

## 功率射頻電機試驗報告

|      |                                                                           |
|------|---------------------------------------------------------------------------|
| 申請廠商 | Barco NV<br>Barco NV President Kennedypark(Kor)35, 8500 Courtrai, Belgium |
| 製造廠商 | Barco NV                                                                  |
| 產品名稱 | ClickShare Button                                                         |
| 廠牌   | Barco                                                                     |
| 型號   | R9861500D01                                                               |
| 系列型號 | R9861500D01C                                                              |
| 發射功率 | 請見本報告第1.1章節產品描述                                                           |
| 工作頻率 | 請見本報告第1.1章節產品描述                                                           |
| 調變方式 | OFDM                                                                      |
| 使用規範 | LP0002 4.7節                                                               |

## 實驗室資訊

台灣檢驗科技股份有限公司 電子通訊實驗室  
新北市新北產業園區五工路134號  
認證有效期間：107年06月14日起至110年06月13日止  
受理日期 民國108年05月20日  
完成日期 民國108年10月18日

陳俊傑



報告簽署人  
陳俊傑簽章

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

| Revision History |             |               |                         |
|------------------|-------------|---------------|-------------------------|
| Revision         | Description | Issue Date    | Remark                  |
| Rev.00           | Original.   | Oct. 18, 2019 | Revised By: Karen Huang |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 測試標準

## 國家通訊傳播委員會低功率射頻電機技術規範

民國 107 年 1 月 10 日版本

待測裝置已於台灣檢驗科技股份有限公司電子通訊實驗室，依據國家通訊傳播委員會於中華民國一百零七年一月頒佈之低功率射頻電機技術規範測試。

台灣檢驗科技股份有限公司根據此條文規範項目測試，測試各項數據皆能符合此規範規定之限度值。

台灣檢驗科技股份有限公司依低功率射頻電機技術規範審驗要點規範製作測試結果報告，測試結果評判為合格。

## 備註：

1. 報告中所描述之測試結果和待測設備的架構組合，均根據實際量測情況作詳實的記錄，且本測試報告僅對上述待測設備樣品負責。
2. 此份報告未經本公司同意，不得部份摘錄複製使用。
3. 系列申請，主型號: R9861500D01 與系列型號: R9861500D01C，除型號差異，產品名稱及傳輸線所接連接器不同，其餘產品基本結構相同，詳見差異說明書，特此說明。

報告審核：

陳俊傑

日期：

10/18/2019

陳俊傑 / 副主任

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

**測試實驗室資料:**

實驗室認可登錄 : 中華民國實驗室認證體系

認可編號 : TAF 0513, 認可頻率範圍9kHz ~ 40GHz

認證有效期間 : 107年06月14日起至110年06月13日止

測試場地 : 新北市新北產業園區五工路134號

實驗室名稱 : 台灣檢驗科技股份有限公司  
電子通訊實驗室

實驗室地址 : 新北市新北產業園區五工路134號

電話 : 886-2-22993939

傳真 : 886-2-22982698

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

### 實驗室之量測不確定度

| 量測項目              | 量測不確定度<br>(擴充不確定度) |              |          |
|-------------------|--------------------|--------------|----------|
| 傳導干擾量測            | 電源線                | 0.15-30MHz   | 2.586 dB |
| 輻射干擾量測<br>(3m測距)  | 水平極化               | 9kHz - 30MHz | 2.3dB    |
|                   |                    | 30-167MHz    | 4.22dB   |
|                   |                    | 167-500MHz   | 3.44dB   |
|                   |                    | 0.5-1GHz     | 3.39dB   |
|                   |                    | 1-18GHz      | 4.08dB   |
|                   |                    | 18-40GHz     | 4.08dB   |
|                   | 垂直極化               | 9kHz - 30MHz | 2.3dB    |
|                   |                    | 30-180MHz    | 3.37dB   |
|                   |                    | 180-417MHz   | 3.19dB   |
|                   |                    | 0.417-1GHz   | 3.19dB   |
|                   |                    | 1-18GHz      | 4.04dB   |
|                   |                    | 18-40GHz     | 4.04dB   |
| 輸出功率              | 傳導方式               | 2.4 GHz      | 1.3 dB   |
|                   |                    | 5 GHz        | 1.55 dB  |
| 有效輻射功率<br>(輻射方式)  | 水平極化               | 2.4GHz       | 4.21 dB  |
|                   |                    | 5 GHz        | 4.62 dB  |
|                   | 垂直極化               | 2.4 GHz      | 4.42 dB  |
|                   |                    | 5 GHz        | 4.74 dB  |
| 功率頻譜密度            | 傳導方式               | 2.4GHz       | 1.3dB    |
|                   |                    | 5GHz         | 1.67dB   |
| 鄰頻道功率量測<br>(輻射方式) | 水平極化               | 30-167MHz    | 4.22dB   |
|                   |                    | 167-500MHz   | 3.44dB   |
|                   |                    | 0.5-1GHz     | 3.39dB   |
|                   | 垂直極化               | 30-180MHz    | 3.37dB   |
|                   |                    | 180-417MHz   | 3.19dB   |
|                   |                    | 0.417-1GHz   | 3.19dB   |

附註: 1. K=2 即代表測試結果具有95%的量測可信度。

2. 本報告中的符合性判定僅依據試驗結果，不考慮其試驗結果的量測不確定度。

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

No. 134, WuKung Road, New Taipei Industrial Park, WuKung District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

| 目錄                      | 頁次 |
|-------------------------|----|
| 1 一般資料.....             | 7  |
| 2 適用規範.....             | 11 |
| 3 受測裝置之系統說明.....        | 16 |
| 4 量測儀器設備.....           | 17 |
| 5 電源線傳導干擾之量測.....       | 19 |
| 6 不必要發射限制之量測.....       | 22 |
| 7 天線增益之要求.....          | 85 |
| 8 26dB & 6dB 頻寬之測試..... | 86 |
| 9 輸出峰值功率之量測.....        | 92 |
| 10 功率密度之限制.....         | 96 |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 1 一般資料

### 1.1 產品描述

|             |                    |
|-------------|--------------------|
| 產品名稱        | ClickShare Button  |
| 產品型號        | R9861500D01        |
| 系列型號        | R9861500D01C       |
| 產品商標        | Barco              |
| SW version: | N/A                |
| HW version: | N/A                |
| 使用電源        | 5Vdc from USB port |

| 調變                | 發射頻帶 (MHz)                        |            | 輸出功率 (dBm) | 頻道數 (Channels) |
|-------------------|-----------------------------------|------------|------------|----------------|
| 802.11 a mode     |                                   | 5250 ~5350 | 10.09      | 4              |
|                   |                                   | 5470 ~5725 | 10.14      | 11             |
| 802.11n HT20 mode | HT20:                             | 5250 ~5350 | 9.86       | 4              |
|                   | HT20:                             | 5470 ~5725 | 10.08      | 11             |
| 調變方式              | 64QAM, 16QAM, QPSK, BPSK for OFDM |            |            |                |

### 天線型式/天線增益

| 天線型式 | Supplier               | Model No.        | 發射頻帶(MHz) | 天線增益(dBi) |
|------|------------------------|------------------|-----------|-----------|
| Chip | FRACTUS ANTENNAS, S.L. | FR05-S1-NO-1-004 | 5250~5350 | 4.9       |
|      |                        |                  | 5470~5725 | 4.9       |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

No. 134, WuKung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 1.2 產品特性

此裝置符合IEEE Std 802.11a/ac/n 標準。其發射頻率落於5250MHz至5350MHz及5470MHz至5725MHz。

802.11a/n/ac mode 採用正交分頻多工OFDM調變技術之發射頻率全段：落於5250-5350 MHz共有4個頻道及5350MHz及5470MHz共有11個頻道。

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

| 802.11a / n HT20 Mode,<br>802.11ac VHT20 Mode |           |
|-----------------------------------------------|-----------|
| channel                                       | Frequency |
| 52                                            | 5260      |
| 56                                            | 5280      |
| 60                                            | 5300      |
| 64                                            | 5320      |

### Operated band in 5470 MHz ~5725 MHz:

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

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

### 1.3 最差測試模式:

經評估後，比較所有調變、data rate及H, E1 & E2 Plan測試值後，依據下表附上最差模式數據。

| MODE                                 | FREQUENCY BAND (MHz) | AVAILABLE CHANNEL | TESTED CHANNEL | MODULATION | DATA RATE (Mbps) | ANTENNA PORT | ANTENNA | PLAN |
|--------------------------------------|----------------------|-------------------|----------------|------------|------------------|--------------|---------|------|
| RADIATED EMISSION TEST (BELOW 1 GHz) |                      |                   |                |            |                  |              |         |      |
| 802.11a                              | 5260~5320            | 52 to 64          | 60             | OFDM       | 6                | Ch1          | Chip    | E2   |
| 802.11n_HT20                         |                      |                   |                |            |                  |              |         |      |
| 802.11a                              | 5500~5700            | 100 to 140        | 116            | OFDM       | 6                | Ch1          |         |      |
| 802.11n_HT20                         |                      |                   |                |            |                  |              |         |      |
| RADIATED EMISSION TEST (ABOVE 1 GHz) |                      |                   |                |            |                  |              |         |      |
| 802.11a                              | 5260~5320            | 52 to 64          | 52,60,64       | OFDM       | 6                | Ch1          | Chip    | E2   |
| 802.11n_HT20                         |                      |                   |                | OFDM       | MCS0             | Ch1          |         |      |
| 802.11a                              | 5500~5700            | 100 to 140        | 100,116,140    | OFDM       | 6                | Ch1          |         |      |
| 802.11n_HT20                         |                      |                   |                | OFDM       | MCS0             | Ch1          |         |      |

### ANTENNA PORT CONDUCTED MEASUREMENT:

| <b>CONDUCTED TEST</b> |                      |                   |                |            |                  |              |
|-----------------------|----------------------|-------------------|----------------|------------|------------------|--------------|
| MODE                  | FREQUENCY BAND (MHz) | AVAILABLE CHANNEL | TESTED CHANNEL | MODULATION | DATA RATE (Mbps) | ANTENNA PORT |
| 802.11a               | 5260~5320            | 52 to 64          | 52,60,64       | OFDM       | 6                | Ch1          |
| 802.11n_HT20          |                      |                   |                | OFDM       | MCS0             | Ch1          |
| 802.11a               | 5500~5700            | 100 to 140        | 100,116,140    | OFDM       | 6                | Ch1          |
| 802.11n_HT20          |                      |                   |                | OFDM       | MCS0             | Ch1          |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

#### 1.4 測試方法之依據

本測試報告之所有項目皆依據國家通訊傳播委員會低功率射頻電機技術規範(LP0002, 107.1.10 版本) 如無國家標準可適用者, 得依美國 EIA、IEEE ANSI 檢驗法檢驗, 及美國 FCC 47 CFR Part 2 有關檢驗之規定及參考 ANSI 63.10:2013、FCC CFR 47 15.407、FCC 14-30、KDB 789033D02 之檢驗法。

#### 低功率射頻電機技術規範4.7節及FCC Part 15.407

| 項次 | 測試項目         | 適用規範                               | 測試結果     | 量測設備             | 備註 |
|----|--------------|------------------------------------|----------|------------------|----|
| 1  | 不必要發射之限制     | 低功率射頻電機技術規範<br>4.7.4               | 請參閱6.5節  | 請參閱<br>4.2; 4.3節 | 合格 |
| 2  | 電源線傳導干擾      | 低功率射頻電機技術規範<br>2.3節                | 請參閱5.5節  | 請參閱4.1節          | 合格 |
| 3  | 天線增益之要求      | 低功率射頻電機技術規範<br>4.7.2 (1), (2), (3) | 請參閱7.2節  | -----            | 合格 |
| 4  | 26 dB& 6dB頻寬 | 低功率射頻電機技術規範<br>4.7.3, 4            | 請參閱8.4節  | 請參閱4.3節          | 合格 |
| 5  | 最大輸出功率       | 低功率射頻電機技術規範<br>4.7.3               | 請參閱9.4節  | 請參閱4.3節          | 合格 |
| 6  | 功率密度         | 低功率射頻電機技術規範<br>4.7.3               | 請參閱10.4節 | 請參閱4.3節          | 合格 |

