



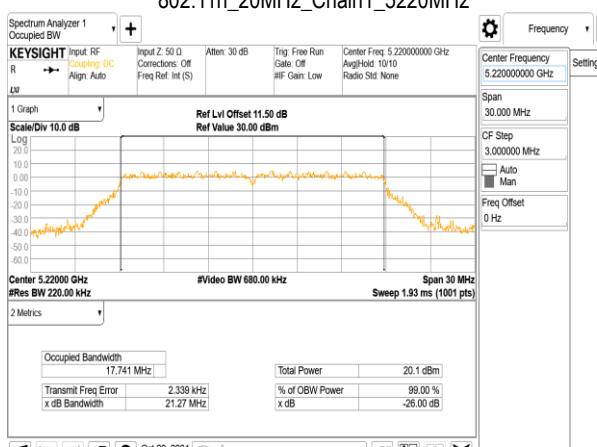
802.11n\_20MHz\_Chain1\_5180MHz



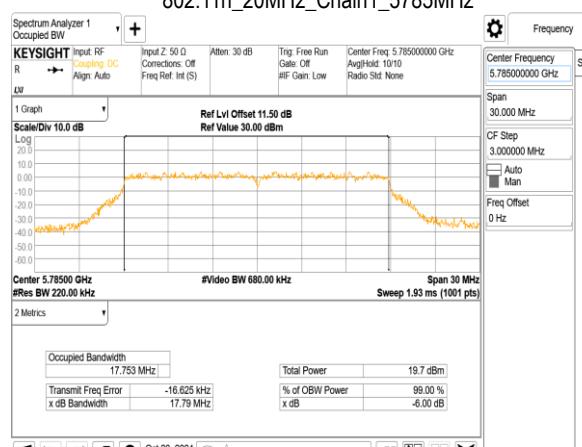
802.11n\_20MHz\_Chain1\_5745MHz



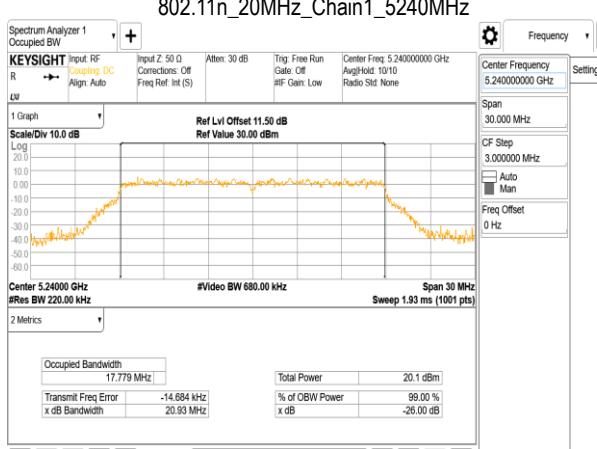
802.11n\_20MHz\_Chain1\_5220MHz



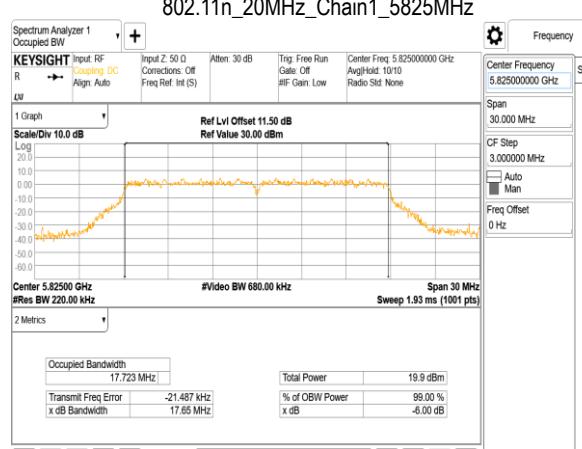
802.11n\_20MHz\_Chain1\_5785MHz



802.11n\_20MHz\_Chain1\_5240MHz



802.11n\_20MHz\_Chain1\_5825MHz



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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

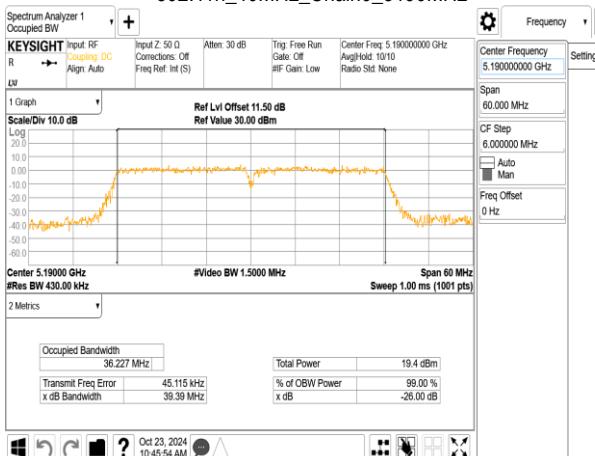
f (886-2) 2298-0488

www.sgs.com.tw

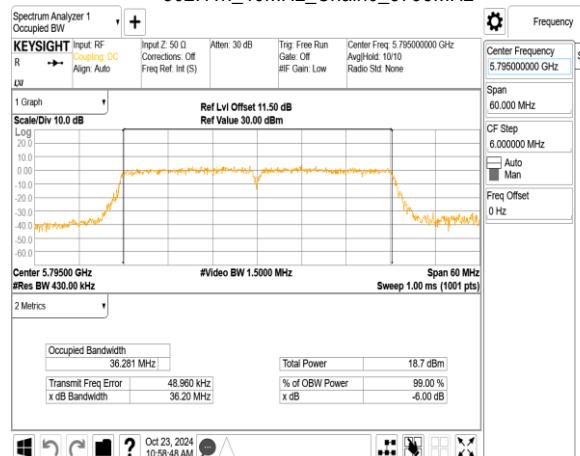
Member of SGS Group



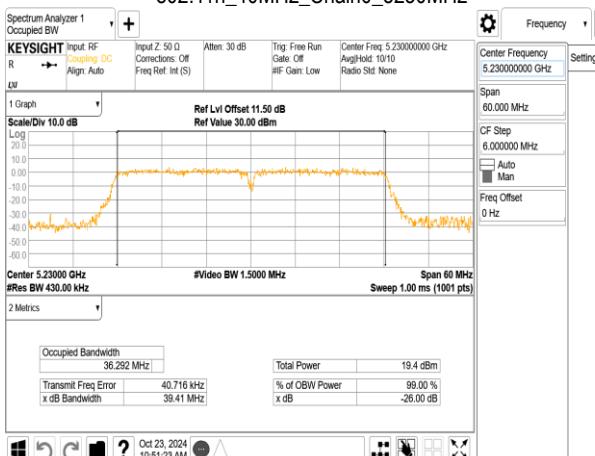
802.11n\_40MHz\_Chain0\_5190MHz



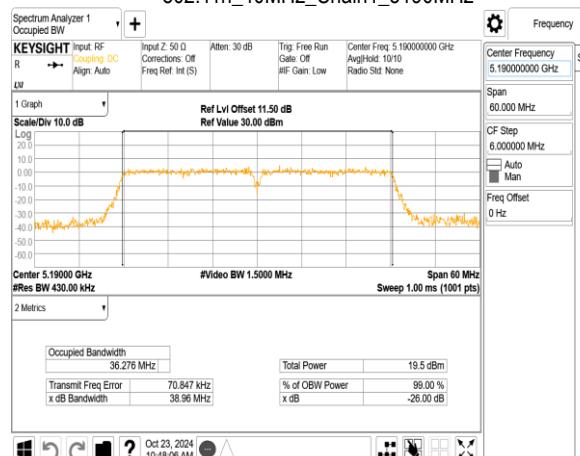
802.11n\_40MHz\_Chain0\_5795MHz



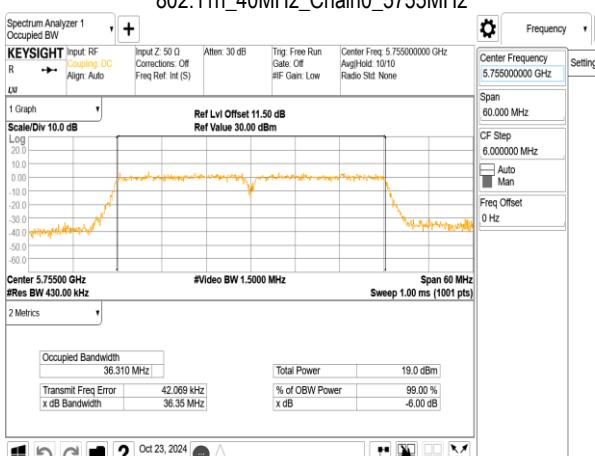
802.11n\_40MHz\_Chain0\_5230MHz



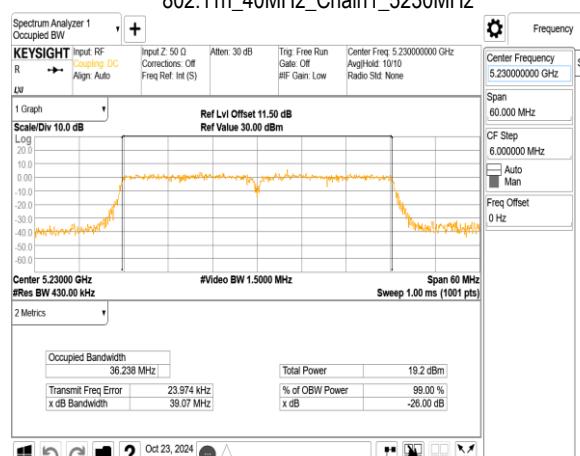
802.11n\_40MHz\_Chain1\_5190MHz



802.11n\_40MHz\_Chain0\_5755MHz



802.11n\_40MHz\_Chain1\_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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

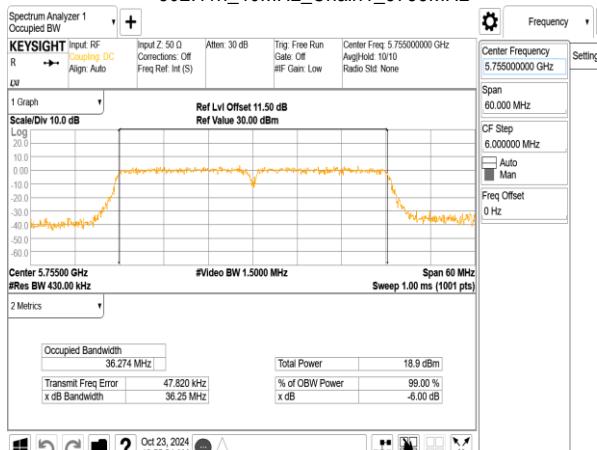
f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



