

Page: 1 of 212

# **ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT**





Applicant: **GOOGLE LLC** 

1600 Amphitheatre Parkway Mountain View, CA 94043

**Product Name:** Wireless Streaming Device

**Brand Name:** GOOGLE

Model No.: GJQ9T

**Model Difference:** N/A

**Report Number:** ER/2021/40063

FCC ID: A4RGJQ9T

IC: 10395A-GJQ9T

Issue Date: July 12, 2021

**Date of Test:** April 21, 2021 ~ May 10, 2021

Date of EUT Received: February 19, 2021

Approved By Blue Yang

### 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 comply with FCC rule part §15.407, ISED RSS-247.

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

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

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

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

\*\*SGS\_Tailors\*\* Index 1.0 \*\*Line 1.0

SGS Taiwan Ltd. 台灣檢驗科技股份有限公司 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 t (886-2) 2299-3279



Page: 2 of 212

	Revision History				
Report Number	Revision	Description	Issue Date	Revised By	
ER/2021/40063	00	Original.	July 12, 2021	Elle Chang	

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

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

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

\*\*SCS Tailwan Ltd.\*\* No 134 We King Part Michael Parts With District New Tailwan Ltd.\*\*

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



Page: 3 of 212

# **Contents**

1	GENERAL INFORMATION	4
2	SYSTEM TEST CONFIGURATION	10
3	SUMMARY OF TEST RESULT	13
4	DESCRIPTION OF TEST MODES	14
5	MEASUREMENT UNCERTAINTY	18
6	CONDUCTED EMISSION TEST	19
7	DUTY CYCLE TEST SIGNAL	23
8	EMISSION BANDWIDTH MEASUREMENT	25
9	MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT	46
10	MAXIMUM POWER SPECTRAL DENSITY	53
11	UNDESIRABLE RADIATED EMISSION MEASUREMENT	67
12	TRANSMISSION IN THE ABSENCE OF DATA	211
13	ANTENNA REQUIREMENT	212

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

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

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

\*\*SCS Tailwan Ltd.\*\* No 134 We King Part Michael Parts With District New Tailwan 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



Page: 4 of 212

## **GENERAL INFORMATION**

#### 1.1 **Product Description**

Product Name:	Wireless Streaming Device	
Brand Name:	GOOGLE	
Model No.:	GJQ9T	
Model Difference:	N/A	
Hardware Version:	N/A	
Firmware Version:	ware Version: N/A	
EUT Series No.: Conducted: G1878051 Radiated: G1878050		
Power Supply:	USB 5V	

#### 1.2 **Modulation & Data Rate**

Modulation type:	64QAM, 16QAM, QPSK, BPSK for OFDM
	256QAM for OFDM in 802.11ac only
Town sitions Dates	802.11 a: 6.5 - 54 Mbps
	802.11 n_20MHz: 6.5 - 72.2 Mbps
	802.11 n_40MHz: 13.5 - 150 Mbps
Transition Rate:	802.11 ac_20MHz: 6.5 - 86.7 Mbps
	802.11 ac_40MHz: 13.5 - 200 Mbps
	802.11 ac_80MHz: 29.3 - 433.3 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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS Tailwan Ltd.\*\* No 134 We King Part Michael Parts With District New Tailwan 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 www.sgs.com.tw



Page: 5 of 212

#### 1.3 **Antenna Designation**

Freq. (MHz)	Peak Antenna Gain (dBi)	Worst Antenna Gain
5150~5250	2.19	-
5250~5350	1.97	-
5470~5725	0.13	-
5725~5850	0.06	-
	(MHz) 5150~5250 5250~5350 5470~5725 5725~5850	(MHz)       Gain (dBi)         5150~5250       2.19         5250~5350       1.97         5470~5725       0.13

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

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

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

\*\*SCS Tailwan Ltd.\*\* No 134 We King Part Michael Parts With District New Tailwan Ltd.\*\*

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 f (886-2) 2298-0488



Page: 6 of 212

#### FCC 1.4

## **WLAN 5 GHz**

Wi-Fi	Frequency Range	Channels	Rated Power(Avg) (dBm) (Worst Case)	Modulation Technology
2	5180~5240	4	17.41 dBm	OFDM
a n_HT	5260~5320	4	17.93 dBm	OFDM
ac_VHT 20M	5500~5720	12	17.69 dBm	OFDM
ZOIVI	5745-5825	5	17.83 dBm	OFDM
n_HT ac_VHT 40M	5190~5230	2	17.31 dBm	OFDM
	5270~5310	2	17.81 dBm	OFDM
	5510~5710	6	17.56 dBm	OFDM
	5755-5795	2	17.85 dBm	OFDM
	5210	1	9.34 dBm	OFDM
ac_VHT 80M	5290	1	10.30 dBm	OFDM
	5530~5690	3	17.69 dBm	OFDM
	5775	1	17.52 dBm	OFDM



Page: 7 of 212

### 1.5 ISED

# WLAN 5 GHz for ISED(Slave)

Wi-Fi	Frequency Range	Channels	EIRP/Avg		er(EIRP/Avg) /orst Case)	Modulation Technology
	5180~5240	4	EIRP	19.60	dBm	OFDM
	5260~5320	4	Avg	17.93	dBm	OFDM
a n_HT	5500~5700	11	Avg	17.69	dBm	OFDM
ac_VHT 20M	5720 (U-NII 2C)	1	Avg	16.10	dBm	OFDM
20101	5720 (U-NII 3)	1	Avg	11.69	dBm	OFDM
	5745-5825	5	Avg	17.83	dBm	OFDM
	5190~5230	2	EIRP	19.50	dBm	OFDM
	5270~5310	2	Avg	17.81	dBm	OFDM
n_HT	5510~5670	5	Avg	17.56	dBm	OFDM
ac_VHT 40M	5710 (U-NII 2C)	1	Avg	16.64	dBm	OFDM
	5710 (U-NII 3)	1	Avg	9.89	dBm	OFDM
	5755-5795	2	Avg	17.85	dBm	OFDM
	5210	1	EIRP	11.53	dBm	OFDM
	5290	1	Avg	10.30	dBm	OFDM
ac_VHT	5530~5610	2	Avg	17.69	dBm	OFDM
80M	5690 (U-NII 2C)	1	Avg	17.09	dBm	OFDM
	5690 (U-NII 3)	1	Avg	8.26	dBm	OFDM
	5775	1	Avg	17.52	dBm	OFDM

Note: As per guidance in presentation 2018-04-10-03 IC Certification updates of April 2018 TCB workshop, Client (Slave mode) devices without active scanning function, but with the cabability of operating in 5600-5650 MHz solely under the control of a certified master device meeting the requirement of RSS-247, are allowed in Canada.

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

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

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 t (886-2) 2299-3279 www.sgs.com.tw

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I SGS Taiwan Ltd.



Page: 8 of 212

#### 1.6 **Test Methodology of Applied Standards**

FCC Part 15, Subpart E §15.407

FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

RSS-247 issue 2 Feb. 2017

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

ANSI C63.10:2013

#### 1.7 **Test Facility**

Laboratory	Test Site Address	Test Site Name	FCC Designa- tion number	IC CAB identifier
		SAC 1		
		SAC 3		
		Conduction 1		
	No.134, Wu Kung Road, New Taipei	Conducted 1		
	Industrial Park, Wuku District, New	Conducted 2	TW0027	
	Taipei City, Taiwan.	Conducted 3		TW3702
		Conducted 4		
		Conducted 5		
SGS Taiwan Ltd.		Conducted 6		
Central RF Lab.		Conduction A		
(TAF code 3702)		SAC C		
(1A1 code 3/02)		SAC D		
		SAC G		
	No.2, Keji 1st Rd., Guishan District,	Conducted A	TW0028	
	Taoyuan City, Taiwan 333	Conducted B		
	ladydair City, Taiwair 555	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

除非分月就明・比較告給果性對測試之接給員質,同時比較給值保留90大。本報告未經本公司書圖計刊,不可能份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS\_Tainsaction\*\* This index the state of t

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 t (886-2) 2299-3279 www.sgs.com.tw



Page: 9 of 212

#### 1.8 **Special Accessories**

There are no special accessories used while test was conducted.

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

\*\*SCS Taiwan Left\*\*

\*\*No 134 \*\*

\*\*\*

\*\*No 134 \*\*

\*\*

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



Page: 10 of 212

### SYSTEM TEST CONFIGURATION

#### **EUT Configuration** 2.1

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

#### 2.2 **EUT Exercise**

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

#### 2.3 **Test Procedure**

#### 2.3.1 **Conducted Emissions**

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

\*\*SGS\_Tailors\*\* Index the Access the Company and the Company

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 t (886-2) 2299-3279 www.sgs.com.tw



Page: 11 of 212

#### 2.4 **Measurement Results Explanation Example**

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

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

\*\*SGS\_Tailors\*\* Index the Access the Company and the Company

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 www.sgs.com.tw



Page: 12 of 212

### 2.5 **Configuration of Tested System**

Fig. 2-1 Radiated Emission Configuration



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



Fig. 2-3 Conducted (AC powerline) **Emission Configuration** 



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

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Data Cable	Power Cord
1.	WLAN Test Software	N/A	N/A	N/A	N/A	N/A
2.	Notebook	Lenovo	T440P	PC-014TAK	N/A	N/A
3.	Notebook	Lenovo	T440P	PC-083PVC 15/10	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

解邦另有説明・比較告結果権對測試之棲品頁頁,同時比較品僅保留90大。本報告未經本公司書圖計可,不可能份復製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS\*\*\* Taken 1 to the produced of the content of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Comp

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 www.sgs.com.tw



Page: 13 of 212

## **SUMMARY OF TEST RESULT**

FCC Rules	IC Rules	Description Of Test	Result
§15.207	RSS-Gen §8.8	AC Power Line Conducted Emission	Compliant
§15.407(e)	RSS-Gen §6.7 RSS-247 §6.2.4.1	Emission Bandwidth	Compliant
§15.407(a)	RSS-247 §6.2.1~ 4 (1)	Maximum Conducted Output Power	Compliant
§15.407(a)	RSS-247 §6.2.1~ 4 (1)	Power Spectral Density	Compliant
§15.205 §15.209 §15.407(b)	RSS-247 §6.2.1~ 4 (2)	Undesirable Radiated Emissions	Compliant
§15.407(c)	RSS-247 §6.4	Transmission in case of Absence of Information	Compliant
§15.203 §15.407(a)	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 <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS Tailwan Ltd.\*\* No 134 We King Part Michael Parts With District New Tailwan 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



Page: 14 of 212

## **DESCRIPTION OF TEST MODES**

## Operating in U-NII Bands Operated band in 5150 MHz ~5250 MHz:

20 M		
СН	Freq (MHz)	
36	5180	
40	5200	
44	5220	
48	5240	

4	40 M		
СН	Freq (MHz)		
38	5190		
46	5230		

80 M					
СН	Freq (MHz)				
42	5210				

## Operated band in 5250 MHz ~5350 MHz:

20 M						
СН	Freq (MHz)					
52	5260					
56	5280					
60	5300					
64	5320					

40 M				
СН	Freq (MHz)			
54	5270			
62	5310			

80 M				
СН	Freq (MHz)			
58	5290			

# Operated band in 5470 MHz ~5725 MHz:

operated bu						
2	20 M					
СН	Freq (MHz)					
100	5500					
104	5520					
108	5540					
112	5560					
116	5580					
120	5600					
124	5620					
128	5640					
132	5660					
136	5680					
140	5700					
144	5720					

U 111 5470 WITZ					
4	0 M				
СН	Freq				
СП	(MHz)				
102	5510				
110	5550				
118	5590				
126	5630				
134	5670				
142	5710				

07 20 WII IZ.						
80 M						
СН	Freq					
100	(MHz)					
106	5530					
122	5610					
138 5690						

20 M					
СН	Freq (MHz)				
149	5745				
153	5765				
157	5785				
161	5805				
165	5825				

Oper	Operated band in 5745 MHz ~5850 MHz:								
М		4	M 0		8	M 0			
Freq MHz)		СН	Freq (MHz)		СН	Freq (MHz)			
5745			5755			5775	<u>.</u>		
5765		159	5795				1		

J .V 12					
80 M					
СН	Freq (MHz)				
155	5775				

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

解邦另有説明・比較告結果権對測試之棲品頁頁,同時比較品僅保留90大。本報告未經本公司書圖計可,不可能份復製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS\*\*\* Taken 1 to the produced of the content of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Comp

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



Page: 15 of 212

#### 4.1 The Worst Test Modes and Channel Details

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

Modulation	Tı	ransmiss	sion Chair	า	Single Transmission Spatial	Multiple Transmission Spatial
⊠ 802.11 a	⊠ Ch0	☐ Ch1	☐ Ch2	□ Ch3	⊠ 1TX	☐ 2TX
⊠ 802.11 n	⊠ Ch0	☐ Ch1	☐ Ch2	□ Ch3	⊠ SISO	☐ MIMO
⊠ 802.11 ac	⊠ Ch0	☐ Ch1	☐ Ch2	□ Ch3	⊠ SISO	☐ MIMO
☐ 802.11 ax	□ Ch0	☐ Ch1	☐ Ch2	□ Ch3	☐ SISO	☐ 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

除非分月就明・比較告給果性對測試之接給員質,同時比較給值保留90大。本報告未經本公司書圖計刊,不可能份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS\_Tainsaction\*\* This index the state of t

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 t (886-2) 2299-3279 www.sgs.com.tw



Page: 16 of 212

### **RADIATED EMISSION TEST:**

RADIATED EMISSION TEST (BELOW 1 GHz)								
MODE	FREQUENCY	AVAILABLE	TESTED	MODULATION	DATA RATE	ANTENNA		
IVIODL	BAND (MHz)	CHANNEL	CHANNEL	WIODULATION	(Mbps)	PORT		
	5180~5240	36 to 48	44					
802.11a	5260~5320	52 to 64	60	OFDM	4	ch0		
	5500~5720	100 to 144	116	OI DIVI	0	CHO		
	5745~5825	149 to 165	157					

RADIATED EMISSION TEST (ABOVE 1 GHz)						
MODE	FREQUENCY	AVAILABLE	TESTED	MODULATION	DATA RATE	ANTENNA
IVIODE	BAND (MHz)	CHANNEL	CHANNEL	IVIODOLATION	(Mbps)	PORT
	5180~5240	36 to 48	36,44,48			
802.11a	5260~5320	52 to 64	52,60,64	OFDM	6	ch0
002.114	5500~5720	100 to 144	100,116,140,144	OI DIVI	0	CHO
	5745~5825	149 to 165	149,157,165			
	5180~5240	36 to 48	36,44,48			
802.11n_HT20	5260~5320	52 to 64	52,60,64	OFDM	MCS0	ch0
002.1111_11120	5500~5720	100 to 144	100,116,140,144			CHO
	5745~5825	149 to 165	149,157,165			
	5190~5230	38 to 46	38,46			
802.11n_HT40	5270~5310	54 to 62	54,62	OFDM	MCS0	ch0
002.1111_11140	5510~5710	102 to 142	102,110,134,142	OI DIVI	IVICSU	CHO
	5755~5795	151 to 159	151,159			
	5210	42	42			
802.11ac_VHT80	5290	58	58	OFDM	MCS0	ch0
002.11ac_v11100	5530~5690	106 to 138	106,122,138	OI DIVI	IVICOU	
	5775	155	155			

### Note:

The field strength of radiation emission was measured as EUT three orthogonal plans, E1 / E2 / H, are positioned to pre-scan the emission generating the highest one. The worst position is tested, and recorded.

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

解邦另有説明・比較告結果権對測試之棲品頁頁,同時比較品僅保留90大。本報告未經本公司書圖計可,不可能份復製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS\*\*\* Taken 1 to the produced of the content of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Comp

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 f (886-2) 2298-0488



Page: 17 of 212

#### 4.1.2 ANTENNA PORT CONDUCTED MEASUREMENT:

CONDUCTED TEST						
MODE	FREQUENCY	AVAILABLE	TESTED	MODULATION	DATA RATE	ANTENNA
WIODL	BAND (MHz)	CHANNEL	CHANNEL	WIODULATION	(Mbps)	PORT
	5180~5240	36 to 48	36,44,48			
802.11a	5260~5320	52 to 64	52,60,64	OFDM	6	ch0
002.114	5500~5720	100 to 144	100,116,140,144		U	CHO
	5745~5825	149 to 165	149,157,165			
	5180~5240	36 to 48	36,44,48		MCS0	
802.11n_HT20	5260~5320	52 to 64	52,60,64	OFDM		ch0
002.1111_11120	5500~5720	100 to 144	100,116,140,144	OI DIVI		CHO
	5745~5825	149 to 165	149,157,165			
	5190~5230	38 to 46	38,46			
802.11n_HT40	5270~5310	54 to 62	54,62	OFDM	MCS0	ch0
002.1111_11140	5510~5710	102 to 142	102,110,134,142	OI DIVI	IVICSU	CHO
	5755~5795	151 to 159	151,159			
	5210	42	42			
802.11ac_VHT80	5290	58	58	OFDM	MCS0	ch0
002.11ac_V11100	5530~5690	106 to 138	106,122,138		IVICOU	
	5775	155	155			

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

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

SGS Taiwan Ltd. 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



Page: 18 of 212

## **MEASUREMENT UNCERTAINTY**

Test Items	Un	certain	ty
AC Power Line Conducted Emission	+/-	2.34	dB
Emission Bandwidth	+/-	1.53	Hz
The Maximum Output Power Measurement	+/-	1	dB
Peak Power Spectral Density Measurement	+/-	1.53	dB
Frequency Stability	+/-	1.53	Hz
Temperature	+/-	0.4	°C
Humidity	+/-	3.5	%
DC / AC Power Source	+/-	1	%

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

### 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



Page: 19 of 212

## **CONDUCTED EMISSION TEST**

## Standard Applicable

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

_ , ,					
Frequency range	Limits dB(uV)				
MHz	Ougoi pook	Average			
IVI□Z	Quasi-peak	Average			
0.15 to 0.50	66 to 56	56 to 46			
0.50 to 5	56	46			
5 to 30	60	50			

### Note

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

Radiated Emission Test Site: Conduction 1						
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUM- BER	LAST CAL.	CAL DUE.	
EMI Test Receiver	R&S	ESCI 7	100759	07/13/2020	07/12/2021	
LISN	SCHWARZ- BECK	NSLK 8127	8127-465	04/09/2021	04/08/2022	
Coaxial Cables	N/A	Coaxial Ca- ble	161207	12/07/2020	12/06/2021	
Test Software	audix	e3	Ver. 6.11- 20180413	N.C.R	N.C.R	

#### 6.3 **EUT Setup**

- 1. The conducted emission tests were performed in the test site, using the setup in accordance with the ANSI C63.10:2013.
- 2. The AC/DC Power adaptor of EUT was plug-in LISN. The rear of the EUT and peripherals were placed flushed with the rear of the tabletop.
- 3. The LISN was connected with 120Vac/60Hz power source.

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

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

\*\*SGS\_Tailors\*\* Index the Access the Company and the Company

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 t (886-2) 2299-3279 www.sgs.com.tw

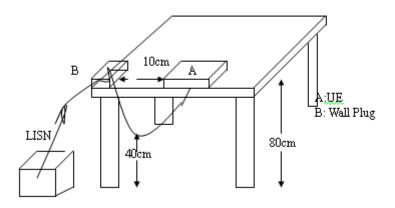
<sup>1.</sup> The lower limit shall apply at the transition frequencies

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



Page: 20 of 212

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



#### 6.5 **Measurement Procedure**

- 1. The EUT was placed on a table which is 0.8m above ground plane.
- 2. Maximum procedure was performed on the six highest emissions to ensure EUT compli-
- 3. Repeat above procedures until all phases of power being supplied by given UE are completed.

#### 6.6 **Measurement Result**

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

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

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

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

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

\*\*SGS\_Tailors\*\* Index the Access the Company and the Company

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 t (886-2) 2299-3279 www.sgs.com.tw



Page: 21 of 212

## AC POWER LINE CONDUCTED EMISSION TEST DATA

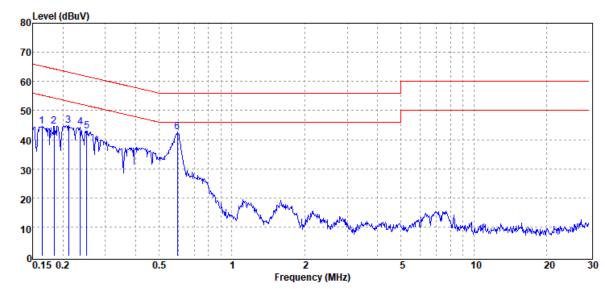
Report Number **Test Site** :Conduction 6F :ER-2021-40063

Test Mode :WLAN 5G **Test Date** :2021-04-23

:AC 120V/60Hz Temp./Humi. :25.1/62 Power

Probe :L Engineer :Ricky Chen

Note:



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit	Margin
MHz	PK/QP/AV	dΒμV	dB	dΒμV	dΒμV	dB
0.16	Peak	44.55	0.04	44.59	65.25	-20.66
0.18	Peak	44.61	0.04	44.65	64.28	-19.63
0.21	Peak	44.77	0.04	44.81	63.14	-18.33
0.24	Peak	44.13	0.04	44.17	62.22	-18.05
0.25	Peak	42.89	0.04	42.93	61.73	-18.80
0.59	Peak	42.48	0.13	42.61	56.00	-13.39

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

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

解邦另有説明・比較告結果権對測試之棲品頁頁,同時比較品僅保留90大。本報告未經本公司書圖計可,不可能份復製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS\*\*\* Taken 1 to the produced of the content of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Comp 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 t (886-2) 2299-3279



Page: 22 of 212

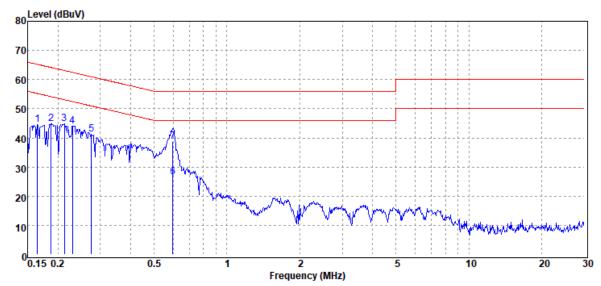
Report Number **Test Site** :Conduction 6F :ER-2021-40063

Test Mode :WLAN 5G **Test Date** :2021-04-23

:AC 120V/60Hz Temp./Humi. :25.1/62 Power

Probe :N Engineer :Ricky Chen

Note:



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit	Margin
MHz	PK/QP/AV	dΒμV	dB	dΒμV	dΒμV	dB
0.17	Peak	44.44	0.10	44.54	65.21	-20.67
0.19	Peak	44.85	0.10	44.95	64.15	-19.20
0.21	Peak	44.69	0.10	44.79	63.10	-18.31
0.23	Peak	43.94	0.10	44.04	62.44	-18.40
0.28	Peak	41.07	0.10	41.17	60.94	-19.77
0.60	Average	26.28	0.18	26.46	46.00	-19.54
0.60	QP	38.67	0.18	38.85	56.00	-17.15

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

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



Page: 23 of 212

## **DUTY CYCLE TEST SIGNAL**

Pre-analysis Check: While conducting average power measurement, duty cycle of each mode shall be checked to ensure its duty cycle in order to compensate for the loss due to insufficient ratio of duty cycle.