#### 1.5 技術判定宣告

型號 差異資訊由報告申請者提供, 報告內測試結果僅代表實際收取的樣品。

經評估, 不同 型號 的樣品, 其 硬體結構 和 軟體設定 完全相同, 此報告內測試結果涵蓋所有不同 型號 的樣品, 毋須另外驗證。

#### 1.6 免責聲明

型號差異性資訊由報告申請人提供, 此報告之測試結果僅適用實際收取的樣品。

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

No. 134, WuKung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 2 適用規範

### 2.1 規範要求 (一般規定)

#### (1) 傳導之規定

依據NCC低功率射頻電機技術規範之2.3節，以市電為電源之低功率射頻電機，其傳導回電源線上頻率自150 kHz~30 百萬赫(MHz) 之射頻電壓(在電源端子每一電源線對接地點)應小於或等於下表所列之限制值。測量時應經過50 微亨利(uH)及50 歐姆( $\Omega$ )之電源線阻抗穩定網路(Line Impedance Stabilization Network；LISN)。頻率重疊處，以較低限制值為準。

| 頻率(MHz)    | 傳導限制值 (dBuV)       |               |
|------------|--------------------|---------------|
|            | 準峰值 (Quasi – peak) | 平均值 (Average) |
| 0.15 – 0.5 | 66 – 56            | 56 - 46       |
| 0.5 – 5    | 56                 | 46            |
| 5 - 30     | 60                 | 50            |

#### (2) 輻射之規定

依據NCC低功率射頻電機技術規範3.10.5節之要求，其他開放頻帶外不必要之輻射需符合2.8節之一般限制要求，其電場強度不得超過下表之限值，且其不必要之發射皆不得大於主波發射強度。各頻段重疊處，以較嚴格之限制值為準。

| 頻率<br>MHz     | 測試距離<br>m | 干擾限制<br>$\mu\text{V/m}$ | 干擾限制<br>$\text{dB}\mu\text{V/m}$ |
|---------------|-----------|-------------------------|----------------------------------|
| 0.009 – 0.490 | 300       | 2,400/頻率 (kHz)          |                                  |
| 0.490 – 1.705 | 30        | 24,000/頻率 (kHz)         |                                  |
| 1.705 - 30    | 30        | 30                      |                                  |
| 30 - 88       | 3         | 100                     | 40.0                             |
| 88 – 216      | 3         | 150                     | 43.5                             |
| 216 – 960     | 3         | 200                     | 46.0                             |
| 960以上         | 3         | 500                     | 54.0                             |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

No. 134, WuKung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## (3) 禁用頻帶限制之規定

依據NCC低功率射頻電機技術規範2.7節之要求，任何低功率射頻電機之主波皆不得使用下表所列各頻帶內之頻率；低功率射頻電機落於下表所列頻帶內之混附發射，其電場強度必須符合第2.8節的限制規定。

| 頻率 (MHz)      | 頻率 (MHz)      | 頻率 (MHz)      |
|---------------|---------------|---------------|
| 0.090~0.110   | 240.00~285.00 | 3332.0~3339.0 |
| 0.490~0.510   | 322.00~335.40 | 3345.8~3358.0 |
| 2.172~2.198   | 399.90~410.00 | 3500.0~4400.0 |
| 3.013~3.033   | 485.00~510.00 | 4500.0~5250.0 |
| 4.115~4.198   | 608.00~614.00 | 5350.0~5460.0 |
| 5.670~5.690   | 703.00~748.00 | 7250.0~7750.0 |
| 6.200~6.300   | 758.00~803.00 | 8025.0~8500.0 |
| 8.230~8.400   | 825.00~915.00 | 9000.0~9200.0 |
| 12.265~12.600 | 930.00~1240.0 | 9300.0~9500.0 |
| 13.340~13.430 | 1300.0~1427.0 | 10600~12700   |
| 14.965~15.020 | 1435.0~1626.5 | 13250~13400   |
| 16.700~16.755 | 1660.0~1785.0 | 14470~14500   |
| 19.965~20.020 | 1805.0~1880.0 | 15350~16200   |
| 25.500~25.700 | 1885.0~1900.0 | 17700~21400   |
| 37.475~38.275 | 1905.0~1985.0 | 22010~23120   |
| 73.500~75.400 | 2010.0~2025.0 | 23600~24000   |
| 108.00~138.00 | 2110.0~2170.0 | 31200~31800   |
| 149.90~150.05 | 2200.0~2300.0 | 36430~36500   |
| 156.70~156.90 | 2310.0~2390.0 | 38600 以上      |
| 162.01~167.17 | 2483.5~2900.0 |               |
| 167.72~173.20 | 3260.0~3267.0 |               |

- (4) 依據NCC低功率射頻電機技術規範2.11節之要求，收、發信機為成套銷售者，收、發信機應一併送審或提供經型式認證合格之對應收、發信機之送審資料；送信機之輻射電場強度不得超過第2.8節之發射規定，且不得接收、解調第2.7節所列之頻率。

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

No. 134, WuKung Road, New Taipei Industrial Park, WuKu District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 2.2 規範要求

依據NCC低功率射頻電機技術規範4.7節無線資訊傳輸設備規範之規定如下

### (A) 最大輸出功率與功率頻譜密度及天線增益，以及發射限制之要求限制

依據NCC低功率射頻電機技術規範4.7.3節之要求，使用於5.15 GHz~5.25 GHz 頻段

#### (1) 供戶外操作使用：

- (A) 最大傳導輸出功率應小於或等於1 W。
- (B) 在任何1 MHz 頻帶中最大功率頻譜密度應小於或等於17 dBm。
- (C) 使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。
- (D) 在水平面仰角超過30 度時，其最大EIRP 應小於或等於21 dBm。

#### (2) 供室內操作使用：

- (A) 最大傳導輸出功率應小於或等於1 W。
- (B) 在任何1 MHz 頻帶中最大功率頻譜密度應小於或等於17 dBm。
- (C) 使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

#### (3) 供固定式點對點操作使用：

- (A) 最大傳導輸出功率應小於或等於1 W。
- (B) 在任何1 MHz 頻帶中最大功率頻譜密度應小於或等於17 dBm。
- (C) 使用超過23 dBi方向增益之指向性天線時，應依超過23 dBi天線方向增益的dBi總量，等量減少最大傳導輸出功率及最大功率頻譜密度。
- (D) 固定式點對點操作，不包括點對多點系統、全方向性應用及多台共站發射機傳送相同資訊。

#### (4) 供用戶端裝置(Client Device)操作使用：

- (A) 最大傳導輸出功率應小於或等於250 mW。
- (B) 在任何1 MHz 頻帶中最大功率頻譜密度應小於或等於11 dBm。
- (C) 使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

使用頻率於5.25 GHz~5.35 GHz 與5.470 GHz~5.725 GHz 頻段

- (1) 最大傳導輸出功率應小於或等於250 mW或11dBm+10log B (B是26 dB發射頻寬，單位MHz)之較小者。
- (2) 最大功率頻譜密度在任何1 MHz 頻帶中應小於或等於11 dBm。
- (3) 使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

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

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

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

使用頻率於5.725 GHz~5.850 GHz 頻段

- (1) 最大傳導輸出功率應小於或等於1 W。
- (2) 在任何500 kHz 頻帶中最大功率頻譜密度應小於或等於30 dBm。
- (3) 供固定式點對點操作時，使用方向增益超過6 dBi 之發射天線，可不需對應減少發射器之傳導輸出功率限制值。
- (4) 除(3)外，使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

### (B) 不必要發射之限制

依據NCC低功率射頻電機技術規範4.7.4節之要求，在5.15 GHz~5.35 GHz 及5.470 GHz~5.725 GHz 頻段操作的發射器：帶外發射之有效等向輻射功率(EIRP)  $\leq$  -27 dBm/MHz。

在5.725 GHz~5.850 GHz 的頻段操作之發射器：所有頻帶邊緣向外5 MHz 內頻率之發射，有效等向輻射功率(EIRP)  $\leq$  27 dBm/MHz~15.6 dBm/MHz (以線性法計算對應之限制值)；所有頻帶邊緣向外5 MHz~25 MHz，有效等向輻射功率35(EIRP)  $\leq$  15.6 dBm/MHz~10 dBm/MHz (以線性法計算對應之限制值)；所有頻帶邊緣外25 MHz~75 MHz，有效等向輻射功率(EIRP)  $\leq$  10 dBm/MHz~-27 dBm/MHz(以線性法計算對應之限制值)；所有頻帶邊緣外 $\geq$  75 MHz 的頻率之發射，有效等向輻射功率(EIRP)  $\leq$  -27 dBm/MHz；有關遮罩限制值詳圖1。

| Frequencies (MHz) | EIRP Limit (dBm) | Equivalent Field Strength at 3m (dBuV/m) |
|-------------------|------------------|------------------------------------------|
| 5150 – 5250       | -27              | 68.3                                     |
| 5250 – 5350       | -27              | 68.3                                     |
| 5470 - 5725       | -27              | 68.3                                     |
| 5725 - 5850       | -27              | 68.3                                     |

Limit derivation in terms of Field Strength:

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

$$E = 1000000 \cdot (30 \cdot EIRP)^{(1/2)} / 3 \text{ uV/m}$$
$$= 68.3 \text{ dBuV/m}$$

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

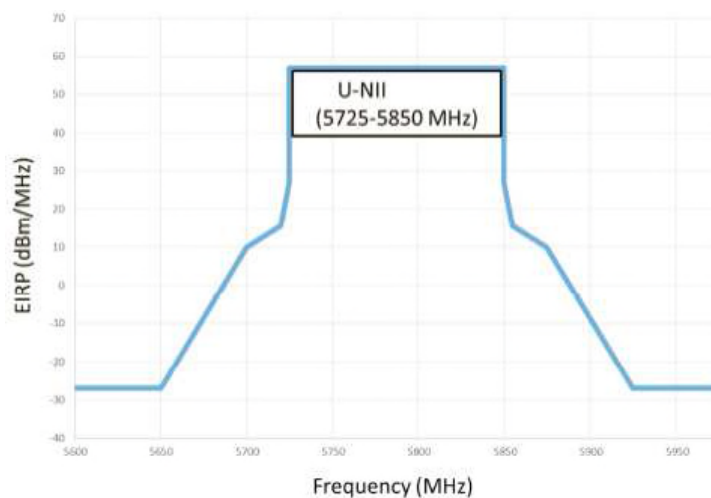


圖 1

**(C) 依據 NCC 低功率射頻電機技術規範 4.7.3.4 節之要求，26dB & 6dB 發射頻寬之測試**

(1) 5.15 GHz~5.25 GHz、5.25 GHz~5.35 GHz 及 5.47 GHz~5.725 GHz 頻段，測試儀器之頻寬應設定為 1 MHz 頻寬或待測物之 26 dB 發射頻寬，兩者取較小者。

(2) 5.725 GHz~5.850 GHz 頻段，測試儀器之頻寬應設定為 500 kHz 或待測物之 26dB 發射頻寬，兩者取較小者。

解析頻寬小於(1)或(2)時，應以補償方式計算總功率頻譜密度。

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

No. 134, WuKung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

### 3 受測裝置之系統說明

| 裝置名稱                | 製造者/申請者             | 型號                           | 纜線說明 |
|---------------------|---------------------|------------------------------|------|
| * ClickShare Button | Barco NV / Barco NV | R9861500D01,<br>R9861500D01C | 無纜線  |

標記：“\*”表欲申請之受測物。

#### 3.1 待測物與測試設備系統圖

##### 3.1.1 量測配置圖

##### Conducted (Antenna Port) Emission



##### Conduction (AC Power Line) Emission



##### Radiated Emission



#### 3.2 輔助測試週邊設備名稱描述

| 編號 | 產品別                | 商標     | 型號   | 序號       | 信號線線長(米) | 電源線長(米) |
|----|--------------------|--------|------|----------|----------|---------|
| 1. | WLAN Test Software | N/A    | N/A  | N/A      | N/A      | N/A     |
| 2. | Notebook           | Lenovo | L420 | S0011721 | N/A      | N/A     |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 4 量測儀器設備