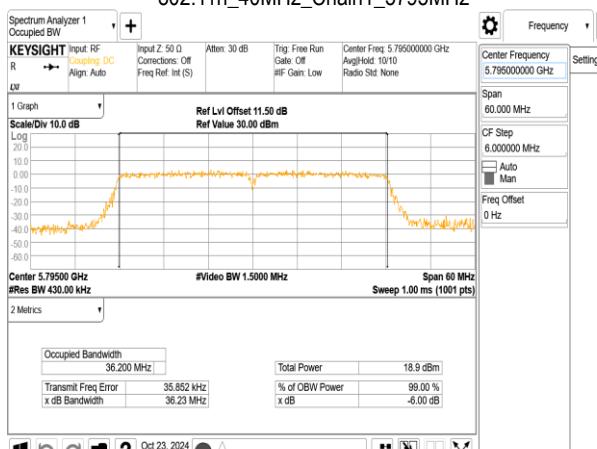
802.11n\_40MHz\_Chain1\_5755MHz



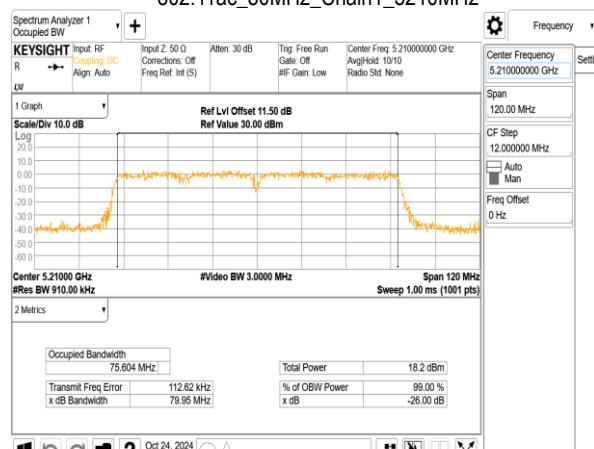
802.11ac\_80MHz\_Chain0\_5775MHz



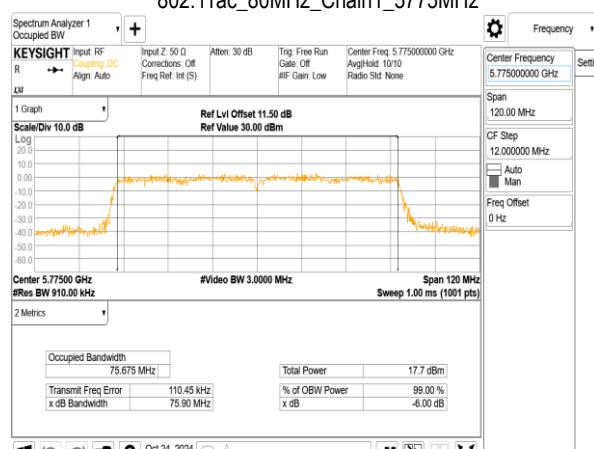
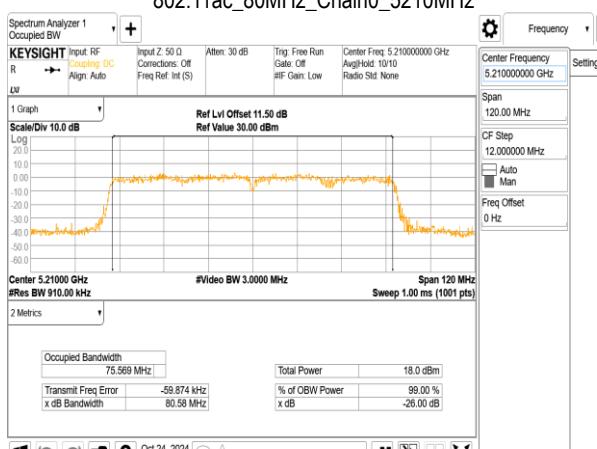
802.11n\_40MHz\_Chain1\_5795MHz



802.11ac\_80MHz\_Chain0\_5210MHz



802.11ac\_80MHz\_Chain1\_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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

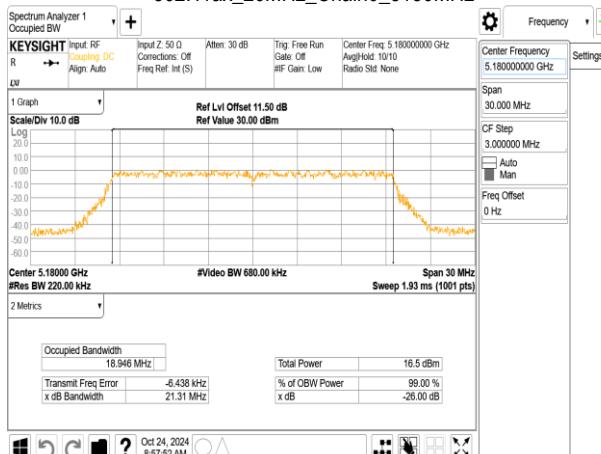
f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

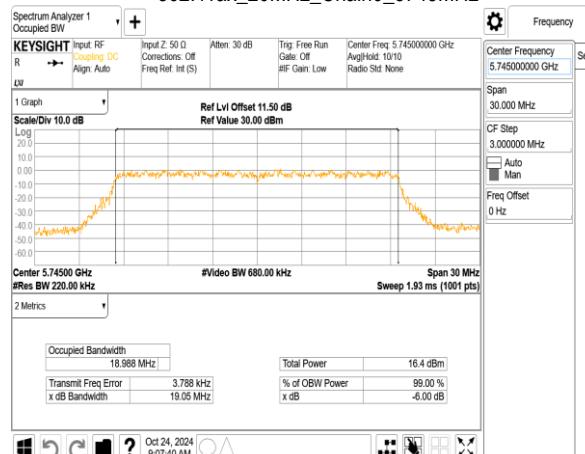
Member of SGS Group



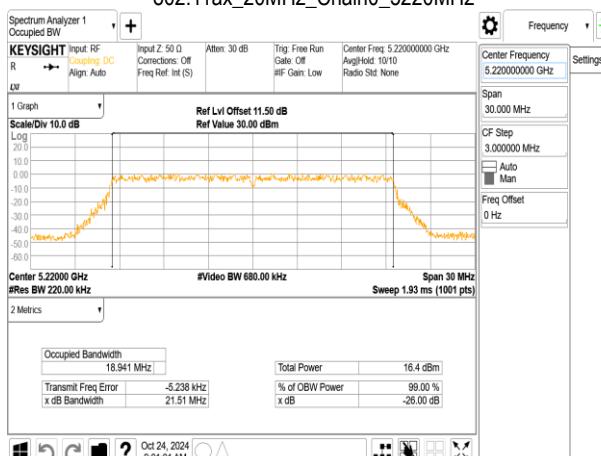
802.11ax\_20MHz\_Chain0\_5180MHz



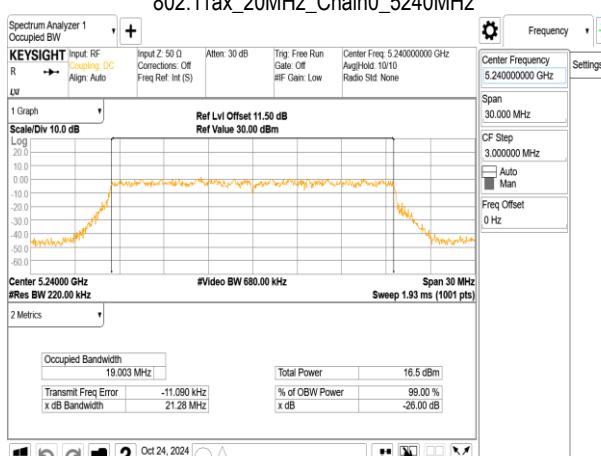
802.11ax\_20MHz\_Chain0\_5745MHz



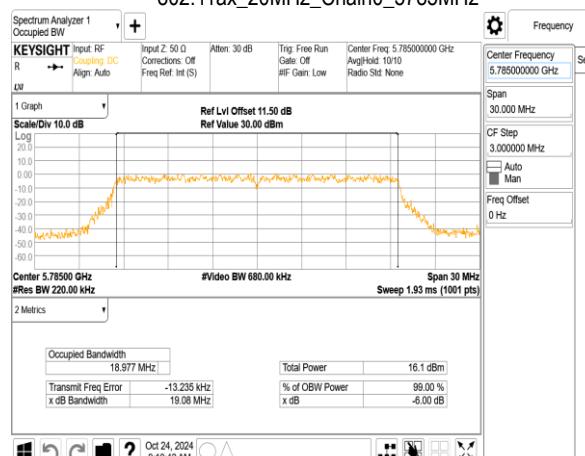
802.11ax\_20MHz\_Chain0\_5220MHz



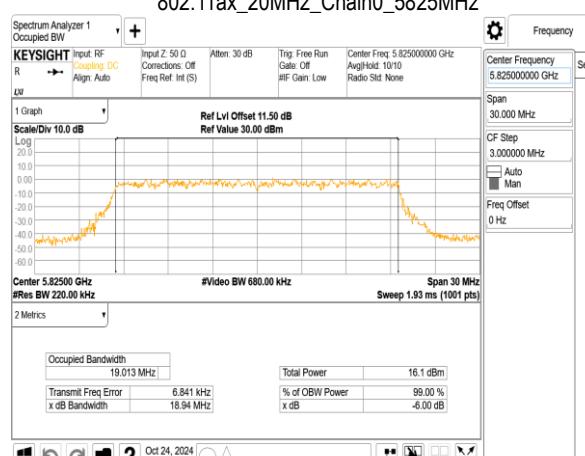
802.11ax\_20MHz\_Chain0\_5240MHz



802.11ax\_20MHz\_Chain0\_5785MHz



802.11ax\_20MHz\_Chain0\_5825MHz



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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

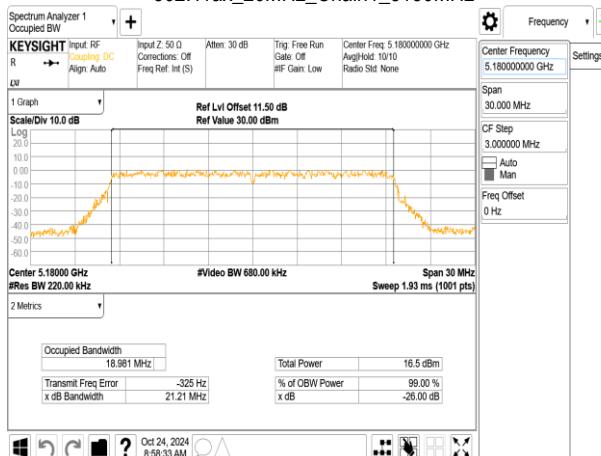
f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