All duty cycle is pre-scanned, and result as obtained below shows only the most representative ones where duty cycle is conducted as the given transmission with given virtual operation that expresses the percentage.

#### 7.1 **Measurement Procedure:**

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

Duty Cycle:

Mode	Duty Cycle (%) =Ton / (Ton+Toff)	Duty Factor (dB) =10*log ( 1/Duty Cycle )	1/T (kHz)	VBW setting (kHz)
802.11a	98.00	0.09	0.70	0.01
802.11n_20	93.00	0.32	0.75	1.00
802.11ac_20	93.00	0.32	0.74	1.00
802.11n_40	87.00	0.60	1.51	2.00
802.11ac_40	87.00	0.60	1.50	2.00
802.11ac_80	76.00	1.19	3.01	4.00

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

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

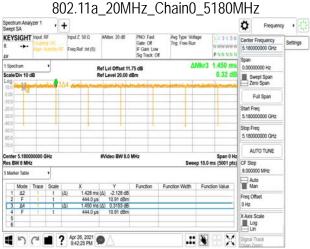
\*\*SGS\_Tailors\*\* Index the Access the Company and the Company

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

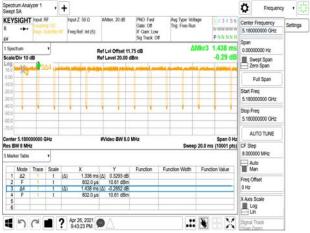


Page: 24 of 212

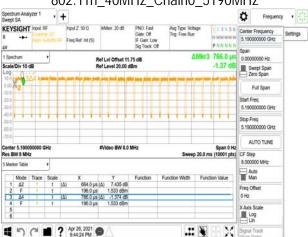
#### 7.2 **DUTY CYCLE TEST SIGNAL MEASUREMENT RESULT**







802.11n 40MHz Chain0 5190MHz



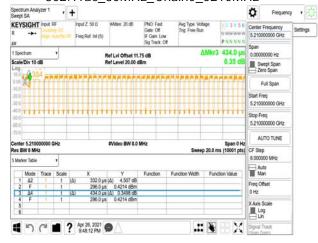
802.11ac 20MHz Chain0 5180MHz



802.11ac\_40MHz\_Chain0\_5190MHz



802.11ac 80MHz Chain0 5210MHz



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

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

SGS Taiwan Ltd. 台灣檢驗科技股份有限公司 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 www.sgs.com.tw



Page: 25 of 212

### **EMISSION BANDWIDTH MEASUREMENT**

#### 8.1 Standard Applicable

There is no limit bandwidth for U-NII-1, U-NII-2-A and U-NII-2-C. The minimum of 6dB Bandwidth measurement is 0.5 MHz for U-NII-3

#### 8.2 **Measurement Procedure**

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules.
- 3. Remove the antenna from the EUT and then connect a low loss RF cable from the Antenna port to the spectrum analyzer.
  - 3.a. 26dB Band width Measurement: Set the spectrum analyzer as 1% of emission BW Sweep=auto,

Detector = Peak,

Trace Mode = Max Hold.

Manually readjust RBW until the RBW/EBW ratio is 1% based on EBW as observed on the result of pre-sequence measurement.

- 3.b. Mark the peak frequency and -26dB (upper and lower) frequency.
- 4. Repeat the procedures as list above until all test default channels (low, middle, and high) are completed.
- 5. Minimum Emission Bandwidth for the band 5.725-5.850GHz.
  - a. Set the spectrum analyzer as

RBW = 100 kHz

VBW = 3\*RBW.

Span = 30M/50MHz,

Detector=Peak,

Sweep=auto

- b. Mark the peak frequency and -6dB (upper and lower) frequency.
- 6. For 99% Bandwidth: Set the spectrum analyzer as

RBW=1%,

VBW = 3\*RBW

Span = 30M/50MHz,

Detector=Sample,

Sweep=auto.

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

- 7. Turn on the 99% bandwidth function, max reading.
- 8. Repeat above procedures until all frequency of interest measured was complete.

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

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

\*\*SGS\_Tailors\*\* Index the Access the Company and the Company

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

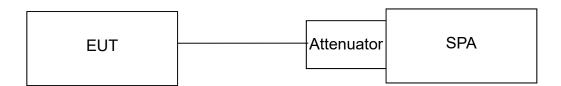


Page: 26 of 212

#### 8.3 **Measurement Equipment Used**

Conducted Emission Test Site: Conducted 2							
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUM- BER	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		

#### 8.4 **Test Set-up**



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

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

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 www.sgs.com.tw



Page: 27 of 212

#### 8.5 **Measurement Result**

#### 8.5.1 FCC 26dB Bandwidth

### 802.11a\_Ch0

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)				
5180	20.70	13.160				
5220	21.34	13.290				
5240	21.58	13.340				
5260	21.56	13.340				
5300	21.85	13.390				
5320	20.97	13.220				
5500	21.09	13.240				
5580	23.90	13.780				
5700	21.18	13.260				
5720(U-NII 2C)	15.68	11.950				
5720(U-NII 3)	5.68	7.540				

### 802.11n\_HT20\_Ch0

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5180	21.17	13.260
5220	24.30	13.860
5240	21.27	13.280
5260	24.38	13.870
5300	25.47	14.060
5320	21.31	13.290
5500	21.32	13.290
5580	25.18	14.010
5700	21.23	13.270
5720(U-NII 2C)	16.44	12.160
5720(U-NII 3)	6.44	8.090

## 802.11n \_HT40\_Ch0

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5190	39.54	15.970
5230	44.69	16.500
5270	44.59	16.490
5310	39.70	15.990
5510	39.39	15.950
5550	44.69	16.500
5670	39.59	15.980
5710(U-NII 2C)	38.04	15.800
5710(U-NII 3)	8.04	9.050

## 802.11ac \_VHT80\_Ch0

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5210	80.85	19.080
5290	80.86	19.080
5530	80.56	19.060
5610	90.72	19.580
5690(U-NII 2C)	80.56	19.060
5690(U-NII 3)	10.56	10.230

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

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

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

\*\*SCS Tailwan Ltd.\*\* No 134 We King Part Michael Parts With District New Tailwan Ltd.\*\*



Page: 28 of 212

#### 8.5.2 6dB Bandwidth (5725 MHz~ 5850 MHz) measure with Peak detector for FCC

00 <b>2</b> . 1 14_0110			
Freq. (MHz)	6dB BW (MHz)	10 Log (B) (dB)	
5745	15.89	12.010	
5785	16.06	12.060	
5825	16.44	12.160	

### 802.11n\_HT20\_Ch0

Freq. (MHz)	6dB BW (MHz)	10 Log (B) (dB)
5745	17.22	12.360
5785	17.32	12.390
5825	16.22	12.100

### 802.11n\_HT40\_Ch0

Freq. (MHz)	6dB BW (MHz)	10 Log (B) (dB)
5755	35.44	15.490
5795	35.48	15.500

### 802.11ac \_VHT80\_Ch0

Freq. (MHz)	80.56	10 Log (B) (dB)
5775	75.27	18.770

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

解邦另有説明・比較告結果権對測試之棲品頁頁,同時比較品僅保留90大。本報告未經本公司書圖計可,不可能份復製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS\*\*\* Taken 1 to the produced of the content of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Comp

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 www.sgs.com.tw



Page: 29 of 212

#### **BW Verification for DFS Function** 8.5.1

### 802.11a\_Ch0

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5240	5248.40	< 5250
5745	5736.76	> 5725

### 802.11n\_HT20\_Ch0

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5240	5248.93	< 5250
5745	5736.17	> 5725

### 802.11n HT40 Ch0

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5230	5248.21	< 5250
5755	5736.9758	> 5725

## 802.11ac \_VHT80\_Ch0

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5210	5247.80647	< 5250
5775	5737.40113	> 5725

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

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

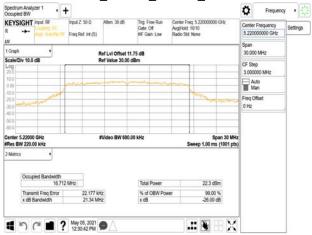


Page: 30 of 212

## 802.11a 20MHz Chain0 5180MHz



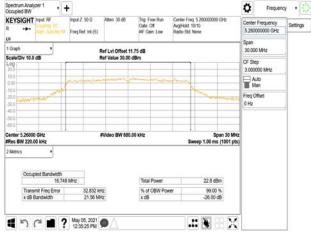
802.11a 20MHz Chain0 5220MHz



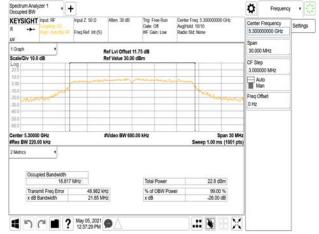
802.11a\_20MHz\_Chain0\_5240MHz



802.11a 20MHz Chain0 5260MHz



802.11a 20MHz Chain0 5300MHz



802.11a\_20MHz\_Chain0\_5320MHz



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

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

解邦另有説明・比較告結果権對測試之棲品頁頁,同時比較品僅保留90大。本報告未經本公司書圖計可,不可能份復製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS\*\*\* Taken 1 to the produced of the content of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Comp

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

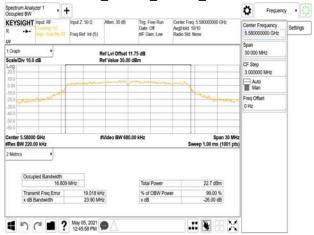


Page: 31 of 212

## 802.11a 20MHz Chain0 5500MHz



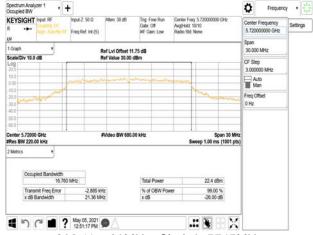
### 802.11a 20MHz Chain0 5580MHz



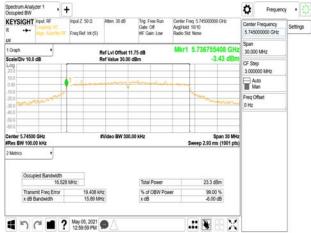
802.11a\_20MHz\_Chain0\_5700MHz



802.11a 20MHz Chain0 5720MHz



802.11a 20MHz Chain0 5745MHz



802.11a\_20MHz\_Chain0\_5785MHz



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

解邦另有説明・比較告結果権對測試之棲品頁頁,同時比較品僅保留90大。本報告未經本公司書圖計可,不可能份復製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS\*\*\* Taken 1 to the produced of the content of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

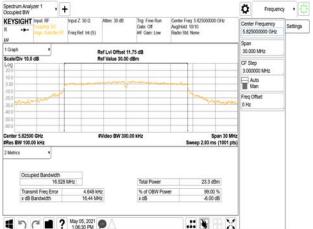
\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Comp

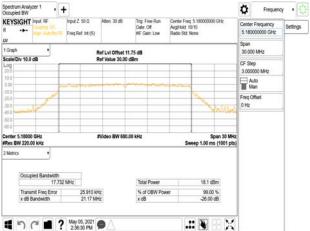


Page: 32 of 212

## 802.11a\_20MHz\_Chain0\_5825MHz



802.11n\_20MHz\_Chain0\_5180MHz



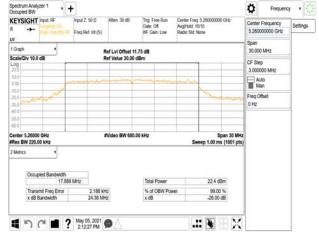
802.11n\_20MHz\_Chain0\_5220MHz



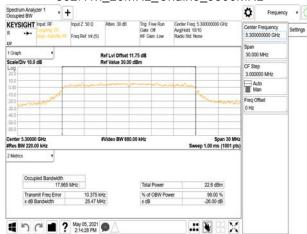
802.11n 20MHz Chain0 5240MHz



802.11n\_20MHz\_Chain0\_5260MHz



802.11n\_20MHz\_Chain0\_5300MHz



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

解邦另有説明・比較告結果権對測試之棲品頁頁,同時比較品僅保留90大。本報告未經本公司書圖計可,不可能份復製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS\*\*\* Taken 1 to the produced of the content of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

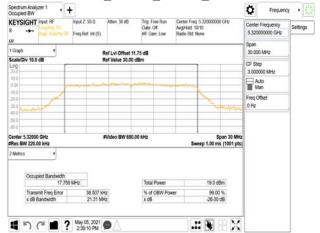
\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Comp

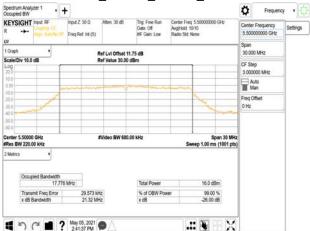


Page: 33 of 212

## 802.11n 20MHz Chain0 5320MHz



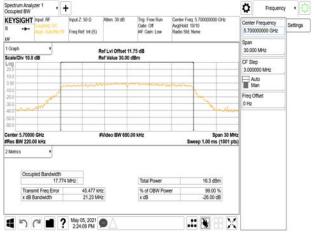
802.11n 20MHz Chain0 5500MHz



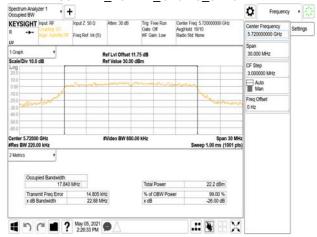
802.11n\_20MHz\_Chain0\_5580MHz



802.11n 20MHz Chain0 5700MHz



802.11n 20MHz Chain0 5720MHz



802.11n\_20MHz\_Chain0\_5745MHz



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

解邦另有説明・比較告結果権對測試之棲品頁頁,同時比較品僅保留90大。本報告未經本公司書圖計可,不可能份復製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS\*\*\* Taken 1 to the produced of the content of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

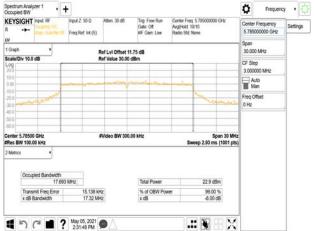
\*\*Policy All Company\*\*\* Taken 2 to the produced of the law.\*\*

\*\*Policy All Comp

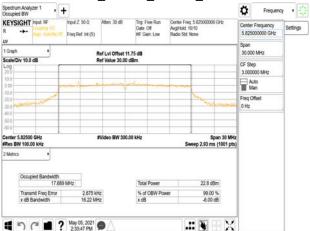


Page: 34 of 212

## 802.11n 20MHz Chain0 5785MHz



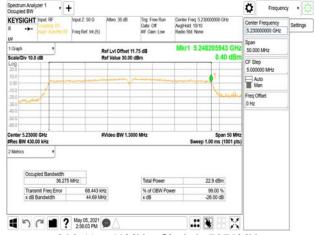
802.11n 20MHz Chain0 5825MHz



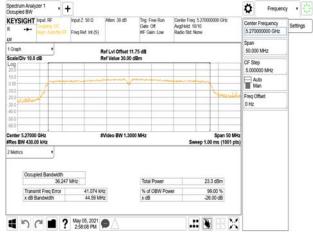
802.11n\_40MHz\_Chain0\_5190MHz



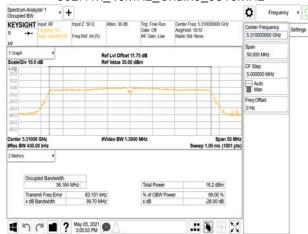
802.11n 40MHz Chain0 5230MHz



802.11n 40MHz Chain0 5270MHz



802.11n\_40MHz\_Chain0\_5310MHz



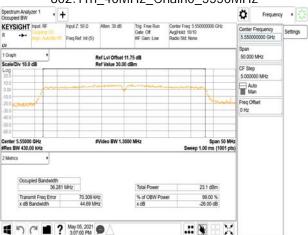
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

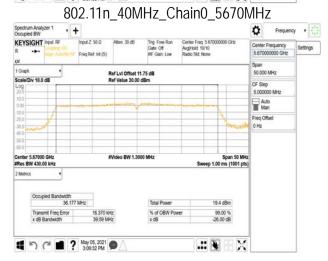
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf,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

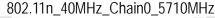


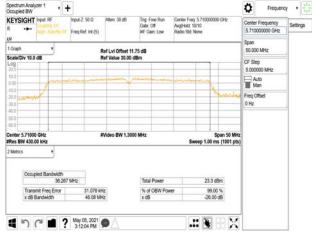
Page: 35 of 212

### 802.11n 40MHz Chain0 5510MHz Frequency • KEYSIGHT Input RI 50,000 MHz Ref Lvi Offset 11.75 dB Ref Value 30.00 dBm Scale/Div 10.0 dB CF Step 5.000000 MHz Auto Man Freq Offset 0 Hz Center 5.51000 GHz #Res BW 430.00 kHz Occupied Bandwidth 36.104 MHz Total Power 17.9 dBm Transmit Freq Error % of OBW Power x dB ■ 9 C ■ ? May 05, 2021 ● .: W - X 802.11n 40MHz Chain0 5550MHz





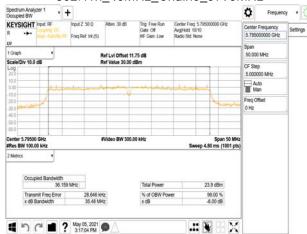




802.11n 40MHz Chain0 5755MHz



802.11n\_40MHz\_Chain0\_5795MHz



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

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

SGS Taiwan Ltd. 台灣檢驗科技股份有限公司 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 www.sgs.com.tw

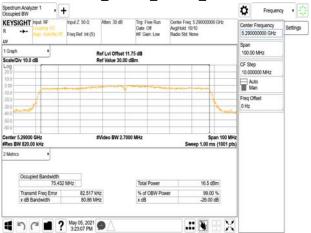


Page: 36 of 212

# 802.11ac 80MHz Chain0 5210MHz



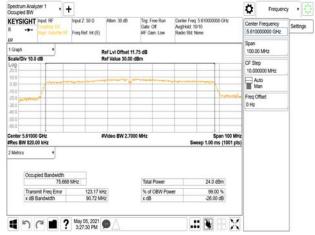
802.11ac 80MHz Chain0 5290MHz



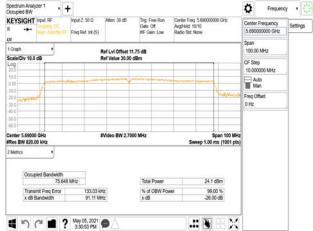
802.11ac\_80MHz\_Chain0\_5530MHz



802.11ac 80MHz Chain0 5610MHz



802.11ac 80MHz Chain0 5690MHz



802.11ac\_80MHz\_Chain0\_5775MHz



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

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



Page: 37 of 212

#### 8.5.2 ISED 99% Bandwidth

#### 802.11a\_Ch0

Fraguanay	99%	10 Log (B)	
Frequency (MHz)	BW (MHz)	(dB)	
5180	16.592	12.200	
5220	16.631	12.210	
5240	16.694	12.230	
5260	16.692	12.230 12.230	
5300	16.720		
5320	16.625	12.210	
5500	16.638	12.210	
5580	16.761	12.240	
5700	16.606	12.200	
5720(U-NII 2C)	13.334	11.250	
5720(U-NII 3)	3.334	5.230	

#### 802.11n\_HT20\_Ch0

Frequency (MHz)	99% BW (MHz)	10 Log (B) (dB)	
5180	17.731	12.490	
5220	17.806	12.510	
5240	17.789	12.500	
5260	17.791	12.500	
5300	17.814	12.510	
5320	17.754	12.490	
5500	17.737	12.490	
5580	17.778	12.500	
5700	17.731	12.490	
5720(U-NII 2C)	13.892	11.430	
5720(U-NII 3)	3.892	5.900	

## 802.11n \_HT40\_Ch0

Frequency (MHz)	99% BW (MHz)	10 Log (B) (dB)
5190	36.146	15.580
5230	36.208	15.590
5270	36.171	15.580
5310	36.094	15.570
5510	36.216	15.590
5550	36.190	15.590
5670	36.091	15.570
5710(U-NII 2C)	33.097	15.200
5710(U-NII 3)	3.097	4.910

#### 802.11ac \_VHT80\_Ch0

Frequency (MHz)	99% BW (MHz)	10 Log (B) (dB)
5210	75.425	18.780
5290	75.624	18.790
5530	75.438	18.780
5610	75.548	18.780
5690(U-NII 2C)	72.751	18.620
5690(U-NII 3)	2.751	4.390

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

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

\*\*SCS Taiwan Left\*\*

\*\*No 134 \*\*

\*\*\*

\*\*No 134 \*\*

\*\*



Page: 38 of 212

#### 8.5.3 6dB Bandwidth (5725 MHz~ 5850 MHz) measure with sample detector for ISED

#### 802.11a Ch0

Frequency (MHz)	99% BW (MHz)	6dB BW (MHz)	
5745	16.729	16.330	
5785	16.685	16.310	
5825	16.693	11.750	

#### 802.11n\_HT20\_Ch0

Frequency (MHz)	99% BW (MHz)	6dB BW (MHz)	
5745	17.763	17.440	
5785	17.799	17.560	
5825	17.799	11.750	

