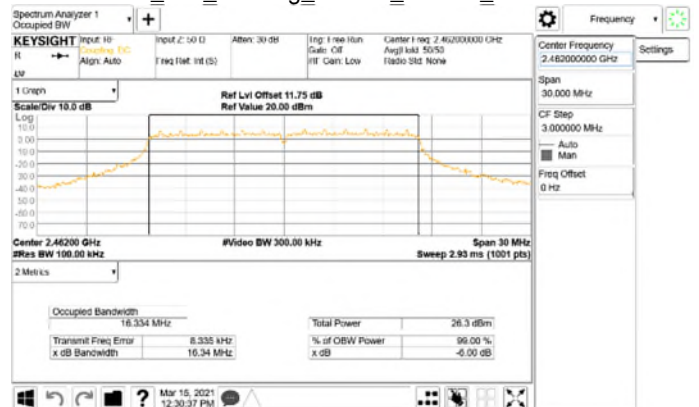
6dB\_BW\_802.11g\_20MHz\_Chain1\_2437MHz



6dB\_BW\_802.11g\_20MHz\_Chain0\_2462MHz



6dB\_BW\_802.11g\_20MHz\_Chain1\_2462MHz



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

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

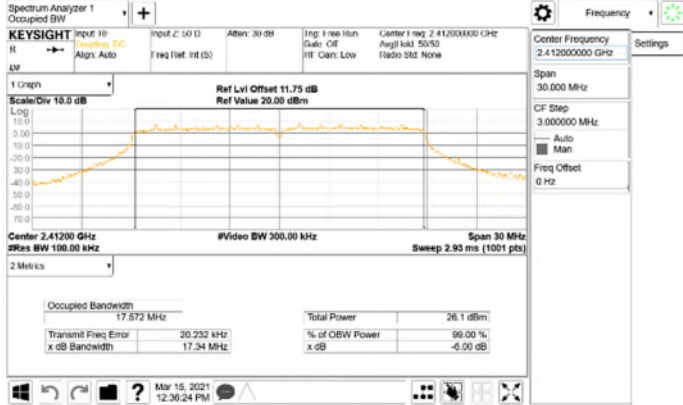
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>.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

SGS Taiwan Ltd. No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號  
台灣檢驗科技股份有限公司 t (886-2) 2299-3279 f (886-2) 2298-0488 www.sgs.com.tw

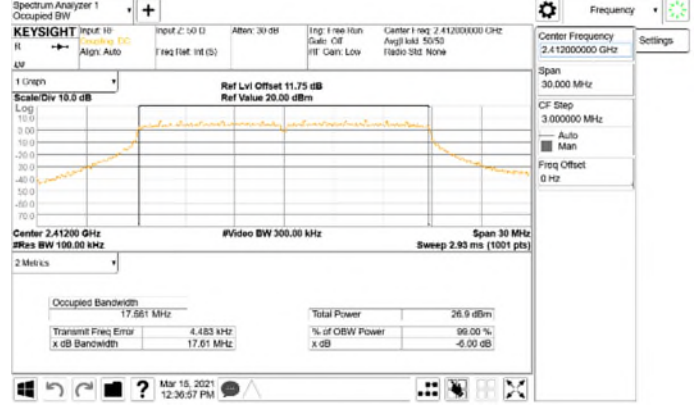
Member of SGS Group



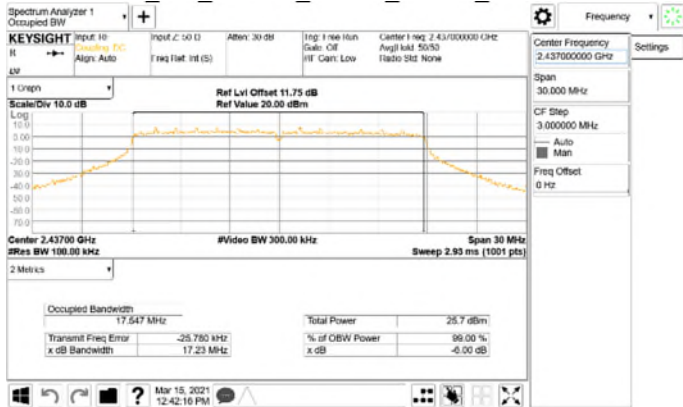
6dB\_BW\_802.11n\_20MHz\_Chain0\_2412MHz



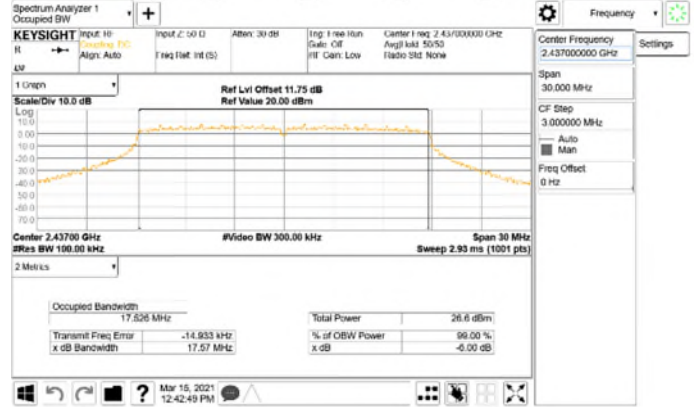
6dB BW 802.11n 20MHz Chain1 2412MHz



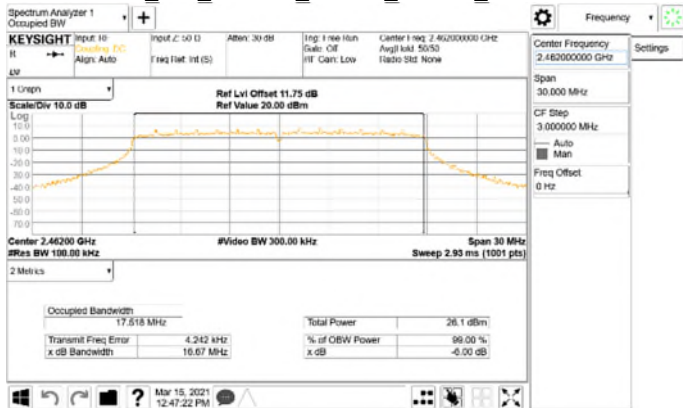
6dB\_BW\_802.11n\_20MHz\_Chain0\_2437MHz



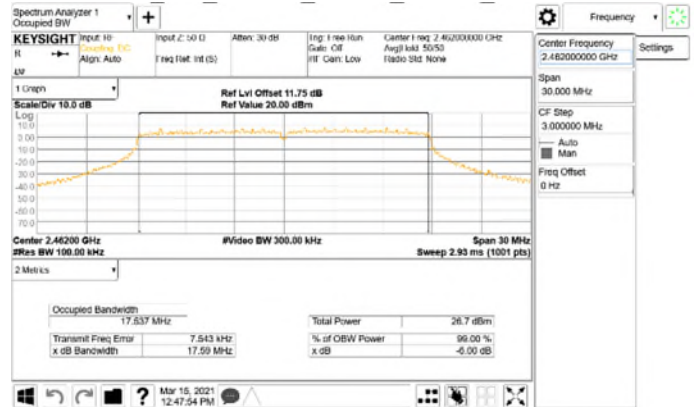
6dB\_BW\_802.11n\_20MHz\_Chain1\_2437MHz



6dB\_BW\_802.11n\_20MHz\_Chain0\_2462MHz



6dB\_BW\_802.11n\_20MHz\_Chain1\_2462MHz



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

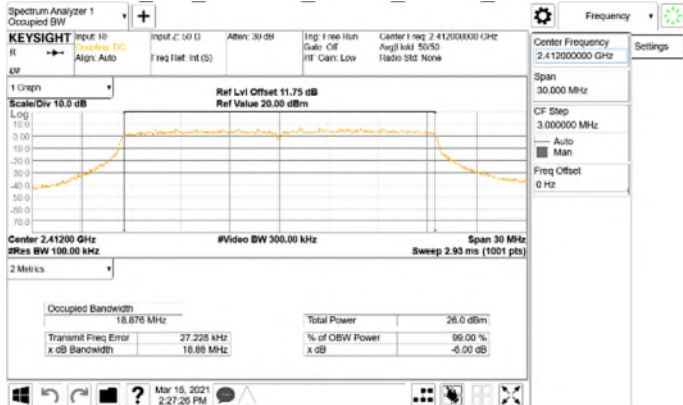
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

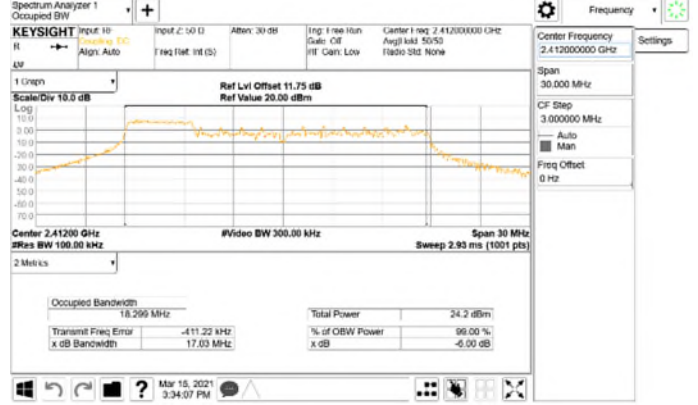
SGS Taiwan Ltd. No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路134號  
台灣檢驗科技股份有限公司 t (886-2) 2299-3279 f (886-2) 2298-0488 www.sgs.com.tw

Member of SGS Group

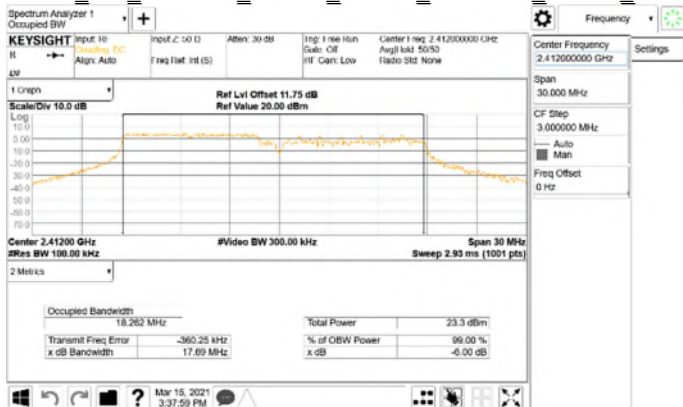
6dB\_BW\_802.11ax\_20MHz\_Chain0\_2412MHz



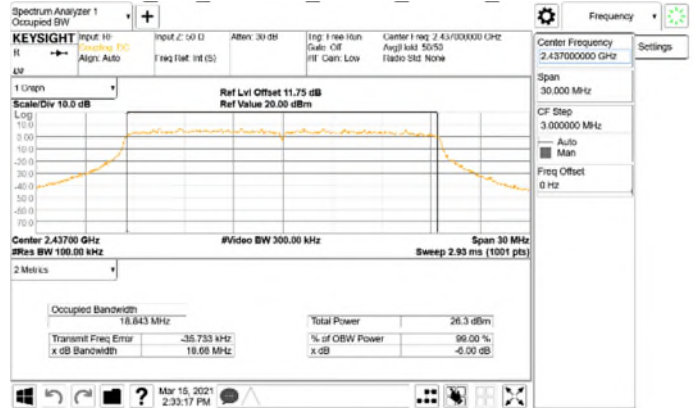
6dB BW 802.11ax 20MHz Chain0 2412MHz RU52 37



6dB\_BW\_802.11ax\_20MHz\_Chain0\_2412MHz\_RU106\_53



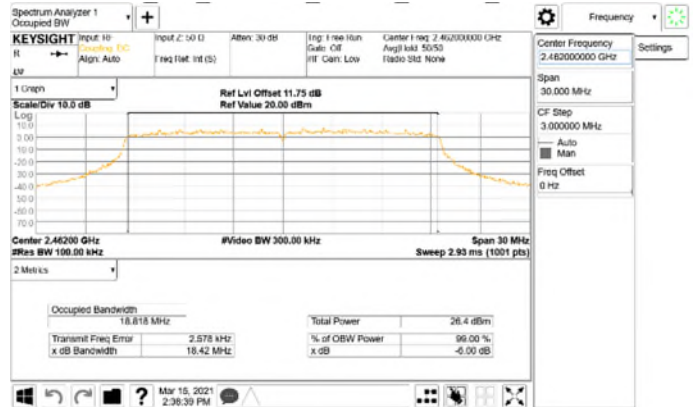
6dB\_BW\_802.11ax\_20MHz\_Chain0\_2437MHz



6dB\_BW\_802.11ax\_20MHz\_Chain0\_2412MHz\_RU26\_0



6dB\_BW\_802.11ax\_20MHz\_Chain0\_2462MHz



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

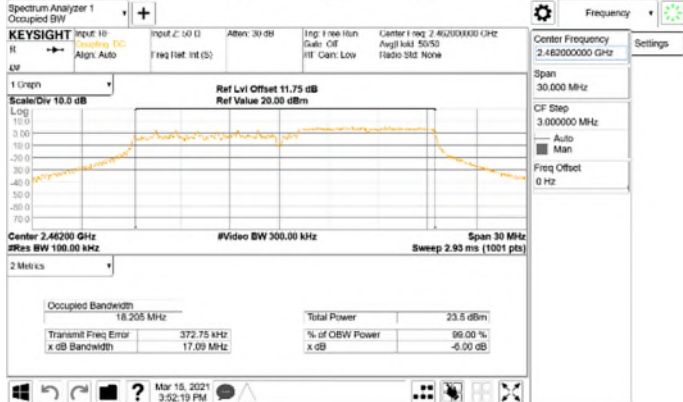
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

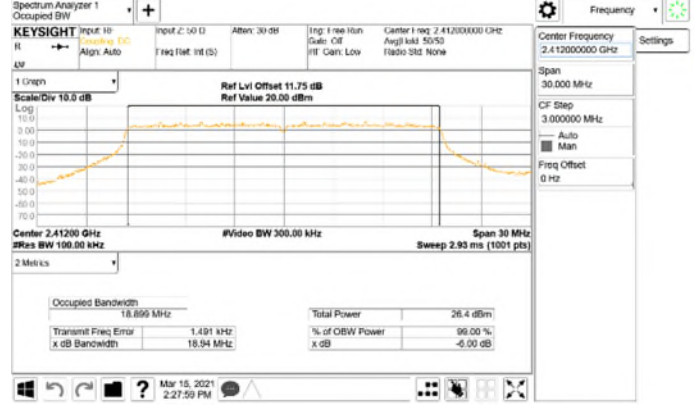
SGS Taiwan Ltd. No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號  
台灣檢驗科技股份有限公司 t (886-2) 2299-3279 f (886-2) 2298-0488 www.sgs.com.tw

Member of SGS Group

6dB\_BW\_802.11ax\_20MHz\_Chain0\_2462MHz\_RU106\_54



6dB BW 802.11ax 20MHz Chain1 2412MHz



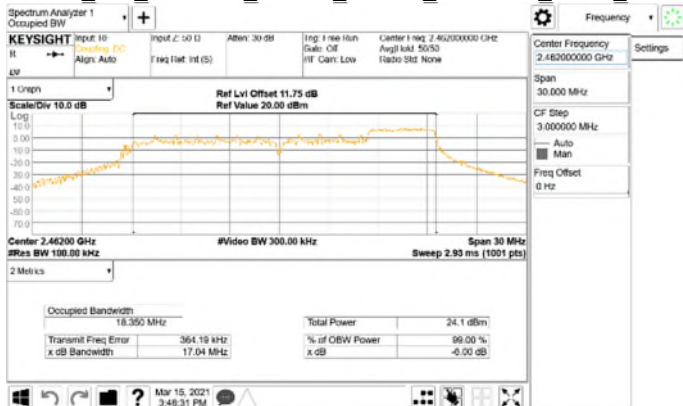
6dB\_BW\_802.11ax\_20MHz\_Chain0\_2462MHz\_RU26\_8



6dB\_BW\_802.11ax\_20MHz\_Chain1\_2412MHz\_RU106\_53



6dB\_BW\_802.11ax\_20MHz\_Chain0\_2462MHz\_RU52\_40



6dB\_BW\_802.11ax\_20MHz\_Chain1\_2412MHz\_RU26\_0



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

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

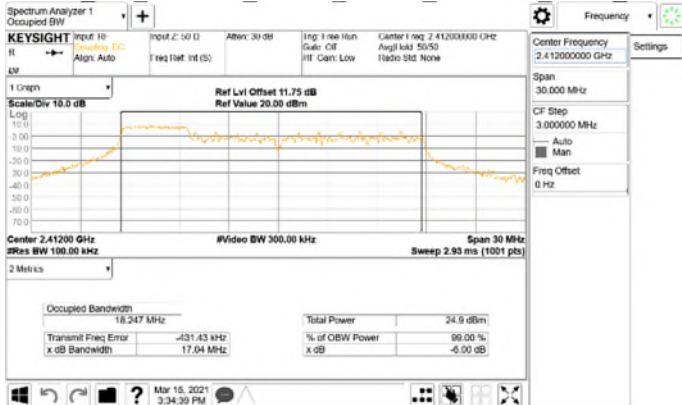
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>.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

SGS Taiwan Ltd. No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號  
台灣檢驗科技股份有限公司 t (886-2) 2299-3279 f (886-2) 2298-0488 www.sgs.com.tw

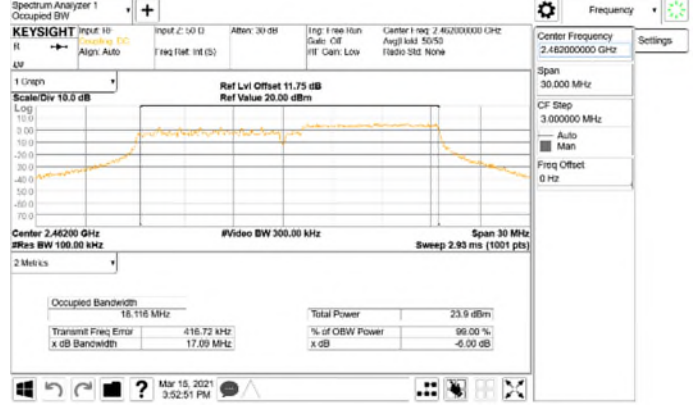
Member of SGS Group



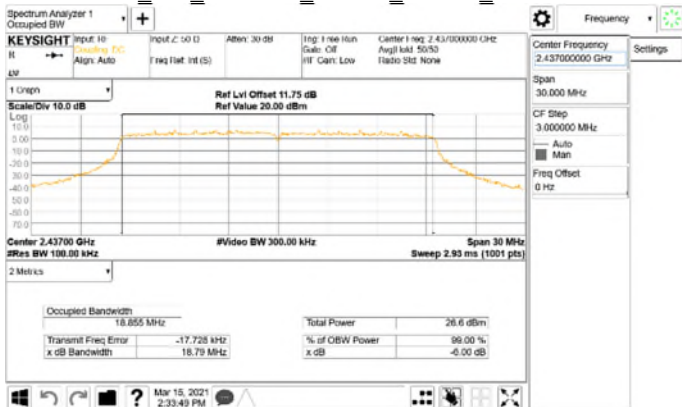
6dB\_BW\_802.11ax\_20MHz\_Chain1\_2412MHz\_RU52\_37



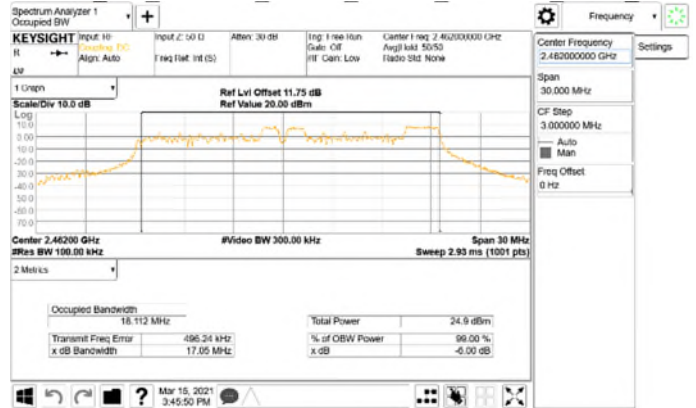
6dB BW 802.11ax 20MHz Chain1 2462MHz RU106\_54



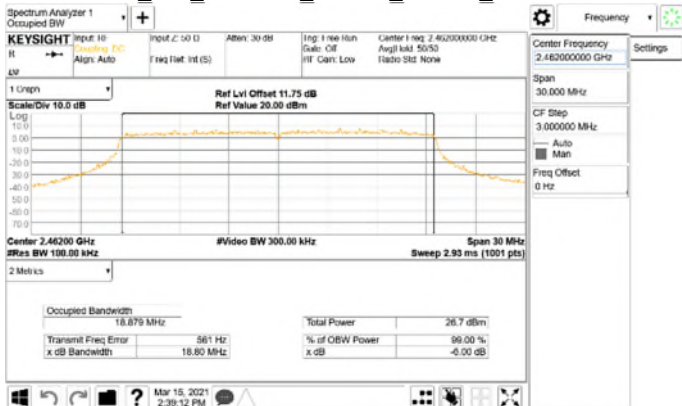
6dB\_BW\_802.11ax\_20MHz\_Chain1\_2437MHz



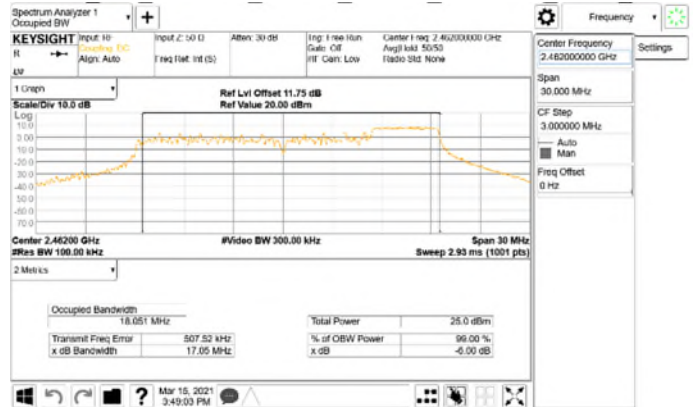
6dB\_BW\_802.11ax\_20MHz\_Chain1\_2462MHz\_RU26\_8



6dB\_BW\_802.11ax\_20MHz\_Chain1\_2462MHz



6dB\_BW\_802.11ax\_20MHz\_Chain1\_2462MHz\_RU52\_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.