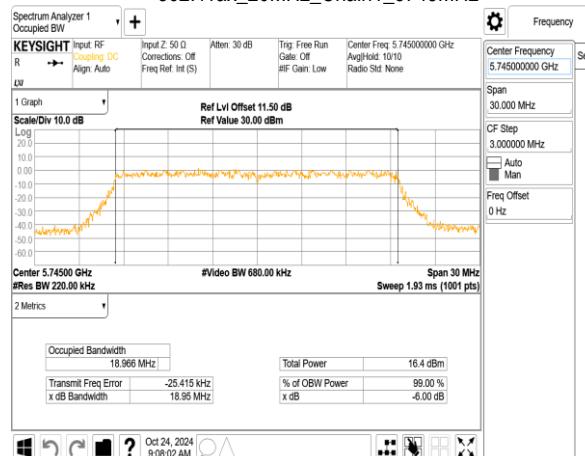
Member of SGS Group



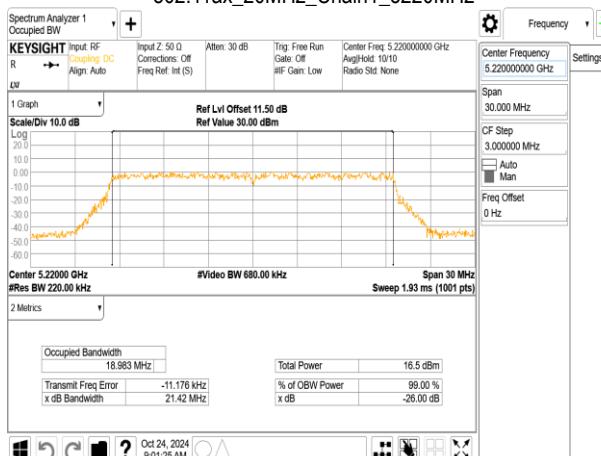
802.11ax\_20MHz\_Chain1\_5180MHz



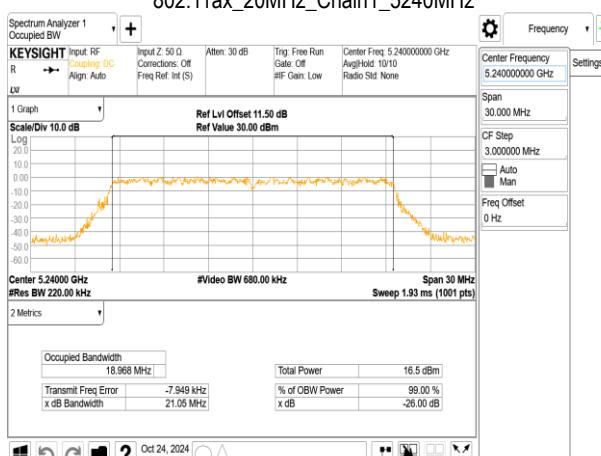
802.11ax\_20MHz\_Chain1\_5745MHz



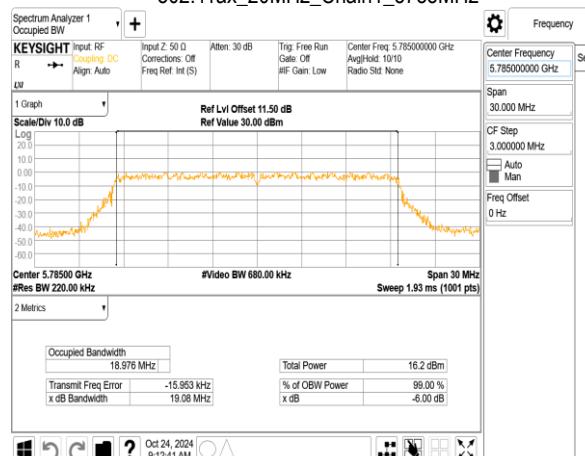
802.11ax\_20MHz\_Chain1\_5220MHz



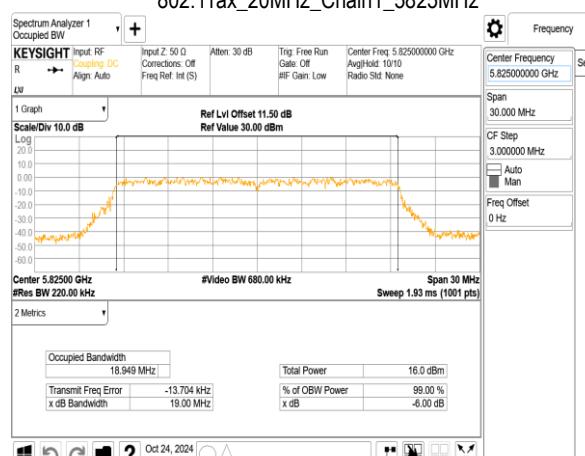
802.11ax\_20MHz\_Chain1\_5240MHz



802.11ax\_20MHz\_Chain1\_5785MHz



802.11ax\_20MHz\_Chain1\_5825MHz



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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



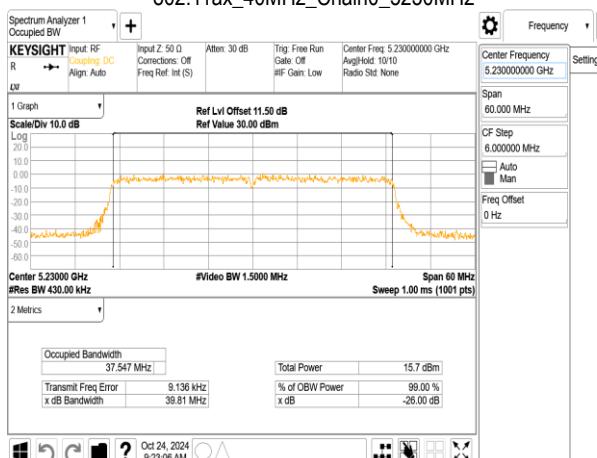
802.11ax\_40MHz\_Chain0\_5190MHz



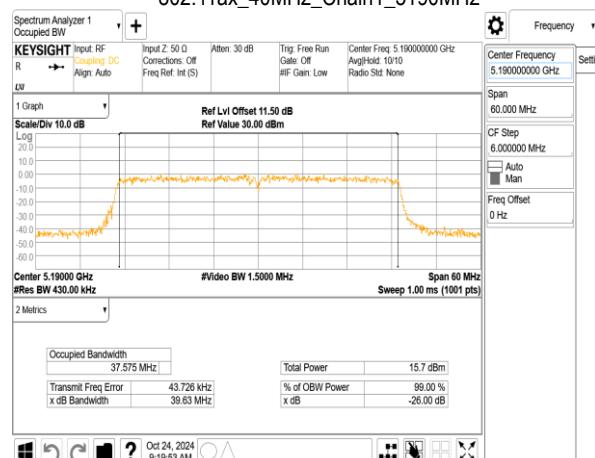
802.11ax\_40MHz\_Chain0\_5795MHz



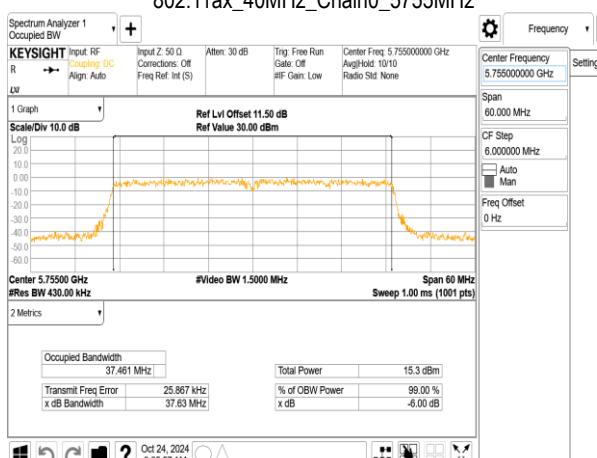
802.11ax\_40MHz\_Chain0\_5230MHz



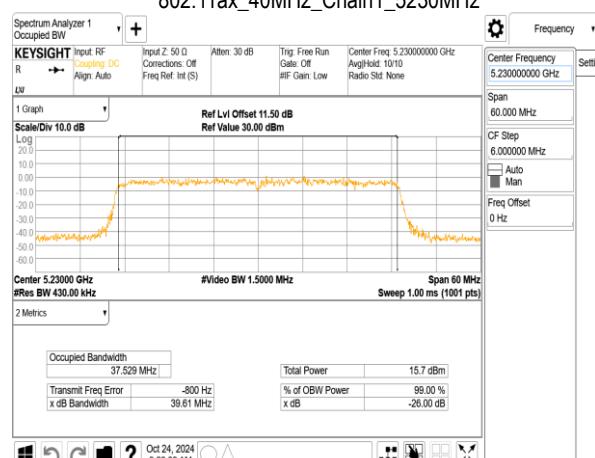
802.11ax\_40MHz\_Chain1\_5190MHz



802.11ax\_40MHz\_Chain0\_5755MHz



802.11ax\_40MHz\_Chain1\_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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



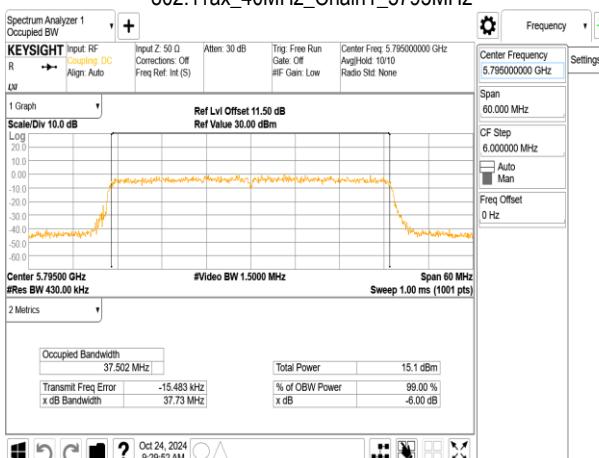
802.11ax\_40MHz\_Chain1\_5755MHz



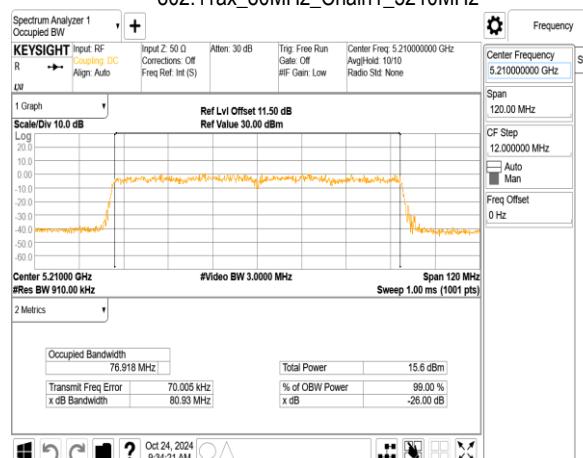
802.11ax\_80MHz\_Chain0\_5775MHz



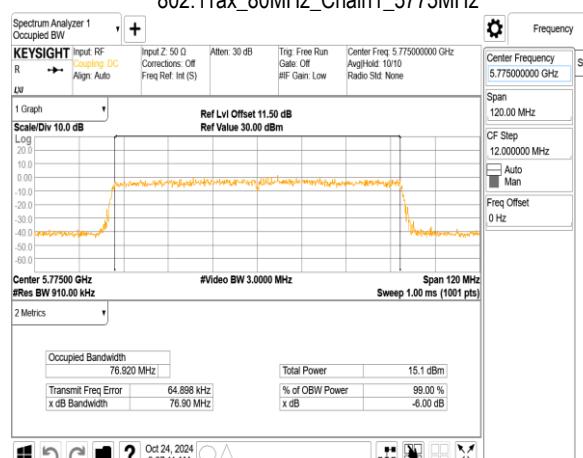
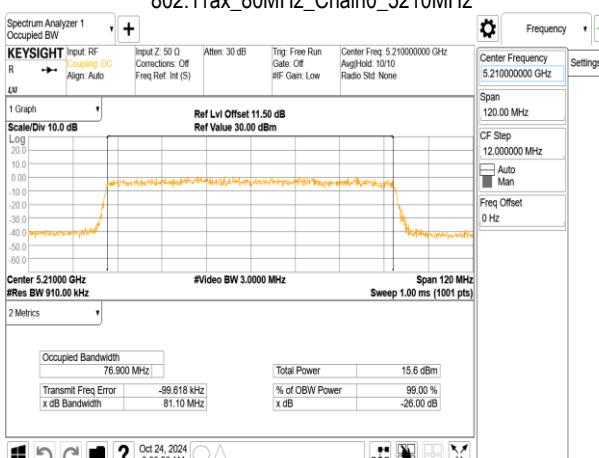
802.11ax\_40MHz\_Chain1\_5795MHz



802.11ax\_80MHz\_Chain0\_5210MHz



802.11ax\_80MHz\_Chain1\_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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group

## 9 MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

### 9.1 Standard Applicable

#### 9.1.1 Duty Cycle

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.