#### 802.11n \_HT40\_Ch0

Frequency (MHz)	99% BW (MHz)	6dB BW (MHz)
5755	36.222	36.060
5795	36.168	36.080

#### 802.11ac \_VHT80\_Ch0

Frequency (MHz)	99% BW (MHz)	6dB BW (MHz)
5775	75.512	75.580

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

解邦另有説明・比較告結果権對測試之棲品頁頁,同時比較品僅保留90大。本報告未經本公司書圖計可,不可能份復製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS\*\*\* Taken 1 to the produced of the content of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\*

\*\*Policy All Company\*\*\*

\*\*Policy All Company\*\*\*

\*\*Policy All Company\*\*\*

\*\*Policy All Company\*\*

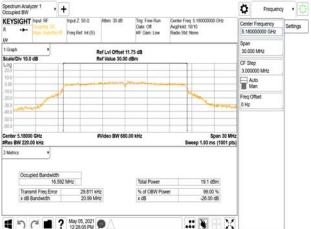
\*\*Poli

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 www.sgs.com.tw

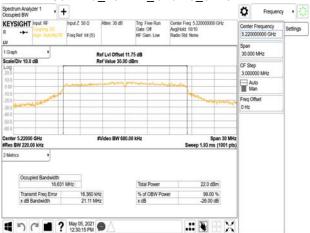


Page: 39 of 212

## 802.11a\_20MHz\_Chain0\_5180MHz



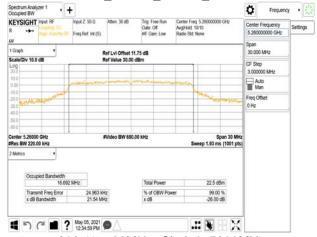
#### 802.11a 20MHz Chain0 5220MHz



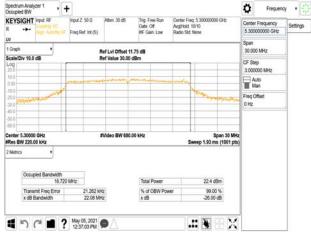
802.11a\_20MHz\_Chain0\_5240MHz



802.11a\_20MHz\_Chain0\_5260MHz



802.11a\_20MHz\_Chain0\_5300MHz



802.11a\_20MHz\_Chain0\_5320MHz



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

解邦另有説明・比較告結果権對測試之棲品頁頁,同時比較品僅保留90大。本報告未經本公司書圖計可,不可能份復製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS\*\*\* Taken 1 to the produced of the content of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\*

\*\*Policy All Company\*\*\*

\*\*Policy All Company\*\*\*

\*\*Policy All Company\*\*\*

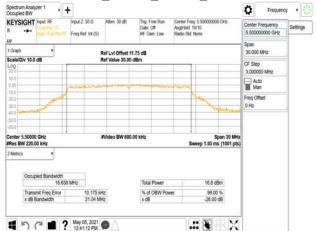
\*\*Policy All Company\*\*

\*\*Poli

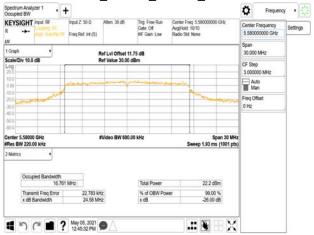


Page: 40 of 212

## 802.11a 20MHz Chain0 5500MHz



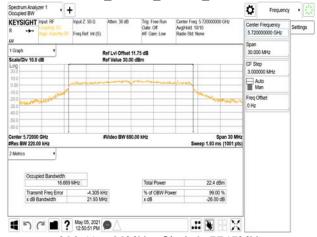
802.11a 20MHz Chain0 5580MHz



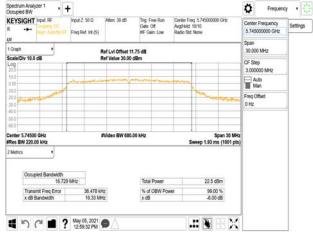
802.11a\_20MHz\_Chain0\_5700MHz



802.11a 20MHz Chain0 5720MHz



802.11a 20MHz Chain0 5745MHz



802.11a\_20MHz\_Chain0\_5785MHz



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

解邦另有説明・比較告結果権對測試之棲品頁頁,同時比較品僅保留90大。本報告未經本公司書圖計可,不可能份復製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS\*\*\* Taken 1 to the produced of the content of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\*

\*\*Policy All Company\*\*\*

\*\*Policy All Company\*\*\*

\*\*Policy All Company\*\*\*

\*\*Policy All Company\*\*

\*\*Poli

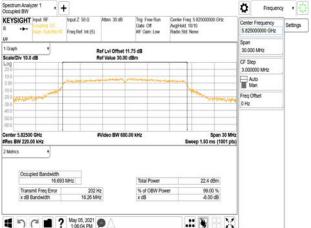
SGS Taiwan Ltd.

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

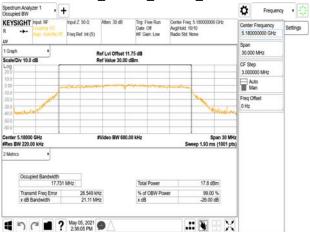


Page: 41 of 212

# 802.11a 20MHz Chain0 5825MHz



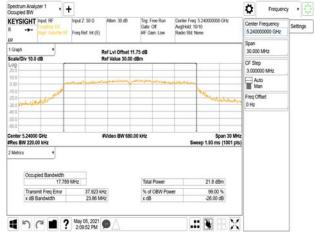
802.11n 20MHz Chain0 5180MHz



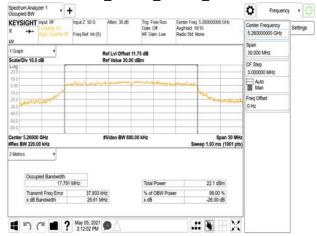
802.11n\_20MHz\_Chain0\_5220MHz



802.11n 20MHz Chain0 5240MHz



802.11n 20MHz Chain0 5260MHz



802.11n\_20MHz\_Chain0\_5300MHz



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

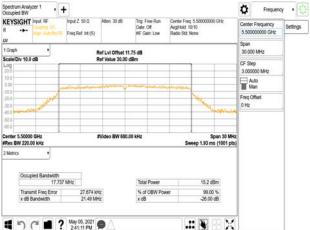


Page: 42 of 212

## 802.11n 20MHz Chain0 5320MHz



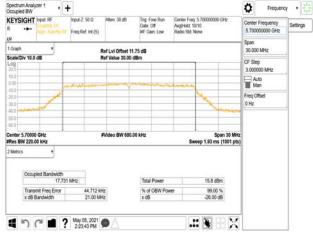
802.11n 20MHz Chain0 5500MHz



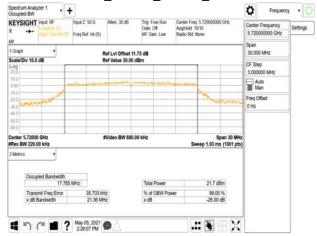
802.11n\_20MHz\_Chain0\_5580MHz



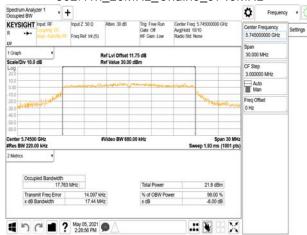
802.11n 20MHz Chain0 5700MHz



802.11n 20MHz Chain0 5720MHz



802.11n\_20MHz\_Chain0\_5745MHz

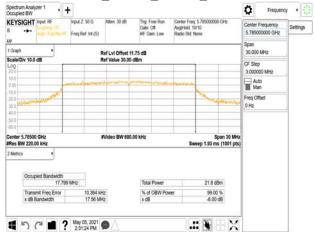


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page: 43 of 212

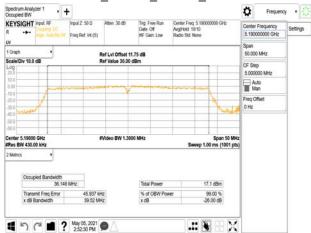
## 802.11n 20MHz Chain0 5785MHz



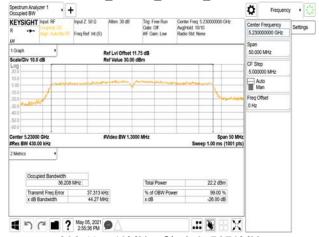
802.11n 20MHz Chain0 5825MHz



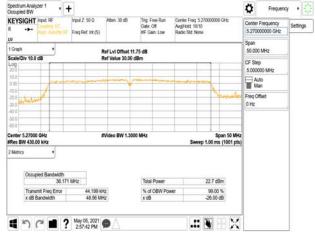
802.11n\_40MHz\_Chain0\_5190MHz



802.11n 40MHz Chain0 5230MHz



802.11n 40MHz Chain0 5270MHz



802.11n\_40MHz\_Chain0\_5310MHz

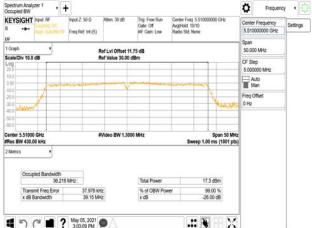


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

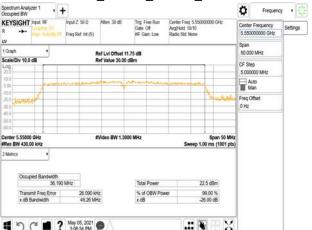


Page: 44 of 212

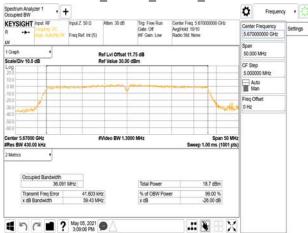
## 802.11n 40MHz Chain0 5510MHz



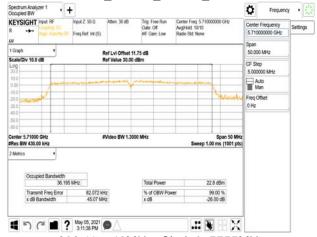
802.11n 40MHz Chain0 5550MHz



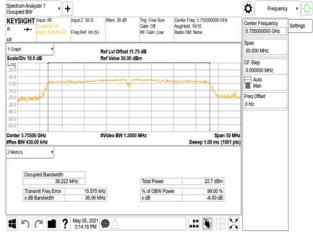
802.11n\_40MHz\_Chain0\_5670MHz



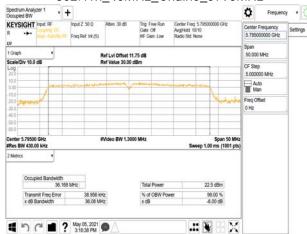
802.11n 40MHz Chain0 5710MHz



802.11n 40MHz Chain0 5755MHz



802.11n\_40MHz\_Chain0\_5795MHz



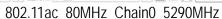
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

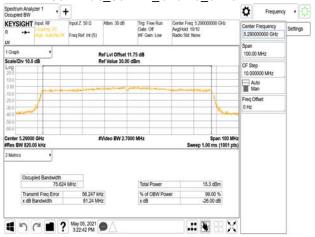


Page: 45 of 212

# 802.11ac 80MHz Chain0 5210MHz

#### Frequency • KEYSIGHT Input RF 100.00 MHz Ref Lvi Offset 11.75 dB Ref Value 30.00 dBm Scale/Div 10.0 dB CF Step 10.000000 MHz Auto Man Freq Offset 0 Hz Center 5.21000 GHz #Res BW 820.00 kHz #Video BW 2.7000 MHz Occupied Bandwidth 75.425 MHz Total Power 14.5 dBm Transmit Freq Error x dB Bandwidth % of OBW Power x dB ■ 9 C ■ ? May 05, 2021 ● .: N - X

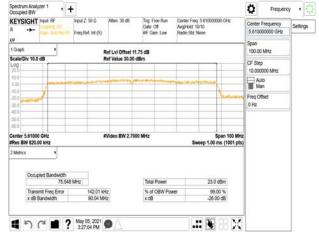




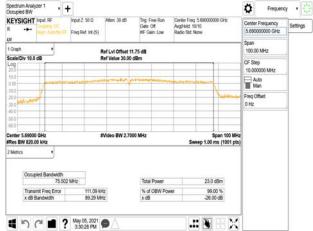
802.11ac\_80MHz\_Chain0\_5530MHz



802.11ac 80MHz Chain0 5610MHz



802.11ac 80MHz Chain0 5690MHz



802.11ac\_80MHz\_Chain0\_5775MHz



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



Page: 46 of 212

## MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

#### Standard Applicable 9.1

#### **FCC**

			LIMIT					
Band EUT CATEGORY		EUT ATEGORY	Conducted Output Power EIRP		TPC	Antenna Directional Gain Requirements		
		Fixed point-to-point	1 Watt(30dBm)	Not required	Not required	23dBi		
U-NII-1		Out door AP	1 Watt(30dBm)	Elevation angle above 30 degrees 125mW (21dBm)	Not required	6dBi		
	$\boxtimes$	Other	250mW(23.98dBm)	Not required	Not required	6dBi		
U-NII-2A	$\boxtimes$	Other	250mW(23.98dBm) or 11dBm+10 log B	Not required	When EIRP >500mW	6dBi		
U-NII-2C	$\boxtimes$	Other	250mW(23.98dBm) or 11dBm+10 log B	Not required	At least 6dB below EIRP 1W (30dBm)	6dBi		
	$\boxtimes$	Other	1 Watt(30dBm)	Not required	Not required	6dBi		
U-NII-3		Fixed point-to-point	1 Watt(30dBm)	Not required	Not required	Not required		

If transmitting antennas of directional gain greater than the antenna requirements column, the Maximum transmit power shall be reduced by the amount in dB that the direction-al gain of the antenna.

#### **ISED**

FREQUENCY	ENCY Limits of RSS-247 6.2.1~6.2.4				
BAND (MHz)	EIRP	Conducted Output Power	TPC		
5150~5250	200 mW or 10 + 10 log <sub>10</sub> B dBm	N/A		Vehicle use, at least 3dB be- low 30mW EIRP	
5250~5350	1.0 W or 250 mW or		Vehicle use, at least 3dB below 30mW EIRP or		
3230*3330	17 + 10 log <sub>10</sub> B dBm			EIRP >500mW, at least 6dB below 1W EIRP	
5470-5600 and 5650-5725	1.0 W or 17 + 10 log <sub>10</sub> B dBm	250 mW or 11 +10 log <sub>10</sub> B		EIRP >500mW, at least 6dB below 1W EIRP	
5725~5850	N/A	1 W	N/A		

For equipment operating in the band **5725-5850** MHz, If transmitting antennas of directional gain greater than 6 dBi are used, the Maximum transmit power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

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

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

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

\*\*SGS\_Tailors\*\* Index 1.0 \*\*Line 1.0

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 www.sgs.com.tw



Page: 47 of 212

#### 9.2 **Measurement Procedure**

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

#### Measurement Equipment Used 9.3

Conducted Emission Test Site: Conducted 2						
EQUIPMENT TYPE MFR MODEL SERIAL NUM- LAST CAL. CAL DU						
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	

#### 9.4 **Test Set-up**



#### 9.5 **Measurement Result**

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power limits are the lesser of 250 mW (23.98dBm) or 11 dBm + 10 log B and EIRP limits are the lesser of 1.0W (30dBm) or 17 + 10 log B.

- Where B is the 26 dB emission bandwidth in megahertz for FCC compliance.
- 2 And B is the 99% for ISED compliance.

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

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

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

\*\*SGS\_Tailors\*\* Index the Access the Company and the Company 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 t (886-2) 2299-3279 f (886-2) 2298-0488 www.sgs.com.tw



Page: 48 of 212

#### **Conducted output power (FCC)** 9.5.1

## 802.11a Ch0

002.114_0			TOTAL	TOTAL	REQUIRED	
СН	Frequency	Data	POWER	POWER	LIMIT	RESULT
СП	(MHz)	Rate	_	_		KESULI
	` ,		(dBm)	(mW)	(dBm)	
36	5180	6	14.39	27.465	23.98	PASS
44	5220	6	17.40	54.925	23.98	PASS
48	5240	6	17.41	55.052	23.98	PASS
52	5260	6	17.84	60.782	23.98	PASS
60	5300	6	17.93	62.055	23.98	PASS
64	5320	6	15.44	34.976	23.98	PASS
100	5500	6	12.43	17.489	23.98	PASS
116	5580	6	17.69	58.718	23.98	PASS
140	5700	6	13.57	22.739	23.98	PASS
144	5720(U-NII 2C)	6	16.10	40.69	22.95	PASS
144	5720 (U-NII 3)	6	11.69	14.74	30	PASS
149	5745	6	17.54	56.725	30	PASS
157	5785	6	17.47	55.818	30	PASS
165	5825	6	17.83	60.642	30	PASS

#### 802.11n HT20 Ch0

СН	Frequency (MHz)	Data Rate	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
36	5180	MCS0	12.94	19.657	23.98	PASS
44	5220	MCS0	17.07	50.876	23.98	PASS
48	5240	MCS0	17.40	54.893	23.98	PASS
52	5260	MCS0	17.53	56.561	23.98	PASS
60	5300	MCS0	17.63	57.878	23.98	PASS
64	5320	MCS0	14.20	26.273	23.98	PASS
100	5500	MCS0	11.04	12.692	23.98	PASS
116	5580	MCS0	17.48	55.914	23.98	PASS
140	5700	MCS0	11.19	13.138	23.98	PASS
144	5720(U-NII 2C)	MCS0	15.66	36.81	23.98	PASS
144	5720 (U-NII 3)	MCS0	11.59	14.42	30	PASS
149	5745	MCS0	17.35	54.265	30	PASS
157	5785	MCS0	17.16	51.942	30	PASS
165	5825	MCS0	17.33	54.015	30	PASS

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

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance. 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 f (886-2) 2298-0488



Page: 49 of 212

## 802.11n HT40 Ch0

СН	Frequency (MHz)	Data Rate	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
38	5190	MCS0	12.09	16.199	23.98	PASS
46	5230	MCS0	17.31	53.887	23.98	PASS
54	5270	MCS0	17.81	60.462	23.98	PASS
62	5310	MCS0	10.93	12.402	23.98	PASS
102	5510	MCS0	12.50	17.802	23.98	PASS
110	5550	MCS0	17.56	57.080	23.98	PASS
134	5670	MCS0	13.35	21.651	23.98	PASS
142	5710(U-NII 2C)	MCS0	16.64	46.15	23.98	PASS
142	5710 (U-NII 3)	MCS0	9.89	9.75	30	PASS
151	5755	MCS0	17.78	60.046	30	PASS
159	5795	MCS0	17.85	61.021	30	PASS

## 802.11ac VHT80 Ch0

СН	Frequency (MHz)	Data Rate	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
42	5210	MCS0	9.34	8.594	23.98	PASS
58	5290	MCS0	10.30	10.720	23.98	PASS
106	5530	MCS0	9.55	9.020	23.98	PASS
122	5610	MCS0	17.69	58.774	23.98	PASS
138	5690(U-NII 2C)	MCS0	17.09	51.13	23.98	PASS
138	5690 (U-NII 3)	MCS0	8.26	6.70	30	PASS
155	5775	MCS0	17.52	56.518	30	PASS

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



Page: 50 of 212

#### 9.5.2 **ISED EIRP**

802.11a Ch0

<u> </u>	1110						
СН	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	REQUIRED LIMIT (dBm)	RESULT
36	5180	14.39	2.19	16.58	45.475	22.2	PASS
44	5220	17.40	2.19	19.59	90.944	22.21	PASS
48	5240	17.41	2.19	19.60	91.154	22.23	PASS
52	5260	17.84	1.97	19.81	95.670	22.23	PASS
60	5300	17.93	1.97	19.90	97.673	22.23	PASS
64	5320	15.44	1.97	17.41	55.052	22.21	PASS
100	5500	12.43	0.13	12.56	18.021	22.21	PASS
116	5580	17.69	0.13	17.82	60.503	22.24	PASS
140	5700	13.57	0.13	13.70	23.430	22.2	PASS

802.11n HT20 Ch0

СН	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	REQUIRED LIMIT (dBm)	RESULT
36	5180	12.94	2.19	15.13	32.547	22.49	PASS
44	5220	17.07	2.19	19.26	84.240	22.51	PASS
48	5240	17.40	2.19	19.59	90.890	22.5	PASS
52	5260	17.53	1.97	19.50	89.026	22.5	PASS
60	5300	17.63	1.97	19.60	91.100	22.51	PASS
64	5320	14.20	1.97	16.17	41.354	22.49	PASS
100	5500	11.04	0.13	11.17	13.077	22.49	PASS
116	5580	17.48	0.13	17.61	57.613	22.5	PASS
140	5700	11.19	0.13	11.32	13.537	22.49	PASS

802.11n\_HT40\_Ch0

СН	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	REQUIRED LIMIT (dBm)	RESULT
38	5190	12.09	2.19	14.28	26.821	23.01	PASS
46	5230	17.31	2.19	19.50	89.224	23.01	PASS
54	5270	17.81	1.97	19.78	95.166	25.58	PASS
62	5310	10.93	1.97	12.90	19.520	25.57	PASS
102	5510	12.50	0.13	12.63	18.343	25.59	PASS
110	5550	17.56	0.13	17.69	58.814	25.59	PASS
134	5670	13.35	0.13	13.48	22.309	25.57	PASS

802.11ac\_VHT80\_Ch0

СН	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	REQUIRED LIMIT (dBm)	RESULT
42	5210	9.34	2.19	11.53	14.229	23.01	PASS
58	5290	10.30	1.97	12.27	16.873	28.79	PASS
106	5530	9.55	0.13	9.68	9.294	28.78	PASS

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

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

\*\*SCS Taiwan Left\*\*

\*\*No 134 \*\*

\*\*\*

\*\*No 134 \*\*

\*\*

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 t (886-2) 2299-3279



Page: 51 of 212

#### 9.5.3 **Conducted output power (ISED)**

#### 802.11a Ch0

СН	Frequency (MHz)	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
52	5260	17.84	60.782	23.23	PASS
60	5300	17.93	62.055	23.23	PASS
64	5320	15.44	34.976	23.21	PASS
100	5500	12.43	17.489	23.21	PASS
116	5580	17.69	58.718	23.24	PASS
140	5700	13.57	22.739	23.20	PASS
144	5720(U-NII 2C)	16.10	40.693	22.25	PASS
144	5720 (U-NII 3)	11.69	14.741	30	PASS
149	5745	17.54	56.725	30	PASS
157	5785	17.47	55.818	30	PASS
165	5825	17.83	60.642	30	PASS