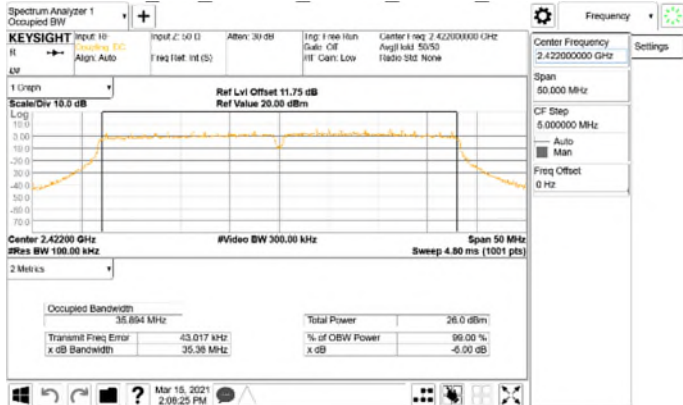
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

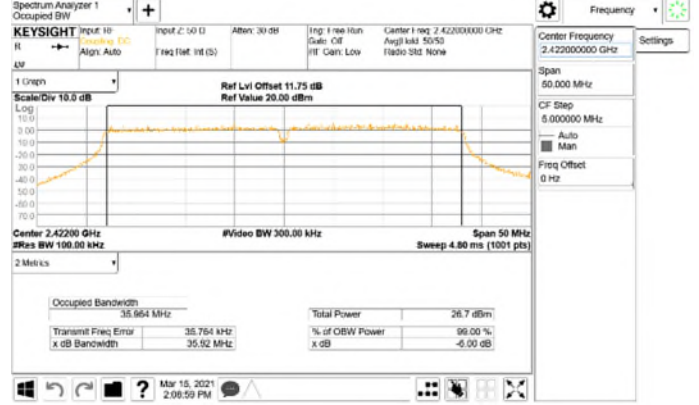
SGS Taiwan Ltd. No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號  
台灣檢驗科技股份有限公司 t (886-2) 2299-3279 f (886-2) 2298-0488 www.sgs.com.tw

Member of SGS Group

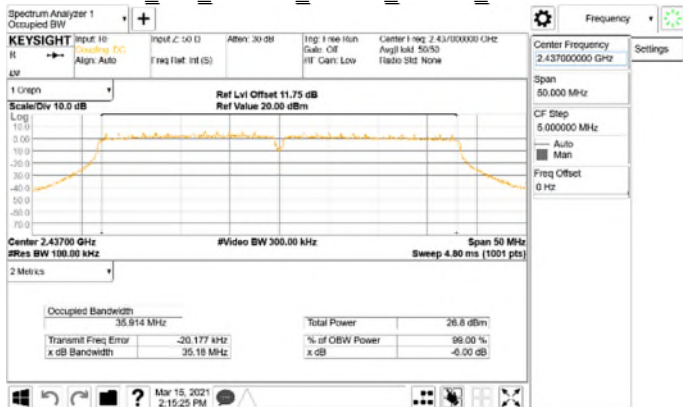
6dB\_BW\_802.11n\_40MHz\_Chain0\_2422MHz



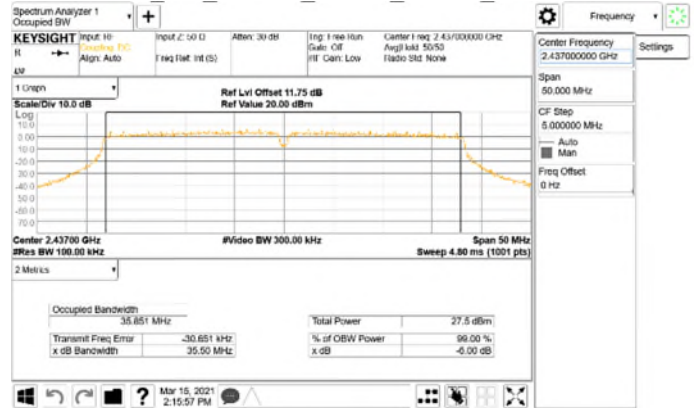
6dB BW 802.11n 40MHz Chain1 2422MHz



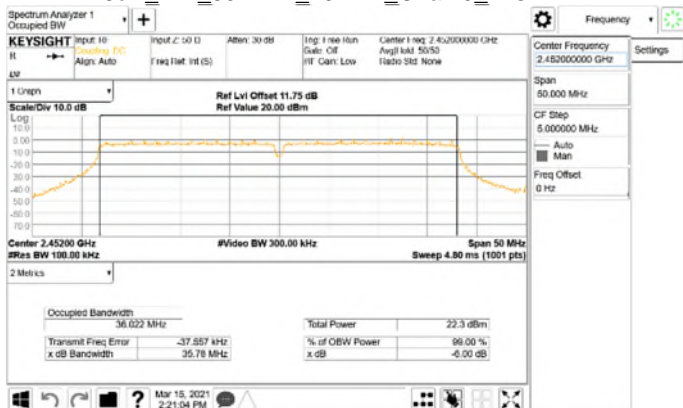
6dB\_BW\_802.11n\_40MHz\_Chain0\_2437MHz



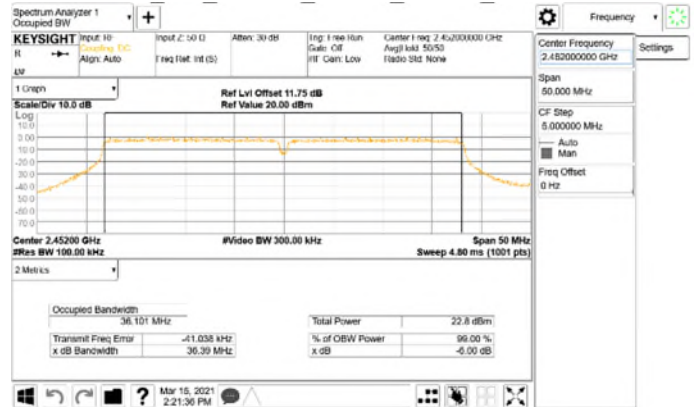
6dB\_BW\_802.11n\_40MHz\_Chain1\_2437MHz



6dB\_BW\_802.11n\_40MHz\_Chain0\_2452MHz



6dB\_BW\_802.11n\_40MHz\_Chain1\_2452MHz



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

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

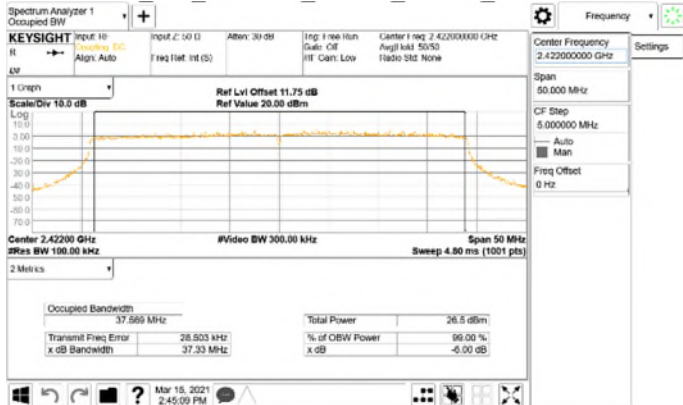
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>.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

SGS Taiwan Ltd. No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號  
台灣檢驗科技股份有限公司 t (886-2) 2299-3279 f (886-2) 2298-0488 www.sgs.com.tw

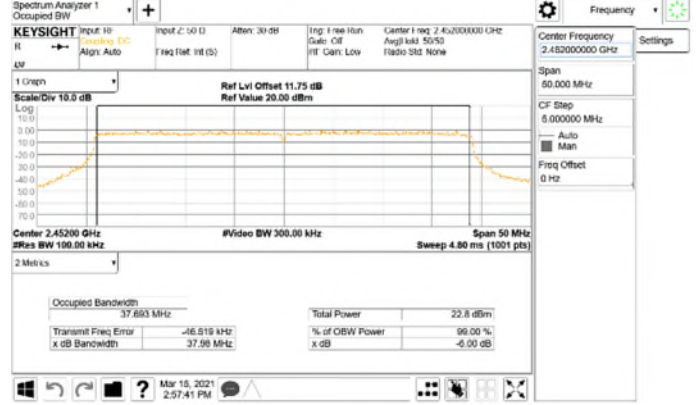
Member of SGS Group



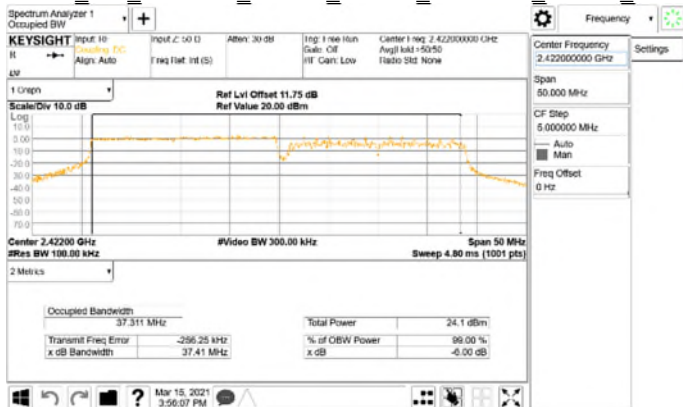
6dB\_BW\_802.11ax\_40MHz\_Chain0\_2422MHz



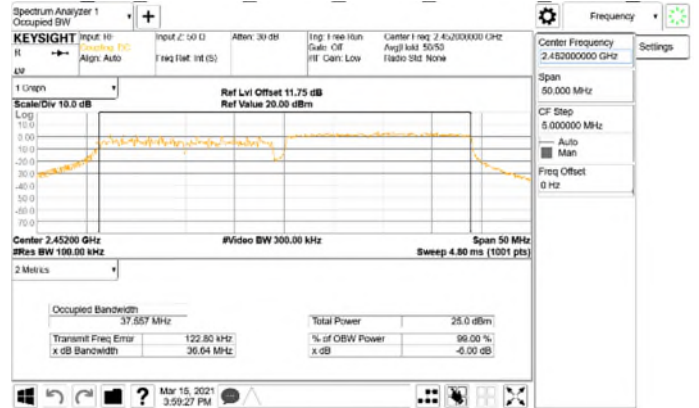
6dB BW 802.11ax 40MHz Chain0 2452MHz



6dB\_BW\_802.11ax\_40MHz\_Chain0\_2422MHz\_RU242\_61



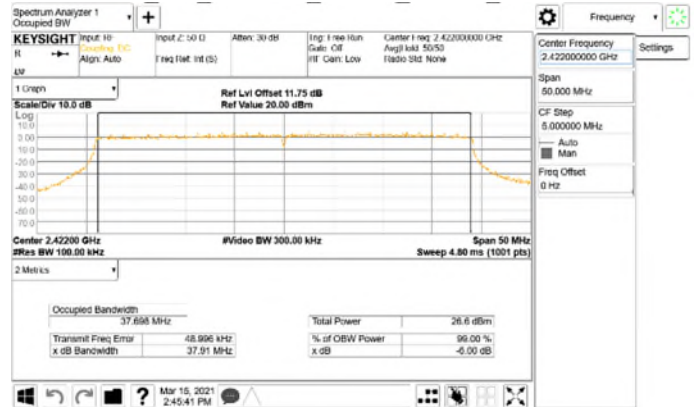
6dB\_BW\_802.11ax\_40MHz\_Chain0\_2452MHz\_RU242\_62



6dB\_BW\_802.11ax\_40MHz\_Chain0\_2437MHz



6dB\_BW\_802.11ax\_40MHz\_Chain1\_2422MHz



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

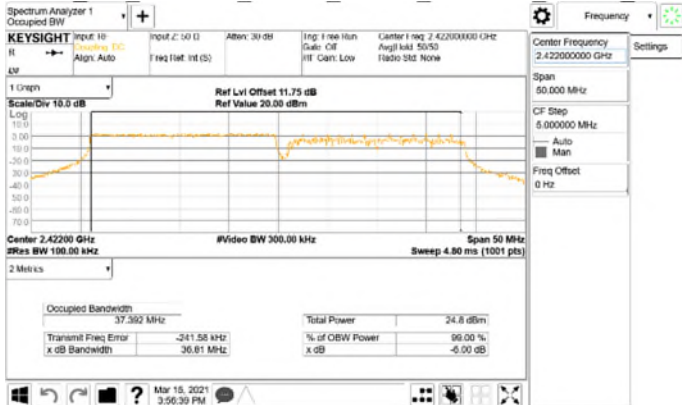
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

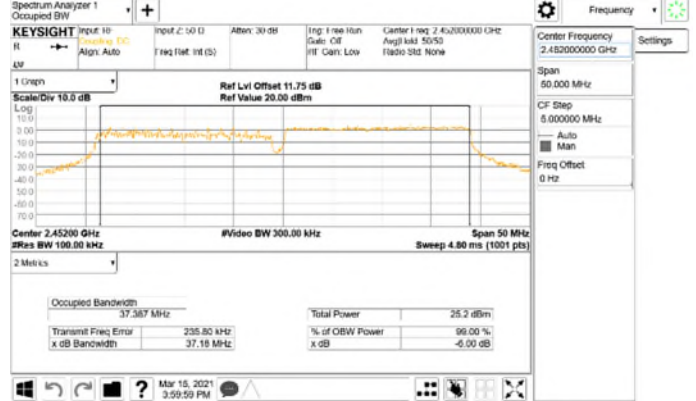
SGS Taiwan Ltd. No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號  
台灣檢驗科技股份有限公司 t (886-2) 2299-3279 f (886-2) 2298-0488 www.sgs.com.tw

Member of SGS Group

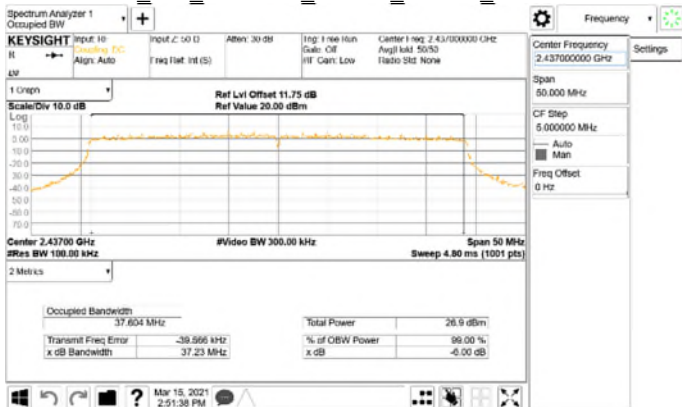
6dB\_BW\_802.11ax\_40MHz\_Chain1\_2422MHz\_RU242\_61



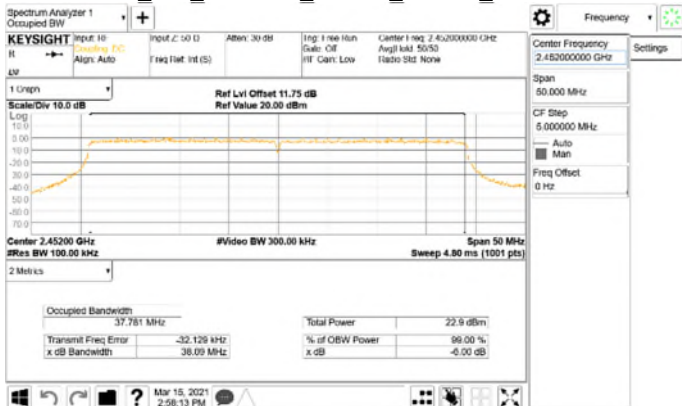
6dB BW 802.11ax 40MHz Chain1 2452MHz RU242 62



6dB\_BW\_802.11ax\_40MHz\_Chain1\_2437MHz



6dB\_BW\_802.11ax\_40MHz\_Chain1\_2452MHz



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

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

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

SGS Taiwan Ltd. No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號  
台灣檢驗科技股份有限公司 t (886-2) 2299-3279 f (886-2) 2298-0488 www.sgs.com.tw

Member of SGS Group

## Beamforming

### 802.11\_n\_HT20 Ch0

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	<b>17360.00</b>	> 500	PASS
2437	17190.00	> 500	PASS
2462	16930.00	> 500	PASS

### 802.11\_ax\_HE20 Ch0

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	<b>18970.00</b>	> 500	PASS
2437	18780.00	> 500	PASS
2462	18460.00	> 500	PASS

### 802.11\_n\_HT20 Ch1

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	<b>17620.00</b>	> 500	PASS
2437	17590.00	> 500	PASS
2462	17560.00	> 500	PASS

### 802.11\_ax\_HE20 Ch1

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	<b>18930.00</b>	> 500	PASS
2437	18900.00	> 500	PASS
2462	18810.00	> 500	PASS

### 802.11\_n\_HT40 Ch0

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2422	35350.00	> 500	PASS
2437	35180.00	> 500	PASS
2452	<b>35950.00</b>	> 500	PASS

### 802.11\_ax\_HE40 Ch0

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2422	36540.00	> 500	PASS
2437	37250.00	> 500	PASS
2452	<b>37980.00</b>	> 500	PASS

### 802.11\_n\_HT40 Ch1

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2422	35920.00	> 500	PASS
2437	35140.00	> 500	PASS
2452	<b>36380.00</b>	> 500	PASS

### 802.11\_ax\_HE40 Ch1

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2422	37800.00	> 500	PASS
2437	37220.00	> 500	PASS
2452	<b>38040.00</b>	> 500	PASS