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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



## 9.1.2 FCC

Band	EUT CATEGORY	e-CRF Title 47 §15.407			
		Conducted Output Power	EIRP	TPC	Antenna Directional Gain Requirements
U-NII-1	Fixed point-to-point	1 Watt(30dBm)	Not required	Not required	23dBi
	Outdoor AP	1 Watt(30dBm)	Elevation angle above 30 degrees 125mW (21dBm)	Not required	6dBi
	Indoor AP	1 Watt(30dBm)	Not required	Not required	6dBi
	V Other	250mW(23.98dBm)	Not required	Not required	6dBi
U-NII-2A	Other	250mW(23.98dBm) or 11dBm+10 log B	Not required	When EIRP >500mW At least 6dB below EIRP 1W (30dBm)	6dBi
U-NII-2C	Other	250mW(23.98dBm) or 11dBm+10 log B	Not required		6dBi
U-NII-3	V Other	1 Watt(30dBm)	Not required	Not required	6dBi
	Fixed point-to-point	1 Watt(30dBm)	Not required	Not required	Not required
U-NII-4	Indoor AP (a channel spans 5725~5850 and 5850~5895MHz)	Not required	36dBm	Not required	Not required
	Indoor client (a channel spans 5725~5850 and 5850~5895MHz)	Not required	30dBm	Not required	Not required
	Subordinate device	Not required	36dBm	Not required	Not required
1. 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 directional gain of the antenna. 2. For the 10 log B, B is the 26 dB emission bandwidth.					

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

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



## 9.1.3 ISED

FREQUENCY BAND (MHz)	EUT CATEGORY	RSS-247 §6.2.1~6.2.4			
		EIRP	Conducted Output Power	TPC	
5150~5250	V	OEM devices installed in vehicles	30 mW or $1.76 + 10 \log_{10} B$	N/A	At least 3dB below 30mW EIRP
		Other device	200 mW or $10 + 10 \log_{10} B$ dBm	N/A	N/A
5250~5350		OEM devices installed in vehicles	30 mW or $1.76 + 10 \log_{10} B$	N/A	At least 3dB below 30mW EIRP
		Other device	1.0 W or $17 + 10 \log_{10} B$ dBm	250 mW or $11 + 10 \log_{10} B$	EIRP >500mW, at least 6dB below 1W EIRP
		Outdoor Fixed with EIRP>200mW	-13 dBW/MHz for $0^\circ \leq \theta < 8^\circ$ -13 -0.716 ( $\theta$ -8) dBW/MHz for $8^\circ \leq \theta < 40^\circ$ -35.9 -1.22 ( $\theta$ -40) dBW/MHz for $40^\circ \leq \theta \leq 45^\circ$ -42 dBW/MHz for $\theta > 45^\circ$	N/A	EIRP >500mW, at least 6dB below 1W EIRP
5470-5600 and 5650-5725		All	1.0 W or $17 + 10 \log_{10} B$ dBm	250 mW or $11 + 10 \log_{10} B$	EIRP >500mW, at least 6dB below 1W EIRP
5725~5850	V	All	N/A	1 W	N/A

1. 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.

2. For the 10 log B, B is the 99% emission bandwidth.

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

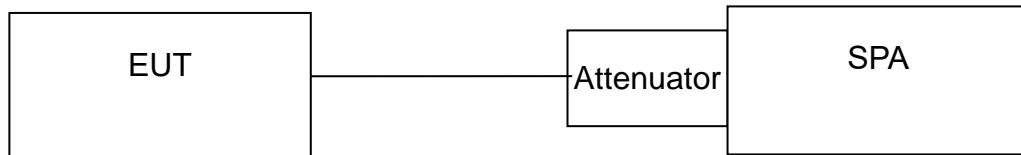
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

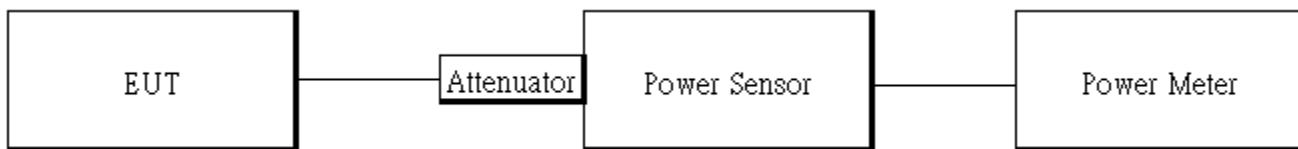
SGS Taiwan Ltd. No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路134號

## 9.2 Test Setup

### 9.2.1 Duty Cycle



### 9.2.2 Output Power



## 9.3 Measurement Procedure

### 9.3.1 Duty Cycle Measurements

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

### 9.3.2 Output Power Measurements

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 power meter
4. Power Meter is used as the auxiliary test equipment to conduct the output power measurement.
5. Record the max. reading and add  $10 \log(1/\text{duty cycle})$ .
6. Repeat above procedures until all frequency (low, middle, and high channel) measured were complete.
7. MIMO mode: offset is set with “measure and add  $10 \log(N)$ ” to measurement for MIMO mode. Offset = cable loss +  $10 \log(N)$ , where N is number of transmitting antenna, cable loss is specified below.

#### Note:

For U-NII1, 2A, 2C and 3 Bands, when the antenna gain is greater than 6 dBi, the power limit attenuated accordingly.

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

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

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

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

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

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

where

Each antenna is driven by no more than one spatial stream;  
NSS = the number of independent spatial streams of data;

NANT = the total number of antennas

$g_{j,k} = 1/20 \cdot 10G_k$  if the kth antenna is being fed by spatial stream j, or zero if it is not;  
 $G_k$  is the gain in dBi of the kth antenna.

## 9.4 Duty Cycle Measurement Result

Mode		Duty Cycle (%) =Ton / (Ton+Toff)	Duty Factor (dB) =10*log ( 1/Duty Cycle )	1/T (kHz)	VBW setting (kHz)
802.11a		93.46	0.29	0.70	1.00
802.11n_20		93.04	0.31	0.75	1.00
802.11ac_20		93.07	0.31	0.74	1.00
802.11n_40		86.91	0.61	1.51	2.00
802.11ac_80		76.85	1.14	3.01	4.00
Mode	RU Config	Duty Cycle (%) =Ton / (Ton+Toff)	Duty Factor (dB) =10*log ( 1/Duty Cycle )	1/T (kHz)	VBW setting (kHz)
802.11ax_20	Full	91.26	0.40	0.96	1.00
	26 RU	96.29	0.16	0.19	1.00
	52 RU	92.94	0.32	0.38	1.00
	106 RU	86.49	0.63	0.78	1.00
802.11ax_40	Full	84.66	0.72	1.81	2.00
	242 RU	74.87	1.26	1.68	2.00
802.11ax_80	Full	74.75	1.26	3.38	4.00
	484 RU	62.55	2.04	2.99	3.00

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。

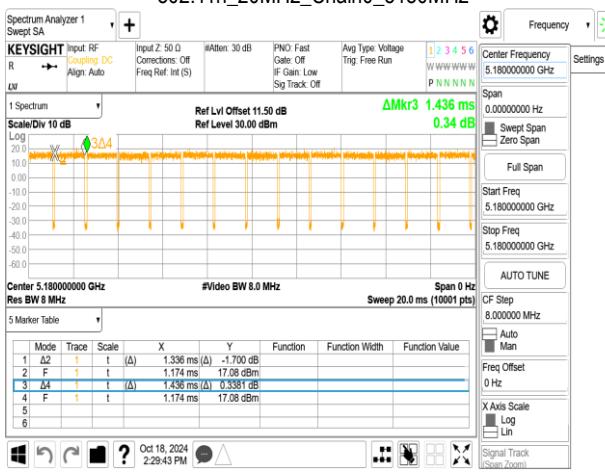
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>.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



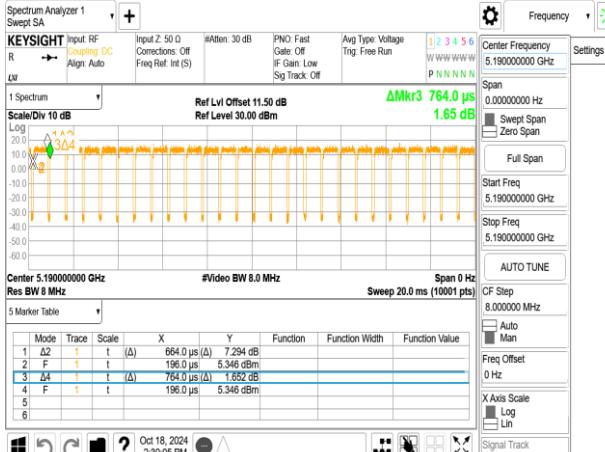
802.11a\_20MHz\_Chain0\_5180MHz



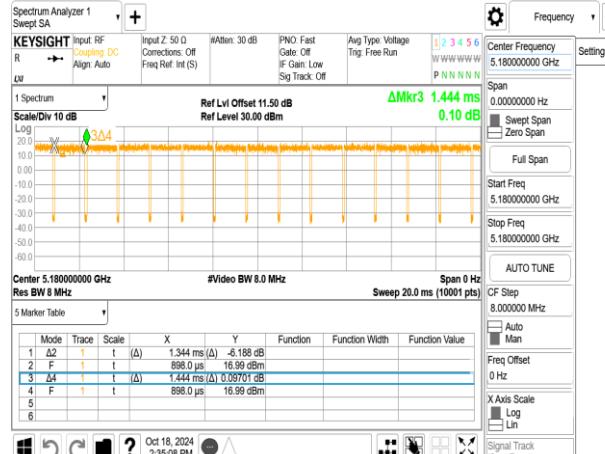
802.11n\_20MHz\_Chain0\_5180MHz



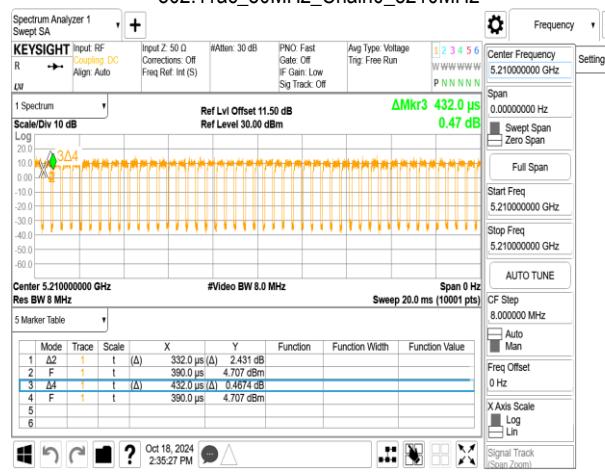
802.11n\_40MHz\_Chain0\_5190MHz



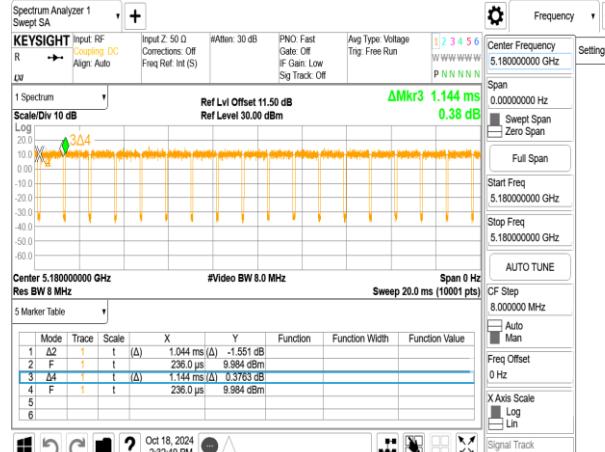
802.11ac\_20MHz\_Chain0\_5180MHz



802.11ac\_80MHz\_Chain0\_5210MHz



802.11ax\_20MHz\_Chain0\_5180MHz



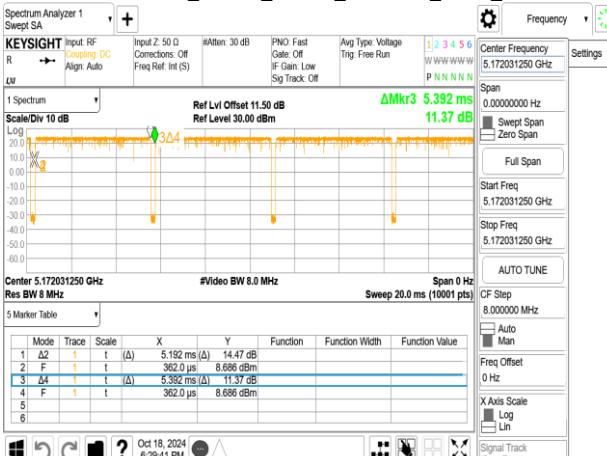
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