## 802.11n\_HT20\_Ch0

СН	Frequency (MHz)	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
52	5260	17.53	56.561	23.5	PASS
60	5300	17.63	57.878	23.51	PASS
64	5320	14.20	26.273	23.49	PASS
100	5500	11.04	12.692	23.49	PASS
116	5580	17.48	55.914	23.5	PASS
140	5700	11.19	13.138	23.49	PASS
144	5720(U-NII 2C)	15.66	36.810	22.43	PASS
144	5720 (U-NII 3)	11.59	14.419	30	PASS
149	5745	17.35	54.265	30	PASS
157	5785	17.16	51.942	30	PASS
165	5825	17.33	54.015	30	PASS

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

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

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 www.sgs.com.tw



Page: 52 of 212

## 802.11n\_HT40\_Ch0

СН	Frequency (MHz)	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
54	5270	17.81	60.462	23.98	PASS
62	5310	10.93	12.402	23.98	PASS
102	5510	12.50	17.802	23.98	PASS
110	5550	17.56	57.080	23.98	PASS
134	5670	13.35	21.651	23.98	PASS
142	5710(U-NII 2C)	16.64	46.154	23.98	PASS
142	5710 (U-NII 3)	9.89	9.755	30	PASS
151	5755	17.78	60.046	30	PASS
159	5795	17.85	61.021	30	PASS

## 802.11ac VHT80 Ch0

	<u></u>				
СН	Frequency (MHz)	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
		(ubiii)	(11144)		
58	5290	10.30	10.720	23.98	PASS
106	5530	9.55	9.020	23.98	PASS
122	5610	17.69	58.774	23.98	PASS
138	5690(U-NII 2C)	17.09	51.134	23.98	PASS
138	5690 (U-NII 3)	8.26	6.700	30	PASS
155	5775	17.52	56.518	30	PASS

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

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

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

\*\*SCS Tailwan Ltd.\*\* No 134 We King Part Michael Parts Willy District. No West Tailwan Ltd.\*\*



Page: 53 of 212

## 10 MAXIMUM POWER SPECTRAL DENSITY

#### Standard Applicable 10.1

#### **FCC**

OPERZTION Band	EUT CATEGORY		LIMIT
		Access Point (Master device )	17dBm/ MHz
U-NII-1		Fixed point-to-point Access Ponit	Trabili, Wil iz
	$\boxtimes$	Mobile and portable client device	11dBm/ MHz
U-NII-2A	$\boxtimes$		11dBm/ MHz
U-NII-2C			11dBm/ MHz
U-NII-3	$\boxtimes$		30dBm/ 500kHz

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

#### **ISED**

OPERZTION FREQUENCY BAND	LIMIT
5150~5250 MHz	EIRP spectral density 10 dBm / MHz
5250~5350 MHz	11dBm / MHz
5470-5600 MHz and 5650-5725 MHz	11dBm / MHz
5725~5850 MHz	30dBm / 500 kHz

For equipment operating in the band 5725-5850 MHz, If transmitting antennas of directional gain greater than 6 dBi are used, the Maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

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

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

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

\*\*SGS\_Tailors\*\* Index the Access the Company and the Company

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



Page: 54 of 212

#### 10.2 Measurement Procedure

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

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

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

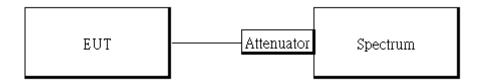
Set RBW= approximately 1% of EBW. VBW≥ 3RBW, where span is enough to capture the entire bandwidth, Sweep time = Auto, detector = RMS or sample, traces 100 sweeps of video averaging.

- 5. User the cursor on spectrum to peak search the highest level of trace
- 6. Record the max. reading and add 10 log(1/duty cycle).
- 7. Repeat above procedures until all default test channel (low, middle, and high) was complete.

#### 10.3 Measurement Equipment Used

Conducted Emission Test Site: Conducted 2						
EQUIPMENT TYPE	EQUIPMENT TYPE MFR MODEL SERIAL NUMBER BER LAST CAL. CAL DUI					
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	

#### 10.4 **Test Set-up**



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

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

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 www.sgs.com.tw



Page: 55 of 212

#### 10.5 **Measurement Result**

#### 10.5.1 Power spectral density

	POWER DENSITY 802.11a MODE					
Frequency (MHz)	ch0 meas PSD (dBm/MHz)	Maxmum Corr'd PSD(dBm/MHz)		Limit	Margin (dB)	
5180	4.662	4.	66	11.00 dBm/MHz	-6.34	
5220	7.435	7.	44	11.00 dBm/MHz	-3.57	
5240	7.302	7.	30	11.00 dBm/MHz	-3.70	
5260	7.631	7.	63	11.00 dBm/MHz	-3.37	
5300	7.645	7.	65	11.00 dBm/MHz	-3.36	
5320	5.241	5.	24	11.00 dBm/MHz	-5.76	
5500	2.355	2.	36	11.00 dBm/MHz	-8.65	
5580	7.665	7.	67	11.00 dBm/MHz	-3.34	
5700	4.070	4.	07	11.00 dBm/MHz	-6.93	
5720 (U-NII 2C)	7.629	7.	63	11.00 dBm/MHz	-3.37	
Frequency (MHz)	ch0 meas PSD (dBm/300kHz)	10log (500kHz/RBW) Factor(dB)	Maxmum Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)	
5720 (U-NII 3)	-0.161	2.22	2.06	30.00 dBm/500kHz	-27.94	
5745	2.933	2.22	5.15	30.00 dBm/500kHz	-24.85	
5785	2.428	2.22	4.65	30.00 dBm/500kHz	-25.35	
5825	2.682	2.22	4.90	30.00 dBm/500kHz	-25.10	

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

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

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

\*\*SCS Tailwan Ltd.\*\* No 134 We King Part Michael Parts Willy District. No West Tailwan 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 www.sgs.com.tw



Page: 56 of 212

POWER DENSITY 802.11n HT20 MODE					
Frequency (MHz)	ch0 meas PSD (dBm/MHz)	Maxmum Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5180	2.750	3.	07	11.00 dBm/MHz	-7.93
5220	6.425	6.	75	11.00 dBm/MHz	-4.26
5240	6.691	7.	01	11.00 dBm/MHz	-3.99
5260	6.914	7.	23	11.00 dBm/MHz	-3.77
5300	7.049	7.	37	11.00 dBm/MHz	-3.63
5320	2.982	3.	30	11.00 dBm/MHz	-7.70
5500	0.217	0.	54	11.00 dBm/MHz	-10.46
5580	6.953	7.	27	11.00 dBm/MHz	-3.73
5700	0.986	1.	31	11.00 dBm/MHz	-9.69
5720 (U-NII 2C)	6.676	7.	00	11.00 dBm/MHz	-4.00
Frequency (MHz)	ch0 meas PSD (dBm/300kHz)	10log (500kHz/RBW) Factor(dB)	Maxmum Corr'd PSD(dBm/500kHz )	Limit	Margin (dB)
5720 (U-NII 3)	-0.199	2.22	2.34	30.00 dBm/500kHz	-27.66
5745	2.181	2.22	4.72	30.00 dBm/500kHz	-25.28
5785	2.542	2.22	5.08	30.00 dBm/500kHz	-24.92
5825	1.622	2.22	4.16	30.00 dBm/500kHz	-25.84

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

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

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

\*\*SCS Tailwan Ltd.\*\* No 134 We King Part Michael Parts Willy District. No West Tailwan 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 www.sgs.com.tw



Page: 57 of 212

	POWER DENSITY 802.11n HT40 MODE					
Frequency (MHz)	ch0 meas PSD (dBm/MHz)	Maxmum Corr'd PSD(dBm/MHz)		Limit	Margin (dB)	
5190	-1.343	-0.	74	11.00 dBm/MHz	-11.74	
5230	3.660	4	26	11.00 dBm/MHz	-6.74	
5270	4.425	5.	03	11.00 dBm/MHz	-5.98	
5310	-3.401	-2.	80	11.00 dBm/MHz	-13.80	
5510	-1.294	-0.	69	11.00 dBm/MHz	-11.69	
5550	3.596	4	20	11.00 dBm/MHz	-6.80	
5670	-0.416	0.	18	11.00 dBm/MHz	-10.82	
5710 (U-NII 2C)	3.173	3.	77	11.00 dBm/MHz	-7.23	
Frequency (MHz)	ch0 meas PSD (dBm/300kHz)	10log (500kHz/RBW) Factor(dB)	Maxmum Corr'd PSD(dBm/500kHz )	Limit	Margin (dB)	
5710 (U-NII 3)	-4.067	2.22	-1.25	30.00 dBm/500kHz	-31.25	
5755	-1.409	2.22	1.41	30.00 dBm/500kHz	-28.59	
5795	-0.686	2.22	2.13	30.00 dBm/500kHz	-27.87	

POWER DENSITY 802.11ac VHT80 MODE					
Frequency (MHz)	ch0 meas PSD (dBm/MHz)	Maxmum Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5210	-7.664	-6.	47	11.00 dBm/MHz	-17.47
5290	-7.180	-5.	99	11.00 dBm/MHz	-16.99
5530	-7.872	-6.	68	11.00 dBm/MHz	-17.68
5610	0.796	1.9	99	11.00 dBm/MHz	-9.01
5690 (U-NII 2C)	0.315	1.5	51	11.00 dBm/MHz	-9.50
Frequency (MHz)	ch0 meas PSD (dBm/300kHz)	10log (500kHz/RBW) Factor(dB)	Maxmum Corr'd PSD(dBm/500kHz )	Limit	Margin (dB)
5690 (U-NII 3)	-7.289	2.22	-3.88	30.00 dBm/500kHz	-33.88
5775	-4.645	2.22	-1.24	30.00 dBm/500kHz	-31.24

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

\*\*SCS Tailwan Ltd.\*\* No 134 We King Part Michael Parts Willy District. No West Tailwan 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



Page: 58 of 212

#### 10.5.2 EIRP spectral density (ISED)

EIRP spectral density 802.11a MODE					
Freq. (MHz)	PSD (dBm)	Ant. Gain (dBi)	EIRP PSD (dBm)	Limit (dBm)	Margin (dB)
5180	4.66	2.19	6.85	10	-3.15
5220	7.44	2.19	9.63	10	-0.38
5240	7.30	2.19	9.49	10	-0.51

EIRP spectral density 802.11n HT20 MODE					
Freq. (MHz)	PSD (dBm)	Ant. Gain (dBi)	EIRP SD (dBm)	Limit (dBm)	Margin (dB)
5180	3.07	2.19	5.26	10	-4.74
5220	6.75	2.19	8.94	10	-1.07
5240	7.01	2.19	9.20	10	-0.80

EIRP spectral density 802.11n HT40 MODE					
Freq. (MHz)	PSD (dBm)	Ant. Gain (dBi)	EIRP SD (dBm)	Limit (dBm)	Margin (dB)
5190	-0.74	2.19	1.45	10	-8.55
5230	4.26	2.19	6.45	10	-3.55

EIRP spectral density 802.11ac VHT80 MODE					
Freq. (MHz)	PSD (dBm)	Ant. Gain (dBi)	EIRP SD (dBm)	Limit (dBm)	Margin (dB)
5210	-6.47	2.19	-4.28	10	-14.28

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 f (886-2) 2298-0488

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

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

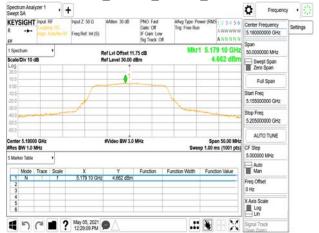
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions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

\*\*SCS Tailwan Ltd.\*\* No 134 We King Part Michael Parts Willy District. No West Tailwan Ltd.\*\*



Page: 59 of 212

## 802.11a\_20MHz\_Chain0\_5180MHz



802.11a 20MHz Chain0 5220MHz



802.11a\_20MHz\_Chain0\_5240MHz



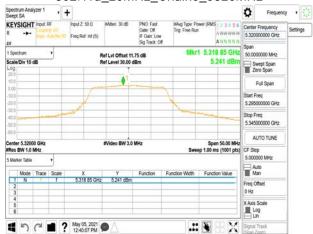
802.11a 20MHz Chain0 5260MHz



802.11a 20MHz Chain0 5300MHz



802.11a\_20MHz\_Chain0\_5320MHz



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

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

SGS Taiwan Ltd. 台灣檢驗科技股份有限公司 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 www.sgs.com.tw



Page: 60 of 212

#### 802.11a\_20MHz\_Chain0\_5500MHz Ö Frequency • KEYSIGHT Input RF Center Frequency 5.500000000 GHz Scale/Div 10 dB 2.355 d Swept Span Zero Span Full Span Start Freq 5.475000000 GHz Stop Freq 5.525000000 GHz Center 5.50000 GH #Res BW 1.0 MHz Auto Man 5.499 25 GHz 2.355 dBm Freq Offset 0 Hz X Axis Scale 1 5 C 1 ? May 05, 2021 .: 😵 802.11a 20MHz Chain0 5580MHz ٥ KEYSIGHT Input RF





802.11a\_20MHz\_Chain0\_5720MHz\_UNII 2C



802.11a 20MHz Chain0 5720MHz UNII 3



802.11a\_20MHz\_Chain0\_5745MHz



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

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

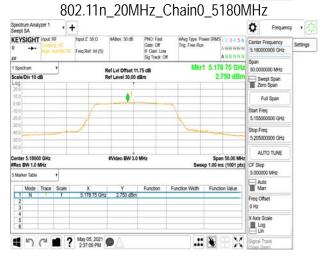
\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

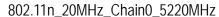


Page: 61 of 212

#### 802.11a\_20MHz\_Chain0\_5785MHz ٥ Frequency KEYSIGHT Input RF Center Frequency 5.785000000 GHz Scale/Div 10 dB 2.428 d Swept Span Zero Span Full Span Start Freq 5.760000000 GHz Center 5.78500 GHz #Res BW 300 kHz Auto Man 5.785 80 GHz 2.428 dBm Freq Offset 0 Hz X Axis Scale 1 5 C 1 ? May 05, 2021 .: 😵 802.11a 20MHz Chain0 5825MHz ٥ KEYSIGHT Input RF





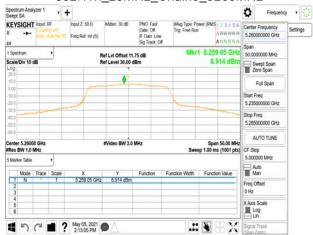




802.11n 20MHz Chain0 5240MHz



802.11n\_20MHz\_Chain0\_5260MHz



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

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

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

SGS Taiwan Ltd. 台灣檢驗科技股份有限公司 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 www.sgs.com.tw



Page: 62 of 212

#### 802.11n 20MHz Chain0 5300MHz 802.11n 20MHz Chain0 5580MHz ٥ Frequency Ö Frequency • KEYSIGHT Input RF KEYSIGHT Input R Center Frequency 5.580000000 GHz Center Frequency 5.300000000 GHz 50,0000000 MHz Scale/Div 10 dB 7.049 d Scale/Div 10 dB 6.953 dl Swept Span Zero Span Swept Span Zero Span Full Span Full Span Start Freq 5.275000000 GHz 5.555000000 GHz Stop Freq 5.325000000 GHz Center 5.30000 GH #Res BW 1.0 MHz PRes BW 1.0 MHz 5.000000 MH Auto Man Auto Man 5.301 10 GHz 7.049 dBm 5.581 40 GHz 6.953 dBm Freq Offset 0 Hz Freq Offset 0 Hz X Axis Scale X Axis Scale Log Lin X 1 5 C 1 ? May 05, 2021 .: 😵 ■ ? May 05, 2021 ● .: 🔻 802.11n 20MHz Chain0 5320MHz 802.11n 20MHz Chain0 5700MHz ٥ ٥ KEYSIGHT Input RF KEYSIGHT Input RF Freq Ref. Int (S) 1 Spectrum Scale/Div 10 dB 5,319 00 GH Ref Lvi Offset 11.75 dB Ref Level 30.00 dBm 50.0000000 MHz Ref Lvi Offset 11.75 dB Ref Level 30.00 dBm 50.0000000 MHz Scale/Div 10 dB 2.982 dl 0.986 df Swept Span Zero Span Swept Span Zero Span 5.295000000 GHz 5.675000000 GHz Stop Freq 5.345000000 GHz 5.725000000 GHz AUTO TUNE AUTO TUNE 5.319 00 GHz 2.982 dBm 5.699 40 GHz 0.9857 dBm Freq Offse 0 Hz X Axis Scale X Axis Scale Log HX 1 9 P 1 9 May 05, 2021 .: 🗑 🖹 X 1 5 C 1 ? May 05, 2021 .: 😵 802.11n\_20MHz\_Chain0\_5500MHz 802.11n\_20MHz\_Chain0\_5720MHz\_UNII 2C ٥ ٥ KEYSIGHT Input RF KEYSIGHT Input RF Settings Mkr1 5.498 95 GI kr1 5 720 65 GH Ref Lvi Offset 11.75 dB Ref Level 30.00 dBm Ref Lvi Offset 11.75 dB Ref Level 30.00 dBm Swept Span Zero Span Swept Span Zero Span Full Span Full Span Stop Freq 5.745000000 GHz Stop Freq 5.525000000 GHz AUTO TUNE AUTO TUNE Center 5.50000 GH #Res BW 1.0 MHz pts) CF Step 5 0000000 MH Auto Man Auto Man 5.720 65 GHz 6.676 dBn 5.498 95 GHz 0.2169 dBm Freq Offset Freq Offset

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

Log

.:: 🗑 🖹 💥

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

1 5 C 1 ? May 05, 2021

4 5 C . May 05, 2021

Log

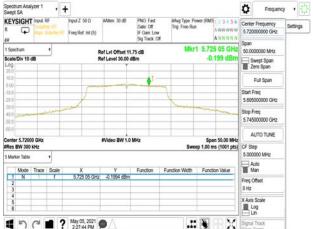
X

.:: 🔖



Page: 63 of 212

## 802.11n\_20MHz\_Chain0\_5720MHz\_UNII 3



#### 802.11n 20MHz Chain0 5745MHz



802.11n\_20MHz\_Chain0\_5785MHz



802.11n 20MHz Chain0 5825MHz



802.11n 40MHz Chain0 5190MHz



802.11n\_40MHz\_Chain0\_5230MHz



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

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I



Page: 64 of 212

#### 802.11n 40MHz Chain0 5270MHz 802.11n 40MHz Chain0 5550MHz ٥ Frequency • Ö Frequency • KEYSIGHT Input RF KEYSIGHT Input R Center Frequency 5.270000000 GHz 5.268 3 GHz 5.552 2 GHz 100.000000 MHz 100.000000 MHz Scale/Div 10 dB 4.425 d Scale/Div 10 dB 3.596 d Swept Span Zero Span Swept Span Zero Span Full Span Full Span Start Freq 5.220000000 GHz 5 500000000 GHz Stop Freq 5.320000000 GHz Center 5.27000 GHz #Res BW 1.0 MHz PRes BW 1.0 MHz 10.000000 MH Auto Man Auto Man 5.268 3 GHz 4.425 dBm 5.552 2 GHz 3.596 dBm Freq Offset 0 Hz Freq Offset 0 Hz X Axis Scale X Axis Scale Log Lin X 1 5 C 1 ? May 05, 2021 .: 😵 ■ ? May 05, 2021 ● .: 🔻 802.11n 40MHz Chain0 5310MHz 802.11n 40MHz Chain0 5670MHz ٥ ٥ KEYSIGHT Input RF KEYSIGHT Input RF Freq Ref. Int (S) 1 Spectrum Scale/Div 10 dB 5,671 4 GHz 100.000000 MHz 100.000000 MHz Ref Lvi Offset 11.75 dB Ref Level 30.00 dBm Ref Lvi Offset 11.75 dB Ref Level 30.00 dBm Scale/Div 10 dB -0.416 di Swept Span Zero Span Swept Span Zero Span 5.260000000 GHz 5.620000000 GHz Stop Freq Stop Freq 5.360000000 GHz 5.720000000 GHz AUTO TUNE AUTO TUNE 5.313 2 GHz -3.401 dBm 5.671 4 GHz -0.4164 dBm Freq Offse 0 Hz Freq Offset 0 Hz X Axis Scale X Axis Scale Log HX 1 5 C 1 ? May 05, 2021 .: 🗑 🖁 💢 ■ ? May 05, 2021 ● .: 😵 802.11n\_40MHz\_Chain0\_5510MHz 802.11n\_40MHz\_Chain0\_5710MHz\_UNII 2C ٥ ٥ KEYSIGHT Input RF KEYSIGHT Input RF Settings ANNNI Span 100.000000 MHz r1 5 508 6 GH Mkr1 5.708 2 GHz Ref Lvi Offset 11.75 dB Ref Level 30.00 dBm Ref Lvi Offset 11.75 dB Ref Level 30.00 dBm Swept Spar Zero Span Swept Span Zero Span Full Span Full Span Start Freq 5.460000000 GHz Stop Freq 5.560000000 GHz Stop Freq 5.760000000 GHz AUTO TUNE AUTO TUNE pts) CF Step 10.000000 MHz Auto Man Auto Man 5.708 2 GHz 5.508 6 GHz Freq Offset Freq Offset