### 4.1 AC 電源端傳導干擾之量測儀器

| Conducted Emission Test Site |        |              |               |            |            |
|------------------------------|--------|--------------|---------------|------------|------------|
| EQUIPMENT TYPE               | MFR    | MODEL NUMBER | SERIAL NUMBER | LAST CAL.  | CAL DUE.   |
| LISN                         | TESEQ  | NNB 51       | 36076         | 02/13/2019 | 02/12/2020 |
| EMI Test Receiver            | R&S    | ESCI         | 101300        | 11/06/2018 | 11/05/2019 |
| Notebook                     | Lenovo | L440         | P0000367      | N/A        | N/A        |

### 4.2 量測場強輻射之量測儀器

| 966 Chamber           |                 |                   |               |            |            |
|-----------------------|-----------------|-------------------|---------------|------------|------------|
| EQUIPMENT TYPE        | MFR             | MODEL NUMBER      | SERIAL NUMBER | LAST CAL.  | CAL DUE.   |
| Broadband Antenna     | TESEQ           | CBL 6112D         | 35240         | 10/30/2018 | 10/29/2019 |
| Horn Antenna          | Schwarzbeck     | BBHA9170          | 184           | 12/27/2018 | 12/26/2019 |
| Horn Antenna          | Schwarzbeck     | BBHA9120D         | 1187          | 01/09/2019 | 01/08/2020 |
| EMI Test Receiver     | R&S             | ESU 40            | 100363        | 04/15/2019 | 04/14/2020 |
| Pre-Amplifier         | EMC Instruments | EMC330            | 980096        | 12/25/2018 | 12/24/2019 |
| Pre-Amplifier         | EMC Instruments | EMC0011830        | 980199        | 12/25/2018 | 12/24/2019 |
| Pre-Amplifier         | EMC Instruments | EMC184045B        | 980135        | 12/25/2018 | 12/24/2019 |
| Band Rejection Filter | Micro-Tronics   | G015              | RF100         | 12/25/2018 | 12/24/2019 |
| Band Rejection Filter | Micro-Tronics   | G016              | RF101         | 12/25/2018 | 12/24/2019 |
| Coaxial Cable         | Huber Suhner    | EMC106-SM-SM-7200 | 150703        | 12/25/2018 | 12/24/2019 |
| Coaxial Cable         | Huber Suhner    | SUCOFLEX 104      | MY17388/4     | 12/25/2018 | 12/24/2019 |
| Coaxial Cable         | Huber Suhner    | RG 214/U          | W22.03        | 12/25/2018 | 12/24/2019 |
| Notebook              | Lenovo          | L440              | P0000367      | N/A        | N/A        |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

No. 134, WuKung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 4.3 天線端傳導測試之量測儀器

| Conducted Emission Test Site |           |              |               |            |            |
|------------------------------|-----------|--------------|---------------|------------|------------|
| EQUIPMENT TYPE               | MFR       | MODEL NUMBER | SERIAL NUMBER | LAST CAL.  | CAL DUE.   |
| Spectrum Analyzer            | KEYSIGHT  | N9010A       | MY53400256    | 11/21/2018 | 11/20/2019 |
| DC Block                     | PASTERNAK | PE8210       | RF256         | 02/26/2019 | 02/25/2020 |
| Attenuator                   | Marvelous | MVE2213-10   | RF80          | 02/26/2019 | 02/25/2020 |
| Power Meter                  | Anritsu   | ML2496A      | 1326001       | 08/05/2019 | 08/04/2020 |
| Power Sensor                 | Anritsu   | MA2411B      | 1315048       | 08/03/2018 | 08/04/2020 |
| Power Sensor                 | Anritsu   | MA2411B      | 1315049       | 08/03/2018 | 08/04/2020 |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

No. 134, WuKung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 5 電源線傳導干擾之量測

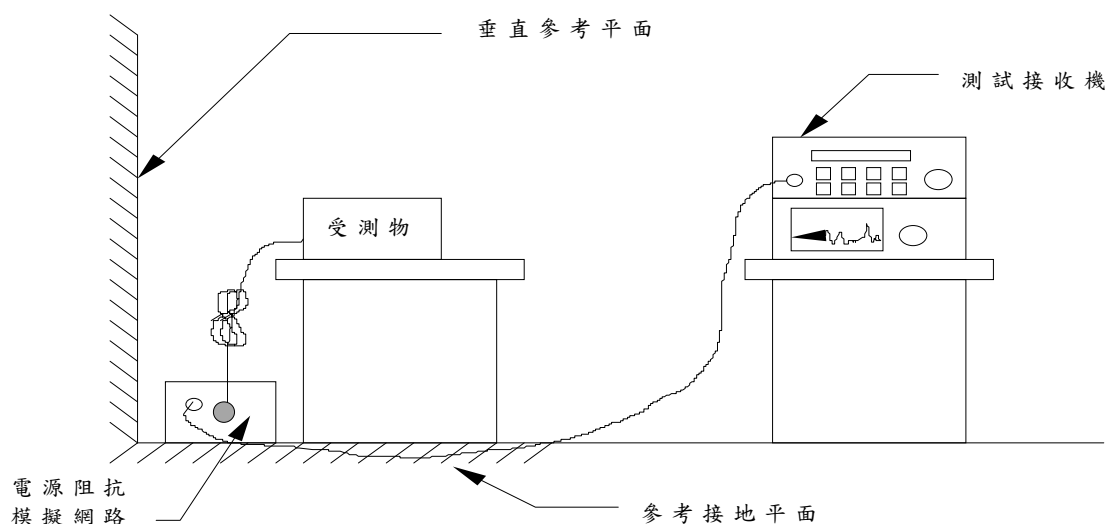
### 5.1 適用標準

依據NCC低功率射頻電機技術規範2.3節之要求。

### 5.2 測試方法

將待測物置於0.8米高的非金屬桌面，使其在工作狀態，待測物電源線接至電源線阻抗穩定網路上，從測試接收機記錄頻率由 0.15MHz 至 30MHz 之間之電源線傳導放射強度。

### 5.3 測試配置



### 5.4 干擾值之計算

電源傳導干擾電壓之計算公式如下

結果值 = 儀器讀值(QP/AV) + 校正因子

其中校正因子為：

饋線損失 + 電源阻抗模擬網路損失

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

No. 134, WuKung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

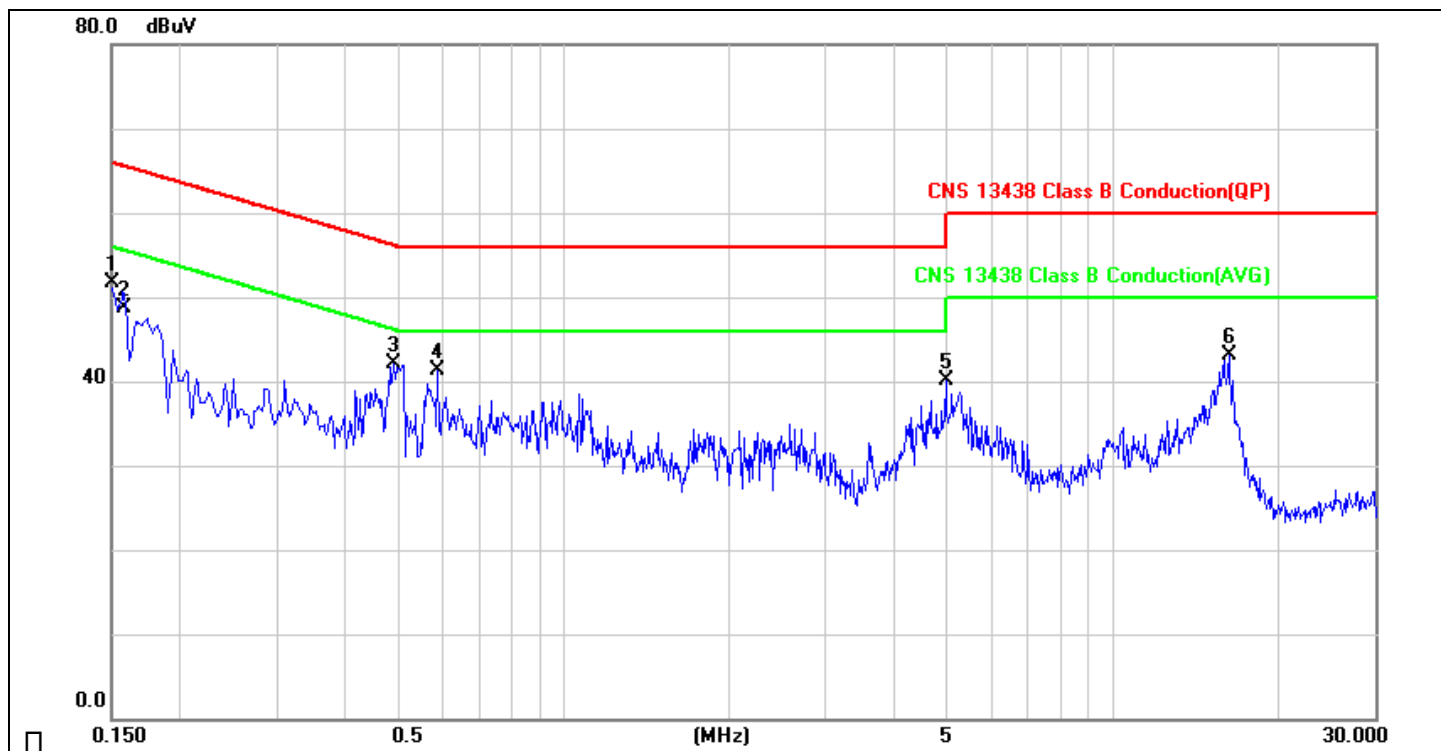
f (886-2) 2298-0488

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

Member of SGS Group

## 5.5 傳導干擾之量測結果

|               |              |                    |              |
|---------------|--------------|--------------------|--------------|
| Description:  | Operation    | Date:              | 2019/10/15   |
| Line:         | L1           | Temp.(°C)/Hum.(%): | 19.9(°C)/67% |
| Test Voltage: | AC 110V/60Hz | Test By:           | Ashton       |



| No. | Mk. | Freq.<br>(MHz) | Reading<br>dBuV | Factor<br>(dB) | Measurement<br>(dBuV) | Limit<br>(dBuV) | Over<br>(dB) | Detector | Comment |
|-----|-----|----------------|-----------------|----------------|-----------------------|-----------------|--------------|----------|---------|
| 1   |     | 0.1500         | 32.20           | 19.46          | 51.66                 | 66.00           | -14.34       | peak     |         |
| 2   |     | 0.1590         | 29.23           | 19.48          | 48.71                 | 65.52           | -16.81       | peak     |         |
| 3   | *   | 0.4900         | 22.42           | 19.75          | 42.17                 | 56.17           | -14.00       | peak     |         |
| 4   |     | 0.5900         | 21.52           | 19.76          | 41.28                 | 56.00           | -14.72       | peak     |         |
| 5   |     | 4.9580         | 20.29           | 19.91          | 40.20                 | 56.00           | -15.80       | peak     |         |
| 6   |     | 16.2260        | 23.04           | 19.98          | 43.02                 | 60.00           | -16.98       | peak     |         |