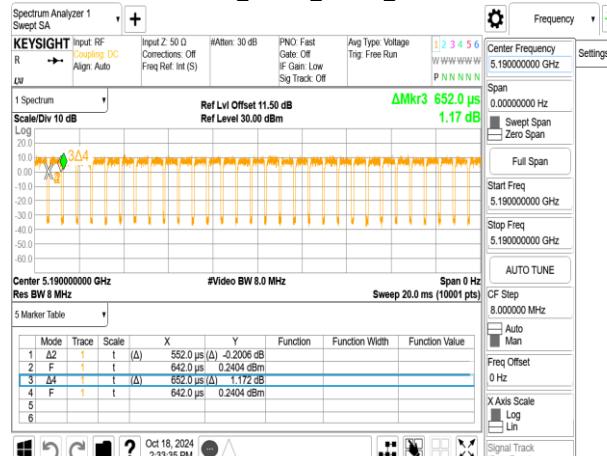
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>.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



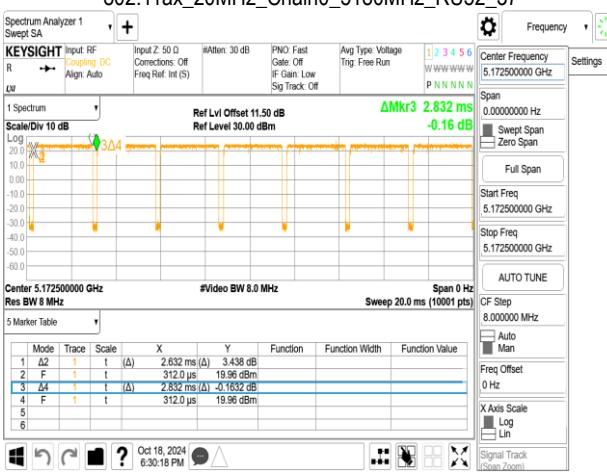
802.11ax\_20MHz\_Chain0\_5180MHz\_RU26\_0



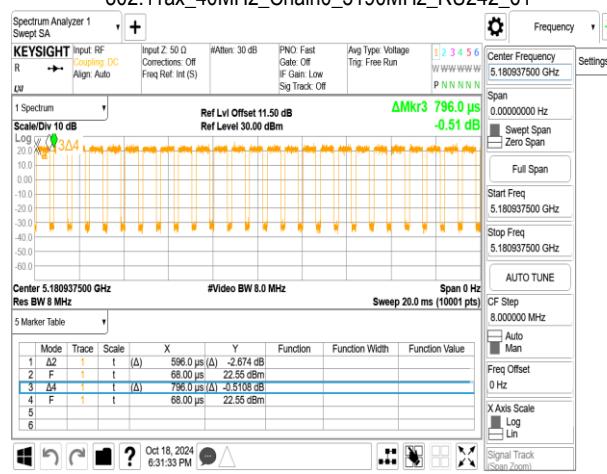
802.11ax\_40MHz\_Chain0\_5190MHz



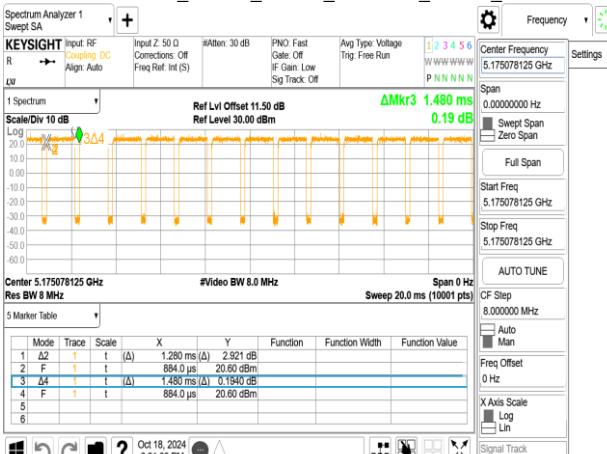
802.11ax\_20MHz\_Chain0\_5180MHz\_RU52\_37



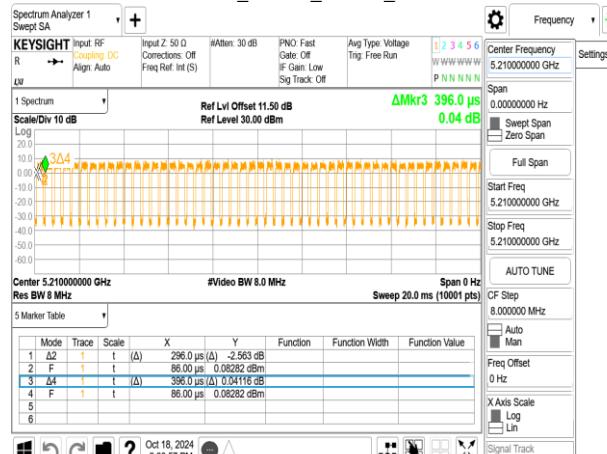
802.11ax\_40MHz\_Chain0\_5190MHz\_RU242\_61



802.11ax\_20MHz\_Chain0\_5180MHz\_RU106\_53



802.11ax\_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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

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

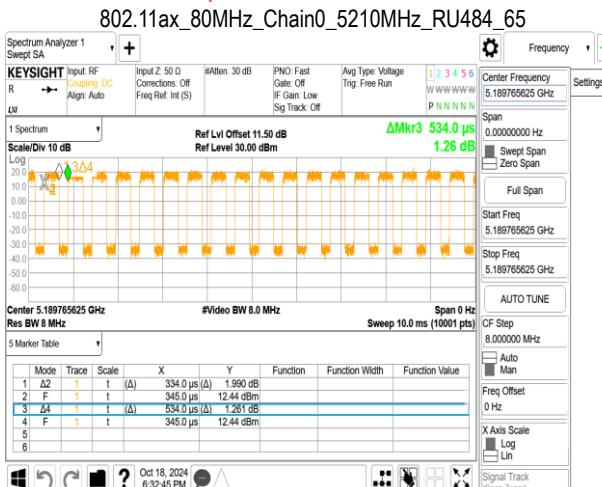
台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



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

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



## 9.5 Output Power Measurement Result

### 9.5.1 FCC Output power

802.11a\_Ch0

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	6	8	6.272	7.97	23.98	PASS
44	5220	6	8	6.185	7.91	23.98	PASS
48	5240	6	8	6.228	7.94	23.98	PASS
149	5745	6	15	30.505	14.84	30	PASS
157	5785	6	15	30.295	14.81	30	PASS
165	5825	6	15	30.717	14.87	30	PASS

802.11a\_Ch1

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	6	8	6.200	7.92	23.98	PASS
44	5220	6	8	6.115	7.86	23.98	PASS
48	5240	6	8	6.157	7.89	23.98	PASS
149	5745	6	15	29.880	14.75	30	PASS
157	5785	6	15	29.606	14.71	30	PASS
165	5825	6	15	30.226	14.80	30	PASS

802.11n\_HT20\_Ch0

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	MCS0	8	6.271	7.97	23.98	PASS
44	5220	MCS0	8	6.185	7.91	23.98	PASS
48	5240	MCS0	8	6.314	8.00	23.98	PASS
149	5745	MCS0	15	29.603	14.71	30	PASS
157	5785	MCS0	15	30.432	14.83	30	PASS
165	5825	MCS0	15	30.014	14.77	30	PASS

802.11n\_HT20\_Ch1

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	MCS0	8	6.199	7.92	23.98	PASS
44	5220	MCS0	8	6.114	7.86	23.98	PASS
48	5240	MCS0	8	6.228	7.94	23.98	PASS
149	5745	MCS0	15	29.196	14.65	30	PASS
157	5785	MCS0	15	29.883	14.75	30	PASS
165	5825	MCS0	15	29.264	14.66	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



## 802.11n\_HT20\_2TX

CH	Frequency (MHz)	Data Rate	Power Setting	Avg. POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
				Ch0	Ch1				
36	5180	MCS0	8	7.94	7.69	12.107	10.83	23.98	PASS
44	5220	MCS0	8	8.01	7.76	12.304	10.90	23.98	PASS
48	5240	MCS0	8	7.97	7.71	12.177	10.86	23.98	PASS
149	5745	MCS0	15	14.81	14.69	59.759	17.76	30	PASS
157	5785	MCS0	15	14.92	14.83	61.501	17.89	30	PASS
165	5825	MCS0	15	14.89	14.76	60.801	17.84	30	PASS

## 802.11n\_HT40\_Ch0

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	MCS0	8	6.338	8.02	23.98	PASS
46	5230	MCS0	8	6.456	8.10	23.98	PASS
151	5755	MCS0	14	24.040	13.81	30	PASS
159	5795	MCS0	14	23.929	13.79	30	PASS

## 802.11n\_HT40\_Ch1

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	MCS0	8	6.251	7.96	23.98	PASS
46	5230	MCS0	8	6.367	8.04	23.98	PASS
151	5755	MCS0	14	23.520	13.71	30	PASS
159	5795	MCS0	14	23.514	13.71	30	PASS

## 802.11n\_HT40\_2TX

CH	Frequency (MHz)	Data Rate	Power Setting	Avg. POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
				Ch0	Ch1				
38	5190	MCS0	8	8.32	8.06	13.187	11.20	23.98	PASS
46	5230	MCS0	8	8.36	8.16	13.399	11.27	23.98	PASS
151	5755	MCS0	14	13.96	13.72	48.431	16.85	30	PASS
159	5795	MCS0	14	13.99	13.74	48.712	16.88	30	PASS

## 802.11ac\_VHT20\_Ch0

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	MCS0	8	6.183	7.912	23.98	PASS
44	5220	MCS0	8	6.140	7.882	23.98	PASS
48	5240	MCS0	8	6.240	7.952	23.98	PASS
149	5745	MCS0	14	23.507	13.712	30	PASS
157	5785	MCS0	14	23.025	13.622	30	PASS
165	5825	MCS0	14	23.345	13.682	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