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

Log

.:: 🗑 🖹 💥

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

1 5 C 1 ? May 05, 2021

■ ? May 05, 2021 ●

Log

X



Frequency •

Center Frequency 5.210000000 GHz

120.000000 MHz

Swept Span Zero Span

12.000000 MHz

Auto Man

Freq Offset 0 Hz

٥

kr1 5 531 68 GH

.:: 🔖

Span 120.000000 MHz

Swept Spar Zero Span

Stop Freq 5.590000000 GHz AUTO TUNE

pts) CF Step 12 000000 MHz

Auto Man

Freq Offset

Log

X

Full Span

Full Span

5.215 16 GH

-7.664 di

Page: 65 of 212

#### 802.11n\_40MHz\_Chain0\_5710MHz\_UNII 3 802.11ac 80MHz Chain0 5210MHz ٥ KEYSIGHT Input RF KEYSIGHT Input R 9 5.726 5 GHz Scale/Div 10 dB Scale/Div 10 dB Swept Span Zero Span Full Span Start Freq 5.660000000 GHz Stop Freq 5.760000000 GHz Center 5.71000 GHz #Res BW 300 kHz PRes BW 1.0 MHz Auto Man 5.726 5 GHz 4.067 dBm 5.215 16 GHz -7.664 dBm Freq Offset 0 Hz X Axis Scale 1 5 C 1 ? May 05, 2021 .: 🔻 ■ ? May 05, 2021 ● 802.11n 40MHz Chain0 5755MHz ٥ KEYSIGHT Input RF KEYSIGHT Input RF Freq Ref. Int (S) 1 Spectrum Scale/Div 10 dB 1 5.754 1 GH Ref Lvi Offset 11.75 dB Ref Level 30.00 dBm 100.000000 MHz Scale/Div 10 dB Swept Span Zero Span 5.705000000 GHz Stop Freq 5.805000000 GHz AUTO TUNE 5 Marker Table 5.754 1 GHz -1.409 dBm Freq Offse 0 Hz X Axis Scale 1 5 C 1 ? May 05, 2021 .: 🗑 🖁 💢

X Axis Scale Log Lin X .: 🔻 802.11ac 80MHz Chain0 5290MHz ٥ 5.292 16 GH 120.000000 MHz Ref Lvi Offset 11.75 dB Ref Level 30.00 dBm -7.180 di Swept Span Zero Span 5.230000000 GHz Stop Freq 5.350000000 GHz AUTO TUNE 5.292 16 GHz -7.180 dBm Freq Offset 0 Hz X Axis Scale Log Lin ■ ? May 05, 2021 ● .: 😵 802.11ac\_80MHz\_Chain0\_5530MHz

Ref Lvi Offset 11.75 dB Ref Level 30.00 dBm

5.531 68 GHz

■ 9 C ■ ? May 05, 2021 ●

٥ KEYSIGHT Input RF Settings ANNNE kr1 5.796 0 GHz Ref Lvi Offset 11.75 dB Ref Level 30.00 dBm Swept Span Zero Span Full Span Stop Freq 5.845000000 GHz AUTO TUNE Auto Man 5.796 0 GHz -0.6859 dBn Freq Offset Log 1 5 C 1 ? May 05, 2021 .:: 🗑 🖹 💥

802.11n\_40MHz\_Chain0\_5795MHz

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

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

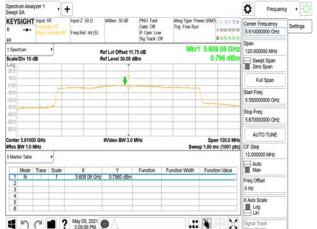
\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

KEYSIGHT Input RF



Page: 66 of 212

## 802.11ac\_80MHz\_Chain0\_5610MHz



## 802.11ac 80MHz Chain0 5690MHz UNII 2C



## 802.11ac\_80MHz\_Chain0\_5690MHz\_UNII 3



802.11ac 80MHz Chain0 5775MHz



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

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

台灣檢驗科技股份有限公司

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 www.sgs.com.tw



Page: 67 of 212

#### 11 UNDESIRABLE RADIATED EMISSION MEASUREMENT

## Standard Applicable

## 11.1.1 Band Edge

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

- 1. For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
- 2. For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

APPLICABLE TO	EIRP LIMIT	FIELD STRENGTH AT 3m
15.407(b)(1) RSS-247 §6.2.1.2		
15.407(b)(2) RSS-247 §6.2.2.2	PK: -27 (dBm/MHz)	PK: 68.3 (dBµV/m)
15.407(b)(3) RSS-247 §6.2.3.2		
	PK:-27 (dBm/MHz) *1	PK: 68.2(dBµV/m) *1
15.407(b)(4)(i)	PK:10 (dBm/MHz) *2	PK:105.2 (dBµV/m) *2
RSS-247 §6.2.4.2	PK:15.6 (dBm/MHz) *3	PK: 110.8(dBµV/m) *3
	PK:27 (dBm/MHz) *4	PK:122.2 (dBµV/m) *4

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

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

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

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

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

\*\*SGS\_Tailors\*\* Index the Access the Company and the Company

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 www.sgs.com.tw

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

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

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



Page: 68 of 212

## 11.1.2 Spurious Emission

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

the radiated emission limits specified as below table.						
Frequency (MHz)	Field strength (microvolts/meter)	Distance (meters)				
0.009-0.490	2400/F(KHz)	300				
0.490-1.705	24000/F(KHz)	30				
1.705-30	30	30				
30-88	100	3				
88-216	150	3				
216-960	200	3				
Above 960	500	3				

#### Note:

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



Page: 69 of 212

#### 11.2 **Measurement Equipment Used**

Radiated Emission Test Site: SAC 3					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUM- BER	LAST CAL.	CAL DUE.
Horn Antenna	Schwarzbeck	BBHA9170	184	12/11/2020	12/10/2021
Horn Antenna	Schwarzbeck	BBHA9120D	1441	10/16/2020	10/15/2021
Bi-log Antenna	SCHWAZBECK	VULB9168	378	08/06/2020	08/05/2021
Loop Antenna	ETS.LIND- GREN	6502	148045	10/19/2020	10/18/2021
EXA Spectrum Analyzer	KEYSIGHT	N9010B	MY60240503	12/11/2020	12/10/2021
EMI Test Receiver	R&S	ESCI 7	100759	07/13/2020	07/12/2021
Pre-Amplifier	HP	8449B	3008A00578	12/16/2020	12/15/2021
Pre-Amplifier	EMC Instru- ments	EMC184045B	980135	10/27/2020	10/26/2021
Pre-Amplifier	HP	8447D	2944A07676	12/16/2020	12/15/2021
Attenuator	Mini-Circuit	BW-S10W2+	4	12/16/2020	12/15/2021
Filter 5150-5350 MHz	Micro-Tronics	BRM50703	1	12/16/2020	12/15/2021
Filter 5470-5725 MHz	Micro-Tronics	BRM50704	1	12/16/2020	12/15/2021
Filter 5725-5875 MHz	Micro-Tronics	BRM50705	1	12/16/2020	12/15/2021
High Pass Filter	WI	WHKX7.0/18G- 8SS	45	12/16/2020	12/15/2021
Coaxial Cable	Huber Suhner	SUCOFLEX 102	MY2636/2	12/16/2020	12/15/2021
Coaxial Cable	Huber Suhner	SUCOFLEX 104	340057/4	12/16/2020	12/15/2021
Coaxial Cable	Huber Suhner	SUCOFLEX 104PEA	800052/2	12/16/2020	12/15/2021
Coaxial Cable	Huber Suhner	SUCOFLEX 102	MY2621/2	12/16/2020	12/15/2021
Coaxial Cable	Huber Suhner	SUCOFLEX 102	MY2617/2	12/16/2020	12/15/2021
Coaxial Cable	Huber Suhner	SUCOFLEX 102	MY2630/2	12/16/2020	12/15/2021
Coaxial Cable	Huber Suhner	SUCOFLEX 102	MY22962/2	12/16/2020	12/15/2021
Site Cal	SGS	SAC III chamber	N/A	01/01/2021	12/31/2021
Test Software	audix	e3	Ver. 6.11- 20180413	N.C.R	N.C.R

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

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

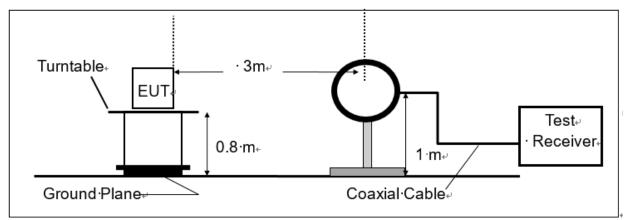
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號 www.sgs.com.tw



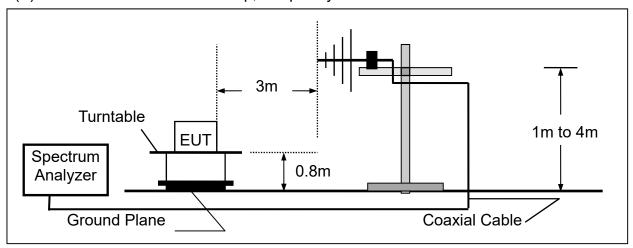
Page: 70 of 212

#### 11.3 Test SET-UP

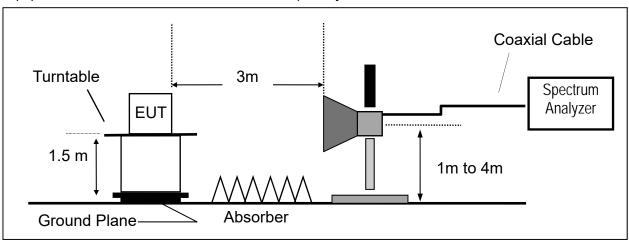
(A) Radiated Emission Test Set-UP Frequency Below 30MHz.



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



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



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

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

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

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



Page: 71 of 212

#### 11.4 **Measurement Procedure**

- 1. The EUT was placed on a turn table which is 0.8m above ground plane.
- The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules.
- The EUT was placed on a turn table with 0.8m for frequency< 1GHz and 1.5m for frequency> 1GHz above ground plane.
- The turn table shall rotate 360 degrees to determine the position of maximum emission level.
- EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emissions.
- Set the spectrum analyzer as RBW=120 kHz and VBW=300 kHz for Peak Detector (PK) and Quasi-peak (QP) at frequency below 1 GHz.
- At frequency above 1 GHz, Set the spectrum analyzer:
  - A. RBW=1 MHz, VBW=3 MHz for Peak Detector.
  - **B.** Set the spectrum analyzer as RBW=1 MHz, VBW=10 Hz (Duty cycle > 98%) or VBW ≥ 1/T (Duty cycle < 98%) for **Average** Detector.
- Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- **10.** Repeat above procedures until all frequency measured were complete.

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



Page: 72 of 212

#### 11.5 **Field Strength Calculation**

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

## FS = RA + AF + CL - AG

Where FS = Field Strength

CL = Cable Attenuation Factor (Cable Loss)

RA = Reading Amplitude

AG = Amplifier Gain

AF = Antenna Factor

The limit of the emission level is expressed in dBuV/m, which converts 20\*log(uV/m)

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

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

## Test Results of Radiated Spurious Emissions form 9 KHz to 30 MHz

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit per 15.31(o) & RSS-GEN §6.13.2 was not reported.

Pre-scanned was done at frequency 5.47 GHz and 5.85 GHz for bandedge measurement of straddle channels 138, 142 and 144 which was 20dB lower than the limit per 15.31(o) & RSS-GEN §6.13.2 was not reported.

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

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

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

\*\*SGS\_Tailors\*\* Index the Access the Company and the Company

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 t (886-2) 2299-3279 www.sgs.com.tw



Page: 73 of 212

## 11.7 **Radiated Spurious Emission Measurement Result**

## 11.7.1 **Below 1GHz Worst-Case Data:**

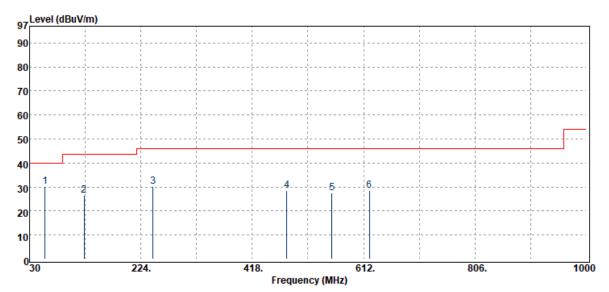
Report Number **Test Site** :SAC III Chamber :ER-2021-40063

**Test Date** :2021-04-23 **Operation Mode** :802.11a

**Test Frequency** :5220 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dΒμV	dB	dBμV/m	dBµV/m	dB
57.16	Peak	39.39	-9.02	30.37	40.00	-9.63
125.06	Peak	36.08	-9.47	26.61	43.50	-16.89
245.34	Peak	39.16	-8.96	30.20	46.00	-15.80
478.14	Peak	31.64	-3.14	28.50	46.00	-17.50
556.71	Peak	29.42	-1.91	27.51	46.00	-18.49
621.70	Peak	28.98	-0.37	28.61	46.00	-17.39

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

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

解邦另有説明・比較告結果権對測試之棲品頁頁,同時比較品僅保留90大。本報告未經本公司書圖計可,不可能份復製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS\*\*\* Taken 1 to the produced of the content of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\*\*

\*\*Policy All Company\*\*\*

\*\*Policy All Company\*\*\*

\*\*Policy All Company\*\*

\*\*Policy All

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 www.sgs.com.tw

SGS Taiwan Ltd.



Page: 74 of 212

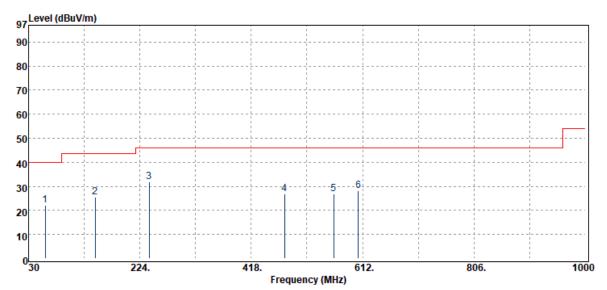
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** :802.11a **Test Date** :2021-04-23

**Test Frequency** :5220 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin 
MHz	PK/QP/AV	dΒμV	dB	dBµV/m	dBµV/m	dB
59.10	Peak	31.39	-9.27	22.12	40.00	-17.88
146.40	Peak	33.76	-8.10	25.66	43.50	-17.84
240.49	Peak	41.03	-9.04	31.99	46.00	-14.01
476.20	Peak	30.01	-3.11	26.90	46.00	-19.10
561.56	Peak	28.66	-1.74	26.92	46.00	-19.08
604.24	Peak	28.48	-0.20	28.28	46.00	-17.72

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

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



Page: 75 of 212

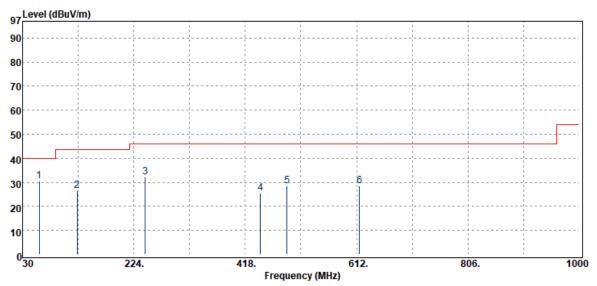
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** :802.11a **Test Date** :2021-04-23

**Test Frequency** :5300 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dΒμV	dB	dBµV/m	dBμV/m	dB
59.10	Peak	39.86	-9.27	30.59	40.00	-9.41
125.06	Peak	35.93	-9.47	26.46	43.50	-17.04
243.40	Peak	41.24	-9.00	32.24	46.00	-13.76
444.19	Peak	28.97	-3.44	25.53	46.00	-20.47
490.75	Peak	31.69	-3.15	28.54	46.00	-17.46
616.85	Peak	28.59	-0.13	28.46	46.00	-17.54

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

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

解邦另有説明・比較告結果権對測試之棲品頁頁,同時比較品僅保留90大。本報告未經本公司書圖計可,不可能份復製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS\*\*\* Taken 1 to the produced of the content of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\*\*

\*\*Policy All Company\*\*\*

\*\*Policy All Company\*\*\*

\*\*Policy All Company\*\*

\*\*Policy All

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 t (886-2) 2299-3279



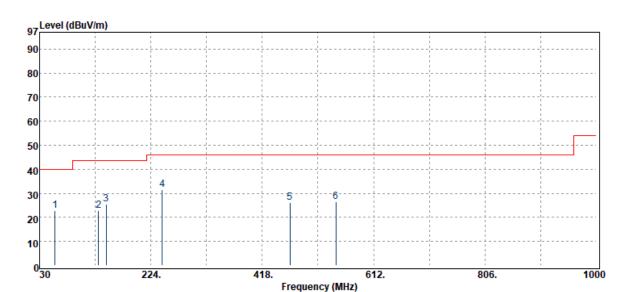
Page: 76 of 212

Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** :802.11a **Test Date** :2021-04-23

**Test Frequency** :5300 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :HORIZONTAL **EUT Pol** :E2 Plane Engineer :Ricky Chen



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dΒμV	dB	dBμV/m	dBµV/m	dB
57.16	Peak	31.69	-9.02	22.67	40.00	-17.33
132.82	Peak	31.80	-8.87	22.93	43.50	-20.57
146.40	Peak	33.46	-8.10	25.36	43.50	-18.14
243.40	Peak	40.42	-9.00	31.42	46.00	-14.58
466.50	Peak	29.08	-3.03	26.05	46.00	-19.95
546.04	Peak	28.48	-1.99	26.49	46.00	-19.51

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



Page: 77 of 212

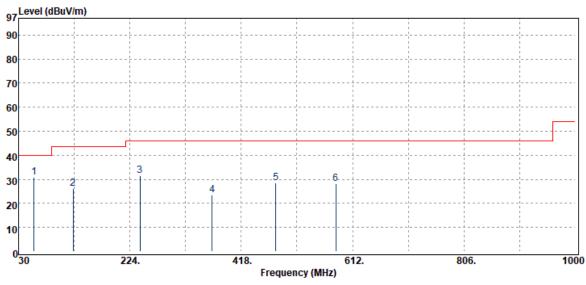
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** :802.11a **Test Date** :2021-04-23

**Test Frequency** :5580 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dΒμV	dB	dBμV/m	dΒμV/m	dB
57.16	Peak	39.81	-9.02	30.79	40.00	-9.21
125.06	Peak	35.76	-9.47	26.29	43.50	-17.21
241.46	Peak	40.70	-9.02	31.68	46.00	-14.32
367.56	Peak	28.83	-5.42	23.41	46.00	-22.59
478.14	Peak	31.65	-3.14	28.51	46.00	-17.49
582.90	Peak	28.83	-0.73	28.10	46.00	-17.90

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

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



Page: 78 of 212

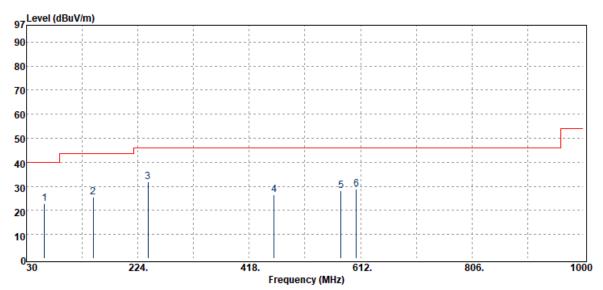
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** :802.11a **Test Date** :2021-04-23

**Test Frequency** :5580 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dΒμV	dB	dΒμV/m	dBµV/m	dB
61.04	Peak	32.15	-9.19	22.96	40.00	-17.04
146.40	Peak	33.52	-8.10	25.42	43.50	-18.08
241.46	Peak	40.78	-9.02	31.76	46.00	-14.24
461.65	Peak	29.53	-3.02	26.51	46.00	-19.49
578.05	Peak	28.98	-0.91	28.07	46.00	-17.93
604.24	Peak	29.22	-0.20	29.02	46.00	-16.98

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

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



Page: 79 of 212

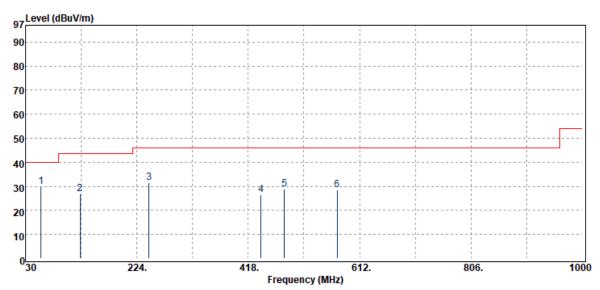
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** :802.11a **Test Date** :2021-04-23

**Test Frequency** :5785 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBµV	Factor dB	Actual FS dBµV/m	Limit @3m dBµV/m	Margin dB
		•		•	•	
57.16	Peak	38.82	-9.02	29.80	40.00	-10.20
125.06	Peak	36.16	-9.47	26.69	43.50	-16.81
245.34	Peak	40.54	-8.96	31.58	46.00	-14.42
440.31	Peak	29.88	-3.44	26.44	46.00	-19.56
481.05	Peak	31.98	-3.19	28.79	46.00	-17.21
573.20	Peak	29.87	-1.23	28.64	46.00	-17.36

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

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

解邦另有説明・比較告結果権對測試之棲品頁頁,同時比較品僅保留90大。本報告未經本公司書圖計可,不可能份復製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

\*\*SCS\*\*\* Taken 1 to the produced of the content of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the produced of the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\* Taken 2 to the pullest extent of the law.\*\*

\*\*Policy All Company\*\*\*\*

\*\*Policy All Company\*\*\*

\*\*Policy All Company\*\*\*

\*\*Policy All Company\*\*

\*\*Policy All

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 www.sgs.com.tw



Page: 80 of 212

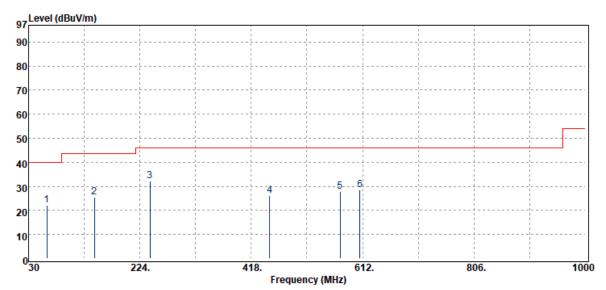
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** :802.11a **Test Date** :2021-04-23