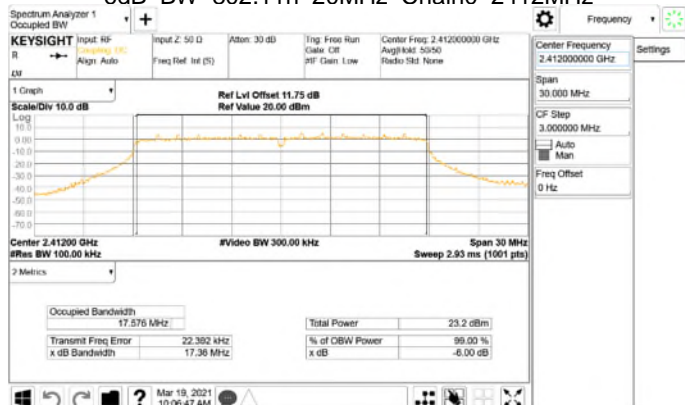
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

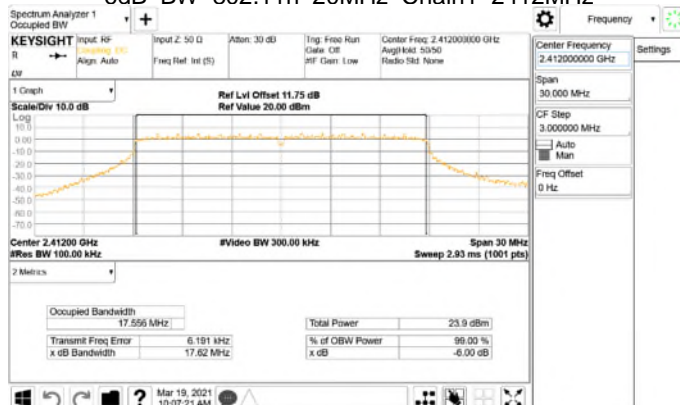
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>.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



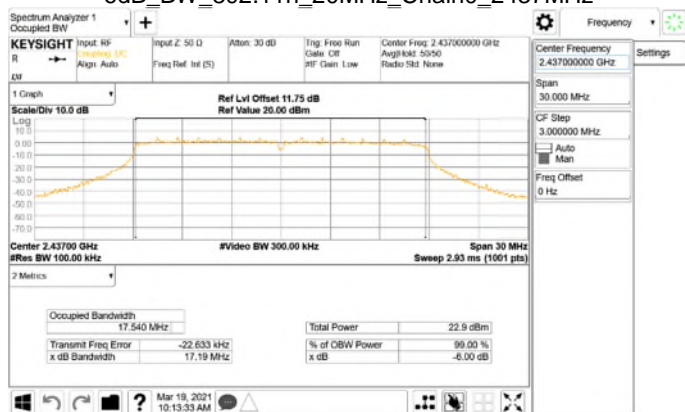
6dB BW 802.11n 20MHz Chain0 2412MHz



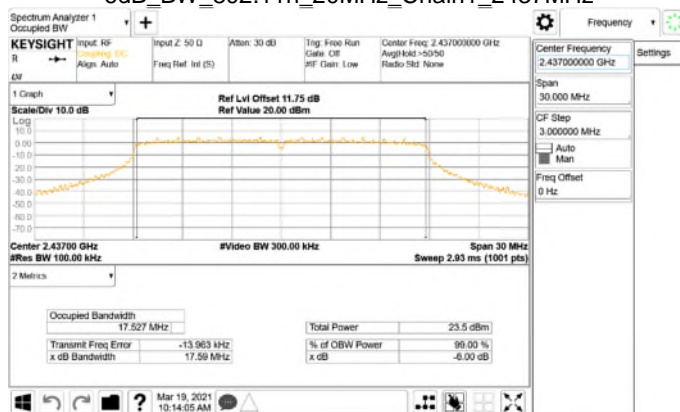
6dB BW 802.11n 20MHz Chain1 2412MHz



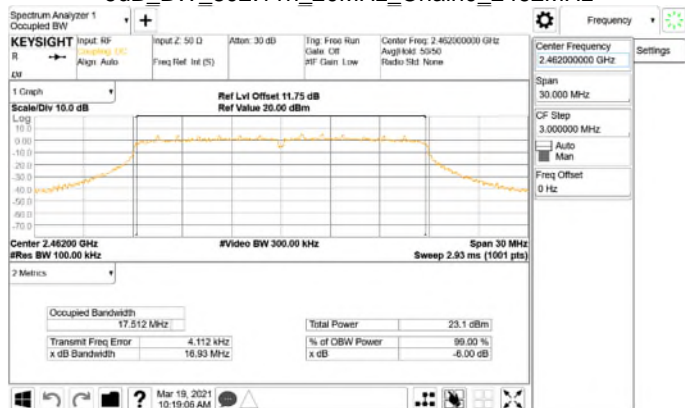
6dB BW 802.11n 20MHz Chain0 2437MHz



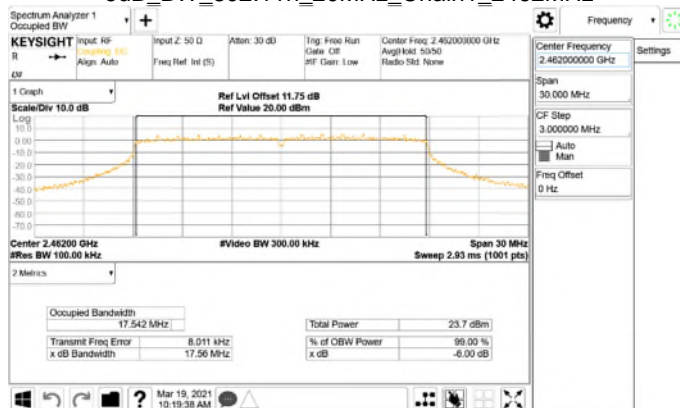
6dB BW 802.11n 20MHz Chain1 2437MHz



6dB BW 802.11n 20MHz Chain0 2462MHz



6dB BW 802.11n 20MHz Chain1 2462MHz

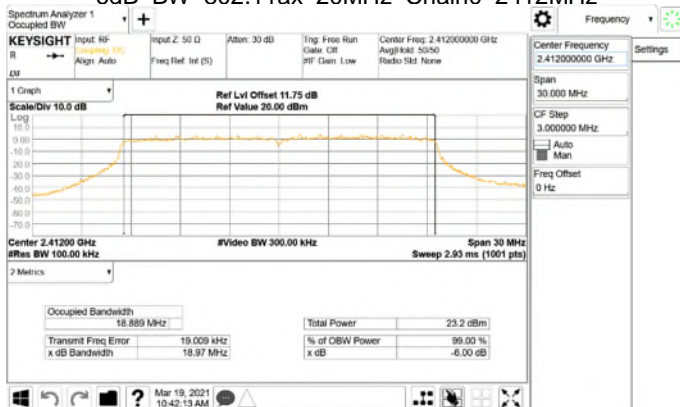


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

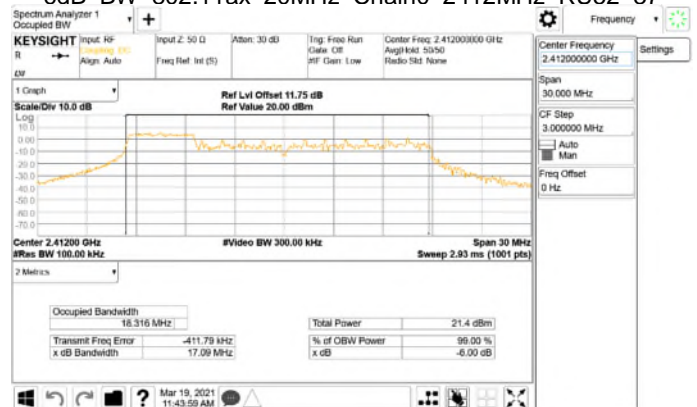
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

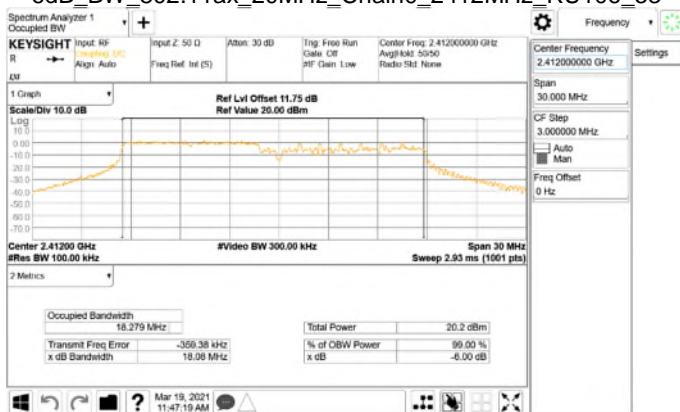
6dB BW 802.11ax 20MHz Chain0 2412MHz



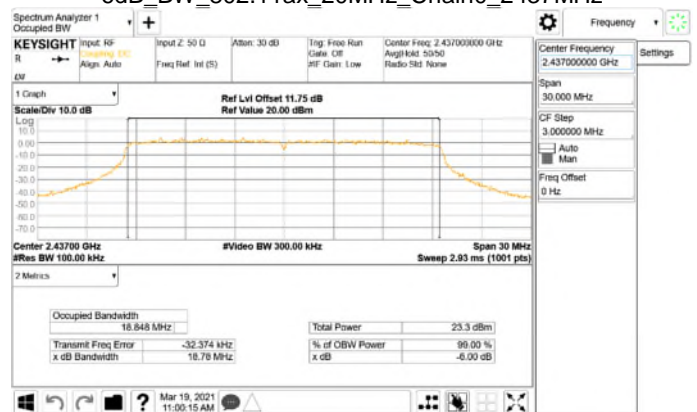
6dB BW 802.11ax 20MHz Chain0 2412MHz RU52 37



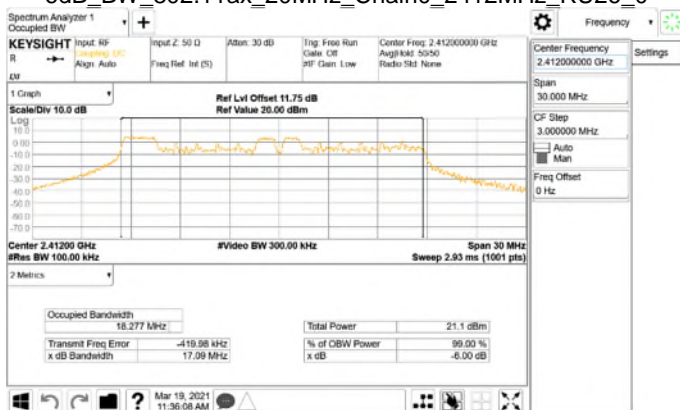
6dB BW 802.11ax 20MHz Chain0 2412MHz RU106\_53



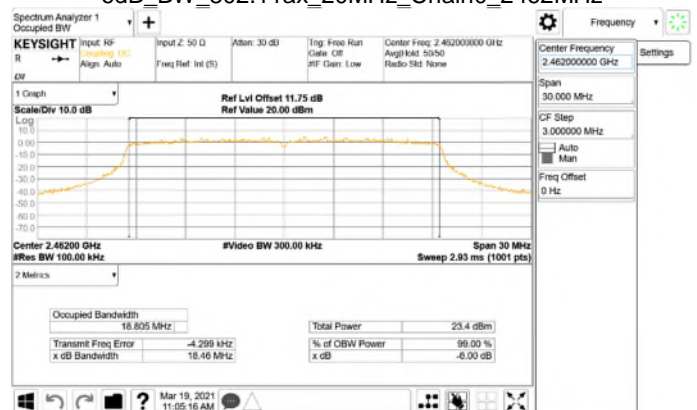
6dB BW 802.11ax 20MHz Chain0 2437MHz



6dB BW 802.11ax 20MHz Chain0 2412MHz RU26\_0



6dB BW 802.11ax 20MHz Chain0 2462MHz



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

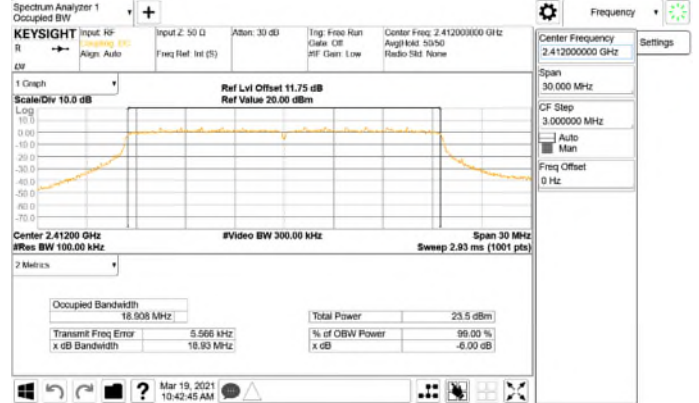
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

6dB BW 802.11ax 20MHz Chain0 2462MHz RU106 54



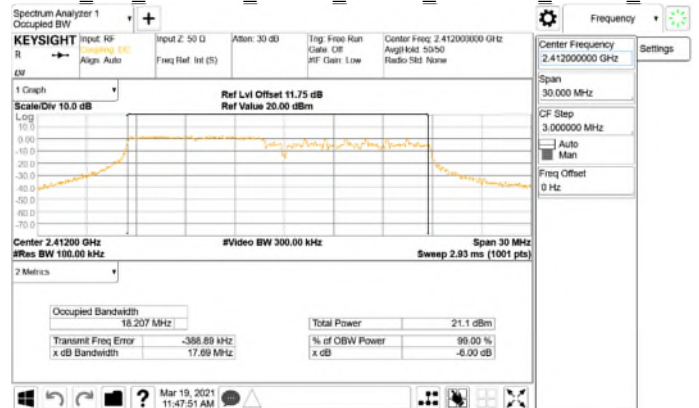
6dB BW 802.11ax 20MHz Chain1 2412MHz



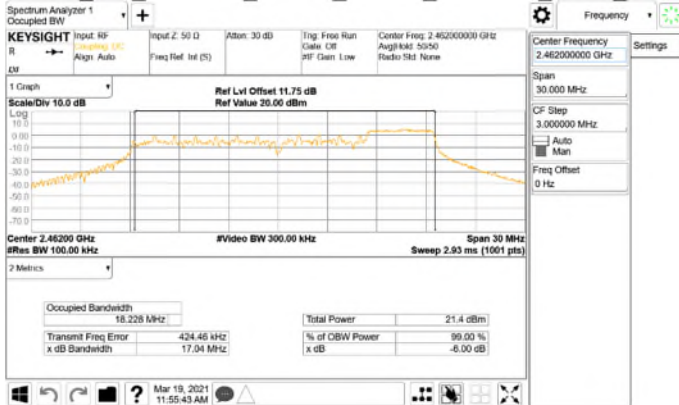
6dB BW 802.11ax 20MHz Chain0 2462MHz RU26\_8



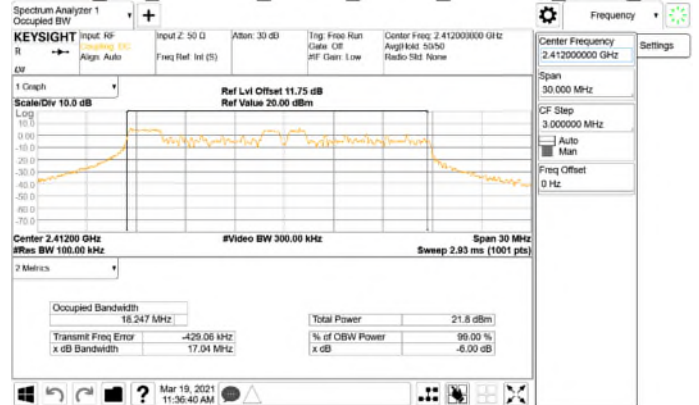
6dB BW 802.11ax 20MHz Chain1 2412MHz RU106\_53



6dB BW 802.11ax 20MHz Chain0 2462MHz RU52\_40



6dB BW 802.11ax 20MHz Chain1 2412MHz RU26\_0



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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

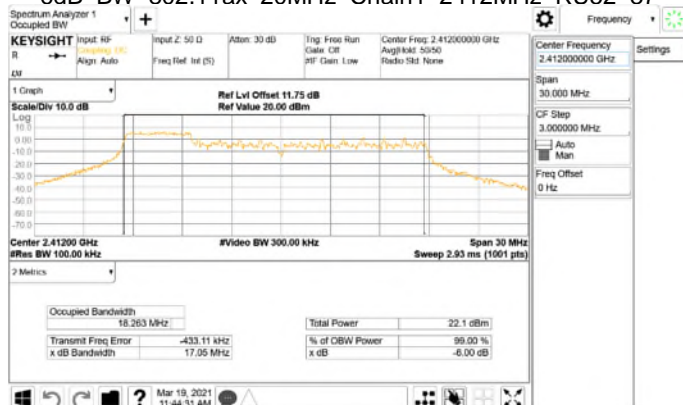
f (886-2) 2298-0488

www.sgs.com.tw

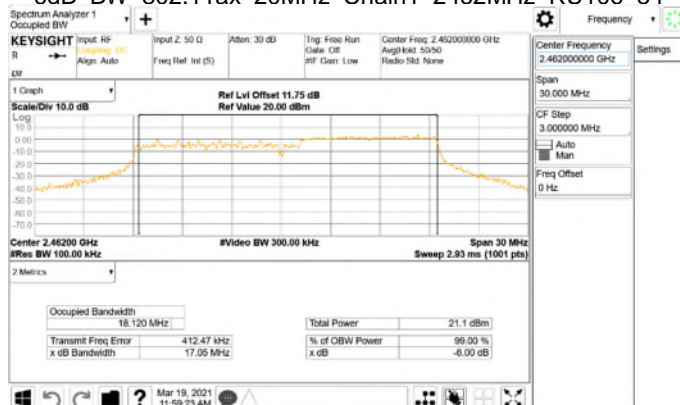
Member of SGS Group



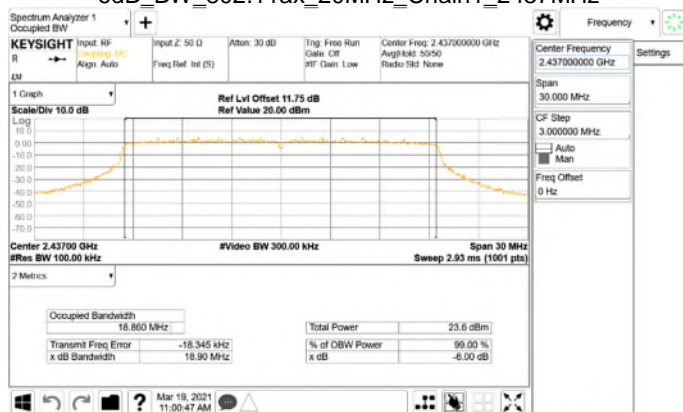
6dB BW 802.11ax 20MHz Chain1 2412MHz RU52 37



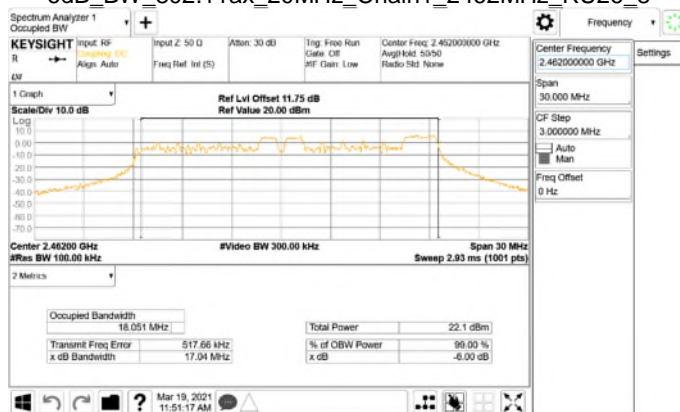
6dB BW 802.11ax 20MHz Chain1 2462MHz RU106 54