802.11ac\_VHT20\_Ch1

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	MCS0	8	6.112	7.86	23.98	PASS
44	5220	MCS0	8	6.098	7.85	23.98	PASS
48	5240	MCS0	8	6.183	7.91	23.98	PASS
149	5745	MCS0	14	23.025	13.62	30	PASS
157	5785	MCS0	14	22.449	13.51	30	PASS
165	5825	MCS0	14	22.866	13.59	30	PASS

802.11ac\_VHT20\_2TX

CH	Frequency (MHz)	Data Rate	Power Setting	Avg. POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
				Ch0	Ch1				
36	5180	MCS0	8	7.66	7.61	11.607	10.65	23.98	PASS
44	5220	MCS0	8	7.94	7.69	12.103	10.83	23.98	PASS
48	5240	MCS0	8	7.92	7.64	12.007	10.79	23.98	PASS
149	5745	MCS0	14	13.80	13.71	47.505	16.77	30	PASS
157	5785	MCS0	14	13.73	13.65	46.799	16.70	30	PASS
165	5825	MCS0	14	13.83	13.72	47.726	16.79	30	PASS

802.11ac\_VHT80\_Ch0

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
42	5210	MCS0	9	6.228	7.94	23.98	PASS
155	5775	MCS0	13	18.465	12.66	30	PASS

802.11ac\_VHT80\_Ch1

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
42	5210	MCS0	9	5.920	7.72	23.98	PASS
155	5775	MCS0	13	18.053	12.57	30	PASS

802.11ac\_VHT80\_2TX

CH	Frequency (MHz)	Data Rate	Power Setting	Avg. POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
				Ch0	Ch1				
42	5210	MCS0	9	7.99	7.76	12.275	10.89	23.98	PASS
155	5775	MCS0	13	12.89	12.65	37.892	15.79	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



## 802.11ax\_HE20\_Ch0

CH	Frequency (MHz)	Data Rate	RU config.	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	MCS0	full	8	6.320	8.01	23.98	PASS
		MCS0	26/0	33	6.258	7.96	23.98	PASS
		MCS0	52/37	33	6.206	7.93	23.98	PASS
		MCS0	106/53	33	6.068	7.83	23.98	PASS
44	5220	MCS0	full	8	6.379	8.05	23.98	PASS
48	5240	MCS0	full	8	6.438	8.09	23.98	PASS
149	5745	MCS0	full	11	12.266	10.89	30	PASS
		MCS0	26/0	29	11.924	10.76	30	PASS
		MCS0	52/37	29	11.852	10.74	30	PASS
		MCS0	106/53	29	12.107	10.83	30	PASS
157	5785	MCS0	full	11	11.607	10.65	30	PASS
165	5825	MCS0	full	11	11.960	10.78	30	PASS
		MCS0	26/8	29	11.599	10.64	30	PASS
		MCS0	52/40	29	11.609	10.65	30	PASS
		MCS0	106/54	29	11.723	10.69	30	PASS

## 802.11ax\_HE20\_Ch1

CH	Frequency (MHz)	Data Rate	RU config.	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	MCS0	full	8	6.205	7.93	23.98	PASS
		MCS0	26/0	33	5.949	7.74	23.98	PASS
		MCS0	52/37	33	5.899	7.71	23.98	PASS
		MCS0	106/53	33	5.957	7.75	23.98	PASS
44	5220	MCS0	full	8	6.248	7.96	23.98	PASS
48	5240	MCS0	full	8	6.277	7.98	23.98	PASS
149	5745	MCS0	full	11	11.979	10.78	30	PASS
		MCS0	26/0	29	11.706	10.68	30	PASS
		MCS0	52/37	29	11.663	10.67	30	PASS
		MCS0	106/53	29	11.859	10.74	30	PASS
157	5785	MCS0	full	11	11.419	10.58	30	PASS
165	5825	MCS0	full	11	11.661	10.67	30	PASS
		MCS0	26/8	29	11.466	10.59	30	PASS
		MCS0	52/40	29	11.397	10.57	30	PASS
		MCS0	106/54	29	11.562	10.63	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



802.11ax\_HE20\_2TX

CH	Frequency (MHz)	Data Rate	RU config.	Power Setting	Avg. POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
					Ch0	Ch1				
36	5180	MCS0	full	8	8.07	7.98	12.684	11.03	23.98	PASS
		MCS0	26/0	33	8.06	7.80	12.435	10.95	23.98	PASS
		MCS0	52/37	33	8.04	7.75	12.319	10.91	23.98	PASS
		MCS0	106/53	33	7.94	7.81	12.263	10.89	23.98	PASS
44	5220	MCS0	full	8	8.14	8.04	12.876	11.10	23.98	PASS
48	5240	MCS0	full	8	8.19	8.10	13.040	11.15	23.98	PASS
149	5745	MCS0	full	11	11.01	10.86	24.792	13.94	30	PASS
		MCS0	26/0	29	10.87	10.79	24.236	13.84	30	PASS
		MCS0	52/37	29	10.94	10.83	24.511	13.89	30	PASS
		MCS0	106/53	29	10.96	10.77	24.416	13.88	30	PASS
157	5785	MCS0	full	11	10.83	10.65	23.705	13.75	30	PASS
165	5825	MCS0	full	11	10.92	10.77	24.284	13.85	30	PASS
		MCS0	26/8	29	10.78	10.61	23.498	13.71	30	PASS
		MCS0	52/40	29	10.76	10.63	23.463	13.70	30	PASS
		MCS0	106/54	29	10.88	10.66	23.889	13.78	30	PASS

802.11ax\_HE40\_Ch0

CH	Frequency (MHz)	Data Rate	RU config.	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	MCS0	full	8	6.373	8.04	23.98	PASS
		MCS0	242/61	33	6.276	7.98	23.98	PASS
46	5230	MCS0	full	8	6.491	8.12	23.98	PASS
151	5755	MCS0	full	10	9.469	9.76	30	PASS
		MCS0	242/61	30	9.304	9.69	30	PASS
159	5795	MCS0	full	10	9.361	9.71	30	PASS
		MCS0	242/62	30	9.347	9.71	30	PASS

802.11ax\_HE40\_Ch1

CH	Frequency (MHz)	Data Rate	RU config.	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	MCS0	full	8	6.256	7.96	23.98	PASS
		MCS0	242/61	33	6.105	7.86	23.98	PASS
46	5230	MCS0	full	8	6.373	8.04	23.98	PASS
151	5755	MCS0	full	10	9.327	9.70	30	PASS
		MCS0	242/61	30	9.198	9.64	30	PASS
159	5795	MCS0	full	10	9.169	9.62	30	PASS
		MCS0	242/62	30	9.177	9.63	30	PASS

802.11ax\_HE40\_2TX

CH	Frequency (MHz)	Data Rate	RU config.	Power Setting	Avg. POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
					Ch0	Ch1				
38	5190	MCS0	full	8	8.11	8.03	12.834	11.08	23.98	PASS
		MCS0	242/61	33	8.11	7.92	12.657	11.02	23.98	PASS
46	5230	MCS0	full	8	8.17	8.10	13.028	11.15	23.98	PASS
151	5755	MCS0	full	10	9.87	9.79	19.247	12.84	30	PASS
159	5795	MCS0	242/61	30	9.94	9.63	19.033	12.79	30	PASS
159	5795	MCS0	full	10	9.84	9.76	19.115	12.81	30	PASS
159	5795	MCS0	242/62	30	9.90	9.59	18.858	12.75	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



802.11ax\_HE80\_Ch0

CH	Frequency (MHz)	Data Rate	RU config.	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
42	5210	MCS0	full	9	6.229	7.94	23.98	PASS
		MCS0	484/65	34	6.120	7.87	23.98	PASS
155	5775	MCS0	full	10	7.523	8.76	30	PASS
		MCS0	484/65	33	7.409	8.70	30	PASS
		MCS0	484/66	33	7.443	8.72	30	PASS

802.11ax\_HE80\_Ch1

CH	Frequency (MHz)	Data Rate	RU config.	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
42	5210	MCS0	full	9	5.935	7.73	23.98	PASS
		MCS0	484/65	34	5.831	7.66	23.98	PASS
155	5775	MCS0	full	10	7.403	8.69	30	PASS
		MCS0	484/65	33	7.291	8.63	30	PASS
		MCS0	484/66	33	7.358	8.67	30	PASS

802.11ax\_HE80\_2TX

CH	Frequency (MHz)	Data Rate	RU config.	Power Setting	Avg. POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
					Ch0	Ch1				
42	5210	MCS0	full	9	8.00	7.80	12.346	10.92	23.98	PASS
		MCS0	484/65	34	7.94	7.74	12.160	10.85	23.98	PASS
155	5775	MCS0	full	10	8.97	8.69	15.298	11.85	30	PASS
		MCS0	484/65	33	8.95	8.65	15.173	11.81	30	PASS
		MCS0	484/66	33	8.92	8.59	15.018	11.77	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



### 9.5.2 ISED Conducted output power and EIRP

#### 802.11a\_Ch0

CH	Frequency (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
149	5745	30.505	14.84	30	PASS
157	5785	30.295	14.81	30	PASS
165	5825	<b>30.717</b>	<b>14.87</b>	30	PASS

#### 802.11a\_Ch1

CH	Frequency (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
149	5745	29.880	14.75	30	PASS
157	5785	29.606	14.71	30	PASS
165	5825	<b>30.226</b>	<b>14.80</b>	30	PASS

#### 802.11n\_HT20\_Ch0

CH	Frequency (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
149	5745	29.603	14.71	30	PASS
157	5785	<b>30.432</b>	<b>14.83</b>	30	PASS
165	5825	30.014	14.77	30	PASS

#### 802.11n\_HT20\_Ch1

CH	Frequency (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
149	5745	29.196	14.65	30	PASS
157	5785	<b>29.883</b>	<b>14.75</b>	30	PASS
165	5825	29.264	14.66	30	PASS

#### 802.11n\_HT20\_2TX

CH	Frequency (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
		Ch0	Ch1				
149	5745	14.81	14.69	59.759	17.76	30	PASS
157	5785	14.92	14.83	<b>61.501</b>	<b>17.89</b>	30	PASS
165	5825	14.89	14.76	60.801	17.84	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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



802.11n\_HT40\_Ch0

CH	Frequency (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
151	5755	<b>24.040</b>	<b>13.81</b>	30	PASS
159	5795	23.929	13.79	30	PASS

802.11n\_HT40\_Ch1

CH	Frequency (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
151	5755	<b>23.520</b>	<b>13.71</b>	30	PASS
159	5795	23.514	13.71	30	PASS

802.11n\_HT40\_2TX

CH	Frequency (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
		Ch0	Ch1				
151	5755	13.96	13.72	48.431	16.85	30	PASS
159	5795	13.99	13.74	<b>48.712</b>	<b>16.88</b>	30	PASS

802.11ac\_VHT20\_Ch0

CH	Frequency (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
149	5745	<b>23.507</b>	<b>13.71</b>	30	PASS
157	5785	23.025	13.62	30	PASS
165	5825	23.345	13.68	30	PASS

802.11ac\_VHT20\_Ch1

CH	Frequency (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
149	5745	<b>23.025</b>	<b>13.62</b>	30	PASS
157	5785	22.449	13.51	30	PASS
165	5825	22.866	13.59	30	PASS

802.11ac\_VHT20\_2TX

CH	Frequency (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
		Ch0	Ch1				
149	5745	13.80	13.71	47.505	16.77	30	PASS
157	5785	13.73	13.65	46.799	16.70	30	PASS
165	5825	13.83	13.72	<b>47.726</b>	<b>16.79</b>	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