**Test Frequency** :5785 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
PK/QP/AV	dΒμV	dB	dBµV/m	dBµV/m	dB
Peak	31.63	-9.55	22.08	40.00	-17.92
Peak	33.73	-8.09	25.64	43.50	-17.86
Peak	41.23	-9.02	32.21	46.00	-13.79
Peak	29.27	-3.25	26.02	46.00	-19.98
Peak	28.97	-1.23	27.74	46.00	-18.26
Peak	28.45	-0.06	28.39	46.00	-17.61
	Mode PK/QP/AV  Peak Peak Peak Peak Peak Peak Peak	Mode PK/QP/AV Reading Level dBμV  Peak 31.63 Peak 33.73 Peak 41.23 Peak 29.27 Peak 28.97	Mode PK/QP/AV         Reading Level dBμV         dB           Peak         31.63         -9.55           Peak         33.73         -8.09           Peak         41.23         -9.02           Peak         29.27         -3.25           Peak         28.97         -1.23	Mode PK/QP/AV         Reading Level dBμV         FS dBμV/m           Peak         31.63         -9.55         22.08           Peak         33.73         -8.09         25.64           Peak         41.23         -9.02         32.21           Peak         29.27         -3.25         26.02           Peak         28.97         -1.23         27.74	Mode PK/QP/AV         Reading Level dBμV         FS dBμV/m         @3m dBμV/m           Peak         31.63         -9.55         22.08         40.00           Peak         33.73         -8.09         25.64         43.50           Peak         41.23         -9.02         32.21         46.00           Peak         29.27         -3.25         26.02         46.00           Peak         28.97         -1.23         27.74         46.00

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

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



Page: 81 of 212

## 11.7.2 **Above 1GHz Worst-Case Data:**

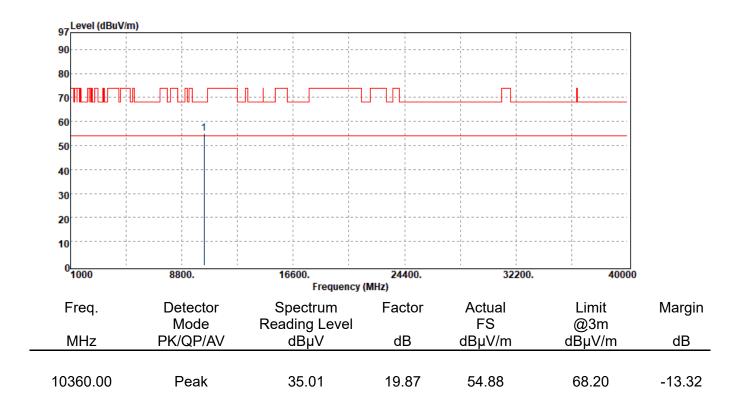
Report Number **Test Site** :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11a

Test Frequency :5180 MHz Temp./Humi. :24.5/65

Test Mode Antenna Pol. :Tx CH Low :VERTICAL

**EUT Pol** :E2 Plane :Ricky Chen Engineer



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

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

\*\*SGS\_Tailors\*\* Index 1.0 \*\*Line 1.0

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 f (886-2) 2298-0488



Page: 82 of 212

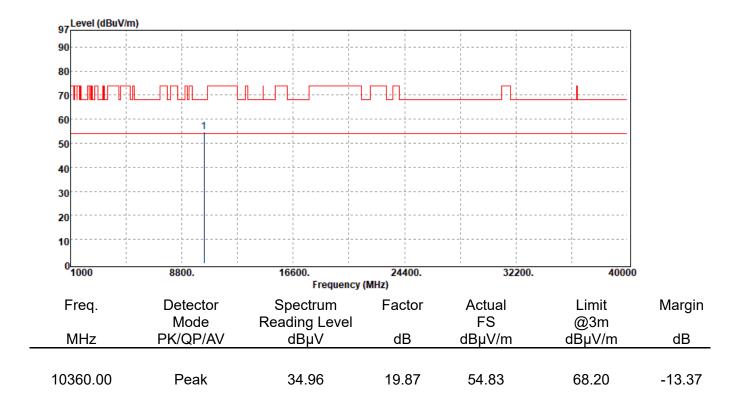
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11a

**Test Frequency** :5180 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

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 f (886-2) 2298-0488



Page: 83 of 212

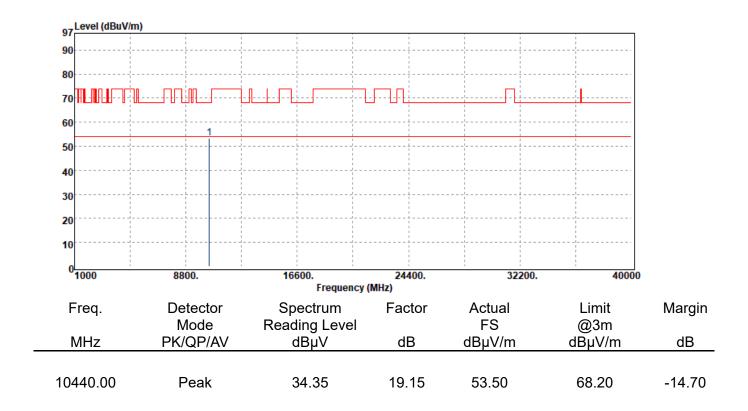
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11a

**Test Frequency** :5220 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 84 of 212

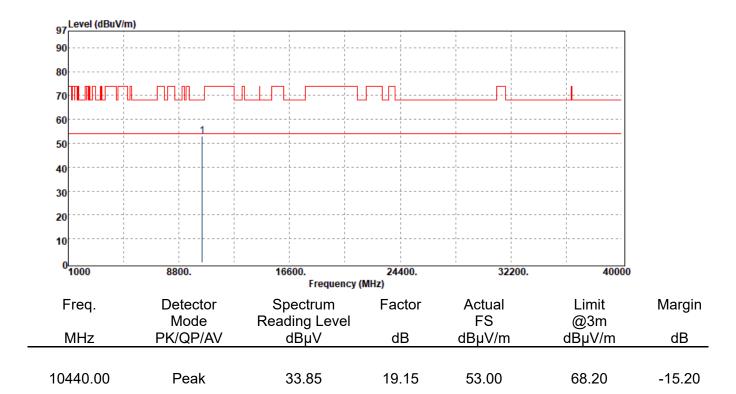
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11a

**Test Frequency** :5220 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

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 www.sgs.com.tw



Page: 85 of 212

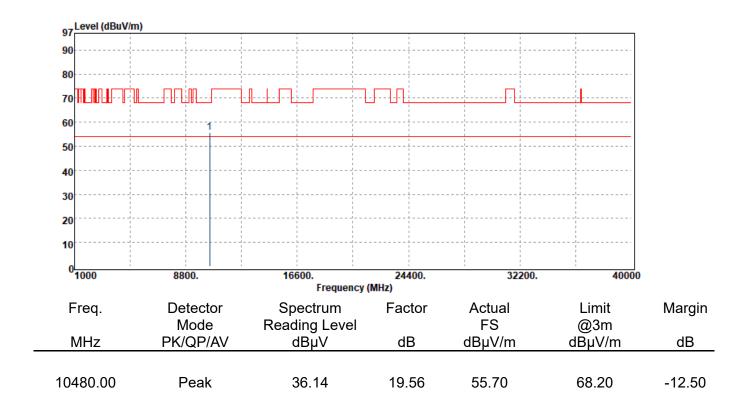
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11a

**Test Frequency** :5240 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

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 f (886-2) 2298-0488



Page: 86 of 212

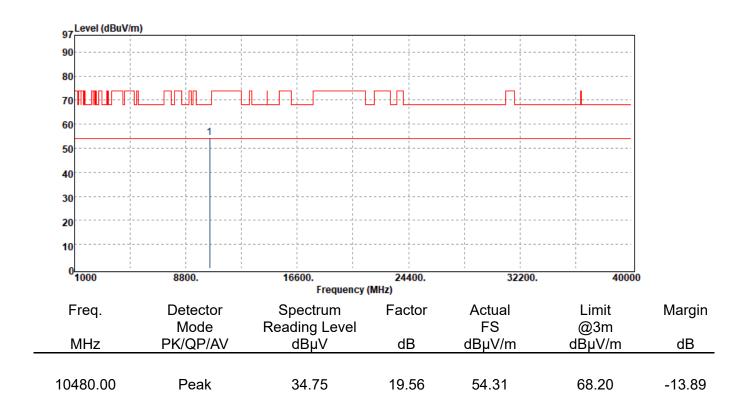
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11a

**Test Frequency** :5240 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

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 www.sgs.com.tw



Page: 87 of 212

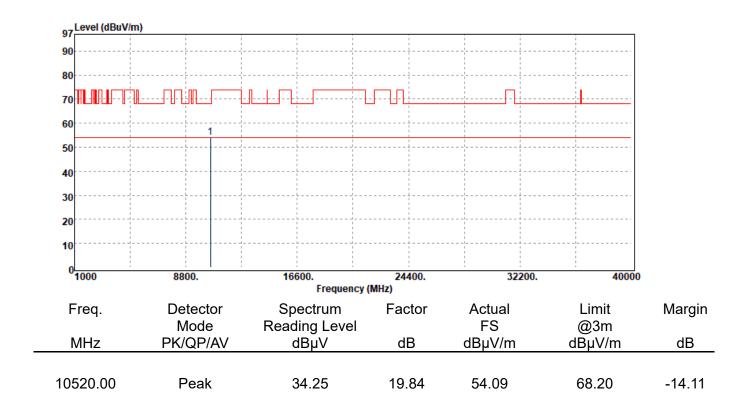
Report Number **Test Site** :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11a

**Test Frequency** :5260 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Low Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

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



Page: 88 of 212

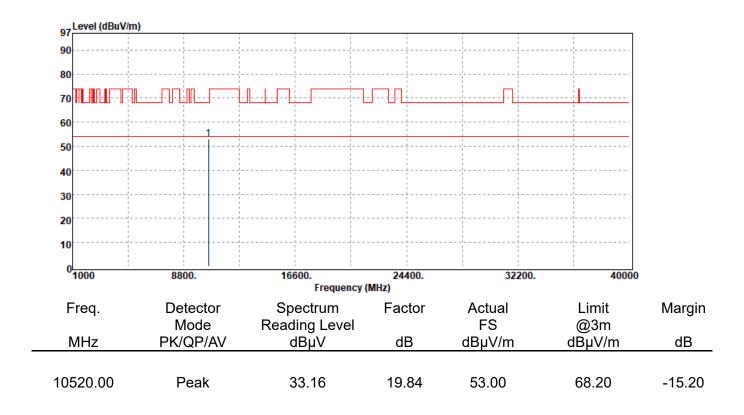
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11a

**Test Frequency** :5260 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 89 of 212

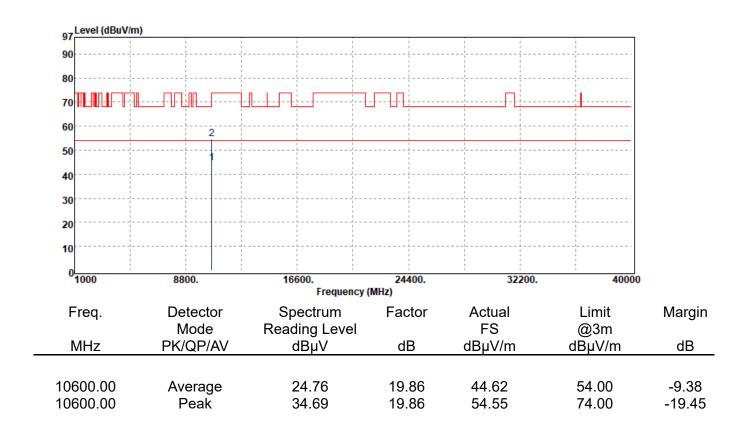
Report Number **Test Site** :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11a

**Test Frequency** :5300 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



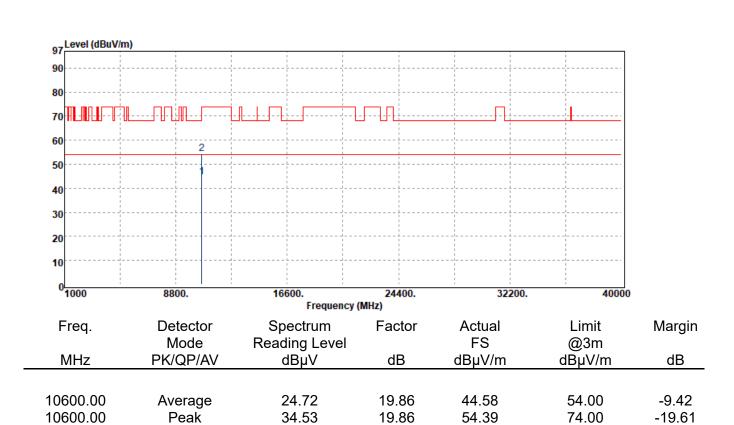
Page: 90 of 212

Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11a

**Test Frequency** :5300 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :HORIZONTAL **EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 91 of 212

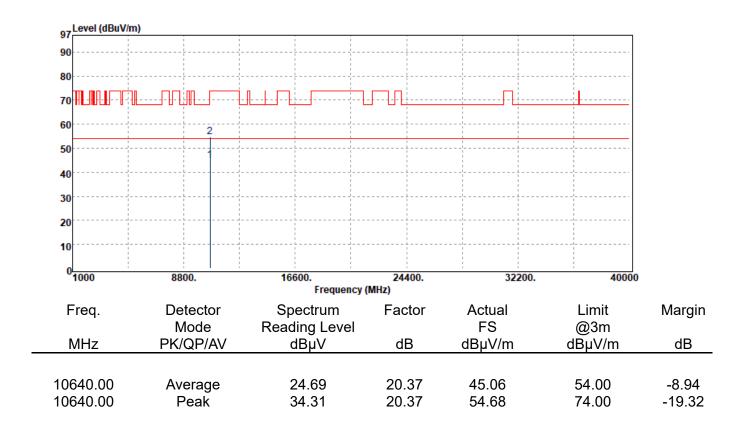
Report Number :ER-2021-40063 Test Site :SAC III Chamber

Operation Mode :802.11a Test Date :2021-04-23

Test Frequency :5320 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :VERTICAL

EUT Pol :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

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



Page: 92 of 212

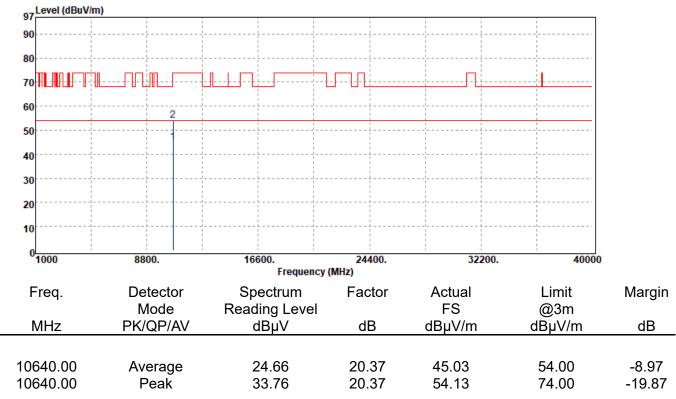
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11a

**Test Frequency** :5320 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

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 f (886-2) 2298-0488



Page: 93 of 212

Report Number **Test Site** :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11a

**Test Frequency** :5500 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Low Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

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 f (886-2) 2298-0488



Page: 94 of 212

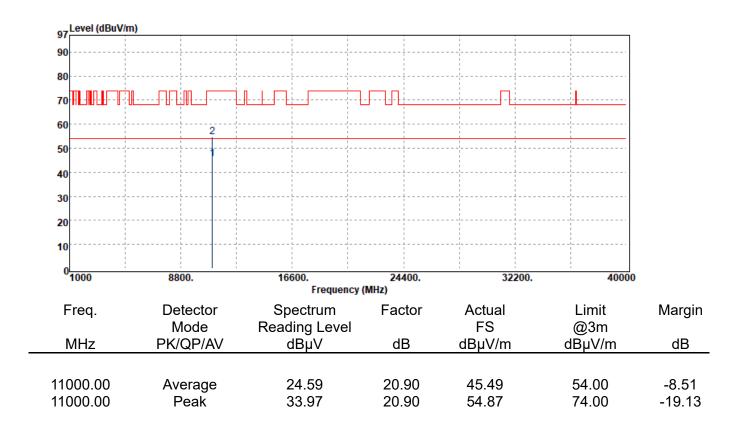
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11a

**Test Frequency** :5500 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 95 of 212

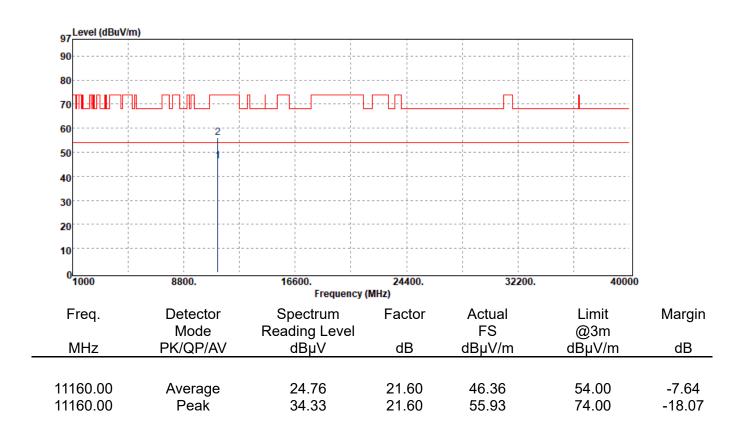
Report Number **Test Site** :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11a

**Test Frequency** :5580 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Test Mode

Report No.:ER/2021/40063

:HORIZONTAL

Page: 96 of 212

Antenna Pol.

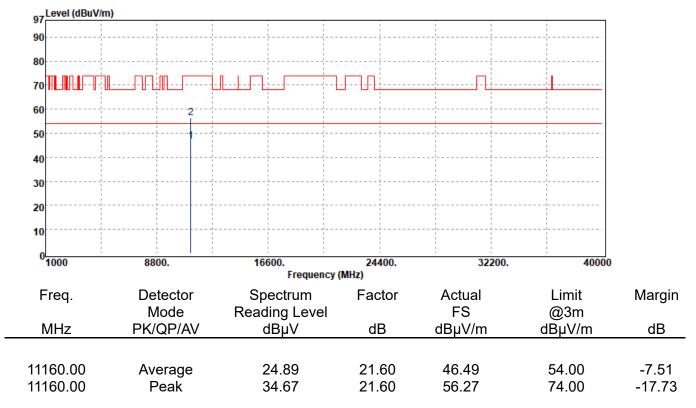
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** :802.11a **Test Date** :2021-04-23

**Test Frequency** :5580 MHz Temp./Humi. :24.5/65

:Tx CH Mid

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 97 of 212

Report Number **Test Site** :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11a

**Test Frequency** :5700 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Test Mode

Report No.:ER/2021/40063

:HORIZONTAL

Page: 98 of 212

Antenna Pol.

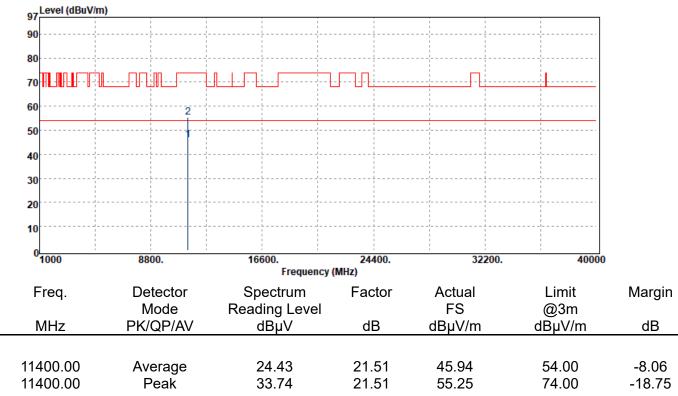
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11a

**Test Frequency** :5700 MHz Temp./Humi. :24.5/65

:Tx CH High **EUT Pol** :E2 Plane Engineer

:Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

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 www.sgs.com.tw



Page: 99 of 212

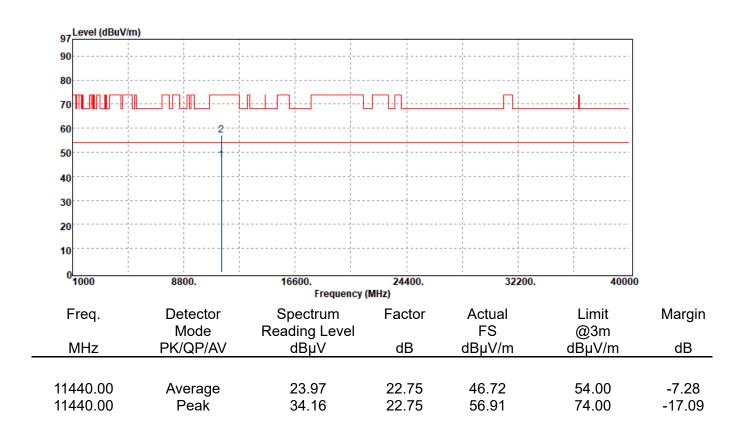
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11a

**Test Frequency** :5720 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 100 of 212

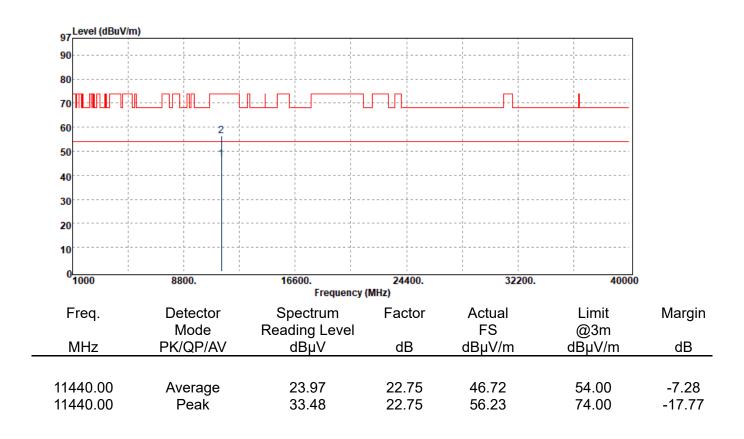
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11a

**Test Frequency** :5720 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 101 of 212

Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11a

**Test Frequency** :5745 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Low Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

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 f (886-2) 2298-0488



Test Mode

Report No.: ER/2021/40063

:HORIZONTAL

Page: 102 of 212

Antenna Pol.