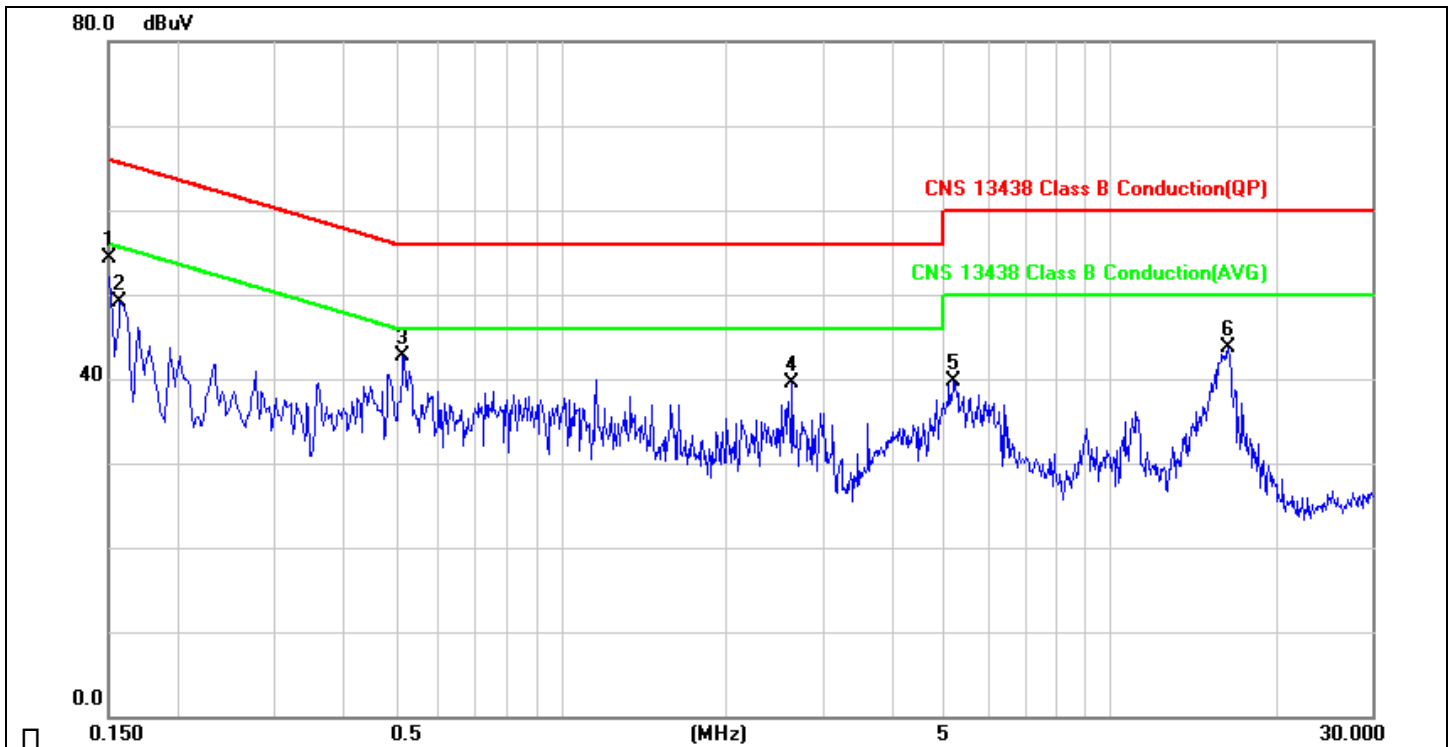
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Description: Operation  
Line: N  
Test Voltage: AC 110V/60Hz

Date: 2019/10/15  
Temp.(°C)/Hum.(%): 19.9(°C)/67%  
Test By: Ashton



| No. | Mk. | Freq.<br>(MHz) | Reading<br>dBuV | Factor<br>(dB) | Measurement<br>(dBuV) | Limit<br>(dBuV) | Over<br>(dB) | Detector | Comment |
|-----|-----|----------------|-----------------|----------------|-----------------------|-----------------|--------------|----------|---------|
| 1   | *   | 0.1500         | 34.69           | 19.69          | 54.38                 | 66.00           | -11.62       | peak     |         |
| 2   |     | 0.1580         | 29.36           | 19.71          | 49.07                 | 65.57           | -16.50       | peak     |         |
| 3   |     | 0.5180         | 22.72           | 19.97          | 42.69                 | 56.00           | -13.31       | peak     |         |
| 4   |     | 2.6420         | 19.22           | 20.19          | 39.41                 | 56.00           | -16.59       | peak     |         |
| 5   |     | 5.2020         | 19.63           | 20.14          | 39.77                 | 60.00           | -20.23       | peak     |         |
| 6   |     | 16.4340        | 23.55           | 20.22          | 43.77                 | 60.00           | -16.23       | peak     |         |

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

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

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

## 6 不必要發射限制之量測

### 6.1 適用標準

依據NCC低功率射頻電機技術規範4.7.4節之要求，在5.15 GHz~5.35 GHz 及5.470 GHz~5.725 GHz 頻段操作的發射器：帶外發射之有效等向輻射功率(EIRP) $\leq$ -27 dBm/MHz。

在5.725 GHz~5.850 GHz 的頻段操作之發射器：所有頻帶邊緣向外5 MHz 內頻率之發射，有效等向輻射功率(EIRP) $\leq$ 27 dBm/MHz~15.6 dBm/MHz (以線性法計算對應之限制值)；所有頻帶邊緣向外5 MHz~25 MHz，有效等向輻射功率35(EIRP) $\leq$ 15.6 dBm/MHz~10 dBm/MHz (以線性法計算對應之限制值)；所有頻帶邊緣外25 MHz~75 MHz，有效等向輻射功率(EIRP) $\leq$ 10 dBm/MHz~-27 dBm/MHz(以線性法計算對應之限制值)；所有頻帶邊緣外 $\geq$ 75 MHz 的頻率之發射，有效等向輻射功率(EIRP) $\leq$ -27 dBm/MHz；有關遮罩限制值詳圖1。

| Frequencies (MHz) | EIRP Limit (dBm) | Equivalent Field Strength at 3m (dBuV/m) |
|-------------------|------------------|------------------------------------------|
| 5150 – 5250       | -27              | 68.3                                     |
| 5250 – 5350       | -27              | 68.3                                     |
| 5470 - 5725       | -27              | 68.3                                     |
| 5725 - 5850       | -27              | 68.3                                     |

Limit derivation in terms of Field Strength:

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

$E = 1000000 \cdot (30 \cdot EIRP)^{(1/2)} / 3 \text{ uV/m}$   
 $= 68.3 \text{ dBuV/m}$

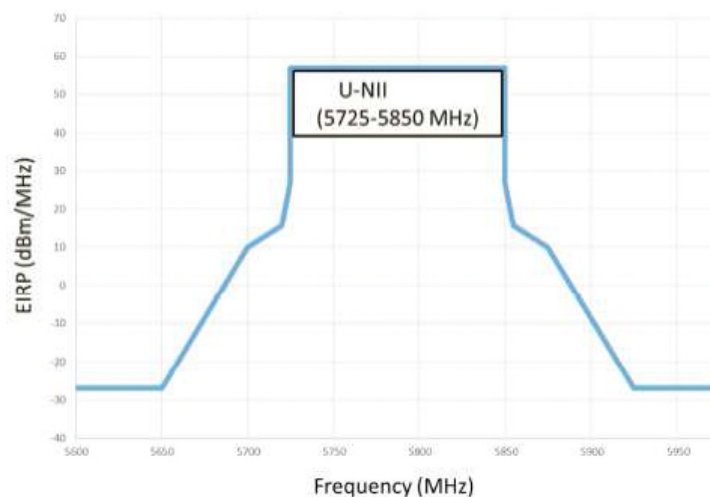


圖1

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

No. 134, WuKung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

| APPLICABLE TO | LIMIT                               |                                                |
|---------------|-------------------------------------|------------------------------------------------|
| V             | FIELD STRENGTH AT 3m (dB $\mu$ V/m) |                                                |
|               | PK                                  | AV                                             |
|               | 74                                  | 54                                             |
|               | EIRP LIMIT (dBm)                    | EQUIVALENT FIELD STRENGTH AT 3m (dB $\mu$ V/m) |
|               | PK                                  | PK                                             |
|               | -27                                 | 68.3                                           |

## 6.26.2 量測方法

## 輻射場強量測

將待測物置於非金屬桌面，測試頻率1GHz以下時，使用桌高0.8 米，1GHz以上時，使用桌高1.5米，使其在工作狀態，接收天線置於 3 米外相同的高度。待測物分別要垂直或水平放置，而且桌面要 360 度旋轉，另外接收天線也要從 1.0 米至 4.0 米升降變化，以找出最大的輻射電場強度，接收天線置於水平、垂直極向各執行測試一次。

## 幅射傳導量測

將發射機之天線埠經由適當之衰減直接連至測試儀器。設定儀器之解析頻寬為1MHz,視訊頻寬 $\geq$ 解析頻寬,將待測物天線增益offset至測試儀器。

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 9kHz~150kHz 測試

|       |        |       |            |
|-------|--------|-------|------------|
| 解析頻寬: | 300Hz  | 視訊頻寬: | 300Hz      |
| 量測天線: | AL-130 | 檢測器:  | Quasi-Peak |

## 150kHz~30MHz 測試

|       |        |       |            |
|-------|--------|-------|------------|
| 解析頻寬: | 10kHz  | 視訊頻寬: | 10kHz      |
| 量測天線: | AL-130 | 檢測器:  | Quasi-Peak |

## 1GHz 以下測試

|       |           |       |            |
|-------|-----------|-------|------------|
| 解析頻寬: | 100kHz    | 視訊頻寬: | 100kHz     |
| 量測天線: | CBL 6112D | 檢測器:  | Quasi-Peak |

## 1GHz 以上測試

|         |                                                              |      |               |
|---------|--------------------------------------------------------------|------|---------------|
| 量測天線:   | BBHA9120D                                                    | 檢測器: | Peak, Average |
| 頻譜分析儀設定 | Peak: RBW: 1MHz ; VBW: 1MHz , Average: RBW: 1MHz ; VBW: 10Hz |      |               |

註: 輻射量測僅放最差模式 (30MHz 以上) 。

## 6.3 場強度之計算

場強之計算公式如

$$\text{結果值} = \text{讀值} + \text{校正因子}$$

其中校正因子為：

天線因子+ 饋線損失 + 濾波器損失 (若有使用) - 放大器增益 (若有使用)

量測結果請見下頁。

Actual FS(dBμV/m) = SPA. Reading level(dBμV) + Factor(dB)

Factor(dB) = Antenna Factor(dBμV/m) + Cable Loss(dB) – Pre\_Amplifier Gain(dB)

The trace on RE(radiation emission) plot is as colored blue, and the detection manner we've employed is peak detector.

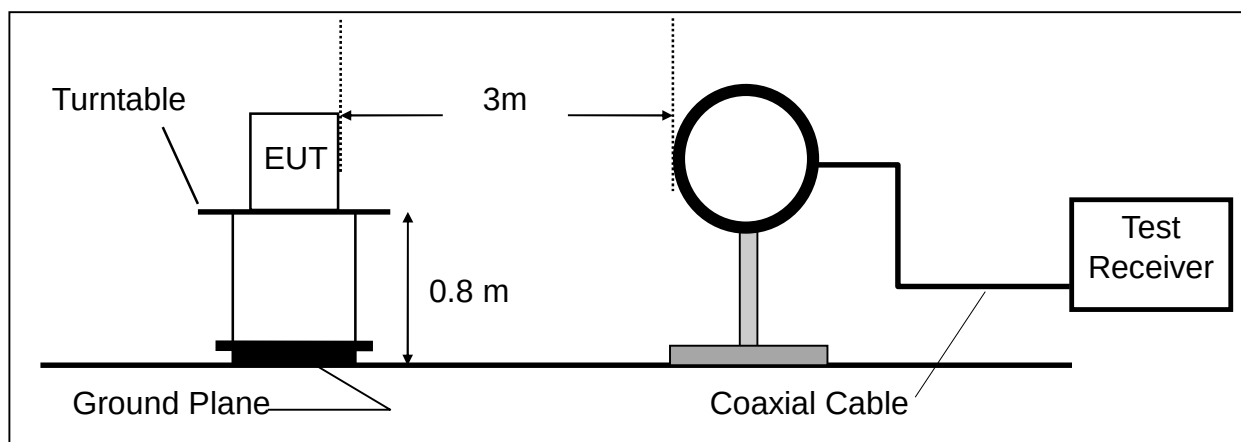
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