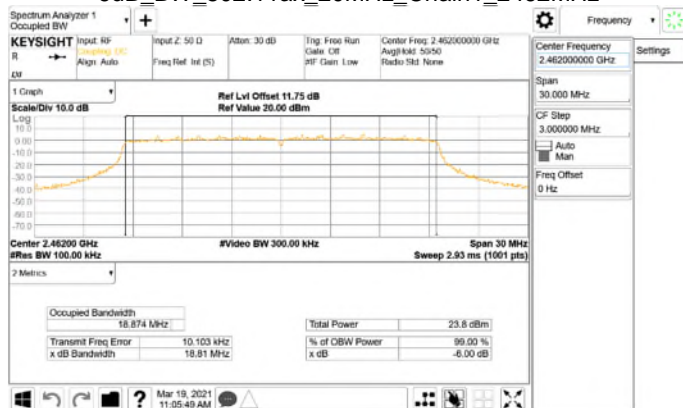
6dB\_BW\_802.11ax\_20MHz\_Chain1\_2437MHz



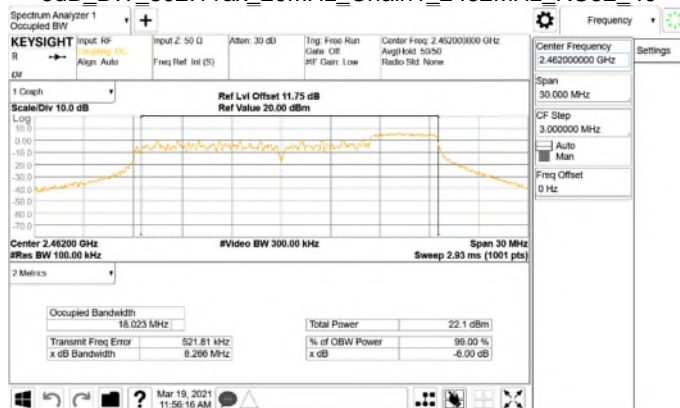
6dB\_BW\_802.11ax\_20MHz\_Chain1\_2462MHz\_RU26\_8



6dB\_BW\_802.11ax\_20MHz\_Chain1\_2462MHz



6dB\_BW\_802.11ax\_20MHz\_Chain1\_2462MHz\_RU52\_40

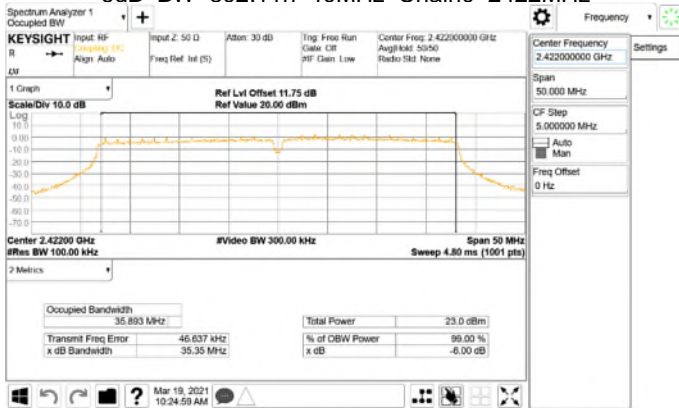


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

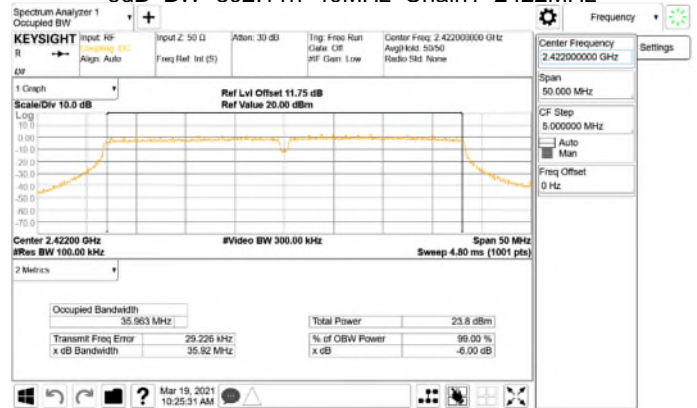
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

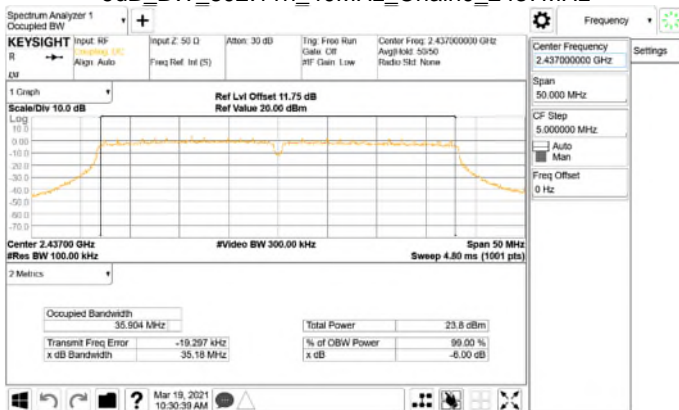
6dB BW 802.11n 40MHz Chain0 2422MHz



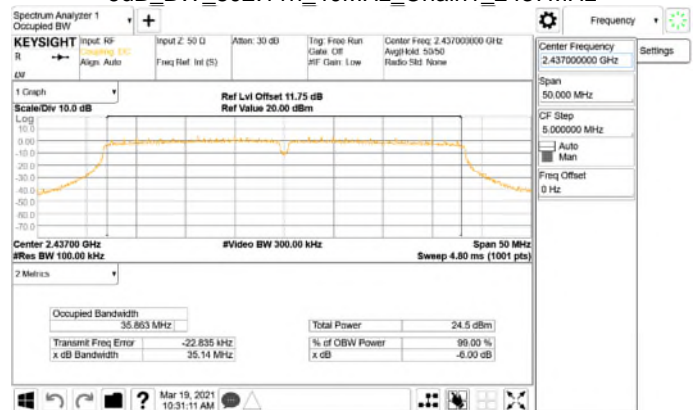
6dB BW 802.11n 40MHz Chain1 2422MHz



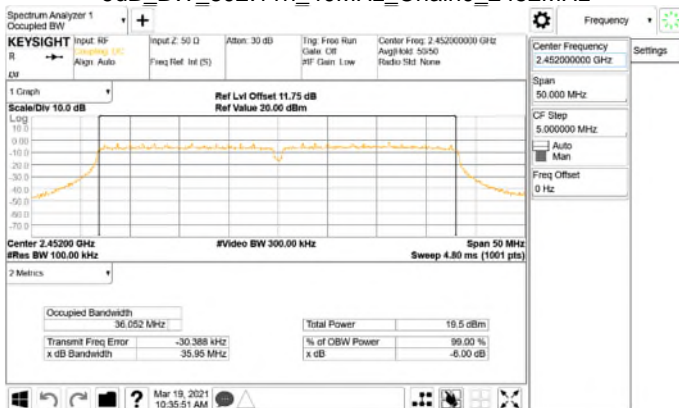
6dB BW 802.11n 40MHz Chain0 2437MHz



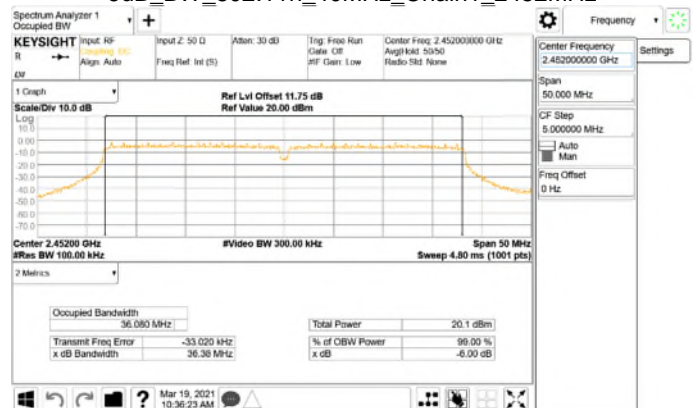
6dB BW 802.11n 40MHz Chain1 2437MHz



6dB BW 802.11n 40MHz Chain0 2452MHz



6dB BW 802.11n 40MHz Chain1 2452MHz



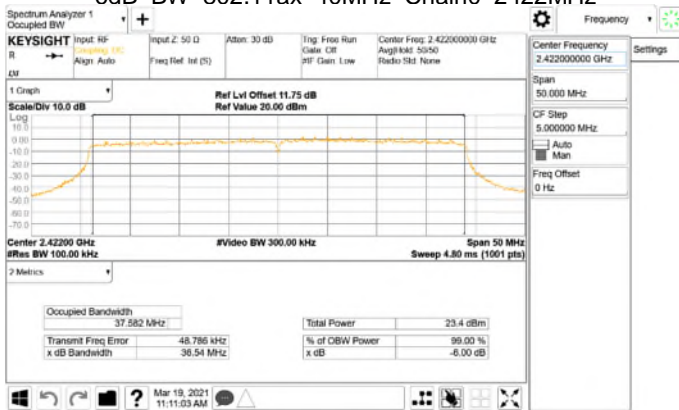
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

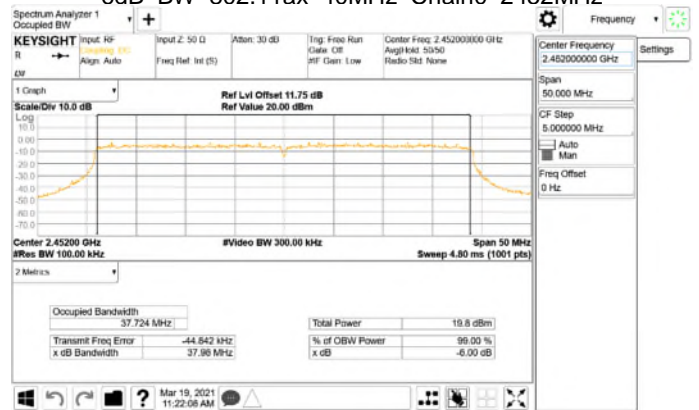
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>.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



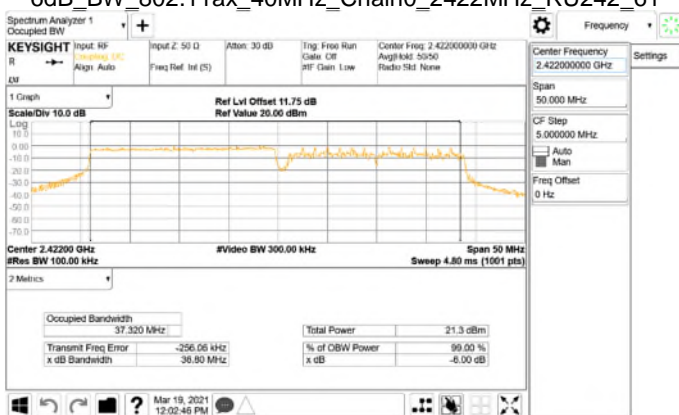
6dB BW 802.11ax 40MHz Chain0 2422MHz



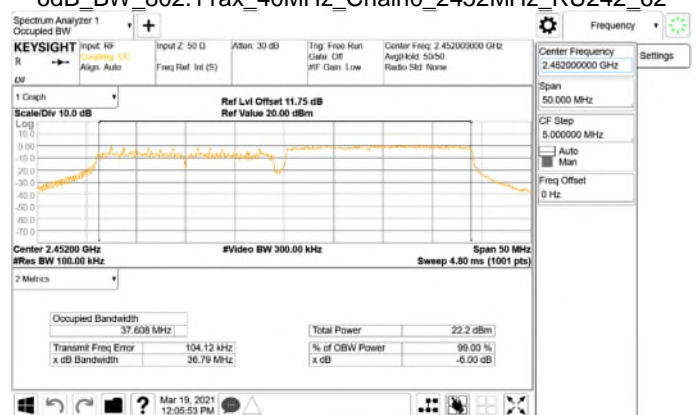
6dB BW 802.11ax 40MHz Chain0 2452MHz



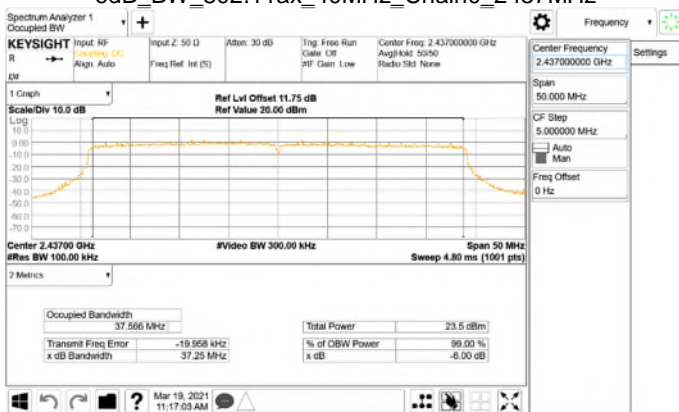
6dB BW 802.11ax 40MHz Chain0 2422MHz RU242\_61



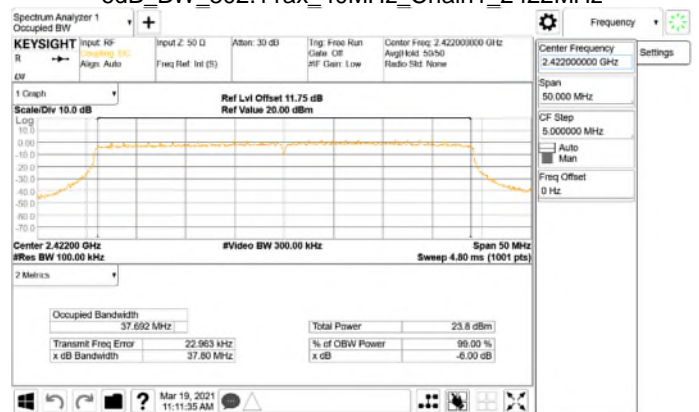
6dB BW 802.11ax 40MHz Chain0 2452MHz RU242\_62



6dB BW 802.11ax 40MHz Chain0 2437MHz



6dB BW 802.11ax 40MHz Chain1 2422MHz

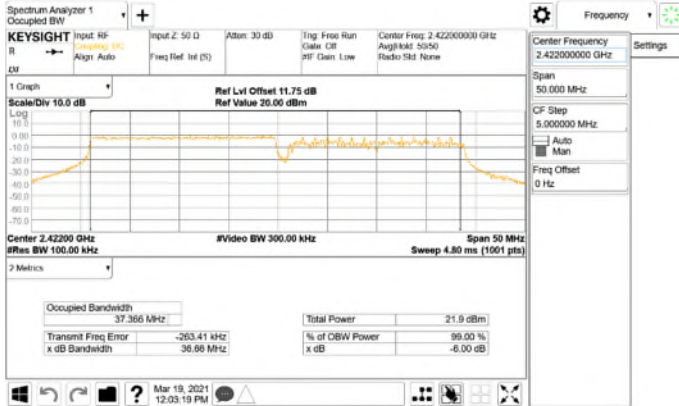


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

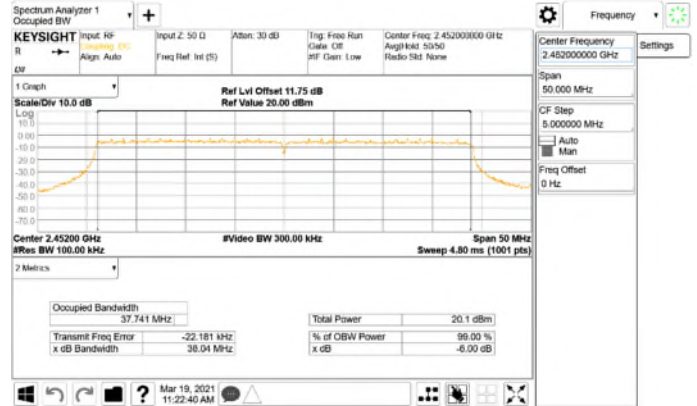
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

6dB BW 802.11ax 40MHz Chain1 2422MHz RU242 61



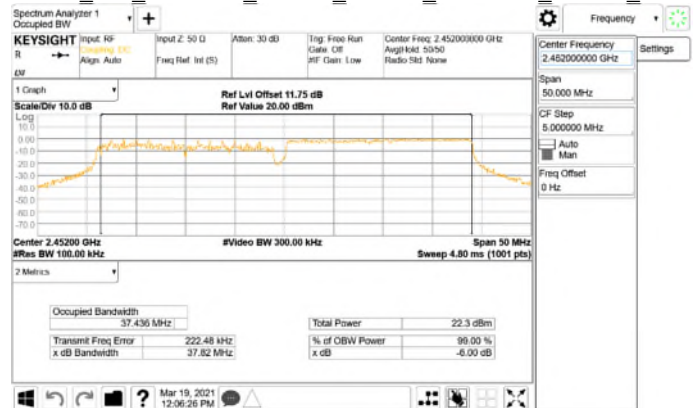
6dB BW 802.11ax 40MHz Chain1 2452MHz



6dB\_BW\_802.11ax\_40MHz\_Chain1\_2437MHz



6dB\_BW\_802.11ax\_40MHz\_Chain1\_2452MHz\_RU242\_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。本報告未經本公司書面許可，不可部份複製。

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

## 9.6 99% Bandwidth

### CDD

802.11b Ch0	
Freq. (MHz)	99% BW (MHz)
2412	13.008
2437	<b>13.014</b>
2462	13.001

802.11b Ch1	
Freq. (MHz)	99% BW (MHz)
2412	13.026
2437	12.994
2462	<b>13.117</b>

802.11g Ch0	
Freq. (MHz)	99% BW (MHz)
2412	<b>16.468</b>
2437	16.461
2462	16.389

802.11g Ch1	
Freq. (MHz)	99% BW (MHz)
2412	<b>16.429</b>
2437	16.375
2462	16.41

802.11n_HT20M Ch0	
Freq. (MHz)	99% BW (MHz)
2412	<b>17.637</b>
2437	17.582
2462	17.544

802.11n_HT20M Ch1	
Freq. (MHz)	99% BW (MHz)
2412	<b>17.598</b>
2437	17.541
2462	17.568

802.11ax_HE20M Ch0	
Freq. (MHz)	99% BW (MHz)
2412	<b>18.959</b>
2437	18.891
2462	18.868

802.11ax_HE20M Ch1	
Freq. (MHz)	99% BW (MHz)
2412	<b>18.962</b>
2437	18.906
2462	18.904

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

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

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

802.11n_HT40M Ch0	
Freq. (MHz)	99% BW (MHz)
2422	35.977
2437	36.031
2452	<b>36.162</b>

802.11n_HT40M Ch1	
Freq. (MHz)	99% BW (MHz)
2422	35.961
2437	35.859
2452	<b>36.112</b>

802.11ax_HE40M Ch0	
Freq. (MHz)	99% BW (MHz)
2422	37.634
2437	37.657
2452	<b>37.739</b>

802.11ax_HE40M Ch1	
Freq. (MHz)	99% BW (MHz)
2422	37.732
2437	37.636
2452	<b>37.83</b>

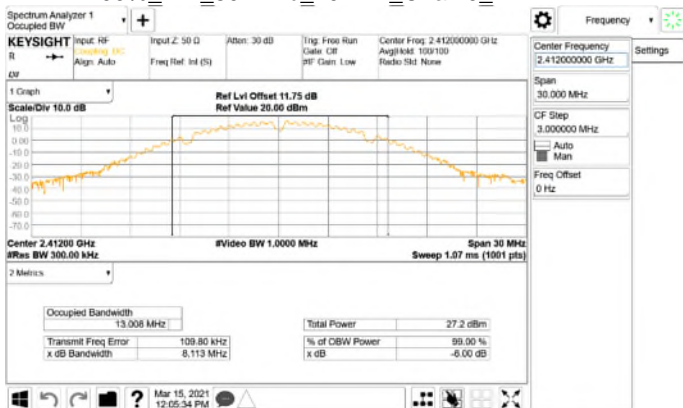
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