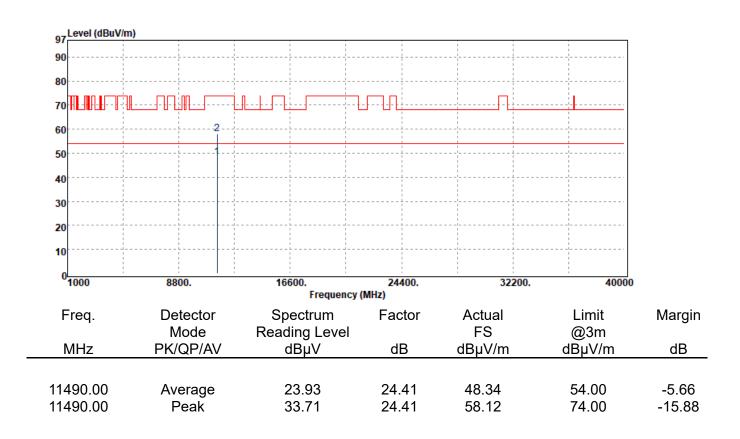
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11a

**Test Frequency** :5745 MHz Temp./Humi. :24.5/65

:Tx CH Low

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

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 www.sgs.com.tw



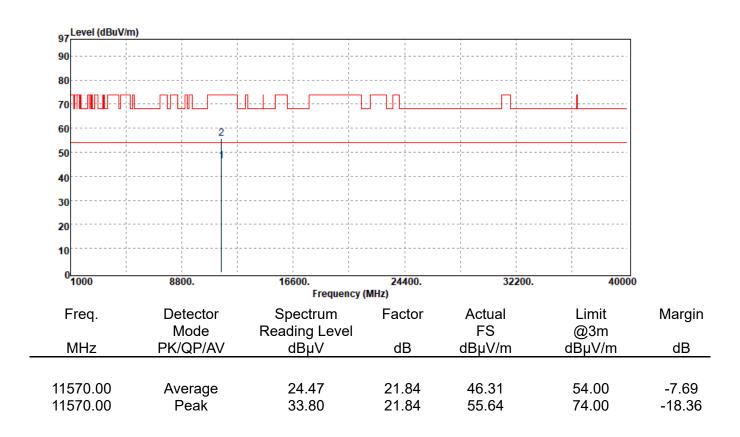
Page: 103 of 212

Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11a

**Test Frequency** :5785 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :VERTICAL **EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 104 of 212

Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11a

**Test Frequency** :5785 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 105 of 212

Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11a

**Test Frequency** :5825 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 106 of 212

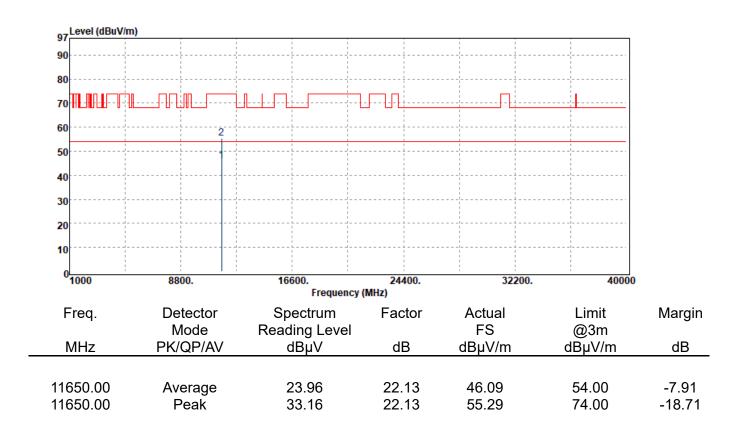
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11a

**Test Frequency** :5825 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 107 of 212

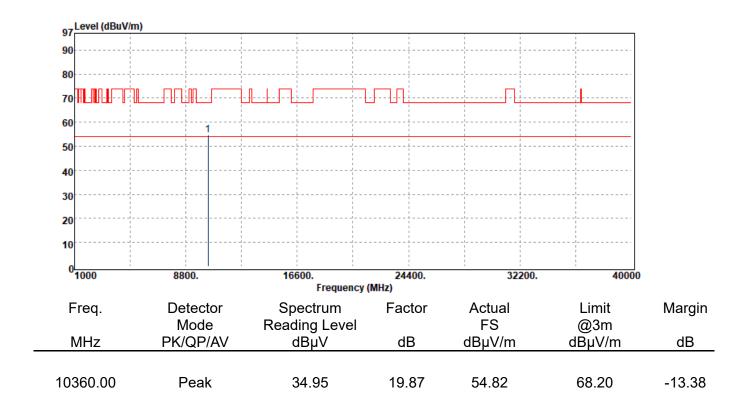
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11n20

**Test Frequency** :5180 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Low Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

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 www.sgs.com.tw



Page: 108 of 212

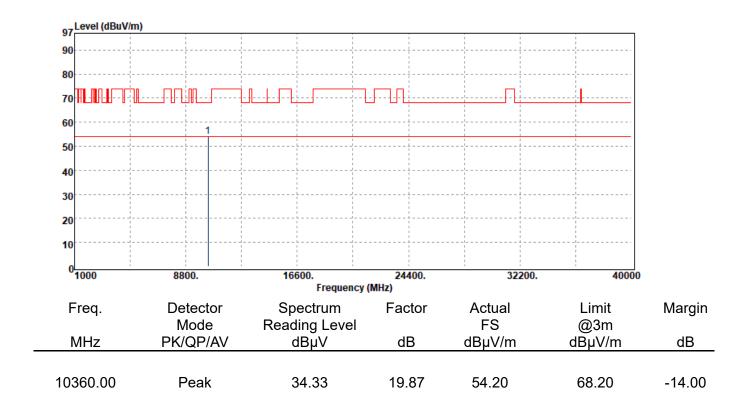
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n20

**Test Frequency** :5180 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 109 of 212

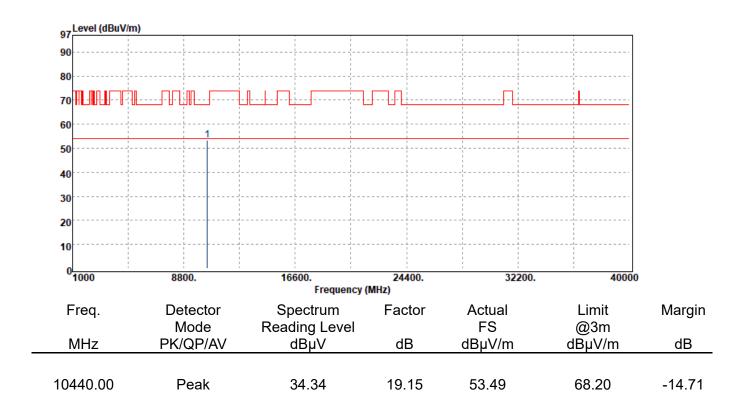
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11n20

**Test Frequency** :5220 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 110 of 212

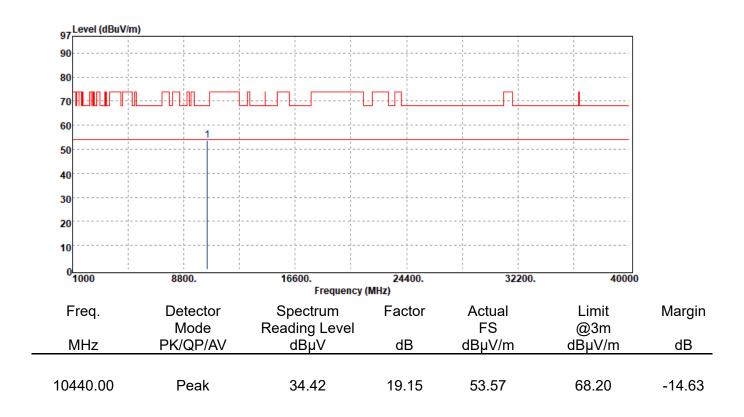
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n20

**Test Frequency** :5220 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 111 of 212

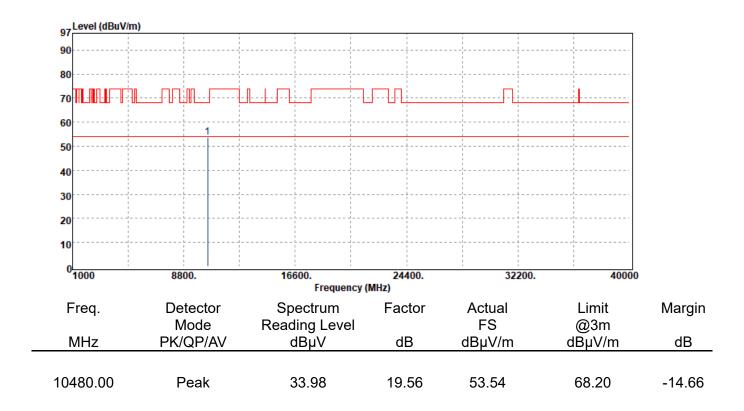
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11n20

**Test Frequency** :5240 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 \*\* \*\*No.124 \*\* \*\*No.124

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 t (886-2) 2299-3279 www.sgs.com.tw



Page: 112 of 212

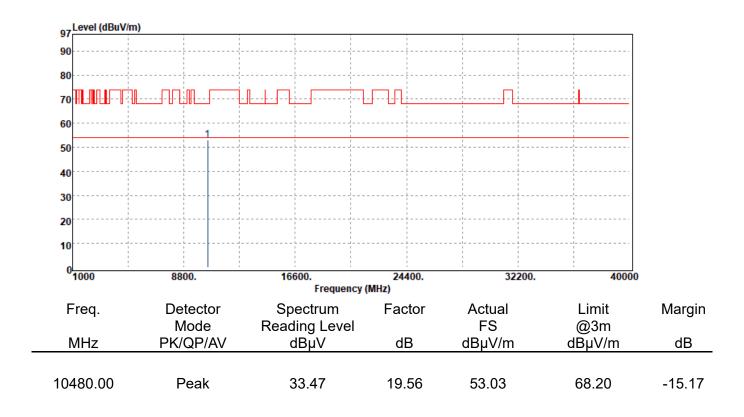
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n20

**Test Frequency** :5240 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 113 of 212

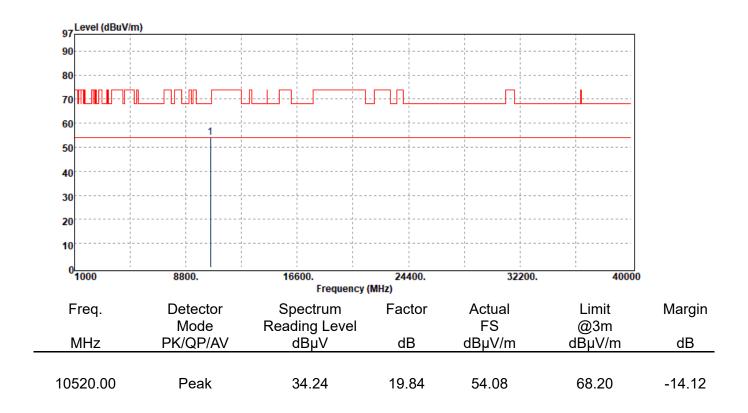
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11n20

**Test Frequency** :5260 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Low Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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

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

\*\*SCS\_Tailors\*\* Index 124 \*\* \*\*No.124 \*\* \*\*No.124

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 t (886-2) 2299-3279 www.sgs.com.tw



Test Mode

Report No.: ER/2021/40063

:HORIZONTAL

Page: 114 of 212

Antenna Pol.

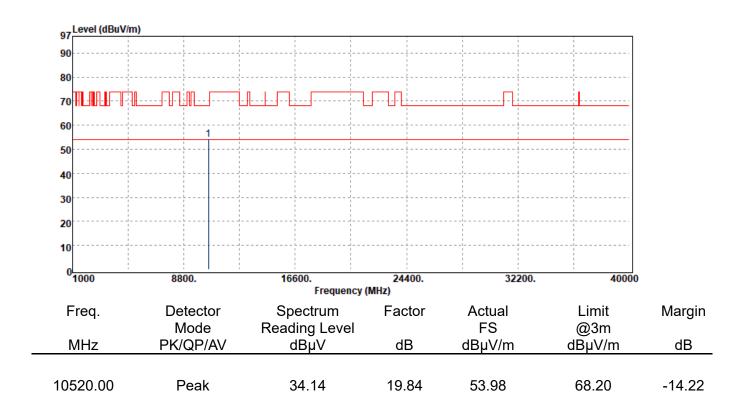
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n20

**Test Frequency** :5260 MHz Temp./Humi. :24.5/65

:Tx CH Low

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 115 of 212

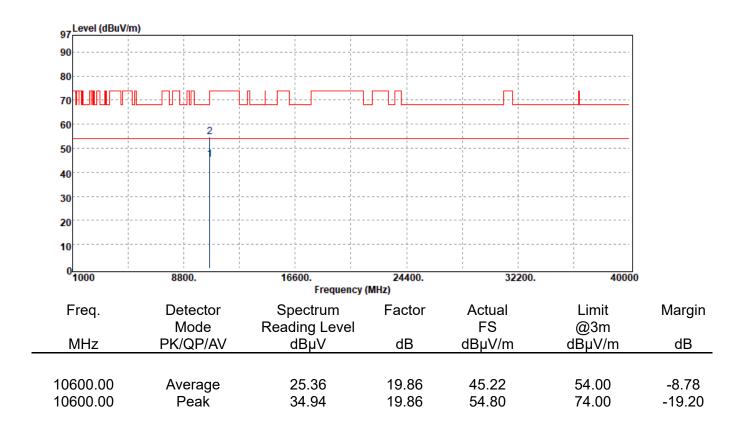
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11n20

**Test Frequency** :5300 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 \*\* \*\*No.124 \*\* \*\*No.124

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 t (886-2) 2299-3279 www.sgs.com.tw



Page: 116 of 212

Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n20

**Test Frequency** :5300 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 117 of 212

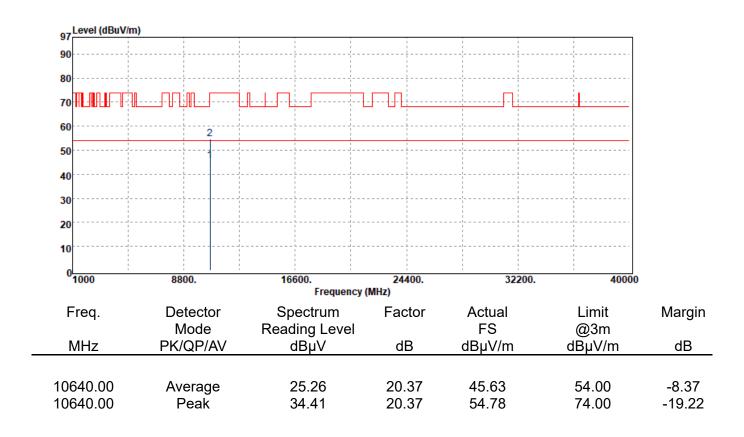
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11n20

**Test Frequency** :5320 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 118 of 212

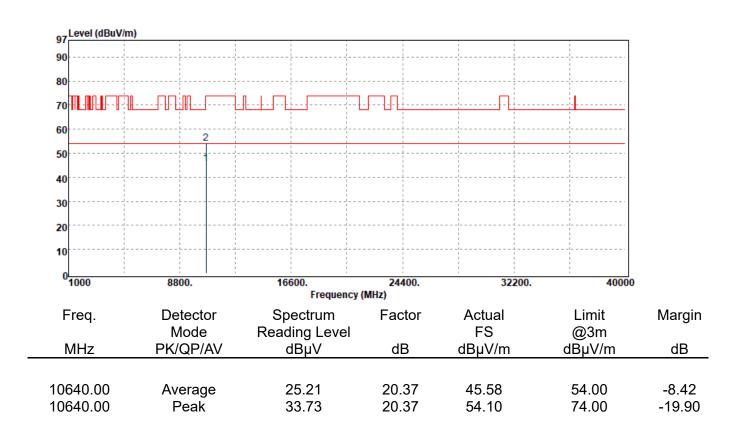
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n20

**Test Frequency** :5320 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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



Page: 119 of 212

Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11n20

**Test Frequency** :5500 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Low Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 120 of 212

Report Number :ER-2021-40063 Test Site :SAC III Chamber

Operation Mode :802.11n20 Test Date :2021-04-23

Test Frequency :5500 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL

EUT Pol :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 \*\* \*\*No.124 \*\* \*\*No.124

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



Page: 121 of 212

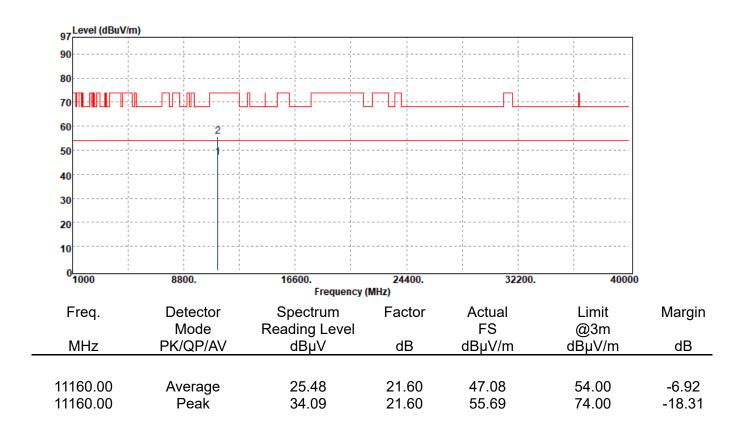
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11n20

**Test Frequency** :5580 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



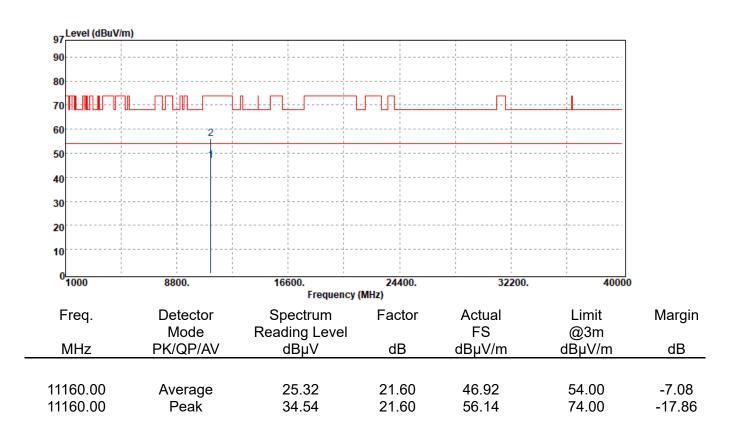
Page: 122 of 212

Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n20

**Test Frequency** :5580 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :HORIZONTAL **EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 123 of 212

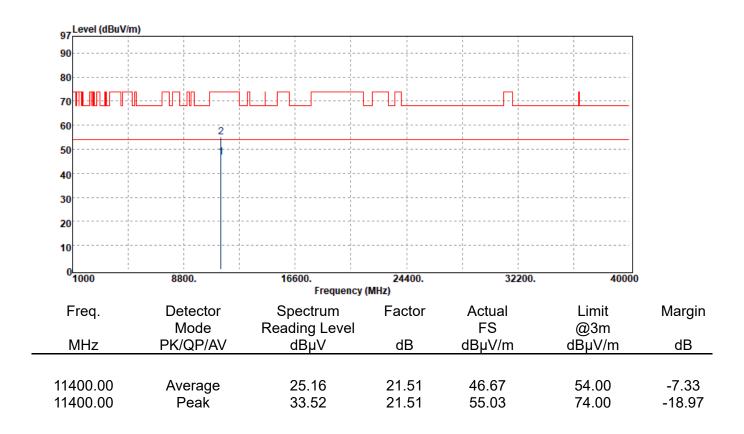
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11n20

**Test Frequency** :5700 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 \*\* \*\*No.124 \*\* \*\*No.124

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 www.sgs.com.tw



Page: 124 of 212

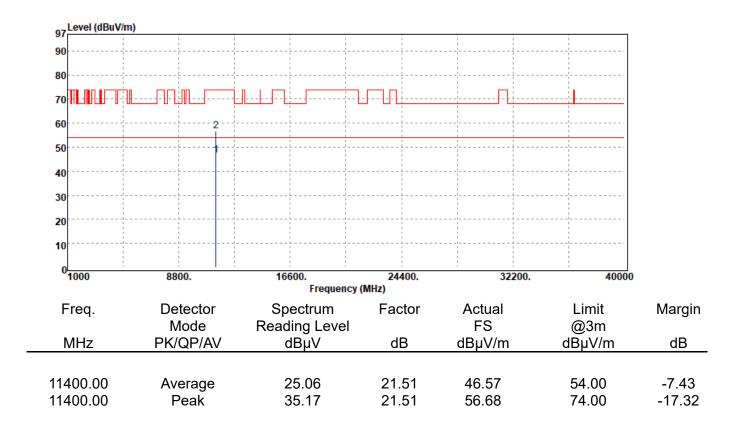
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n20

**Test Frequency** :5700 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 \*\* \*\*No.124 \*\* \*\*No.124

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 www.sgs.com.tw



Page: 125 of 212

Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11n20

**Test Frequency** :5720 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Test Mode

Report No.: ER/2021/40063

:HORIZONTAL

Page: 126 of 212

Antenna Pol.