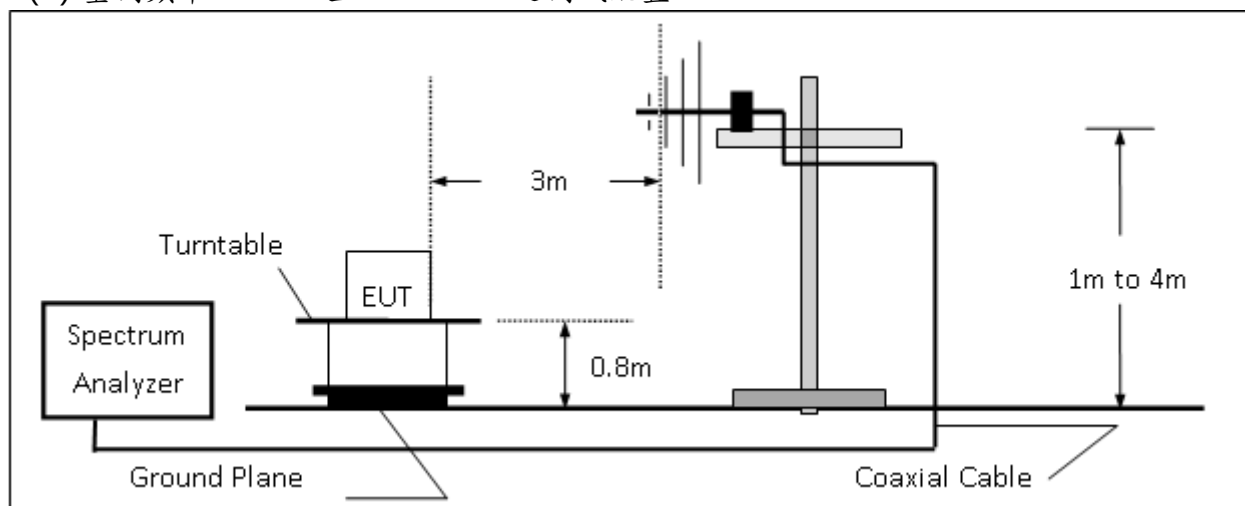
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for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

## 6.4 輻射之測試配置

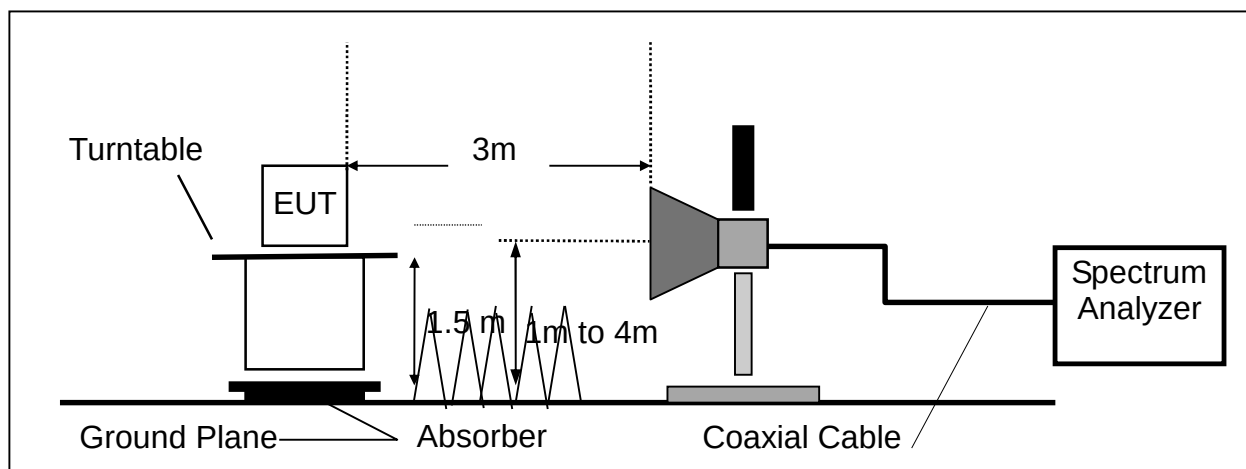
(A) 量測頻率低於 30MHz 以下之測試配置



(B) 量測頻率 30MHz 至 1000MHz 之測試配置



(C) 量測頻率 1000MHz 以上之測試配置



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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

No. 134, WuKung Road, New Taipei Industrial Park, WuKung District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

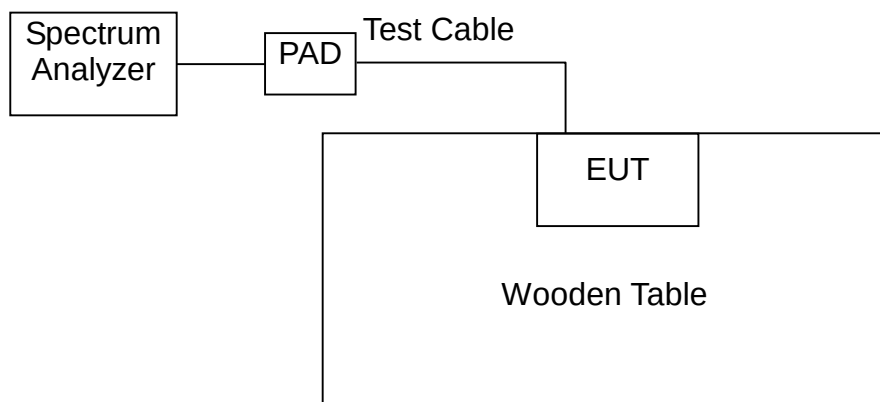
t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## (D) 傳導之測試配置圖



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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

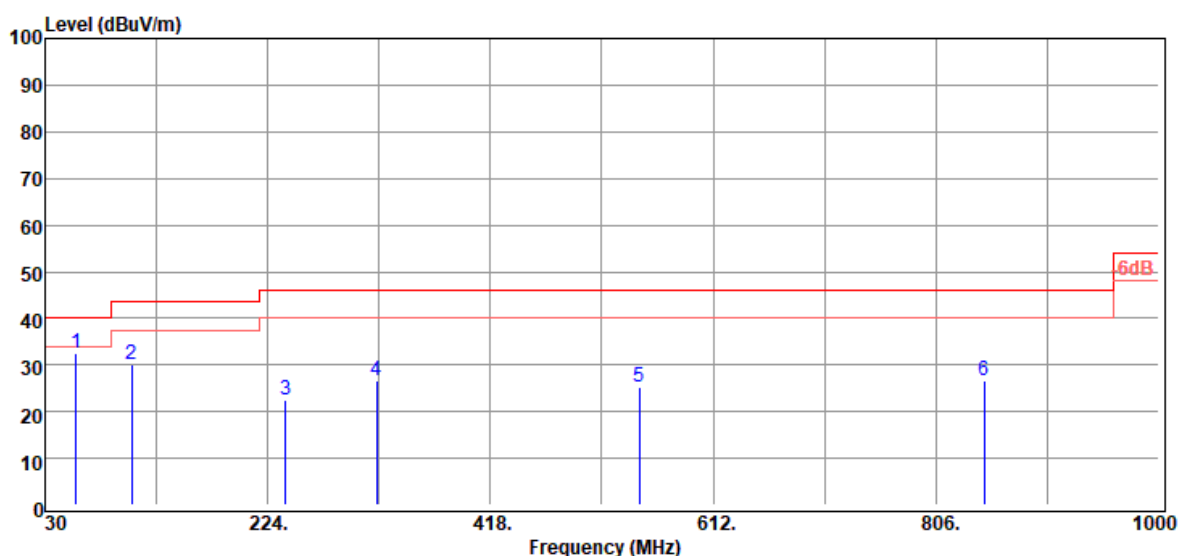
Member of SGS Group

## 6.5 場強輻射之量測結果

## 802.11a 發射模式 1GHz 以下測試 (5250MHz-5350MHz)

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 2  
 Test Channel :5300 MHz  
 Test Mode :TX CH MID  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :VERTICAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 57.16        | Peak                         | 53.99                             | -21.45       | 32.54                  | 40.00                  | -7.46        |
| 105.66       | Peak                         | 46.32                             | -16.25       | 30.07                  | 43.50                  | -13.43       |
| 239.52       | Peak                         | 37.71                             | -15.21       | 22.50                  | 46.00                  | -23.50       |
| 319.06       | Peak                         | 39.14                             | -12.47       | 26.67                  | 46.00                  | -19.33       |
| 547.98       | Peak                         | 31.78                             | -6.69        | 25.09                  | 46.00                  | -20.91       |
| 847.71       | Peak                         | 31.28                             | -4.51        | 26.77                  | 46.00                  | -19.23       |

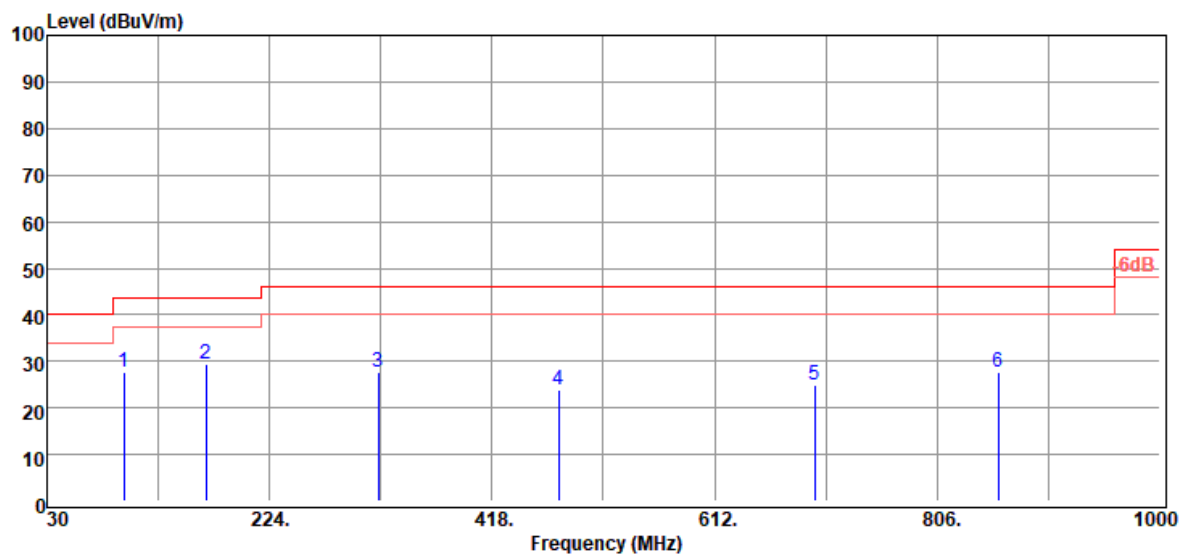
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
Operation Mode :802.11a / Band 2  
Test Channel :5300 MHz  
Test Mode :TX CH MID  
EUT Pol :E2 Plan

Test Date :2019-10-14  
Temp./Humi. :24.3/50  
Antenna Pol. :HORIZONTAL  
Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 96.93        | Peak                         | 45.42                             | -17.66       | 27.76                  | 43.50                  | -15.74       |
| 168.71       | Peak                         | 46.89                             | -17.38       | 29.51                  | 43.50                  | -13.99       |
| 319.06       | Peak                         | 40.15                             | -12.47       | 27.68                  | 46.00                  | -18.32       |
| 476.20       | Peak                         | 32.34                             | -8.59        | 23.75                  | 46.00                  | -22.25       |
| 699.30       | Peak                         | 31.05                             | -6.08        | 24.97                  | 46.00                  | -21.03       |
| 859.35       | Peak                         | 31.42                             | -3.82        | 27.60                  | 46.00                  | -18.40       |