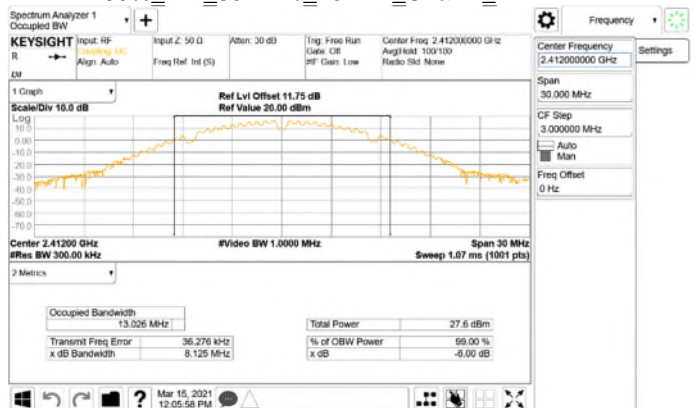
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>.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



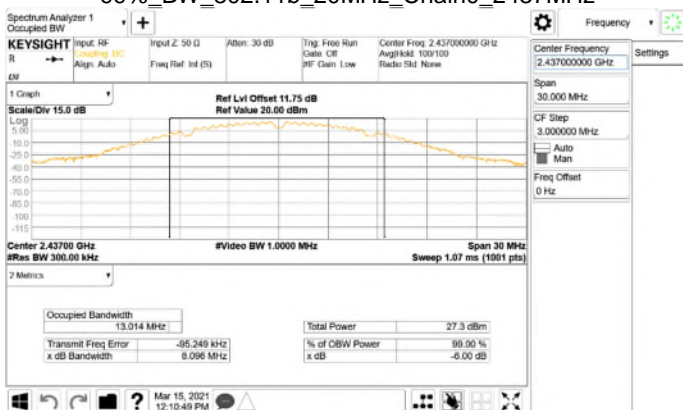
99%\_BW\_802.11b\_20MHz\_Chain0\_2412MHz



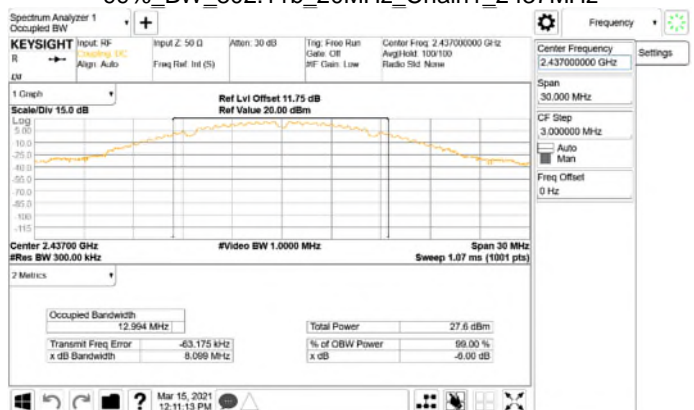
99%\_BW\_802.11b\_20MHz\_Chain1\_2412MHz



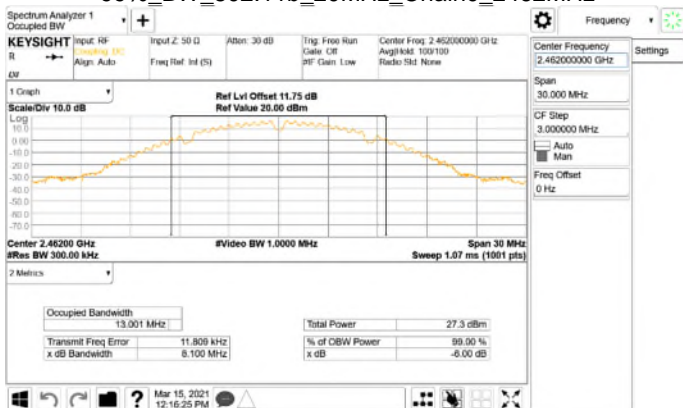
99%\_BW\_802.11b\_20MHz\_Chain0\_2437MHz



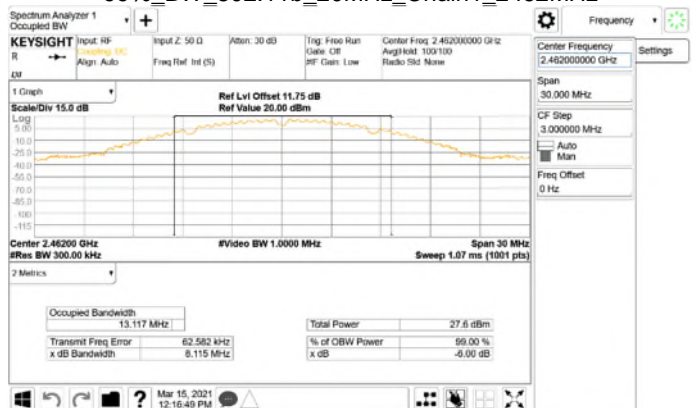
99%\_BW\_802.11b\_20MHz\_Chain1\_2437MHz



99%\_BW\_802.11b\_20MHz\_Chain0\_2462MHz



99%\_BW\_802.11b\_20MHz\_Chain1\_2462MHz

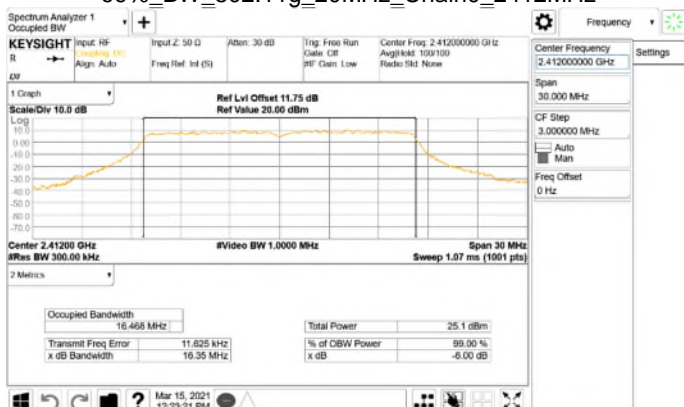


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

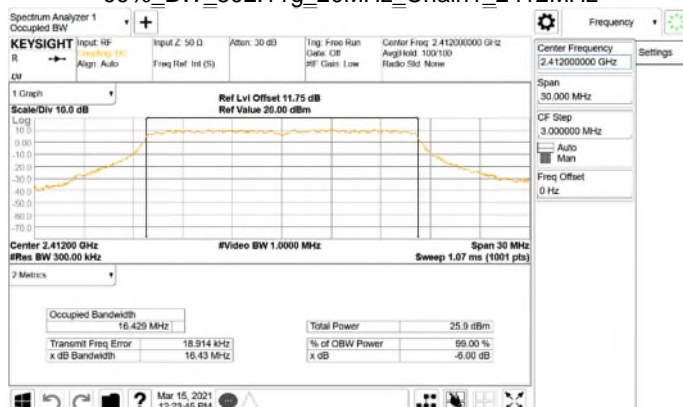
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

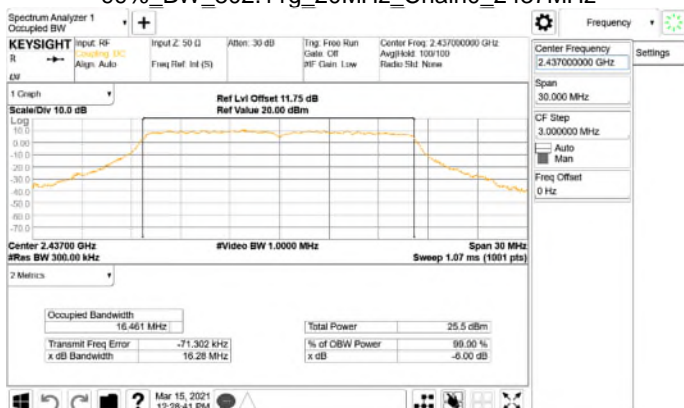
99%\_BW\_802.11g\_20MHz\_Chain0\_2412MHz



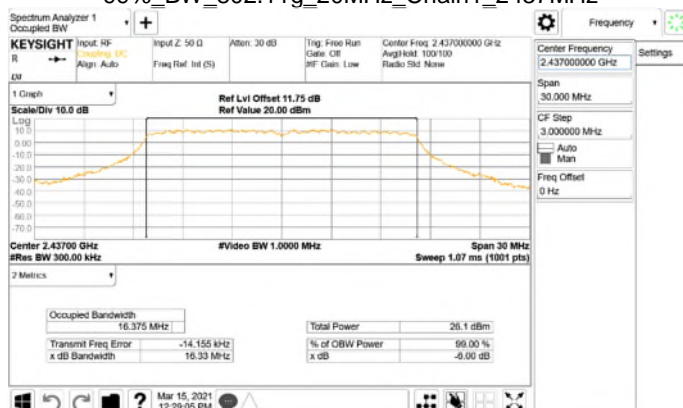
99%\_BW\_802.11g\_20MHz\_Chain1\_2412MHz



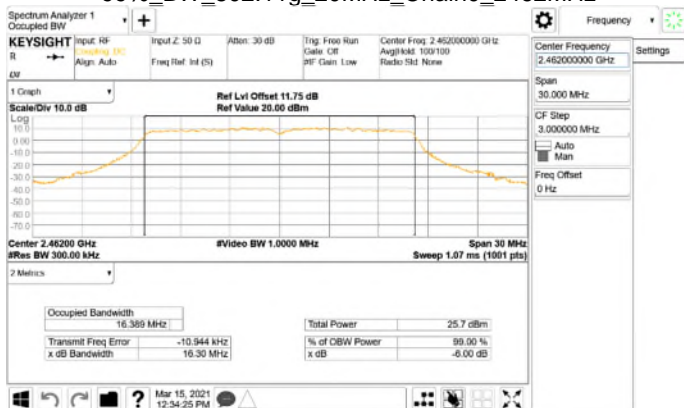
99%\_BW\_802.11g\_20MHz\_Chain0\_2437MHz



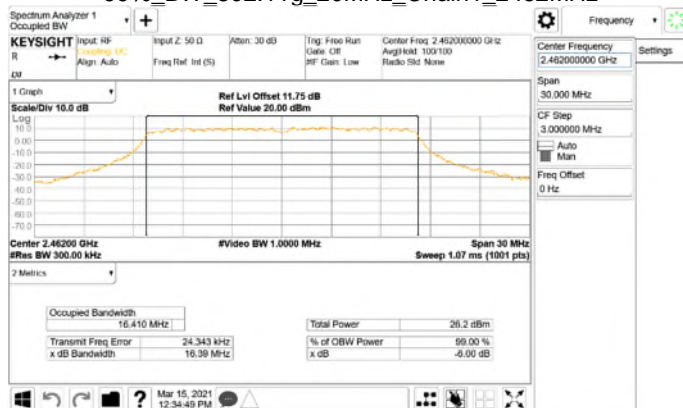
99%\_BW\_802.11g\_20MHz\_Chain1\_2437MHz



99%\_BW\_802.11g\_20MHz\_Chain0\_2462MHz



99%\_BW\_802.11g\_20MHz\_Chain1\_2462MHz



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

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

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

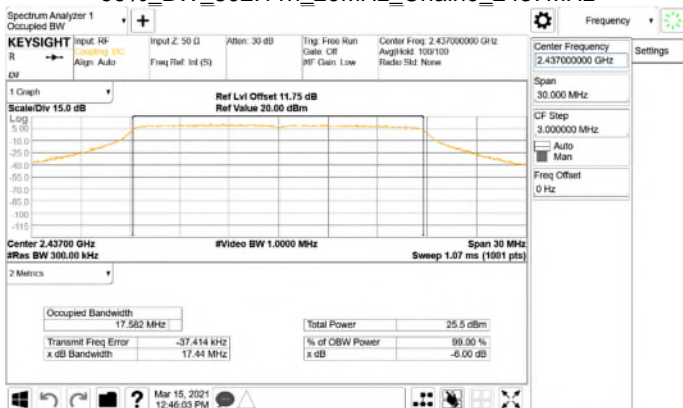
99%\_BW\_802.11n\_20MHz\_Chain0\_2412MHz



99%\_BW\_802.11n\_20MHz\_Chain1\_2412MHz



99%\_BW\_802.11n\_20MHz\_Chain0\_2437MHz



99%\_BW\_802.11n\_20MHz\_Chain1\_2437MHz



99%\_BW\_802.11n\_20MHz\_Chain0\_2462MHz



99%\_BW\_802.11n\_20MHz\_Chain1\_2462MHz



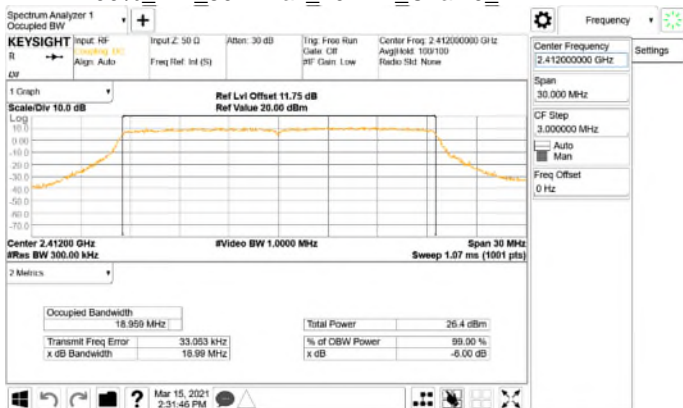
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

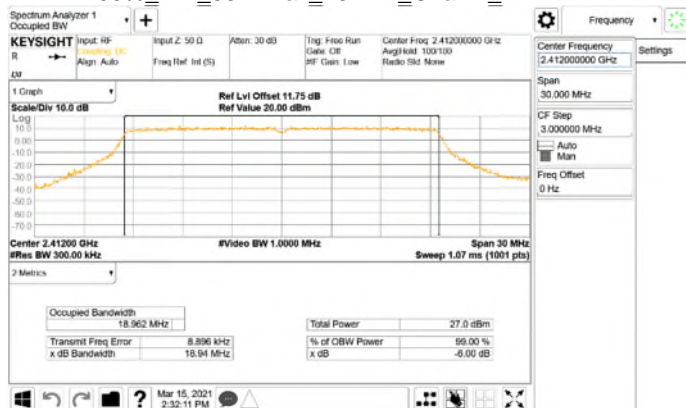
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>.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



99%\_BW\_802.11ax\_20MHz\_Chain0\_2412MHz



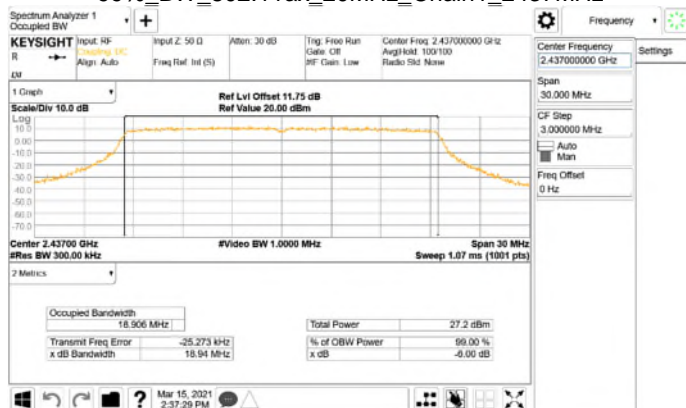
99%\_BW\_802.11ax\_20MHz\_Chain1\_2412MHz



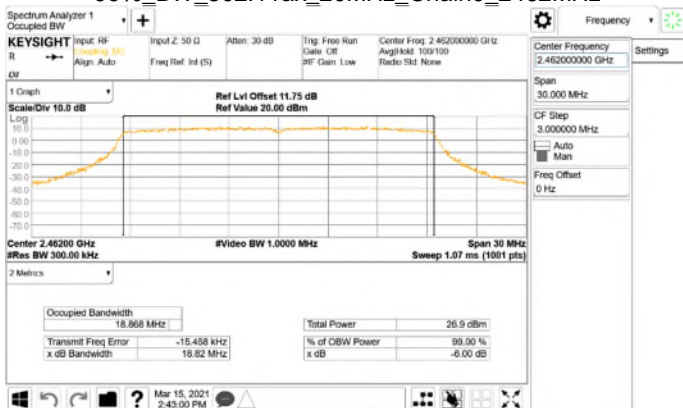
99%\_BW\_802.11ax\_20MHz\_Chain0\_2437MHz



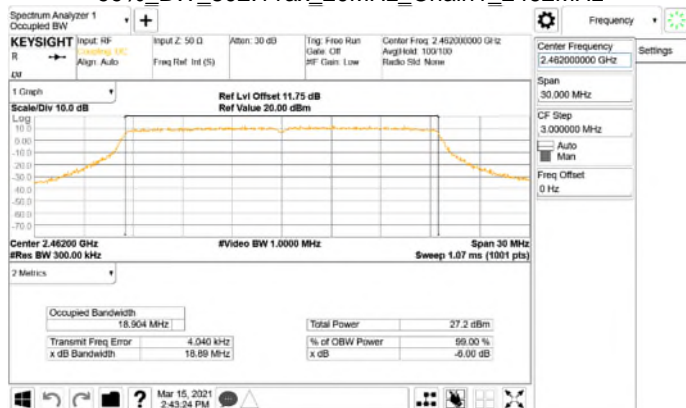
99%\_BW\_802.11ax\_20MHz\_Chain1\_2437MHz



99%\_BW\_802.11ax\_20MHz\_Chain0\_2462MHz



99%\_BW\_802.11ax\_20MHz\_Chain1\_2462MHz



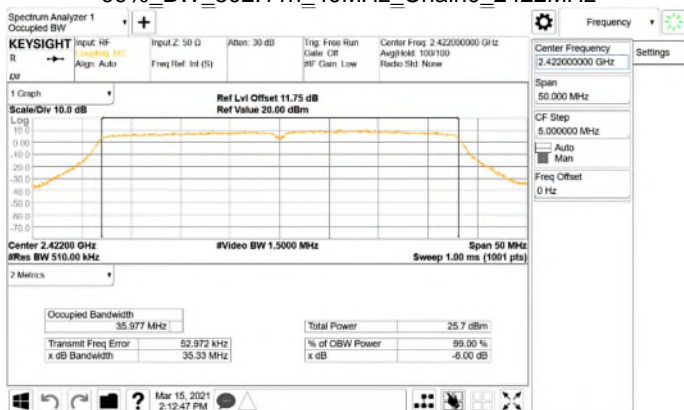
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

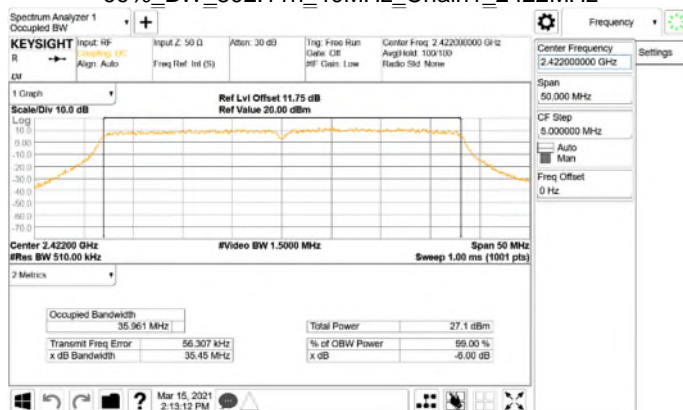
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>.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