802.11ac\_VHT80\_Ch0

CH	Frequency (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
155	5775	18.465	12.66	30	PASS

802.11ac\_VHT80\_Ch1

CH	Frequency (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
155	5775	18.053	12.57	30	PASS

802.11ac\_VHT80\_2TX

CH	Frequency (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
		Ch0	Ch1				
155	5775	12.89	12.65	37.892	15.79	30	PASS

802.11ax\_HE20\_Ch0

CH	Frequency (MHz)	RU config.	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
149	5745	full	12.266	10.89	30	PASS
		26/0	11.924	10.76	30	PASS
		52/37	11.852	10.74	30	PASS
		106/53	12.107	10.83	30	PASS
157	5785	full	11.607	10.65	30	PASS
165	5825	full	11.960	10.78	30	PASS
		26/8	11.599	10.64	30	PASS
		52/40	11.609	10.65	30	PASS
		106/54	11.723	10.69	30	PASS

802.11ax\_HE20\_Ch1

CH	Frequency (MHz)	RU config.	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
149	5745	full	11.979	10.78	30	PASS
		26/0	11.706	10.68	30	PASS
		52/37	11.663	10.67	30	PASS
		106/53	11.859	10.74	30	PASS
157	5785	full	11.419	10.58	30	PASS
165	5825	full	11.661	10.67	30	PASS
		26/8	11.466	10.59	30	PASS
		52/40	11.397	10.57	30	PASS
		106/54	11.562	10.63	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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



802.11ax\_HE20\_2TX

CH	Frequency (MHz)	RU config.	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
			Ch0	Ch1				
149	5745	full	11.01	10.86	24.792	13.94	30	PASS
		26/0	10.87	10.79	24.236	13.84	30	PASS
		52/37	10.94	10.83	24.511	13.89	30	PASS
		106/53	10.96	10.77	24.416	13.88	30	PASS
157	5785	full	10.83	10.65	23.705	13.75	30	PASS
165	5825	full	10.92	10.77	24.284	13.85	30	PASS
		26/8	10.78	10.61	23.498	13.71	30	PASS
		52/40	10.76	10.63	23.463	13.70	30	PASS
		106/54	10.88	10.66	23.889	13.78	30	PASS

802.11ax\_HE40\_Ch0

CH	Frequency (MHz)	RU config.	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
151	5755	full	9.469	9.76	30	PASS
		242/61	9.304	9.69	30	PASS
159	5795	full	9.361	9.71	30	PASS
		242/62	9.347	9.71	30	PASS

802.11ax\_HE40\_Ch1

CH	Frequency (MHz)	RU config.	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
151	5755	full	9.327	9.70	30	PASS
		242/61	9.198	9.64	30	PASS
159	5795	full	9.169	9.62	30	PASS
		242/62	9.177	9.63	30	PASS

802.11ax\_HE40\_2TX

CH	Frequency (MHz)	RU config.	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
			Ch0	Ch1				
151	5755	full	9.87	9.79	19.247	12.84	30	PASS
		242/61	9.94	9.63	19.033	12.79	30	PASS
159	5795	full	9.84	9.76	19.115	12.81	30	PASS
		242/62	9.90	9.59	18.858	12.75	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



## 802.11ax\_HE80\_Ch0

CH	Frequency (MHz)	RU config.	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
155	5775	full	7.523	8.76	30	PASS
		484/65	7.409	8.70	30	PASS
		484/66	7.443	8.72	30	PASS

## 802.11ax\_HE80\_Ch1

CH	Frequency (MHz)	RU config.	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
155	5775	full	7.403	8.69	30	PASS
		484/65	7.291	8.63	30	PASS
		484/66	7.358	8.67	30	PASS

## 802.11ax\_HE80\_2TX

CH	Frequency (MHz)	RU config.	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
			Ch0	Ch1				
155	5775	full	8.97	8.69	15.298	11.85	30	PASS
		484/65	8.95	8.65	15.173	11.81	30	PASS
		484/66	8.92	8.59	15.018	11.77	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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



## EIRP

### 802.11a\_Ch0

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	7.97	3.41	13.740	11.38	14.77	PASS
44	5220	7.91	3.41	13.552	11.32	14.77	PASS
48	5240	7.94	3.41	13.646	11.35	14.77	PASS

### 802.11a\_Ch1

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	7.92	3.41	13.583	11.33	14.77	PASS
44	5220	7.86	3.41	13.397	11.27	14.77	PASS
48	5240	7.89	3.41	13.490	11.30	14.77	PASS

### 802.11n\_HT20\_Ch0

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	7.97	3.41	13.740	11.38	14.77	PASS
44	5220	7.91	3.41	13.552	11.32	14.77	PASS
48	5240	8.00	3.41	13.836	11.41	14.77	PASS

### 802.11n\_HT20\_Ch1

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	7.92	3.41	13.583	11.33	14.77	PASS
44	5220	7.86	3.41	13.397	11.27	14.77	PASS
48	5240	7.94	3.41	13.646	11.35	14.77	PASS

### 802.11n\_HT20\_2TX

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	10.83	3.41	26.546	14.24	14.77	PASS
44	5220	10.90	3.41	26.977	14.31	14.77	PASS
48	5240	10.86	3.41	26.730	14.27	14.77	PASS

### 802.11n\_HT40\_Ch0

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	8.02	3.41	13.900	11.43	14.77	PASS
46	5230	8.10	3.41	14.158	11.51	14.77	PASS

### 802.11n\_HT40\_Ch1

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	7.96	3.41	13.709	11.37	14.77	PASS
46	5230	8.04	3.41	13.964	11.45	14.77	PASS

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

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



802.11n\_HT40\_2TX

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	11.20	3.41	28.907	14.61	14.77	PASS
46	5230	11.27	3.41	29.376	14.68	14.77	PASS

802.11ac\_VHT20\_Ch0

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	7.91	3.41	13.552	11.32	14.77	PASS
44	5220	7.88	3.41	13.459	11.29	14.77	PASS
48	5240	7.95	3.41	13.677	11.36	14.77	PASS

802.11ac\_VHT20\_Ch1

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	7.86	3.41	13.397	11.27	14.77	PASS
44	5220	7.85	3.41	13.366	11.26	14.77	PASS
48	5240	7.91	3.41	13.552	11.32	14.77	PASS

802.11ac\_VHT20\_2TX

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	10.65	3.41	25.468	14.06	14.77	PASS
44	5220	10.83	3.41	26.546	14.24	14.77	PASS
48	5240	10.79	3.41	26.303	14.20	14.77	PASS

802.11ac\_VHT80\_Ch0

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
42	5210	7.94	3.41	13.646	11.35	14.77	PASS

802.11ac\_VHT80\_Ch1

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
42	5210	7.72	3.41	12.972	11.13	14.77	PASS

802.11ac\_VHT80\_2TX

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
42	5210	10.89	3.41	26.915	14.30	14.77	PASS

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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



802.11ax\_HE20\_Ch0

CH	Frequency (MHz)	RU config.	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	full	8.01	3.41	13.868	11.42	14.77	PASS
		26/0	7.96	3.41	13.709	11.37	14.77	PASS
		52/37	7.93	3.41	13.614	11.34	14.77	PASS
		106/53	7.83	3.41	13.305	11.24	14.77	PASS
44	5220	full	8.05	3.41	13.996	11.46	14.77	PASS
48	5240	full	8.09	3.41	14.125	11.50	14.77	PASS

802.11ax\_HE20\_Ch1

CH	Frequency (MHz)	RU config.	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	full	7.93	3.41	13.614	11.34	14.77	PASS
		26/0	7.74	3.41	13.032	11.15	14.77	PASS
		52/37	7.71	3.41	12.942	11.12	14.77	PASS
		106/53	7.75	3.41	13.062	11.16	14.77	PASS
44	5220	full	7.96	3.41	13.709	11.37	14.77	PASS
48	5240	full	7.98	3.41	13.772	11.39	14.77	PASS

802.11ax\_HE20\_2TX

CH	Frequency (MHz)	RU config.	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	full	11.03	3.41	27.797	14.44	14.77	PASS
		26/0	10.95	3.41	27.290	14.36	14.77	PASS
		52/37	10.91	3.41	27.040	14.32	14.77	PASS
		106/53	10.89	3.41	26.915	14.30	14.77	PASS
44	5220	full	11.10	3.41	28.249	14.51	14.77	PASS
48	5240	full	11.15	3.41	28.576	14.56	14.77	PASS

802.11ax\_HE40\_Ch0

CH	Frequency (MHz)	RU config.	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	full	8.04	3.41	13.964	11.45	14.77	PASS
		242/61	7.98	3.41	13.772	11.39	14.77	PASS
46	5230	full	8.12	3.41	14.223	11.53	14.77	PASS

802.11ax\_HE40\_Ch1

CH	Frequency (MHz)	RU config.	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	full	7.96	3.41	13.709	11.37	14.77	PASS
		242/61	7.86	3.41	13.397	11.27	14.77	PASS
46	5230	full	8.04	3.41	13.964	11.45	14.77	PASS

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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



802.11ax\_HE40\_2TX

CH	Frequency (MHz)	RU config.	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	full	11.08	3.41	28.119	14.49	14.77	PASS
		242/61	11.02	3.41	27.733	14.43	14.77	PASS
46	5230	full	11.15	3.41	28.576	14.56	14.77	PASS

802.11ax\_HE80\_Ch0

CH	Frequency (MHz)	RU config.	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
42	5210	full	7.94	3.41	13.646	11.35	14.77	PASS
		484/65	7.87	3.41	13.428	11.28	14.77	PASS

802.11ax\_HE80\_Ch1

CH	Frequency (MHz)	RU config.	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
42	5210	full	7.73	3.41	13.002	11.14	14.77	PASS
		484/65	7.66	3.41	12.794	11.07	14.77	PASS

802.11ax\_HE80\_2TX

CH	Frequency (MHz)	RU config.	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
42	5210	full	10.92	3.41	27.102	14.33	14.77	PASS
		484/65	10.85	3.41	26.669	14.26	14.77	PASS

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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



## 10 MAXIMUM POWER SPECTRAL DENSITY

### 10.1 FCC Standard

Operation Bands	EUT CATEGORY		e-CRF Title 47 §15.407 Power Spectral Density	Antenna Directional Gain Requirements
U-NII-1	Outdoor Access Point (Master)		1. 17dBm/ MHz 2. EIRP<=125mW(21dBm) at any elevation angle > 30°	
	Indoor Access Point (Master)		17dBm / MHz	
	Fixed point-to-point Access Ponit		17dBm / MHz	
	V	Client device	11dBm / MHz	6dBi
U-NII-2A	All		11dBm / MHz	6dBi
U-NII-2C	All		11dBm / MHz	6dBi
U-NII-3	V	All	30dBm / 500kHz	6dBi
U-NII-4	Indoor AP		20dBm / MHz e.i.r.p.	Not required
	Indoor client		14dBm / MHz e.i.r.p.	Not required
	Subordinate device		20dBm / MHz e.i.r.p.	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.				