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

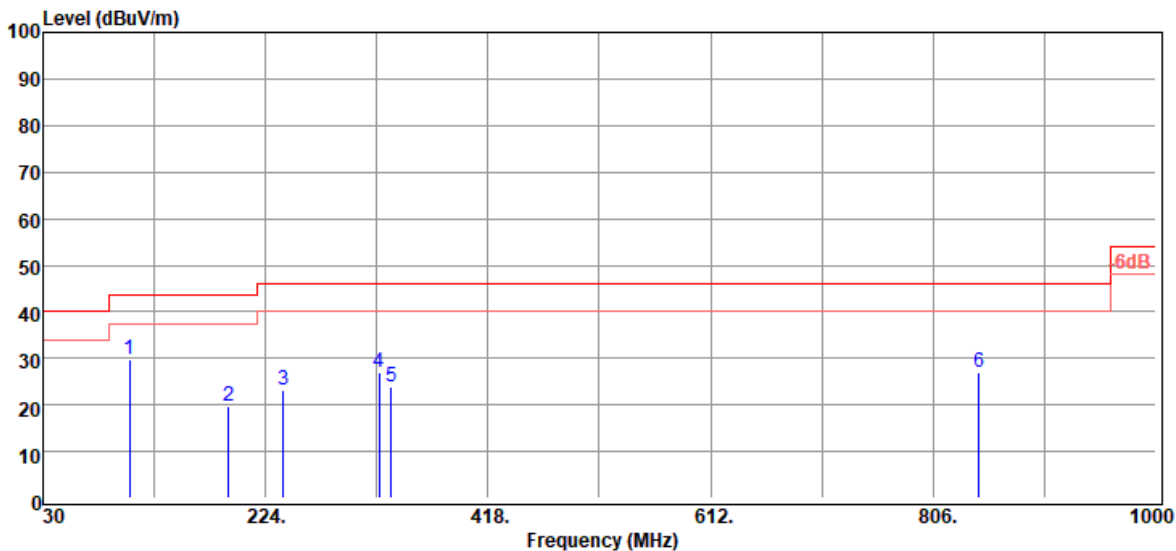
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

## 802.11a 發射模式 1GHz 以下測試 (5470MHz-5725MHz)

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 3  
 Test Channel :5580 MHz  
 Test Mode :TX CH MID  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :VERTICAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 105.66       | Peak                         | 45.94                             | -16.25       | 29.69                  | 43.50                  | -13.81       |
| 191.99       | Peak                         | 37.75                             | -17.91       | 19.84                  | 43.50                  | -23.66       |
| 239.52       | Peak                         | 38.46                             | -15.21       | 23.25                  | 46.00                  | -22.75       |
| 322.94       | Peak                         | 39.22                             | -12.37       | 26.85                  | 46.00                  | -19.15       |
| 333.61       | Peak                         | 36.27                             | -12.27       | 24.00                  | 46.00                  | -22.00       |
| 845.77       | Peak                         | 31.60                             | -4.65        | 26.95                  | 46.00                  | -19.05       |

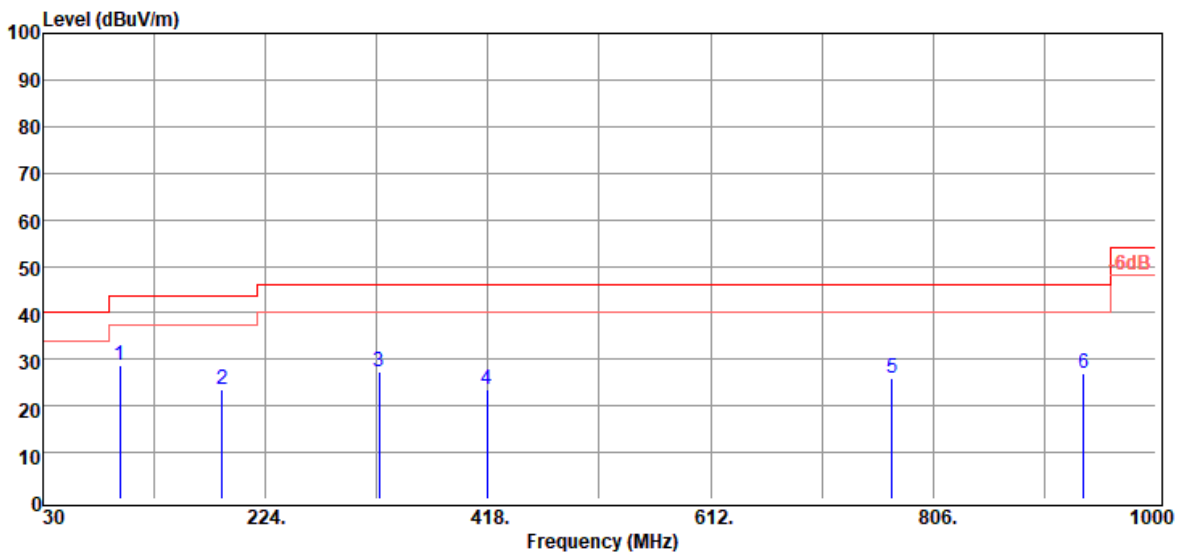
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 3  
 Test Channel :5580 MHz  
 Test Mode :TX CH MID  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 96.93        | Peak                         | 46.31                             | -17.66       | 28.65                  | 43.50                  | -14.85       |
| 186.17       | Peak                         | 41.63                             | -18.01       | 23.62                  | 43.50                  | -19.88       |
| 322.94       | Peak                         | 39.68                             | -12.37       | 27.31                  | 46.00                  | -18.69       |
| 417.03       | Peak                         | 33.34                             | -9.70        | 23.64                  | 46.00                  | -22.36       |
| 770.11       | Peak                         | 31.17                             | -5.14        | 26.03                  | 46.00                  | -19.97       |
| 936.95       | Peak                         | 30.97                             | -3.90        | 27.07                  | 46.00                  | -18.93       |

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

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

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

## 802.11n HT20 發射模式 1GHz 以下測試 (5250MHz-5350MHz)

Report Number :E2/2019/40032

Test Date :2019-10-14

Operation Mode :802.11n20 / Band 2

Temp./Humi. :24.3/50

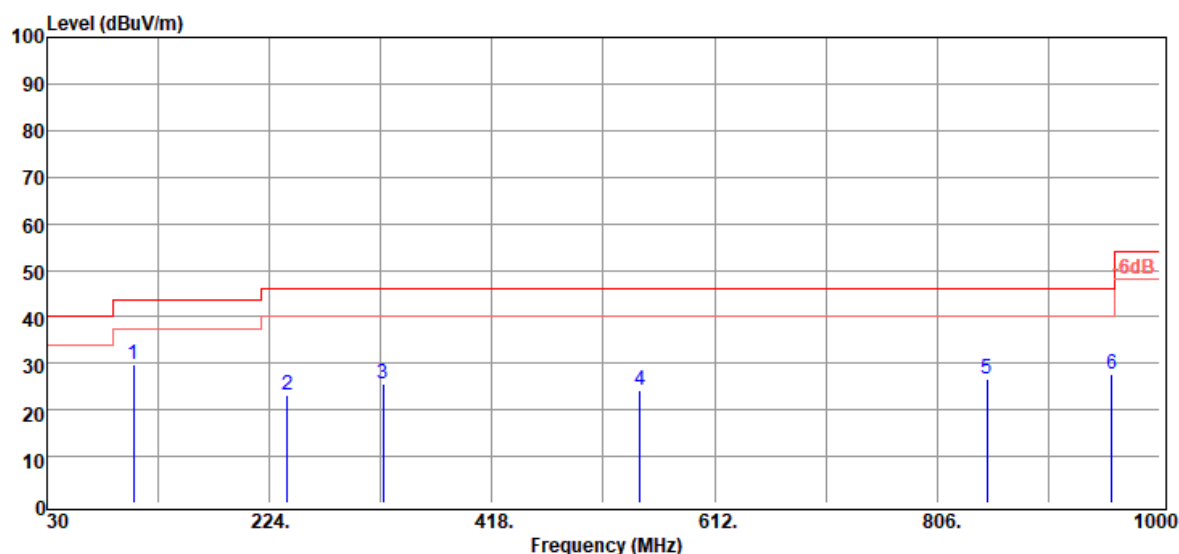
Test Channel :5300 MHz

Antenna Pol. :VERTICAL

Test Mode :TX CH MID

Engineer :Enzo

EUT Pol :E2 Plan



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 105.66       | Peak                         | 45.86                             | -16.25       | 29.61                  | 43.50                  | -13.89       |
| 239.52       | Peak                         | 38.56                             | -15.21       | 23.35                  | 46.00                  | -22.65       |
| 322.94       | Peak                         | 38.06                             | -12.37       | 25.69                  | 46.00                  | -20.31       |
| 547.01       | Peak                         | 31.06                             | -6.71        | 24.35                  | 46.00                  | -21.65       |
| 849.65       | Peak                         | 31.02                             | -4.36        | 26.66                  | 46.00                  | -19.34       |
| 958.29       | Peak                         | 31.05                             | -3.32        | 27.73                  | 46.00                  | -18.27       |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

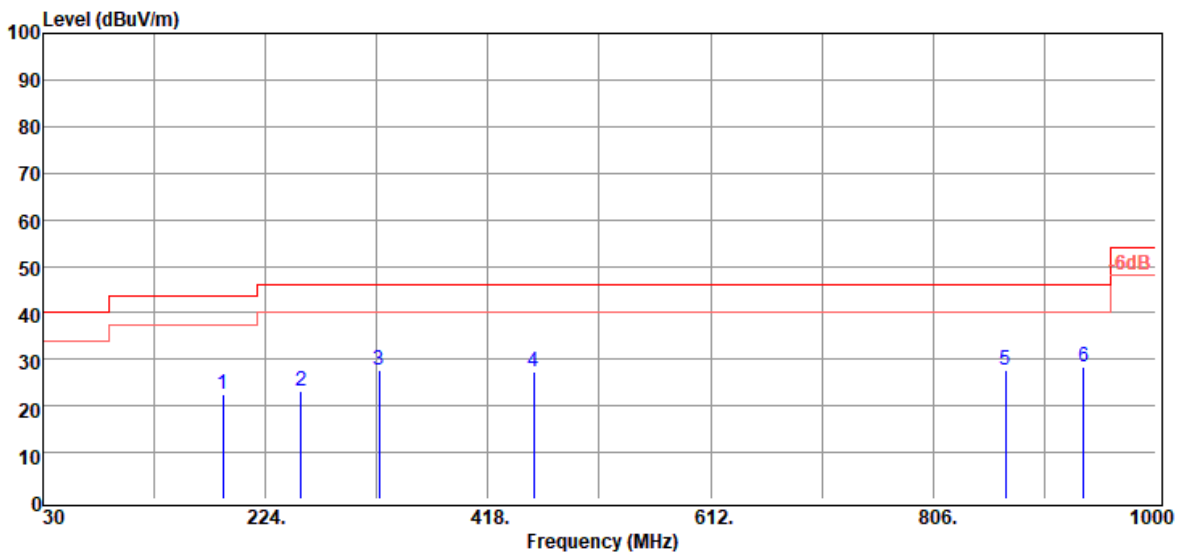
f (886-2) 2298-0488

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

Member of SGS Group

Report Number :E2/2019/40032  
 Operation Mode :802.11n20 / Band 2  
 Test Channel :5300 MHz  
 Test Mode :TX CH MID  
 EUT Pol :E2 Plan

Test Date :2019-10-15  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 187.14       | Peak                         | 40.54                             | -18.01       | 22.53                  | 43.50                  | -20.97       |
| 255.04       | Peak                         | 36.43                             | -13.39       | 23.04                  | 46.00                  | -22.96       |
| 322.94       | Peak                         | 40.05                             | -12.37       | 27.68                  | 46.00                  | -18.32       |
| 457.77       | Peak                         | 37.08                             | -9.58        | 27.50                  | 46.00                  | -18.50       |
| 869.05       | Peak                         | 31.47                             | -3.88        | 27.59                  | 46.00                  | -18.41       |
| 936.95       | Peak                         | 32.31                             | -3.90        | 28.41                  | 46.00                  | -17.59       |