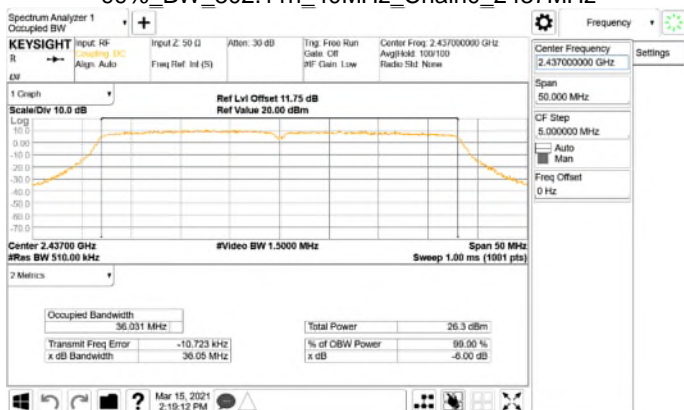
99%\_BW\_802.11n\_40MHz\_Chain0\_2422MHz



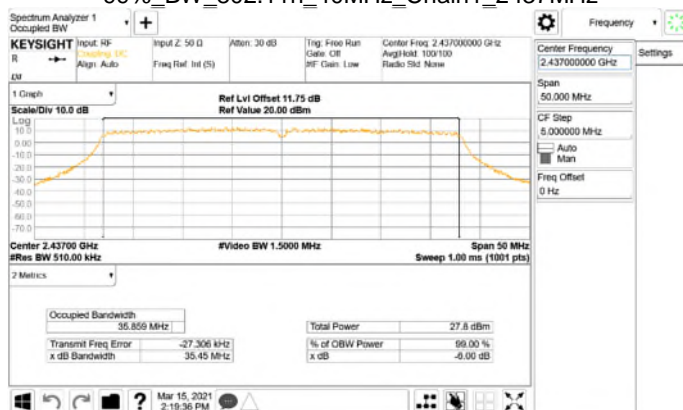
99%\_BW\_802.11n\_40MHz\_Chain1\_2422MHz



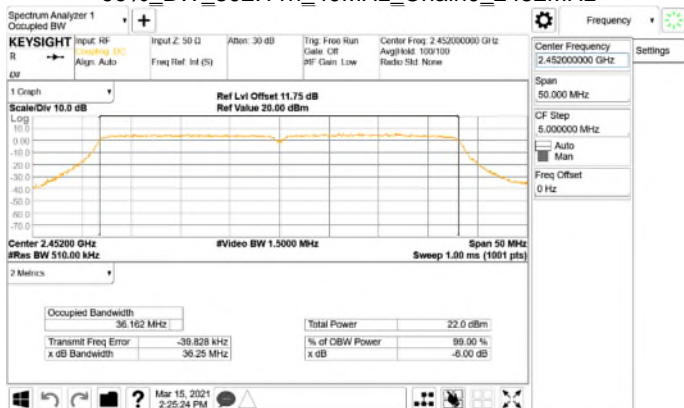
99%\_BW\_802.11n\_40MHz\_Chain0\_2437MHz



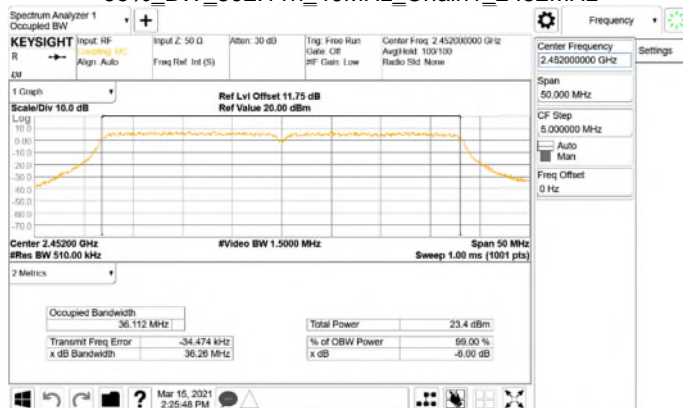
99%\_BW\_802.11n\_40MHz\_Chain1\_2437MHz



99%\_BW\_802.11n\_40MHz\_Chain0\_2452MHz



99%\_BW\_802.11n\_40MHz\_Chain1\_2452MHz



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

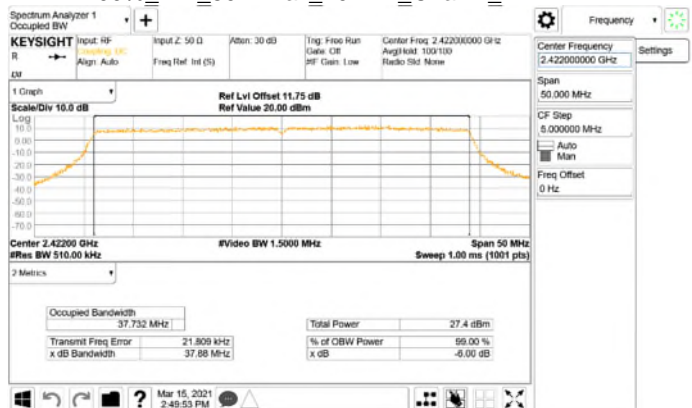
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

99%\_BW\_802.11ax\_40MHz\_Chain0\_2422MHz



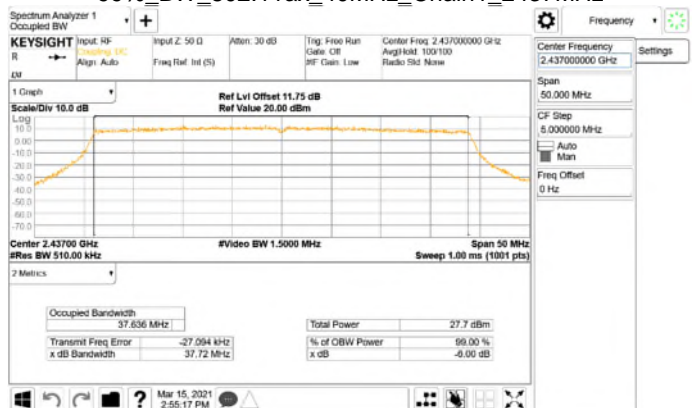
99%\_BW\_802.11ax\_40MHz\_Chain1\_2422MHz



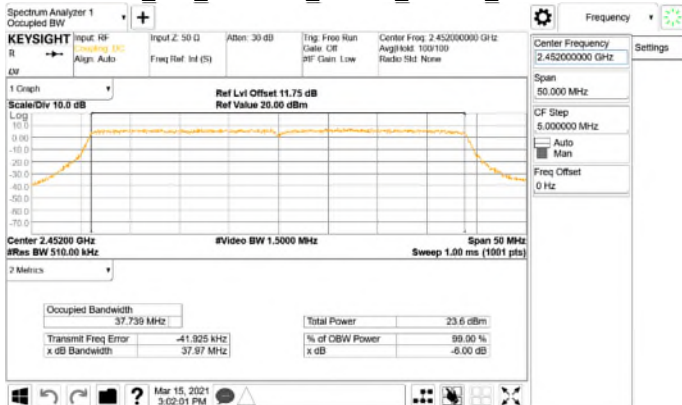
99%\_BW\_802.11ax\_40MHz\_Chain0\_2437MHz



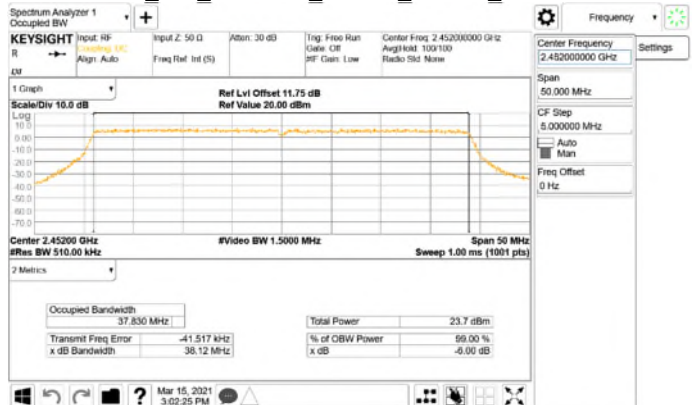
99%\_BW\_802.11ax\_40MHz\_Chain1\_2437MHz



99%\_BW\_802.11ax\_40MHz\_Chain0\_2452MHz



99%\_BW\_802.11ax\_40MHz\_Chain1\_2452MHz



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

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

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

## Beamforming

802.11n_HT20M Ch0	
Freq. (MHz)	99% BW (MHz)
2412	17.641
2437	17.578
2462	17.538

802.11n_HT20M Ch1	
Freq. (MHz)	99% BW (MHz)
2412	17.603
2437	17.537
2462	17.571

802.11n_HT40M Ch0	
Freq. (MHz)	99% BW (MHz)
2422	35.998
2437	36.012
2452	36.142

802.11n_HT40M Ch1	
Freq. (MHz)	99% BW (MHz)
2422	35.994
2437	35.887
2452	36.125

802.11ax_HE20M Ch0	
Freq. (MHz)	99% BW (MHz)
2412	18.94
2437	18.892
2462	18.867

802.11ax_HE20M Ch1	
Freq. (MHz)	99% BW (MHz)
2412	18.961
2437	18.884
2462	18.923

802.11ax_HE40M Ch0	
Freq. (MHz)	99% BW (MHz)
2422	37.602
2437	37.644
2452	37.753

802.11ax_HE40M Ch1	
Freq. (MHz)	99% BW (MHz)
2422	37.741
2437	37.635
2452	37.854

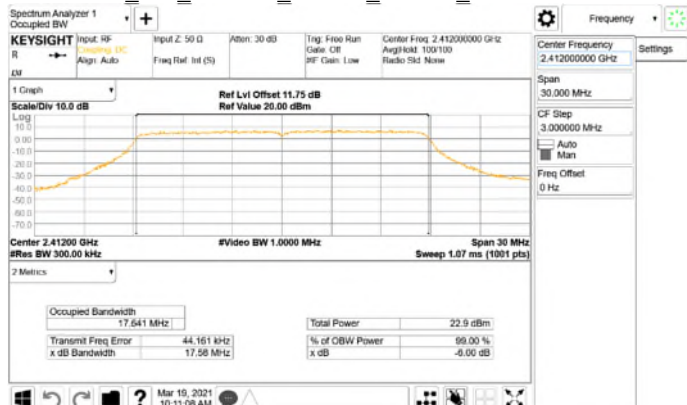
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

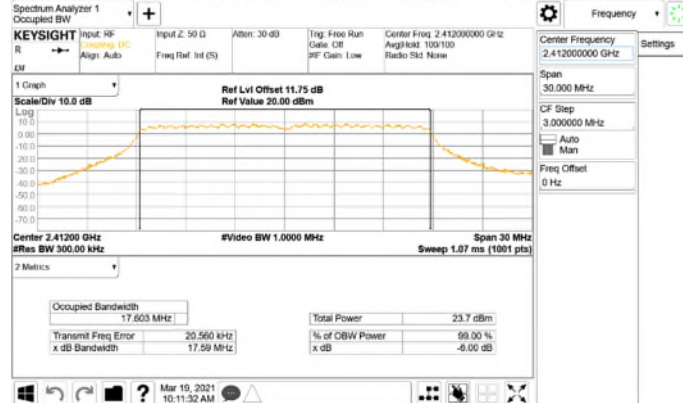
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>.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



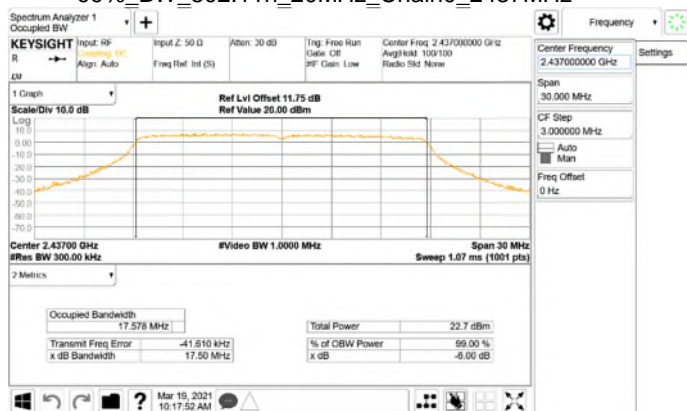
99% BW\_802.11n\_20MHz\_Chain0\_2412MHz



99% BW 802.11n 20MHz Chain1 2412MHz



99% BW\_802.11n\_20MHz\_Chain0\_2437MHz



99% BW\_802.11n\_20MHz\_Chain1\_2437MHz



99% BW\_802.11n\_20MHz\_Chain0\_2462MHz



99% BW\_802.11n\_20MHz\_Chain1\_2462MHz

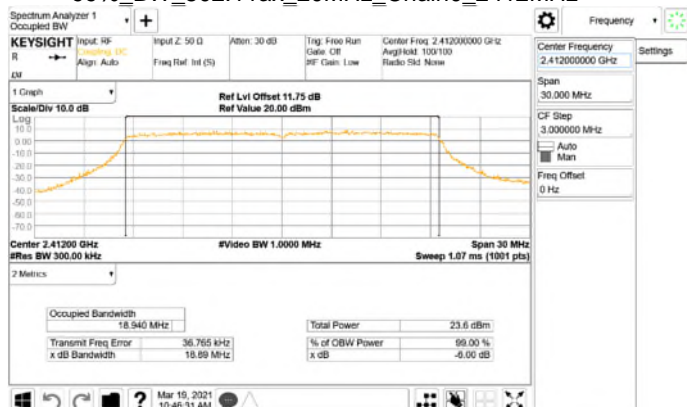


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

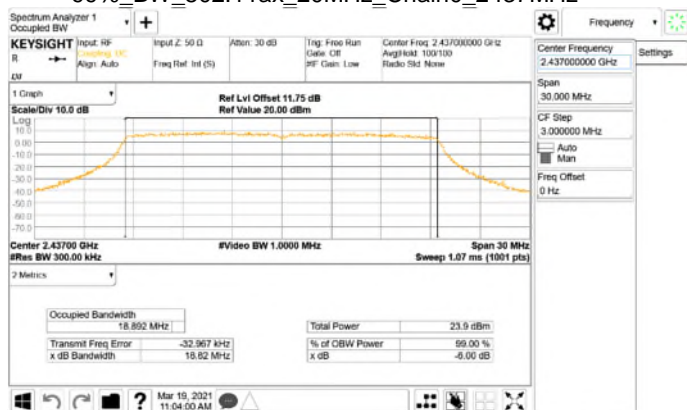
99%\_BW\_802.11ax\_20MHz\_Chain0\_2412MHz



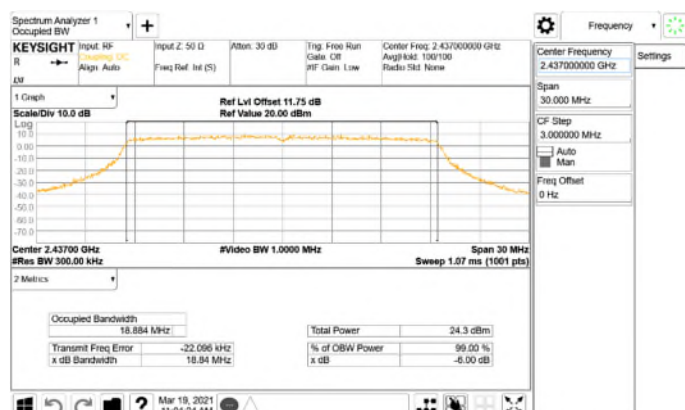
99% BW 802.11ax 20MHz Chain1 2412MHz



99%\_BW\_802.11ax\_20MHz\_Chain0\_2437MHz



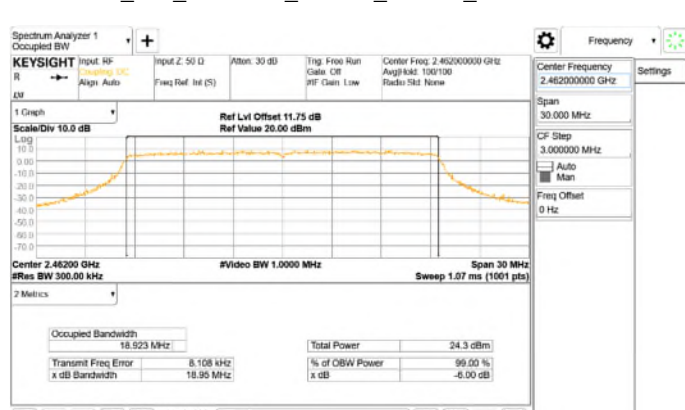
99%\_BW\_802.11ax\_20MHz\_Chain1\_2437MHz



99%\_BW\_802.11ax\_20MHz\_Chain0\_2462MHz



99%\_BW\_802.11ax\_20MHz\_Chain1\_2462MHz



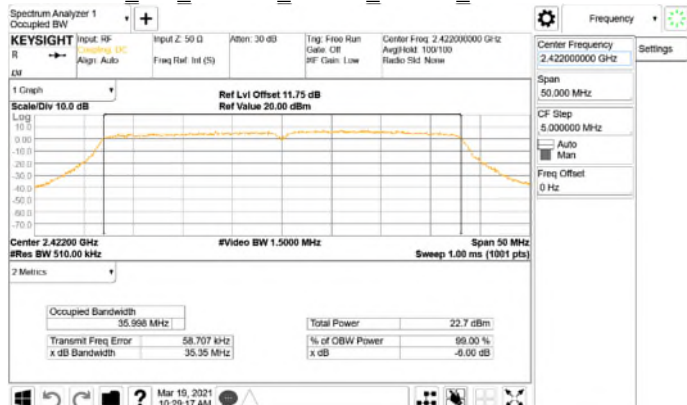
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

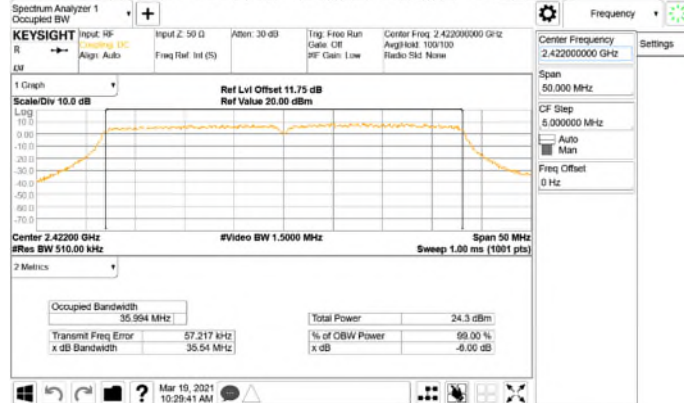
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>.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