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

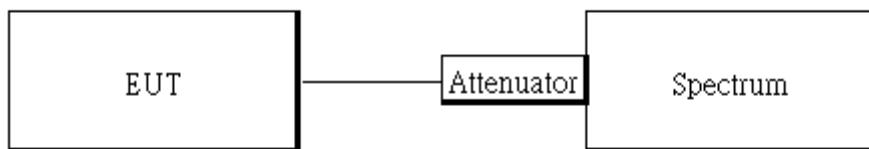
[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group

## 10.2 ISED Standard

FREQUENCY BAND (MHz)	EUT CATEGORY	RSS-247 §6.2.1~6.2.4	
		EIRP Density	Power Density
5150~5250	V	OEM devices installed in vehicles	N/A
		Other device	10 dBm/MHz
5250~5350		OEM devices installed in vehicles	N/A
		Other device	N/A
5470-5600 and 5650-5725		All	N/A
5725~5850	V	All	30 dBm/500kHz
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.			

## 10.3 Test Setup



## 10.4 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 (1001 pts), Detector = power averaging (rms), if available. Otherwise, use sample detector mode, 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=300kHz, VBW=1MHz, where span is enough to capture the entire bandwidth, Sweep time = Auto, detector = RMS or sample, traces 100 sweeps of video averaging.

In addition, measurement bandwidth of Maximum PSD is specified in 500 kHz, add  $10 \log (500 \text{ kHz}/\text{RBW})$

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

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

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



to the measured result.

5. User the cursor on spectrum to peak search the highest level of trace
6. (1)Duty cycle  $\geq 98\%$  : Record the max. reading.  
(2)Duty cycle  $< 98\%$  : Record the max. reading and add  $10 \log(1/\text{duty cycle})$ .
7. Repeat above procedures until all default test channel (low, middle, and high) was complete.

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

**Note:**

For U-NII1, 2A, 2C and 3 Bands, when the antenna gain is greater than 6 dBi, the power spectral density limit attenuated accordingly.

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

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

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

where

Each antenna is driven by no more than one spatial stream;  
NSS = the number of independent spatial streams of data;

NANT = the total number of antennas

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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



## 10.5 Measurement Result

POWER DENSITY 802.11a MODE							
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Maximum Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5180	-3.121	-	0.29	0.29		11.00 dBm/MHz	-10.71
5220	-2.698	-	0.29	0.29		11.00 dBm/MHz	-10.71
5240	-2.819	-	0.29	0.29		11.00 dBm/MHz	-10.71
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Maximum Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5745	1.994	-	0.29	2.22	4.50	30.00 dBm/500kHz	-25.50
5785	2.248	-	0.29	2.22	4.76	30.00 dBm/500kHz	-25.24
5825	2.506	-	0.29	2.22	5.02	30.00 dBm/500kHz	-24.98
POWER DENSITY 802.11n HT20 MODE							
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Maximum Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5180	-2.901	-2.611	0.31	0.57		10.58 dBm/MHz	-10.01
5220	-2.515	-2.317	0.31	0.91		10.58 dBm/MHz	-9.67
5240	-2.878	-2.800	0.31	0.48		10.58 dBm/MHz	-10.10
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Maximum Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5745	-2.807	-2.765	0.31	2.22	2.75	29.19 dBm/500kHz	-26.44
5785	-2.636	-2.753	0.31	2.22	2.85	29.19 dBm/500kHz	-26.34
5825	-2.599	-2.949	0.31	2.22	2.77	29.19 dBm/500kHz	-26.42
POWER DENSITY 802.11n HT40 MODE							
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Maximum Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5190	-7.321	-7.270	0.61	-3.68		10.58 dBm/MHz	-14.26
5230	-6.920	-6.774	0.61	-3.23		10.58 dBm/MHz	-13.81
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Maximum Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5755	-6.999	-7.278	0.61	2.22	-1.30	29.19 dBm/500kHz	-30.49
5795	-6.483	-6.533	0.61	2.22	-0.67	29.19 dBm/500kHz	-29.86
POWER DENSITY 802.11ac VHT80 MODE							
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Maximum Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5210	-10.727	-10.671	1.14	-6.55		10.58 dBm/MHz	-17.13
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Maximum Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5775	-10.776	-10.211	1.14	2.22	-4.11	29.19 dBm/500kHz	-33.30

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

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



POWER DENSITY 802.11ax HE20 MODE								
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Maximum Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5180	full	-3.999	-4.199	0.40	-0.69		10.58 dBm/MHz	-11.27
	26/0	-1.015	-1.696	0.16	1.83		10.58 dBm/MHz	-8.75
	52/37	-0.276	-0.746	0.32	2.83		10.58 dBm/MHz	-7.75
	106/53	-2.557	-3.125	0.63	0.81		10.58 dBm/MHz	-9.77
5220	full	-3.439	-3.402	0.40	-0.01		10.58 dBm/MHz	-10.59
5240	full	-3.906	-3.912	0.40	-0.50		10.58 dBm/MHz	-11.08
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Maximum Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5745	full	-6.407	-6.643	0.40	2.22	-0.89	29.19 dBm/500kHz	-30.08
	26/0	-3.598	-3.514	0.16	2.22	1.83	29.19 dBm/500kHz	-27.36
	52/37	-2.695	-2.989	0.32	2.22	2.71	29.19 dBm/501kHz	-26.48
	106/53	-6.108	-5.818	0.63	2.22	-0.10	29.19 dBm/502kHz	-29.29
5785	full	-6.634	-6.300	0.40	2.22	-0.83	29.19 dBm/503kHz	-30.02
5825	full	-6.137	-6.790	0.40	2.22	-0.82	29.19 dBm/504kHz	-30.01
	26/8	-1.768	-1.713	0.16	2.22	3.65	29.19 dBm/505kHz	-25.54
	52/40	-1.516	-1.460	0.32	2.22	4.06	29.19 dBm/506kHz	-25.13
	106/54	-4.281	-4.802	0.63	2.22	1.33	29.19 dBm/507kHz	-27.86
POWER DENSITY 802.11ax HE40 MODE								
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Maximum Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5190	full	-7.622	-8.595	0.72	-4.35		10.58 dBm/MHz	-14.93
	242/61	-3.781	-4.168	1.26	0.30		10.58 dBm/MHz	-10.28
5230	full	-7.627	-7.814	0.72	-3.99		10.58 dBm/MHz	-14.57
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Maximum Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5755	full	-11.400	-10.813	0.72	2.22	-5.15	29.19 dBm/501kHz	-34.34
	242/61	-6.950	-7.100	1.26	2.22	-0.53	29.19 dBm/502kHz	-29.72
5795	full	-10.216	-9.905	0.72	2.22	-4.11	29.19 dBm/503kHz	-33.30
	242/62	-6.836	-6.507	1.26	2.22	-0.18	29.19 dBm/504kHz	-29.37
POWER DENSITY 802.11ax HE80 MODE								
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Maximum Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5210	full	-10.314	-10.877	1.26	-6.32		10.58 dBm/MHz	-16.90
	484/65	-8.071	-8.073	2.04	-3.02		10.58 dBm/MHz	-13.60
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Maximum Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5775	full	-14.319	-14.067	1.26	2.22	-7.70	29.19 dBm/500kHz	-36.89
	484/65	-11.946	-11.484	2.04	2.22	-4.44	29.19 dBm/501kHz	-33.63
	484/66	-11.100	-11.383	2.04	2.22	-3.97	29.19 dBm/502kHz	-33.16

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

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

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

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group



802.11a\_20MHz\_Chain0\_5180MHz



802.11a\_20MHz\_Chain0\_5220MHz



802.11a\_20MHz\_Chain0\_5240MHz



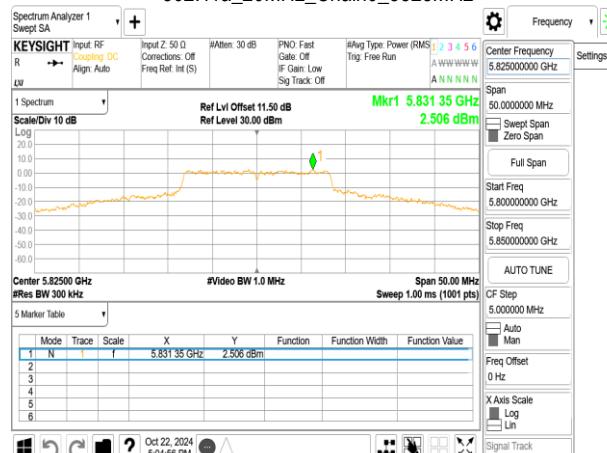
802.11a\_20MHz\_Chain0\_5745MHz



802.11a\_20MHz\_Chain0\_5785MHz



802.11a\_20MHz\_Chain0\_5825MHz



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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

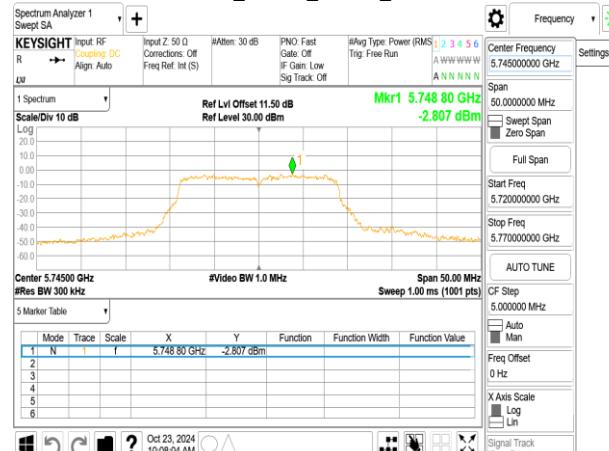
Member of SGS Group



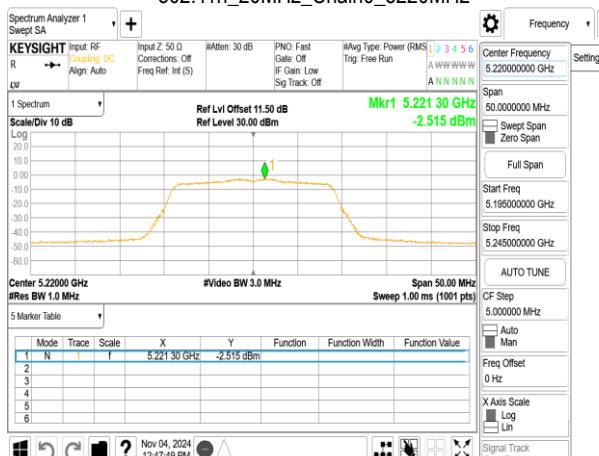
802.11n\_20MHz\_Chain0\_5180MHz



802.11n\_20MHz\_Chain0\_5745MHz



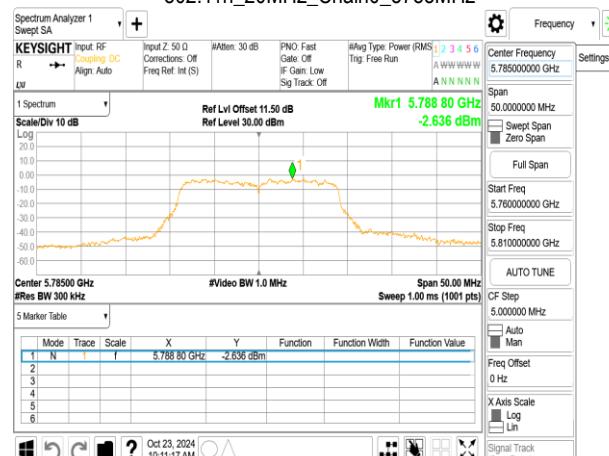
802.11n\_20MHz\_Chain0\_5220MHz



802.11n\_20MHz\_Chain0\_5240MHz



802.11n\_20MHz\_Chain0\_5785MHz



802.11n\_20MHz\_Chain0\_5825MHz



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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group