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

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

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

# 802.11n HT20 發射模式 1GHz 以下測試 (5470MHz-5725MHz)

Report Number :E2/2019/40032

Test Date :2019-10-15

Operation Mode :802.11n20 / Band 3

Temp./Humi. :24.3/50

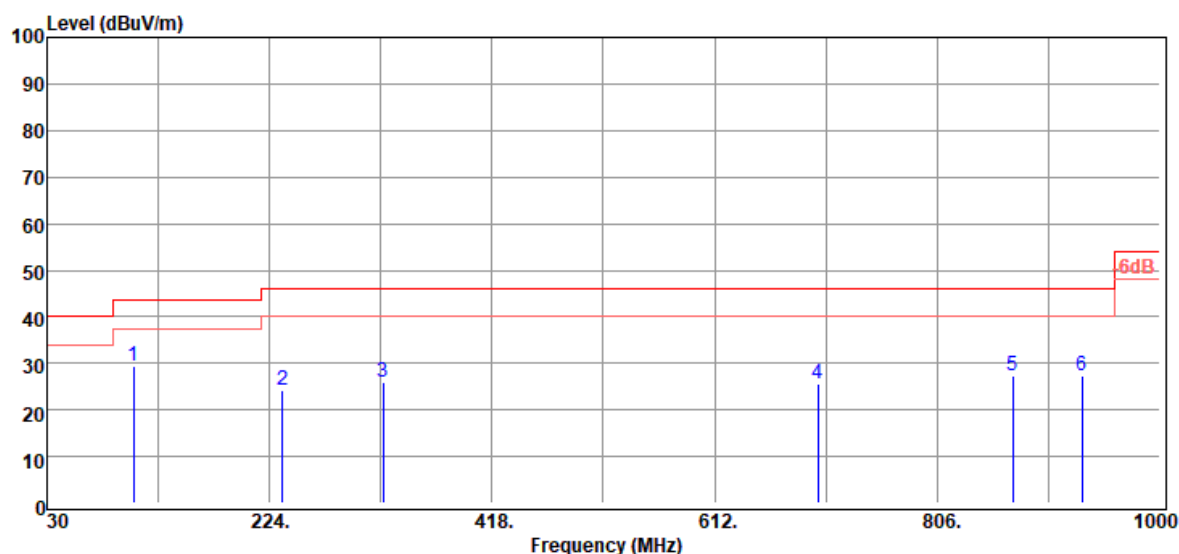
Test Channel :5580 MHz

Antenna Pol. :VERTICAL

Test Mode :TX CH MID

Engineer :Enzo

EUT Pol :E2 Plan



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 105.66       | Peak                         | 45.55                             | -16.25       | 29.30                  | 43.50                  | -14.20       |
| 235.64       | Peak                         | 40.08                             | -15.72       | 24.36                  | 46.00                  | -21.64       |
| 322.94       | Peak                         | 38.38                             | -12.37       | 26.01                  | 46.00                  | -19.99       |
| 702.21       | Peak                         | 31.54                             | -6.07        | 25.47                  | 46.00                  | -20.53       |
| 871.96       | Peak                         | 31.35                             | -4.02        | 27.33                  | 46.00                  | -18.67       |
| 932.10       | Peak                         | 31.34                             | -3.94        | 27.40                  | 46.00                  | -18.60       |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

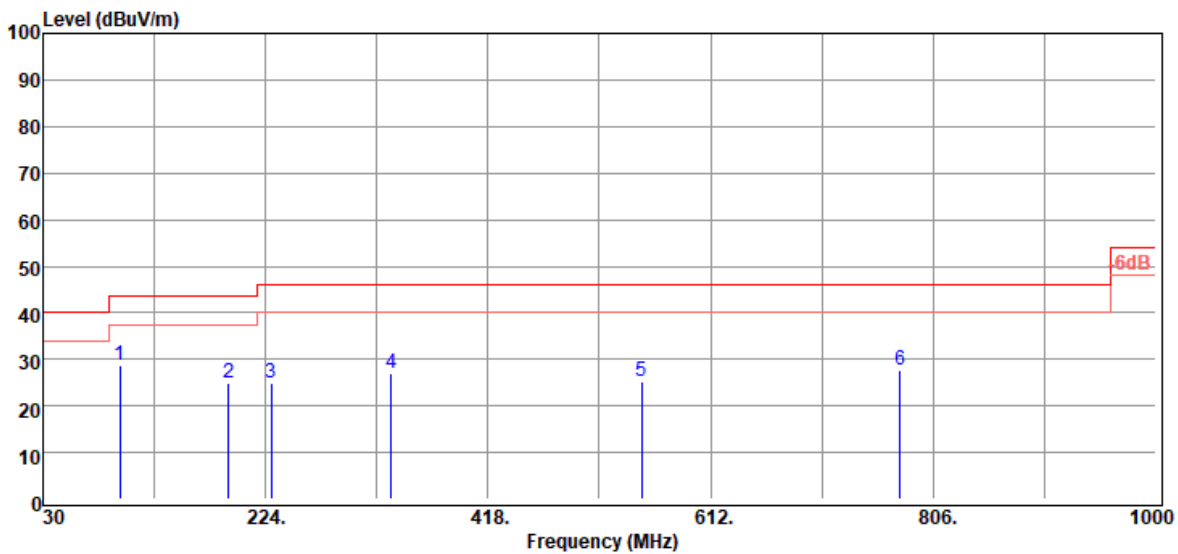
f (886-2) 2298-0488

www.tw.sgs.com

Member of SGS Group

Report Number :E2/2019/40032  
 Operation Mode :802.11n20 / Band 3  
 Test Channel :5580 MHz  
 Test Mode :TX CH MID  
 EUT Pol :E2 Plan

Test Date :2019-10-15  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBUV | Factor<br>dB | Actual<br>FS<br>dBUV/m | Limit<br>@3m<br>dBUV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 96.93        | Peak                         | 46.47                             | -17.66       | 28.81                  | 43.50                  | -14.69       |
| 191.99       | Peak                         | 42.66                             | -17.91       | 24.75                  | 43.50                  | -18.75       |
| 228.85       | Peak                         | 41.42                             | -16.48       | 24.94                  | 46.00                  | -21.06       |
| 333.61       | Peak                         | 39.27                             | -12.27       | 27.00                  | 46.00                  | -19.00       |
| 551.86       | Peak                         | 32.02                             | -6.67        | 25.35                  | 46.00                  | -20.65       |
| 776.90       | Peak                         | 32.43                             | -4.85        | 27.58                  | 46.00                  | -18.42       |

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

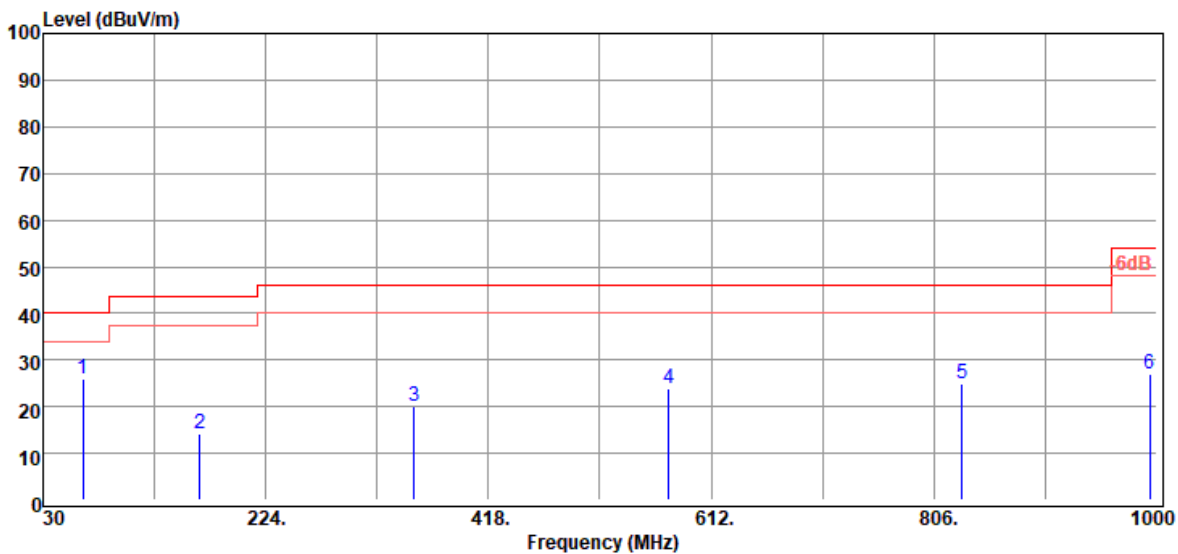
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

## Fully System

Report Number :E2/2019/40032  
Operation Mode :System mode  
Test Channel :System mode  
Test Mode :System mode  
EUT Pol :E2 Plan

Test Date :2019-10-15  
Temp./Humi. :24.3/50  
Antenna Pol. :VERTICAL  
Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 64.92        | Peak                         | 46.72                             | -20.60       | 26.12                  | 40.00                  | -13.88       |
| 166.77       | Peak                         | 31.64                             | -17.29       | 14.35                  | 43.50                  | -29.15       |
| 353.01       | Peak                         | 31.94                             | -12.03       | 19.91                  | 46.00                  | -26.09       |
| 575.14       | Peak                         | 30.63                             | -6.93        | 23.70                  | 46.00                  | -22.30       |
| 830.25       | Peak                         | 30.01                             | -5.24        | 24.77                  | 46.00                  | -21.23       |
| 994.18       | Peak                         | 29.96                             | -3.08        | 26.88                  | 54.00                  | -27.12       |

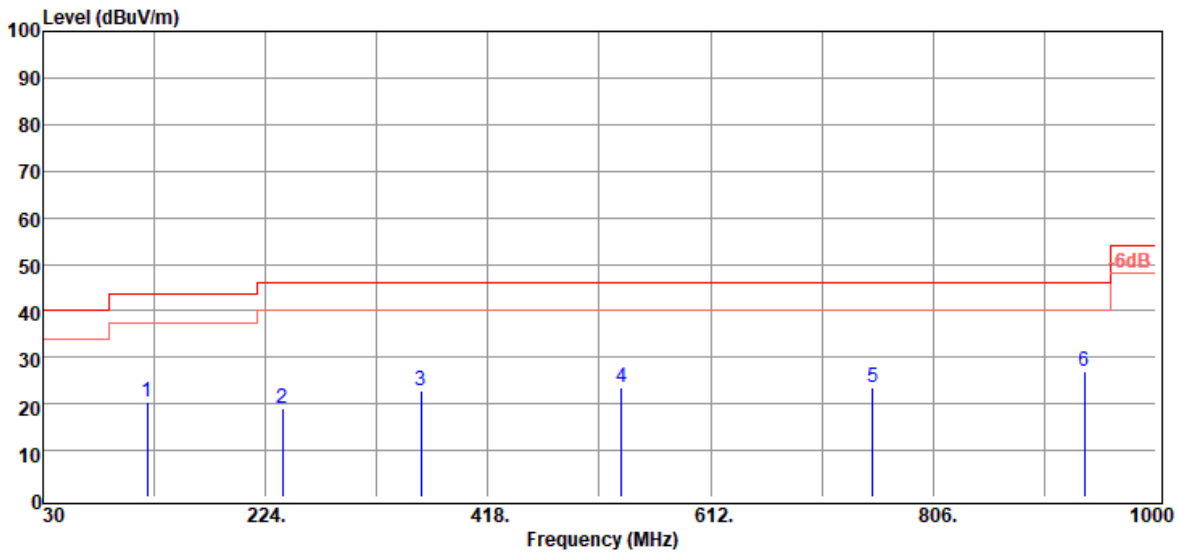
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :System mode  
 Test Channel :System mode  
 Test Mode :System mode  
 EUT Pol :E2 Plan

Test Date :2019-10-15  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 121.18       | Peak                         | 35.25                             | -14.96       | 20.29                  | 43.50                  | -23.21       |
| 238.55       | Peak                         | 34.53                             | -15.33       | 19.20                  | 46.00                  | -26.80       |
| 359.80       | Peak                         | 34.88                             | -12.14       | 22.74                  | 46.00                  | -23.26       |
| 534.40       | Peak                         | 31.16                             | -7.80        | 23.36                  | 46.00                  | -22.64       |
| 753.62       | Peak                         | 29.61                             | -5.95        | 23.66                  | 46.00                  | -22.34       |
| 937.92       | Peak                         | 30.98                             | -3.91        | 27.07                  | 46.00                  | -18.93       |