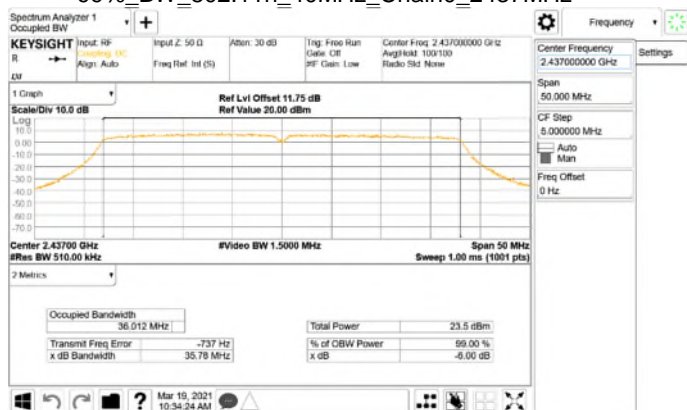
99% BW\_802.11n\_40MHz\_Chain0\_2422MHz



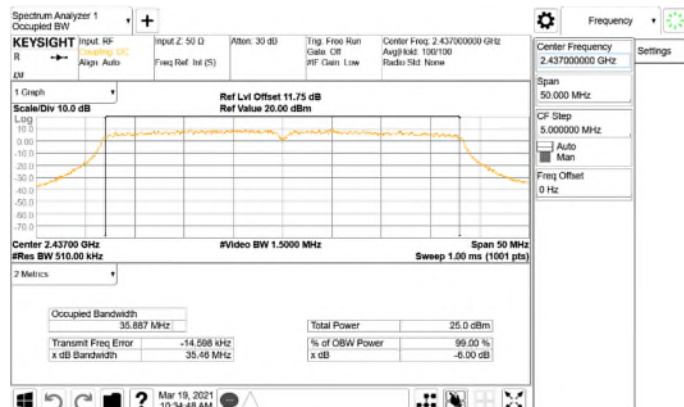
99% BW\_802.11n\_40MHz\_Chain1\_2422MHz



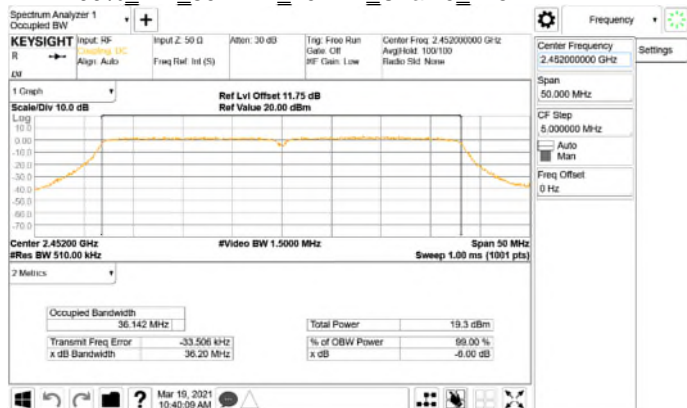
99% BW\_802.11n\_40MHz\_Chain0\_2437MHz



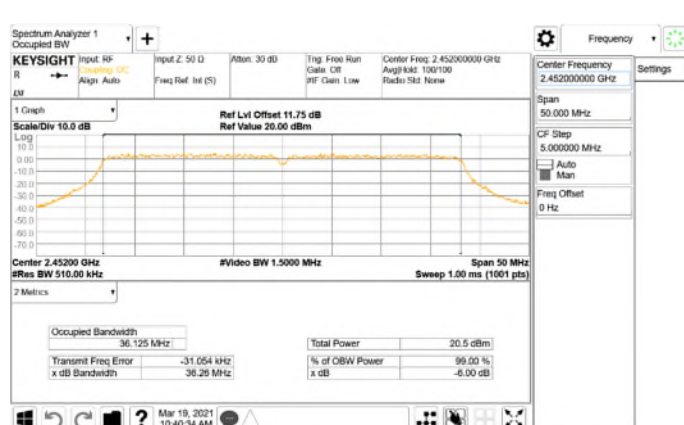
99% BW\_802.11n\_40MHz\_Chain1\_2437MHz



99% BW\_802.11n\_40MHz\_Chain0\_2452MHz



99% BW\_802.11n\_40MHz\_Chain1\_2452MHz

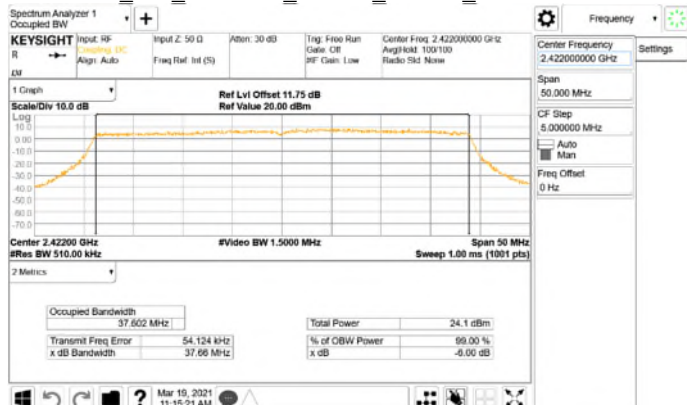


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

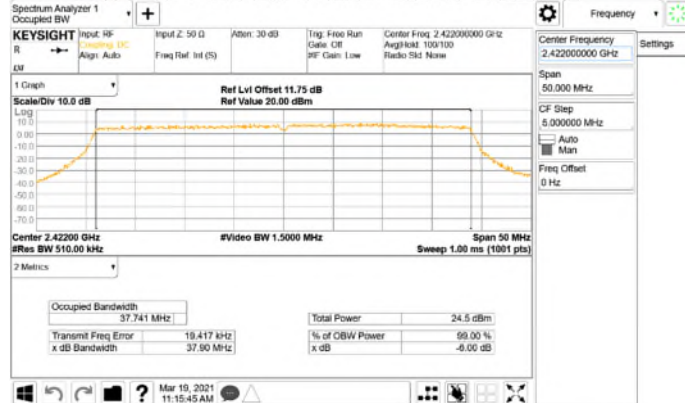
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

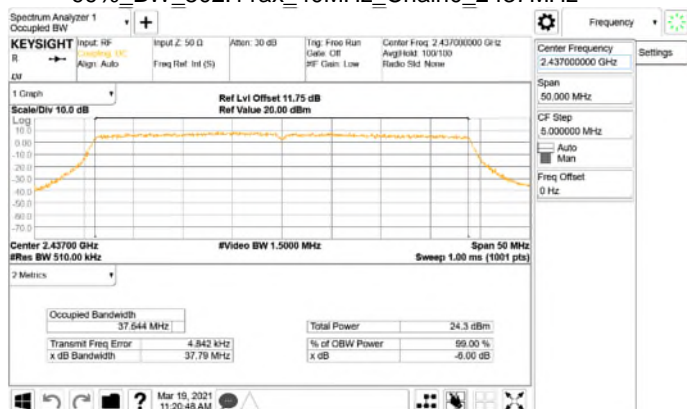
99%\_BW\_802.11ax\_40MHz\_Chain0\_2422MHz



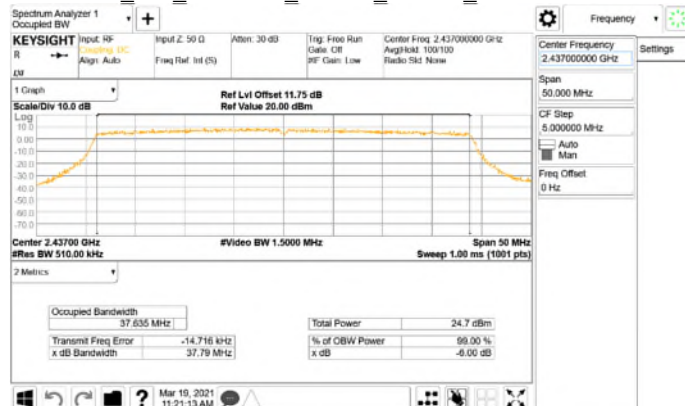
99% BW 802.11ax 40MHz Chain1 2422MHz



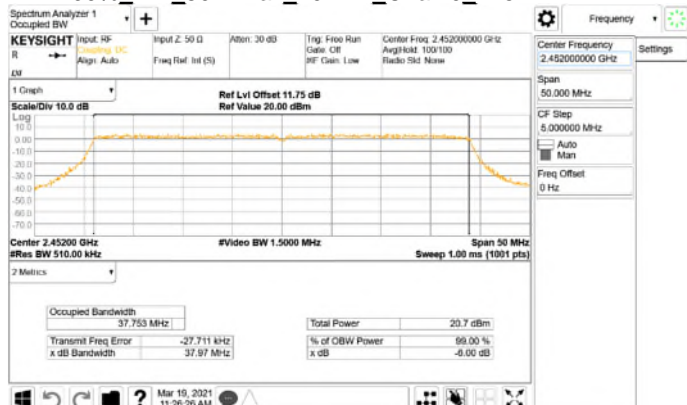
99%\_BW\_802.11ax\_40MHz\_Chain0\_2437MHz



99%\_BW\_802.11ax\_40MHz\_Chain1\_2437MHz



99%\_BW\_802.11ax\_40MHz\_Chain0\_2452MHz



99%\_BW\_802.11ax\_40MHz\_Chain1\_2452MHz



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

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

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

## 10 CONDUCTED BAND EDGES AND SPURIOUS EMISSION MEASUREMENT

### 10.1 Standard Applicable

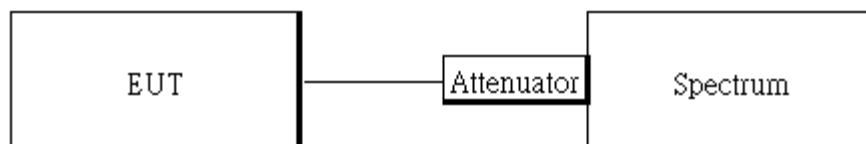
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a) & RSS-Gen §8.10, must also comply with the radiated emission limits specified in §15.209(a) & RSS-Gen §8.9.

### 10.2 Measurement Equipment Used

Conducted Emission Test Site					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
EXA Spectrum Analyzer	KEYSIGHT	N9010B	MY60240503	12/11/2020	12/10/2021
Attenuator	Mini-Circuit	BW-S10W2+	2	12/16/2020	12/15/2021
DC Block	Mini-Circuits	BLK-18-S+	1	12/16/2020	12/15/2021

### 10.3 Test SET-UP



### 10.4 Measurement Procedure

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

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

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



**Reference Level of Emission Limit:**

1. Set analyzer center frequency to DTS channel center frequency.
2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance .
3. Set the span to 1.5 times the DTS channel bandwidth.
4. Set the RBW = 100kHz & VBW = 300 kHz.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.
10. MIMO mode: offset is set following “measure and add 10 Log (N)” on spectrum to measure for MIMO mode. Offset = cable loss + 10 log (N), where N is number of transmitting antenna.

**Conducted Band Edge:**

1. To connect Antenna Port of EUT to Spectrum.
2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance .
3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
4. Set start to edge frequency, and stop frequency of spectrum analyzer so as to encompass the spectrum to be examined.
5. Set the spectrum analyzer as RBW=100 kHz, VBW=300 kHz, Detector = Peak, Sweep = auto
6. Mark the highest reading of the emission as the reference level measurement.
7. Set DL as the limit = reading on marker of reference level measurement – 20dBm
8. Mark the highest readings of the emissions outside of 2400MHz~2483.5MHz.
9. Repeat above procedures until all default test channel (low, middle, and high) was complete.
10. MIMO mode: offset is set following “measure and add 10 Log (N)” on spectrum to measure for MIMO mode. Offset = cable loss + 10 log (N), where N is number of transmitting 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90天。本報告未經本公司書面許可，不可部份複製。

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

**Conducted Spurious Emission:**

1. To connect Antenna Port of EUT to Spectrum
2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance .
3. Set RBW = 100 kHz & VBW= 300 kHz, Detector =Peak, Sweep = Auto.
4. Allow trace to fully stabilize.
5. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.
6. Repeat above procedures until all default test channel measured were complete.
7. MIMO mode: offset is set following “measure and add 10 Log (N)” on spectrum to measure for MIMO mode. Offset = cable loss + 10 log (N), where N is number of transmitting antenna.

**Note:**

*For test of MIMO mode, the highest emission of worst case employing Measure and add 10 log (N) technical is reported on this report after the comparison between Main Antenna at single transmitting mode and Aux that yields the higher value. The MIMO transmitting mode produces higher value of outcome.*

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

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

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

## 10.5 Measurement Result

### CDD

Reference Level of Limit 802.11b mode		
Freq. (MHz)	PSD (dBm)	Reference Level of Limit (dBm)
2412	18.72	-1.28
2437	18.93	-1.07
2462	18.89	-1.11

Reference Level of Limit 802.11ax20 mode		
Freq. (MHz)	PSD (dBm)	Reference Level of Limit (dBm)
2412	9.82	-10.18
2437	9.93	-10.07
2462	10.56	-9.44

Reference Level of Limit 802.11g mode		
Freq. (MHz)	PSD (dBm)	Reference Level of Limit (dBm)
2412	10.35	-9.65
2437	10.69	-9.31
2462	11.28	-8.72

Reference Level of Limit 802.11n40 MODE		
Freq. (MHz)	PSD (dBm)	Reference Level of Limit (dBm)
2422	8.35	-11.65
2437	8.79	-11.21
2452	4.1	-15.90

Reference Level of Limit 802.11n20 mode		
Freq. (MHz)	PSD (dBm)	Reference Level of Limit (dBm)
2412	10.94	-9.06
2437	10.47	-9.53
2462	11.39	-8.61

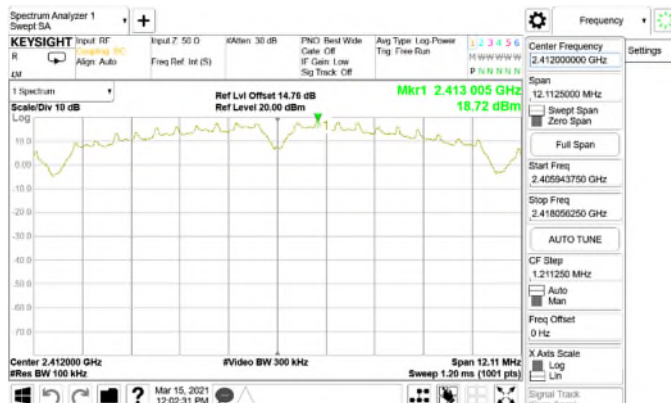
Reference Level of Limit 802.11ax40 MODE		
Freq. (MHz)	PSD (dBm)	Reference Level of Limit (dBm)
2422	8.24	-11.76
2437	7.34	-12.66
2452	3.76	-16.24

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

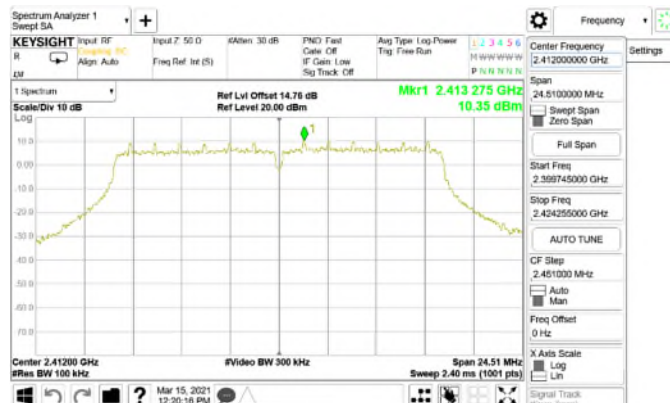
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

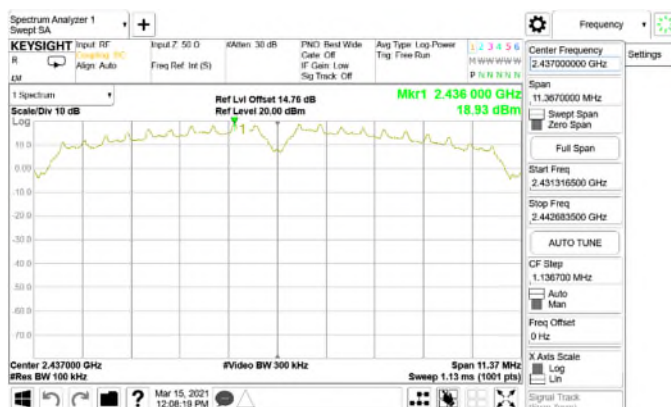
Reference Level\_802.11b\_20MHz\_Chain0\_2412MHz



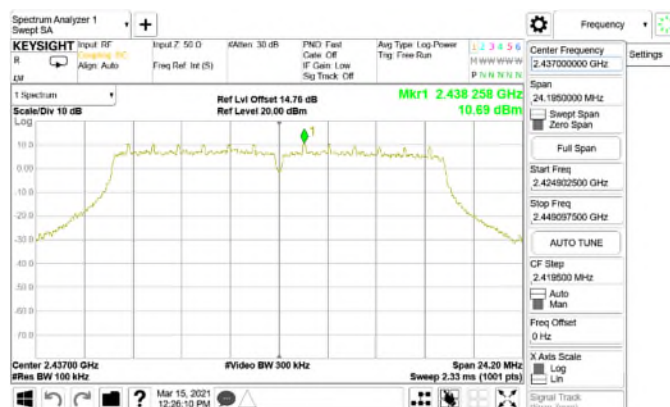
Reference Level\_802.11g\_20MHz\_Chain0\_2412MHz



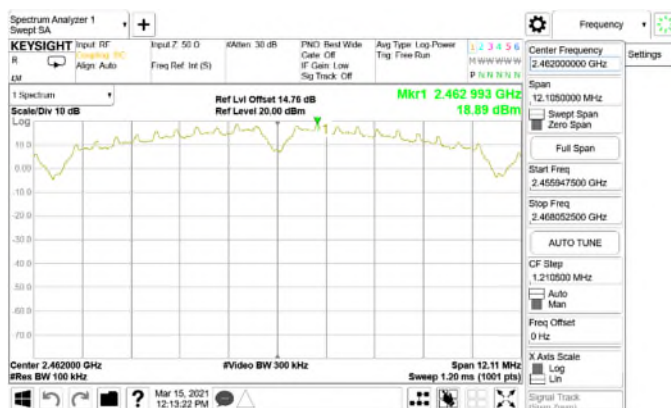
Reference Level\_802.11b\_20MHz\_Chain0\_2437MHz



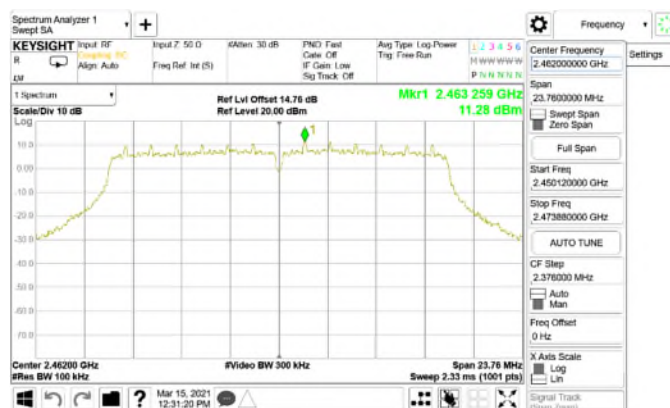
Reference Level\_802.11g\_20MHz\_Chain0\_2437MHz



Reference Level\_802.11b\_20MHz\_Chain0\_2462MHz



Reference Level\_802.11g\_20MHz\_Chain0\_2462MHz



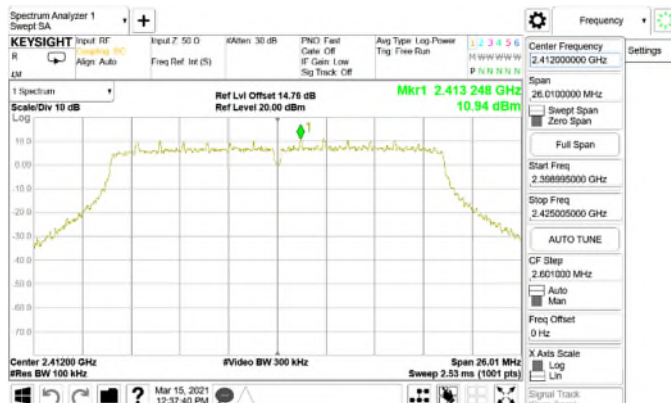
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

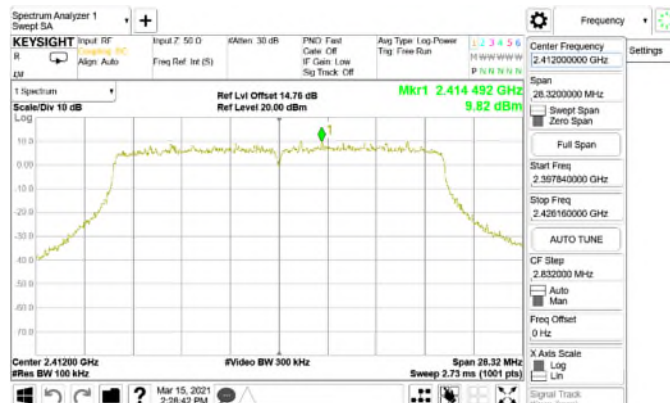
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>.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