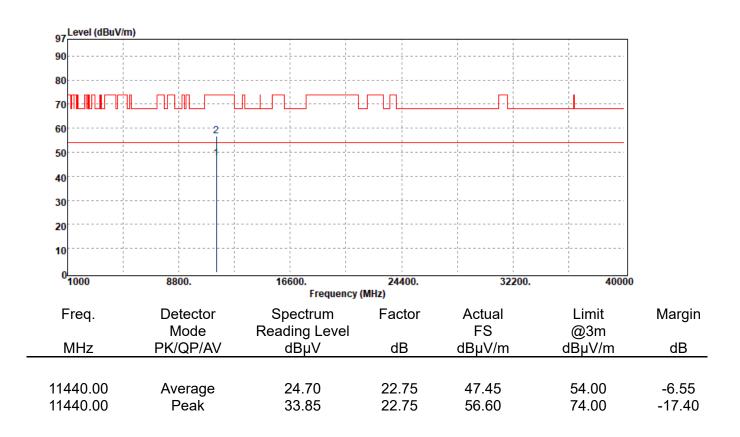
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n20

**Test Frequency** :5720 MHz Temp./Humi. :24.5/65

:Tx CH High

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 127 of 212

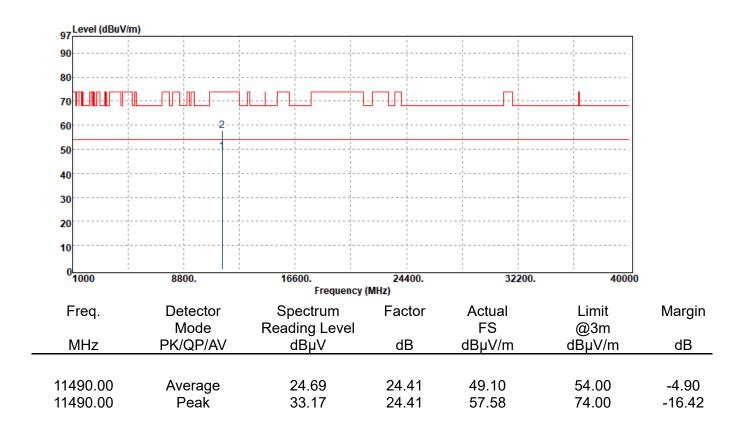
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11n20

**Test Frequency** :5745 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Low Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



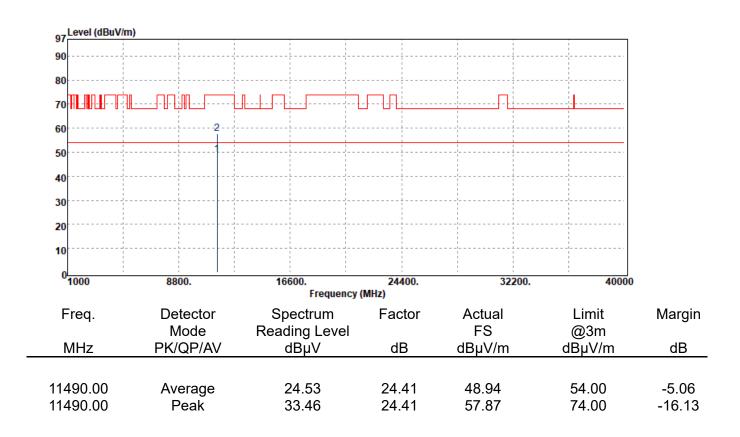
Page: 128 of 212

Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n20

**Test Frequency** :5745 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL **EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 129 of 212

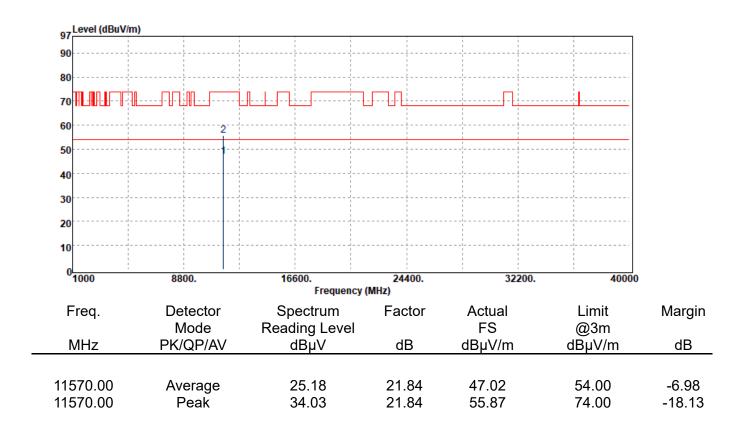
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11n20

**Test Frequency** :5785 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Test Mode

Report No.: ER/2021/40063

:HORIZONTAL

Page: 130 of 212

Antenna Pol.

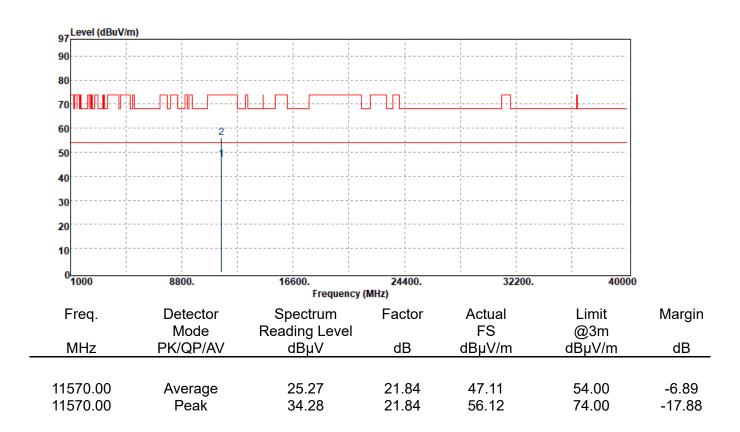
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n20

**Test Frequency** :5785 MHz Temp./Humi. :24.5/65

:Tx CH Mid

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 131 of 212

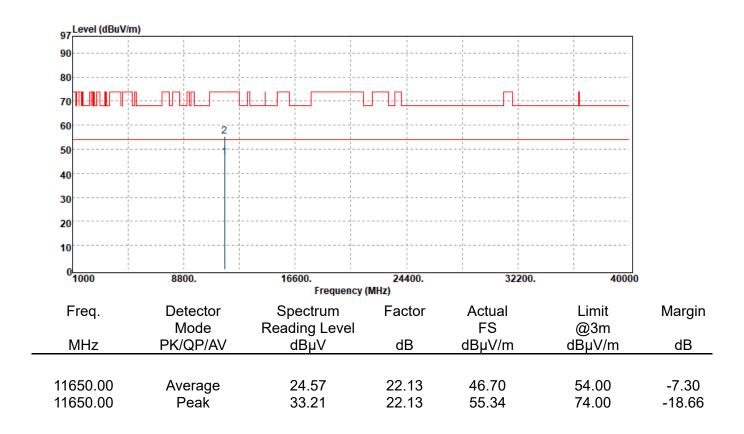
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11n20

**Test Frequency** :5825 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 \*\* \*\*No.124 \*\* \*\*No.124

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 f (886-2) 2298-0488



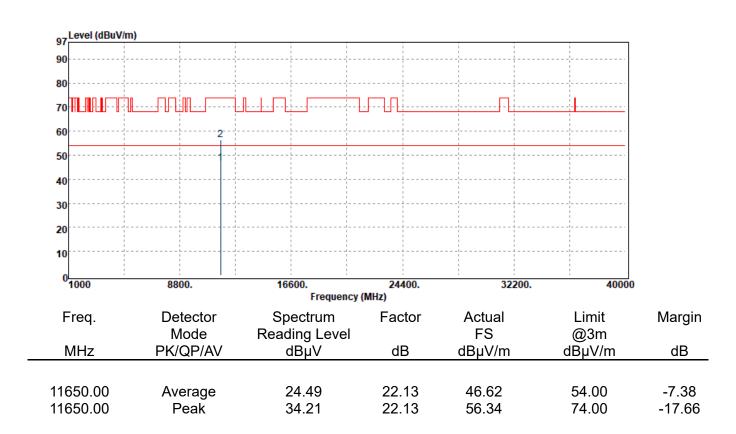
Page: 132 of 212

Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n20

**Test Frequency** :5825 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :HORIZONTAL **EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 133 of 212

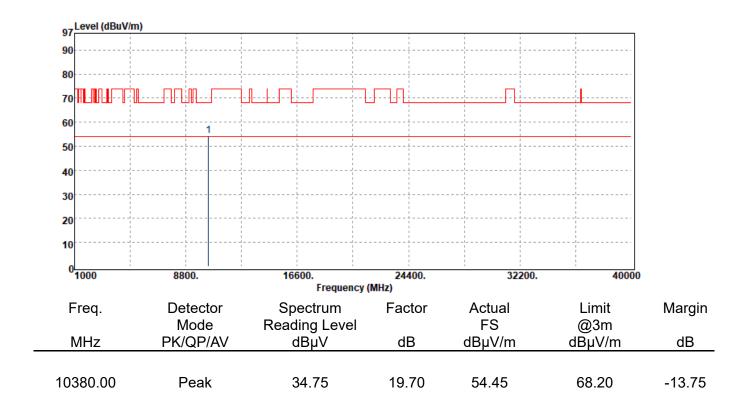
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11n40

**Test Frequency** :5190 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Low Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 134 of 212

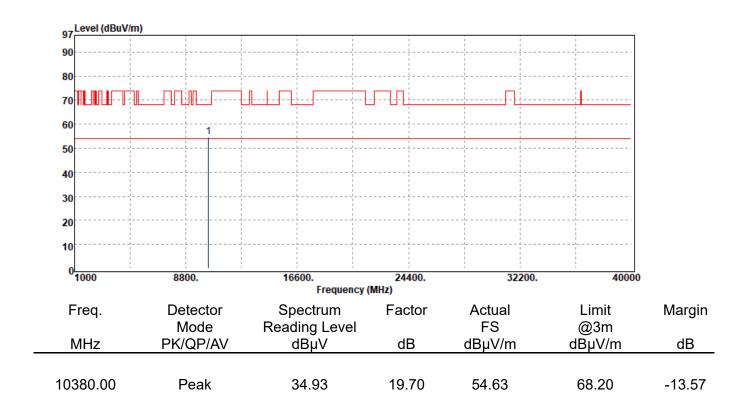
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n40

**Test Frequency** :5190 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 135 of 212

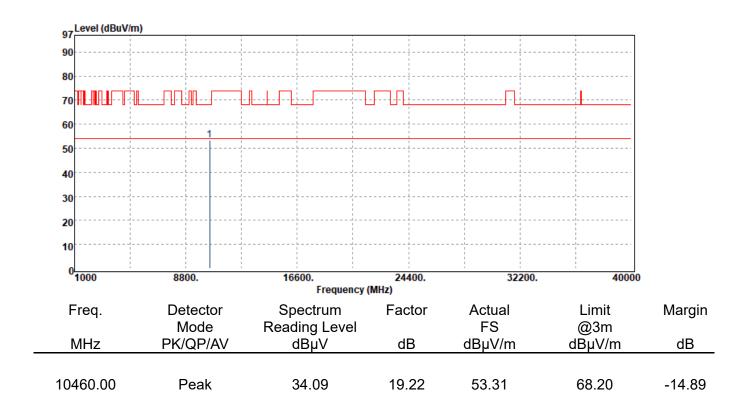
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11n40

**Test Frequency** :5230 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Test Mode

Report No.: ER/2021/40063

:HORIZONTAL

Page: 136 of 212

Antenna Pol.

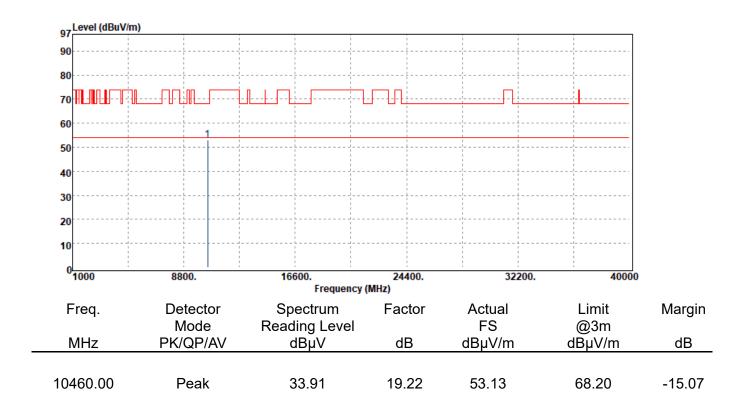
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n40

**Test Frequency** :5230 MHz Temp./Humi. :24.5/65

:Tx CH High

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 \*\* \*\*No.124 \*\* \*\*No.124

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 www.sgs.com.tw



Page: 137 of 212

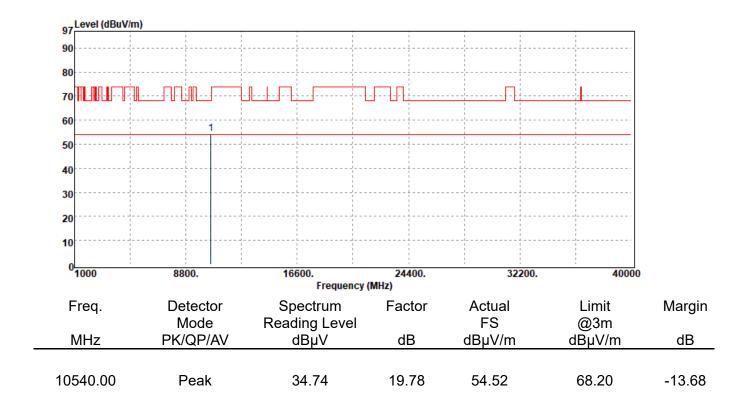
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode** Test Date :2021-04-23 :802.11n40

**Test Frequency** :5270 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Low Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 \*\* \*\*No.124 \*\* \*\*No.124

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 www.sgs.com.tw



Page: 138 of 212

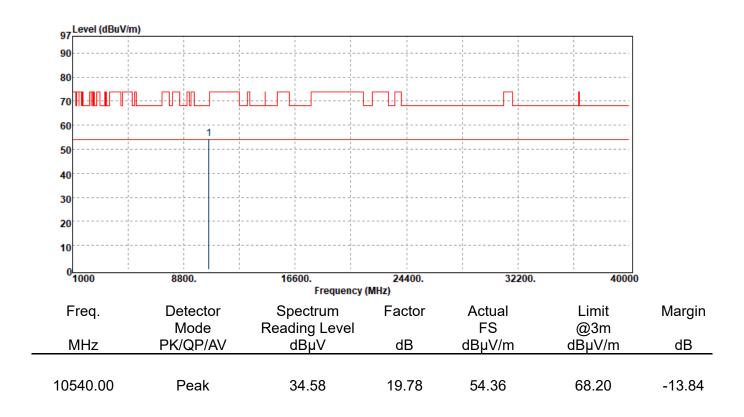
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n40

**Test Frequency** :5270 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 139 of 212

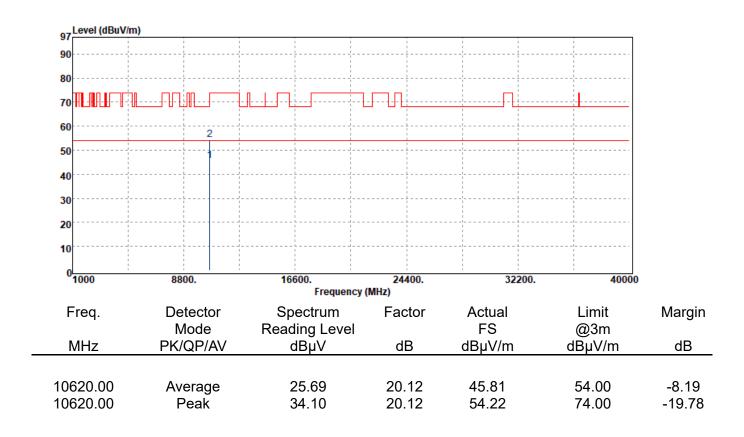
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n40

**Test Frequency** :5310 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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

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

\*\*SCS\_Tailors\*\* Index 124 the Scs\_Tailors\*\* I

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



Page: 140 of 212

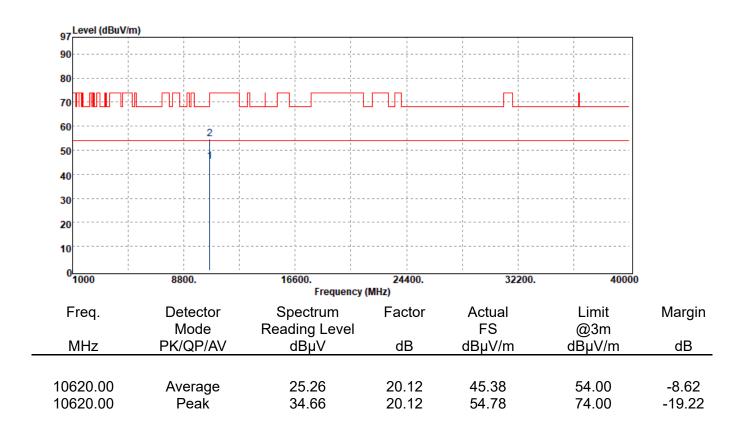
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n40

**Test Frequency** :5310 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :HORIZONTAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 141 of 212

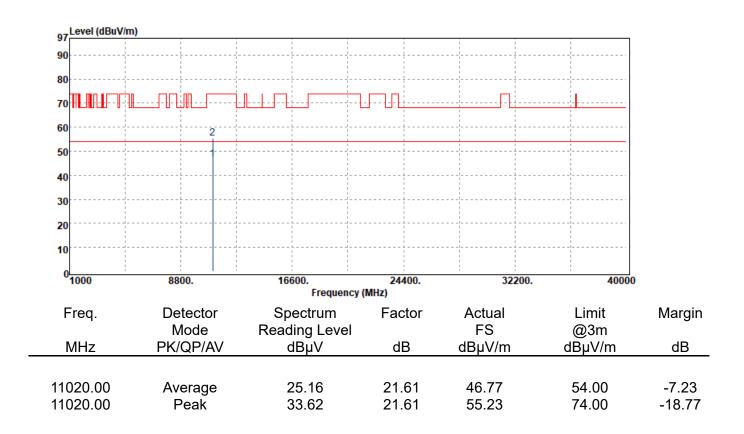
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n40

**Test Frequency** :5510 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Low Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 142 of 212

Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n40

**Test Frequency** :5510 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Low Antenna Pol. :HORIZONTAL **EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 143 of 212

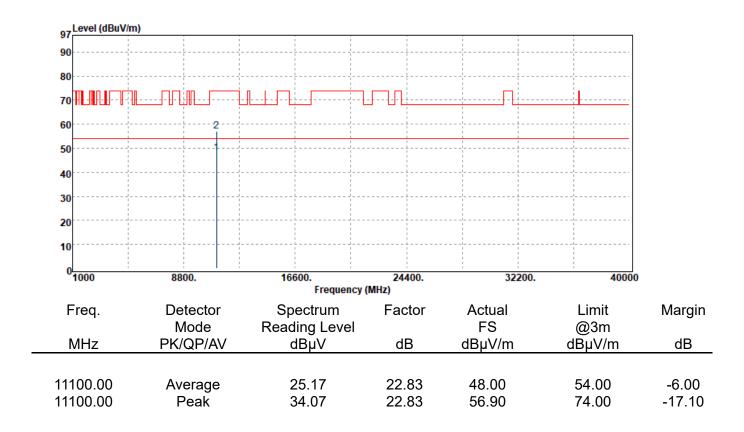
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n40

**Test Frequency** :5550 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH Mid Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Test Mode

Report No.: ER/2021/40063

:HORIZONTAL

Page: 144 of 212

Antenna Pol.

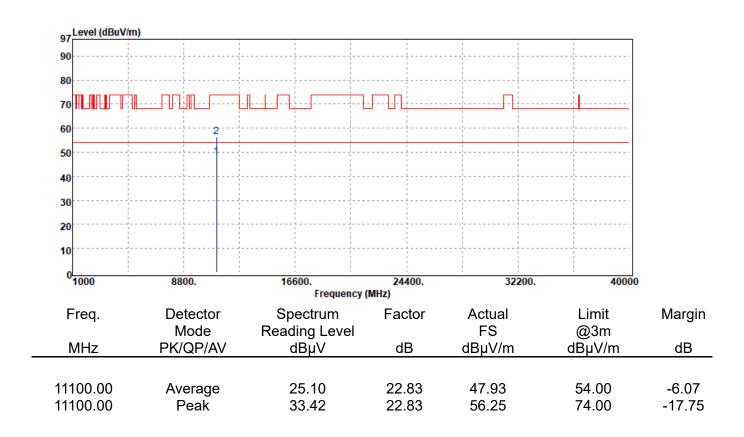
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n40

**Test Frequency** :5550 MHz Temp./Humi. :24.5/65

:Tx CH Mid

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Page: 145 of 212

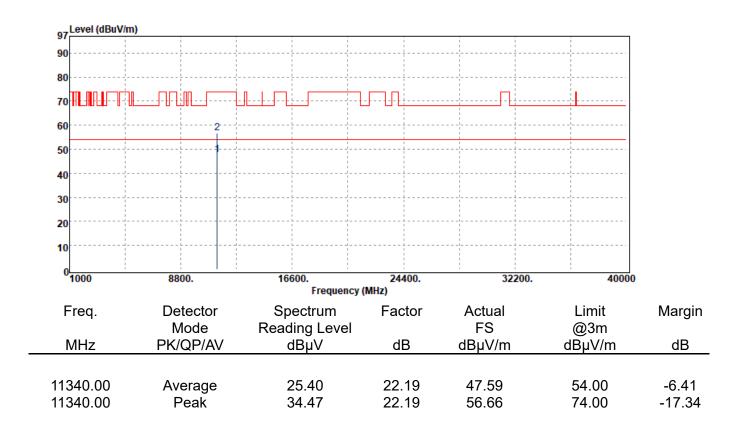
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n40

**Test Frequency** :5670 MHz Temp./Humi. :24.5/65

Test Mode :Tx CH High Antenna Pol. :VERTICAL

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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



Test Mode

Report No.: ER/2021/40063

:HORIZONTAL

Page: 146 of 212

Antenna Pol.

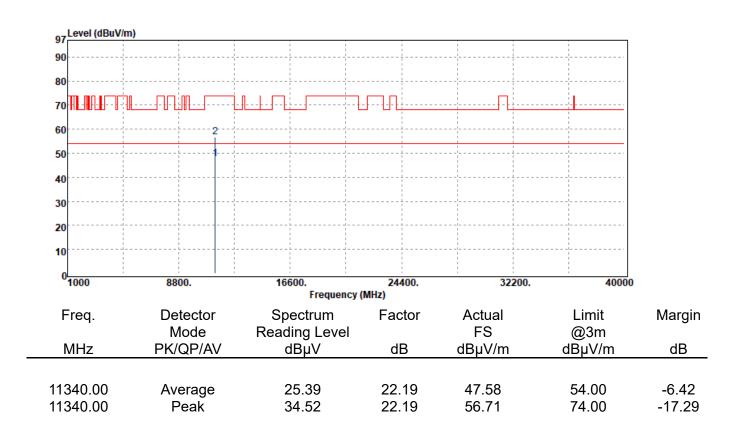
Report Number Test Site :SAC III Chamber :ER-2021-40063

**Operation Mode Test Date** :2021-04-23 :802.11n40

**Test Frequency** :5670 MHz Temp./Humi. :24.5/65

:Tx CH High

**EUT Pol** :E2 Plane Engineer :Ricky Chen



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