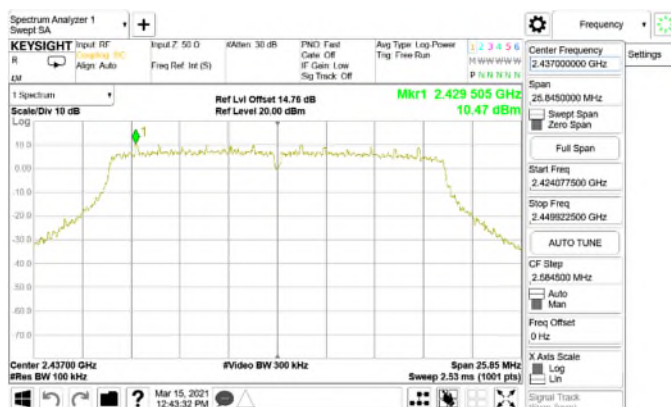
Reference Level\_802.11n\_20MHz\_Chain0\_2412MHz



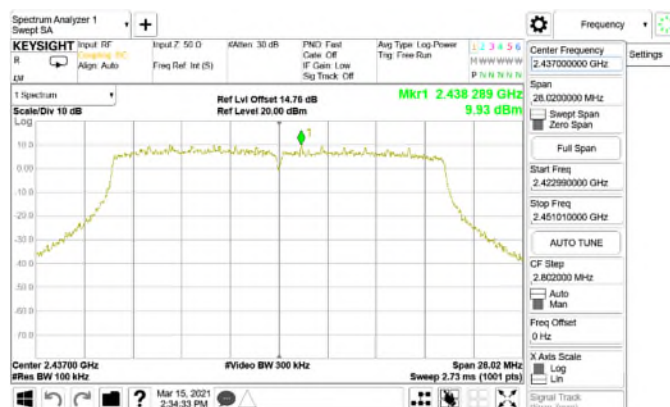
Reference Level\_802.11ax\_20MHz\_Chain0\_2412MHz



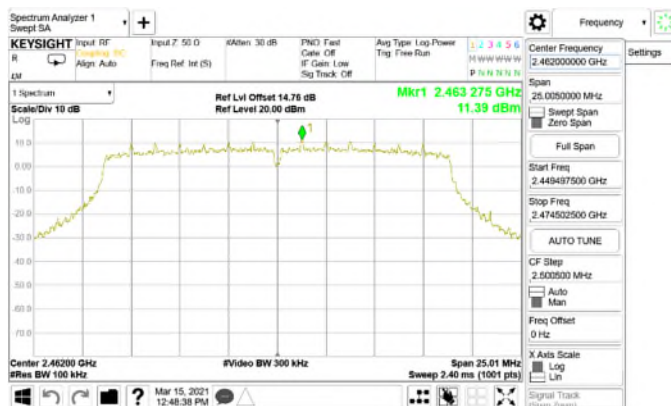
Reference Level\_802.11n\_20MHz\_Chain0\_2437MHz



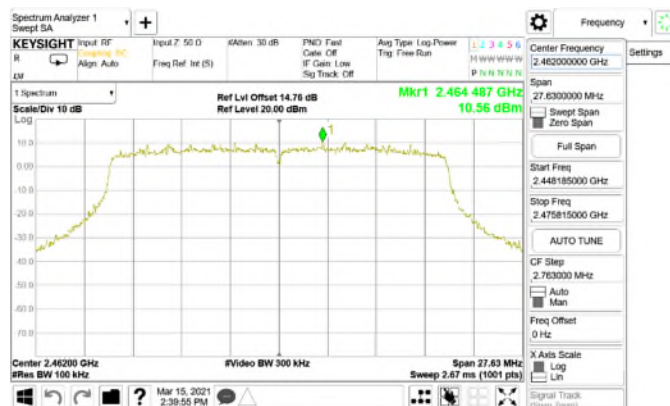
Reference Level\_802.11ax\_20MHz\_Chain0\_2437MHz



Reference Level\_802.11n\_20MHz\_Chain0\_2462MHz



Reference Level\_802.11ax\_20MHz\_Chain0\_2462MHz



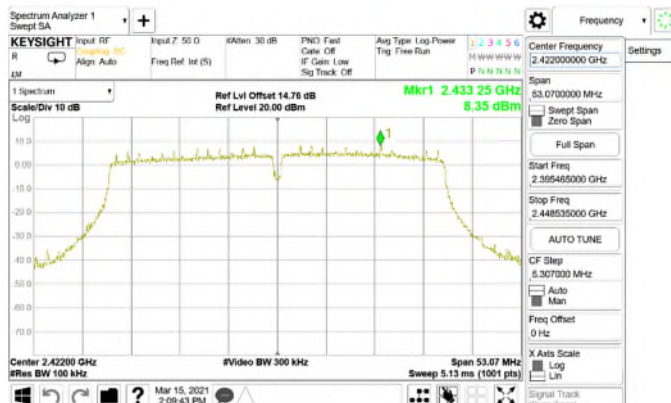
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

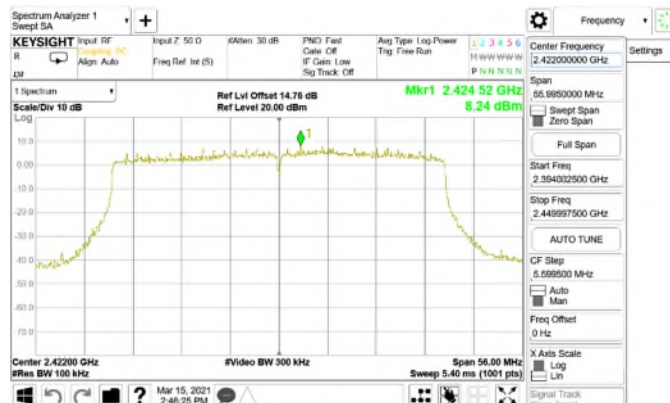
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>.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



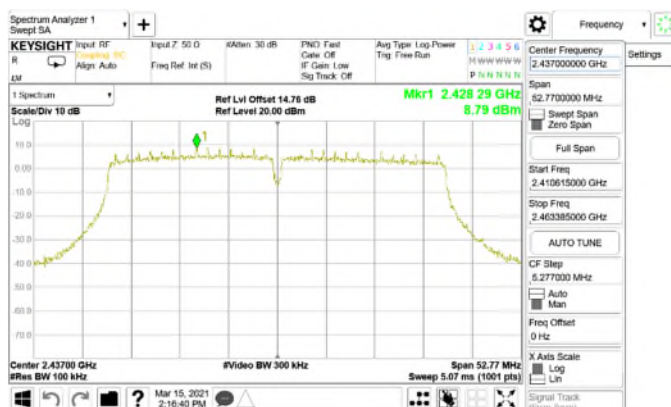
Reference Level\_802.11n\_40MHz\_Chain0\_2422MHz



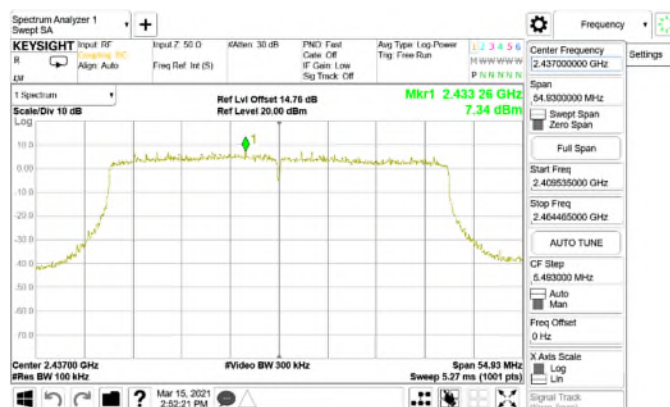
Reference Level\_802.11ax\_40MHz\_Chain0\_2422MHz



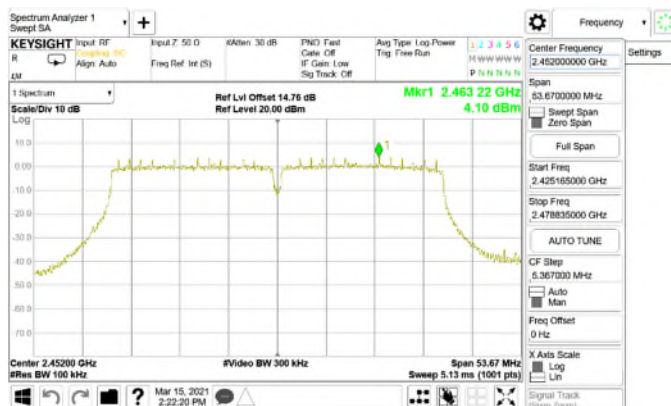
Reference Level\_802.11n\_40MHz\_Chain0\_2437MHz



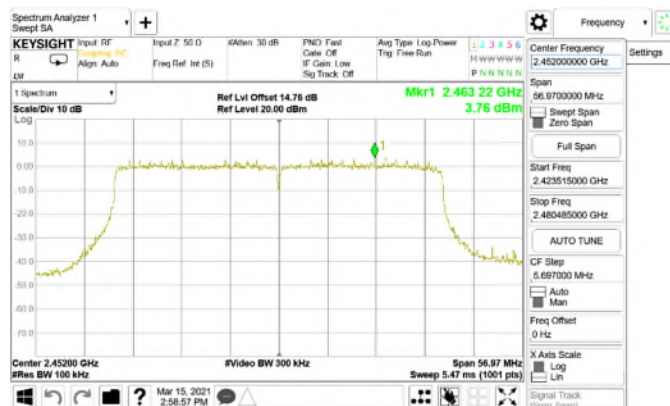
Reference Level\_802.11ax\_40MHz\_Chain0\_2437MHz



Reference Level\_802.11n\_40MHz\_Chain0\_2452MHz



Reference Level\_802.11ax\_40MHz\_Chain0\_2452MHz

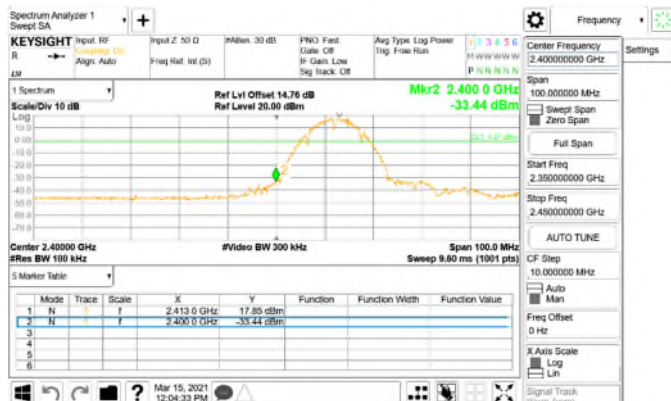


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

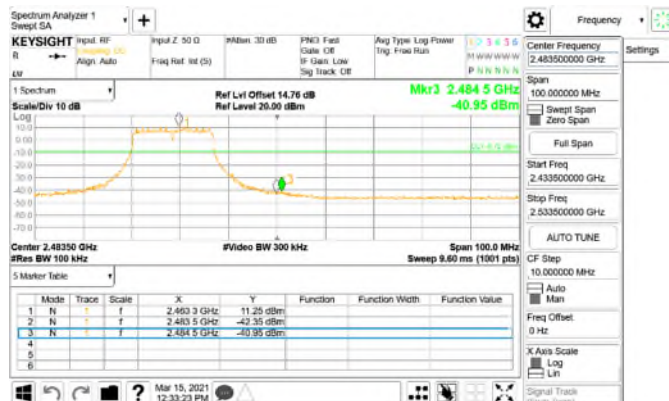
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

Bandedge\_802.11b\_20MHz\_Chain0\_2412MHz



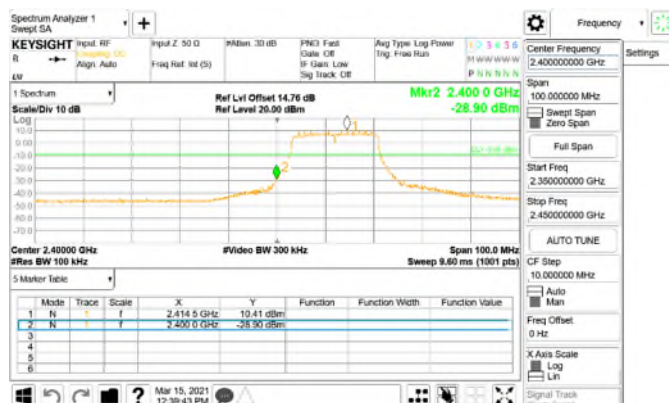
Bandedge\_802.11g\_20MHz\_Chain0\_2462MHz



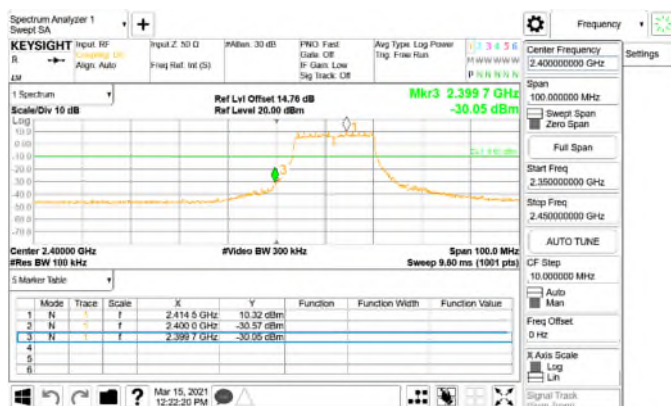
Bandedge\_802.11b\_20MHz\_Chain0\_2462MHz



Bandedge\_802.11n\_20MHz\_Chain0\_2412MHz



Bandedge\_802.11g\_20MHz\_Chain0\_2412MHz



Bandedge\_802.11n\_20MHz\_Chain0\_2462MHz



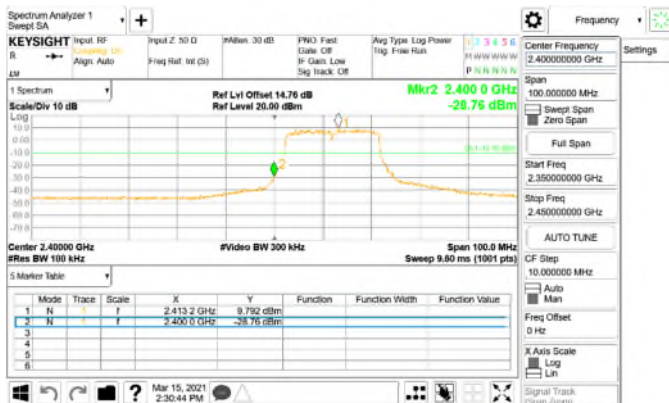
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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



Bandedge\_802.11ax\_20MHz\_Chain0\_2412MHz



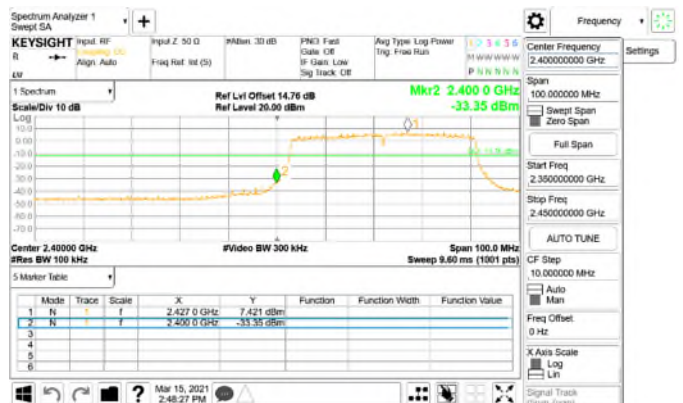
Bandedge\_802.11n\_40MHz\_Chain0\_2452MHz



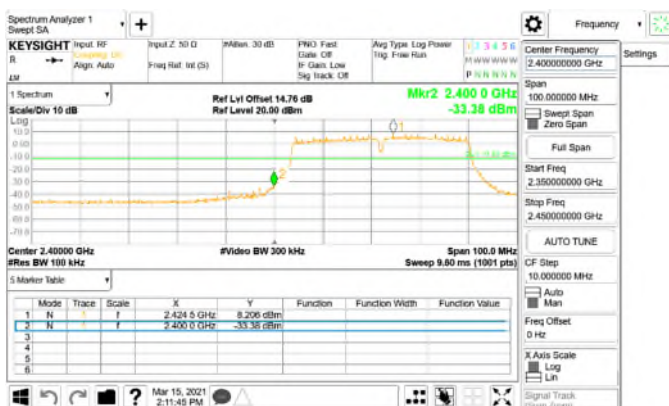
Bandedge\_802.11ax\_20MHz\_Chain0\_2462MHz



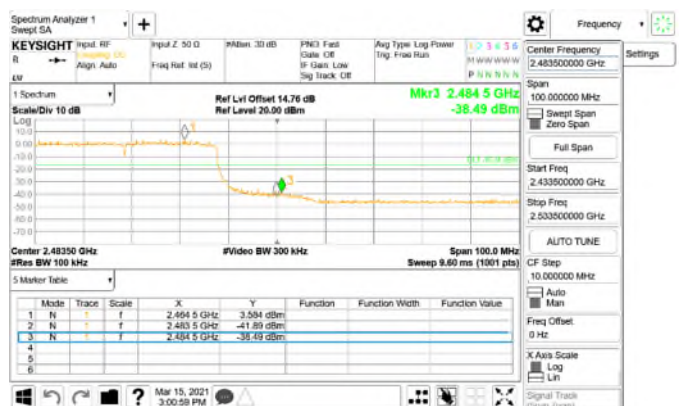
Bandedge\_802.11ax\_40MHz\_Chain0\_2422MHz



Bandedge\_802.11n\_40MHz\_Chain0\_2422MHz



Bandedge\_802.11ax\_40MHz\_Chain0\_2452MHz



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

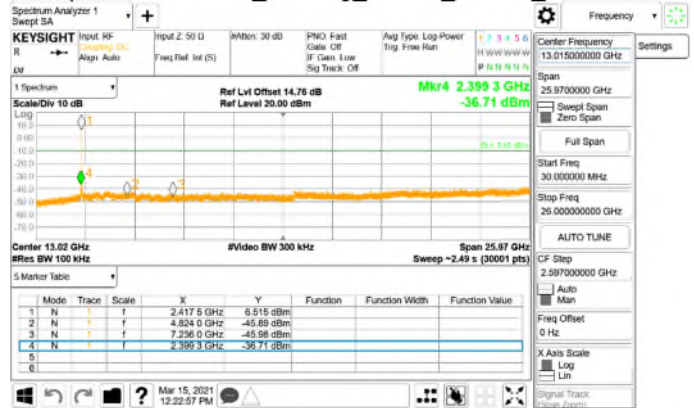
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

Spurious Emission\_802.11b\_20MHz\_Chain0\_2412MHz



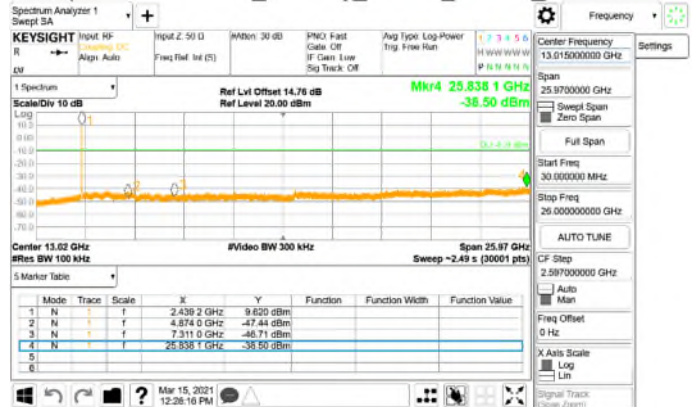
Spurious Emission\_802.11g\_20MHz\_Chain0\_2412MHz



Spurious Emission\_802.11b\_20MHz\_Chain0\_2437MHz



Spurious Emission\_802.11g\_20MHz\_Chain0\_2437MHz



Spurious Emission\_802.11b\_20MHz\_Chain0\_2462MHz



Spurious Emission\_802.11g\_20MHz\_Chain0\_2462MHz



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

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

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