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

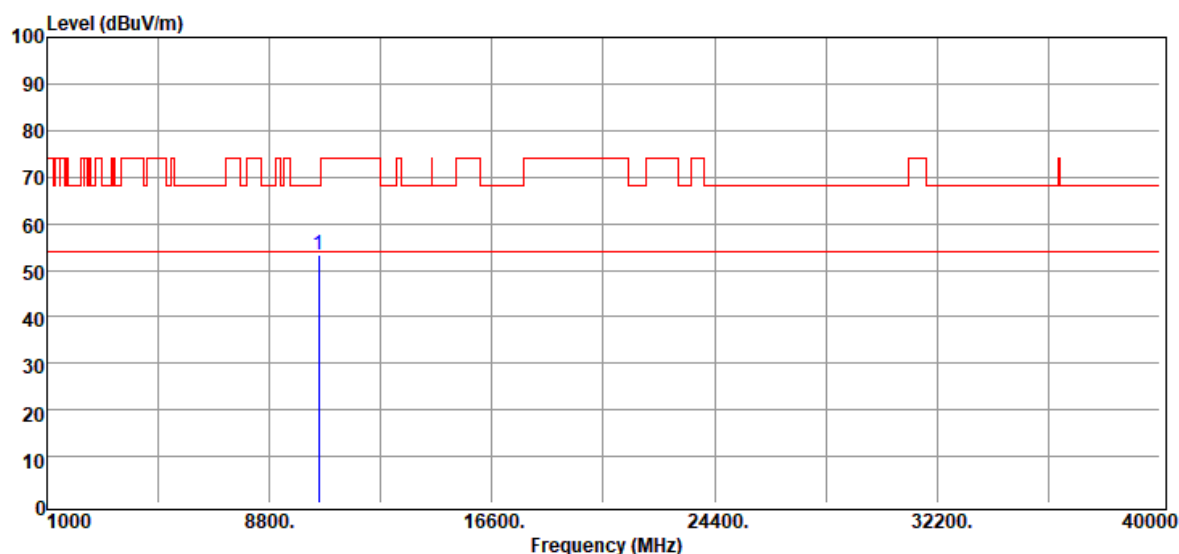
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

## 802.11a 發射模式 1GHz 以上測試 (5250MHz-5350MHz)

Report Number :E2/2019/40032  
Operation Mode :802.11a / Band 2  
Test Channel :5260 MHz  
Test Mode :TX CH LOW  
EUT Pol :E2 Plan

Test Date :2019-10-14  
Temp./Humi. :24.3/50  
Antenna Pol. :VERTICAL  
Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 10520.00     | Peak                         | 28.59                             | 24.69        | 53.28                  | 68.20                  | -14.92       |

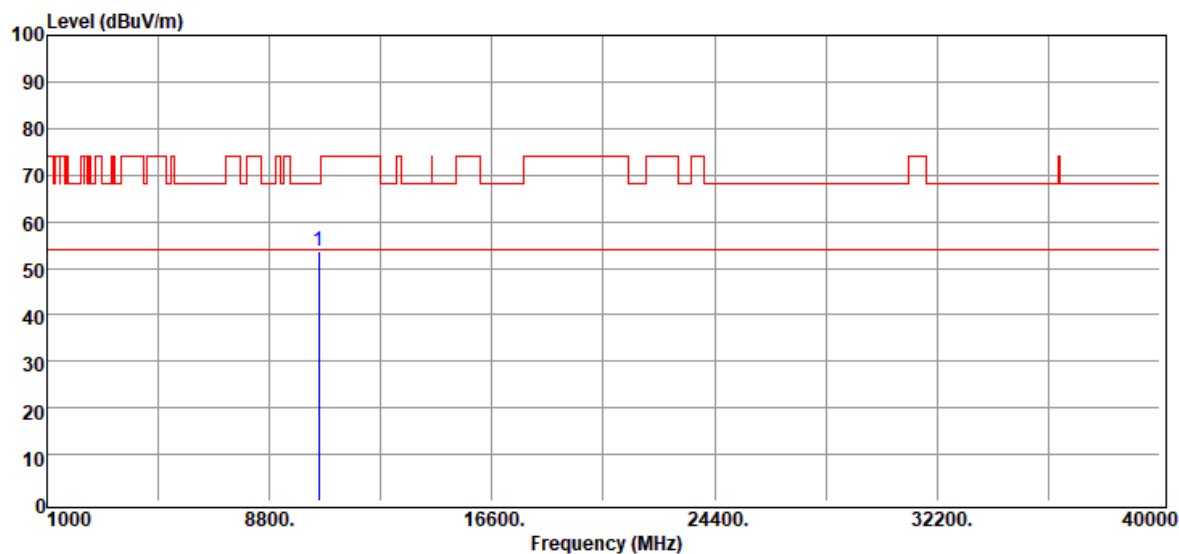
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 2  
 Test Channel :5260 MHz  
 Test Mode :TX CH LOW  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 10520.00     | Peak                         | 28.83                             | 24.69        | 53.52                  | 68.20                  | -14.68       |

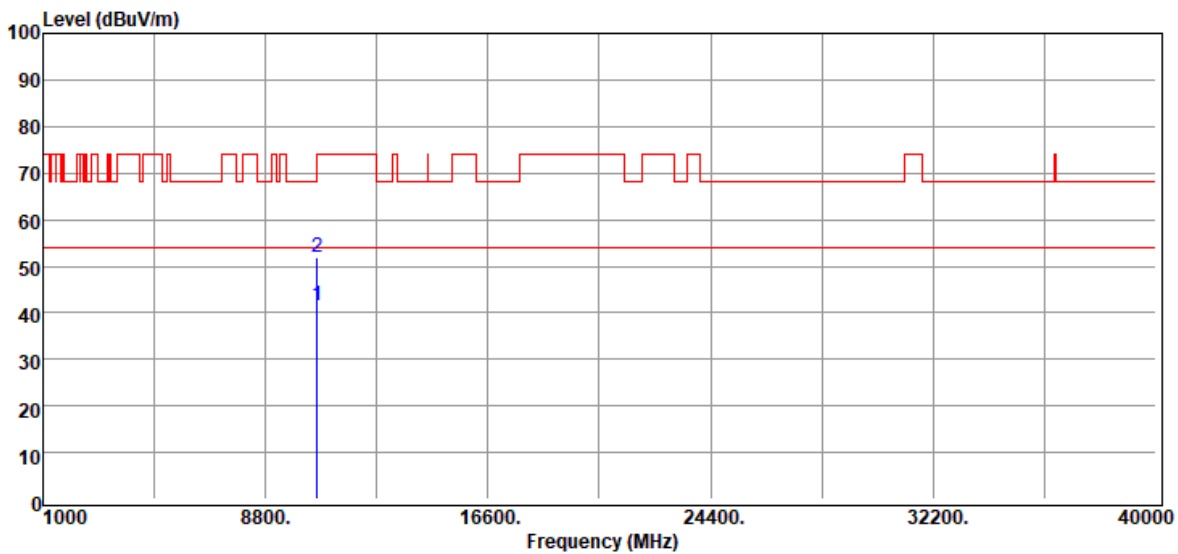
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 2  
 Test Channel :5300 MHz  
 Test Mode :TX CH MID  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :VERTICAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 10600.00     | Average                      | 17.78                             | 23.85        | 41.63                  | 54.00                  | -12.37       |
| 10600.00     | Peak                         | 28.19                             | 23.85        | 52.04                  | 74.00                  | -21.96       |

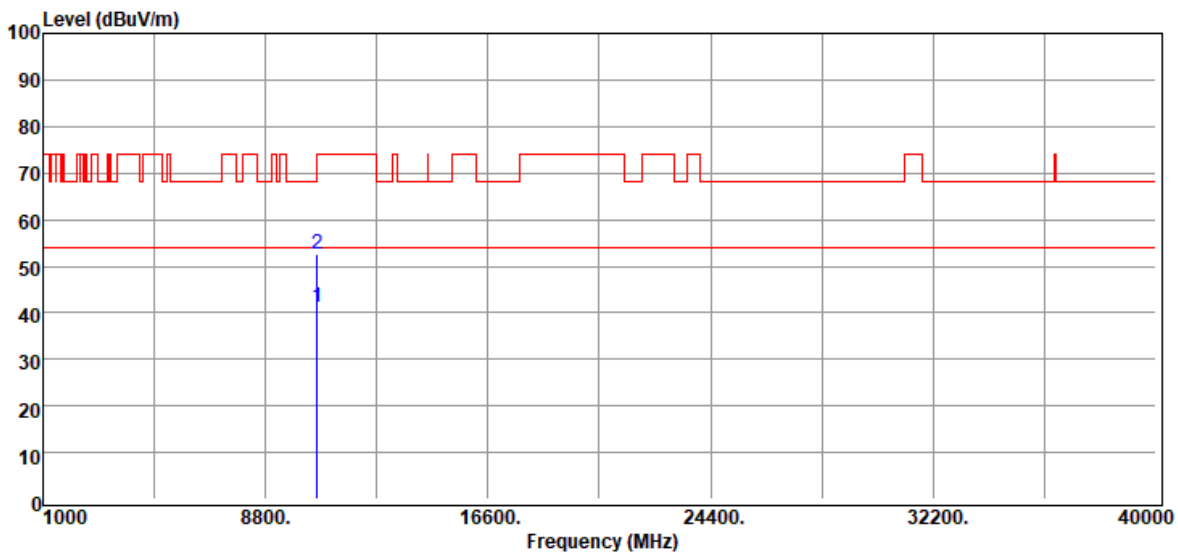
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 2  
 Test Channel :5300 MHz  
 Test Mode :TX CH MID  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 10600.00     | Average                      | 17.31                             | 23.85        | 41.16                  | 54.00                  | -12.84       |
| 10600.00     | Peak                         | 28.75                             | 23.85        | 52.60                  | 74.00                  | -21.40       |

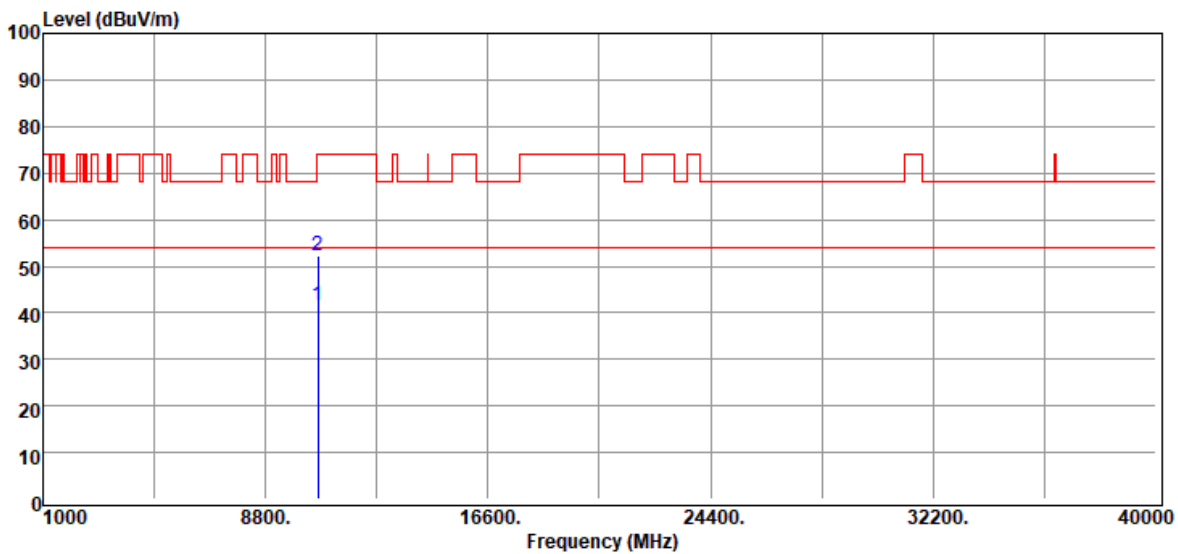
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 2  
 Test Channel :5320 MHz  
 Test Mode :TX CH HIGH  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :VERTICAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 10640.00     | Average                      | 17.66                             | 23.75        | 41.41                  | 54.00                  | -12.59       |
| 10640.00     | Peak                         | 28.50                             | 23.75        | 52.25                  | 74.00                  | -21.75       |

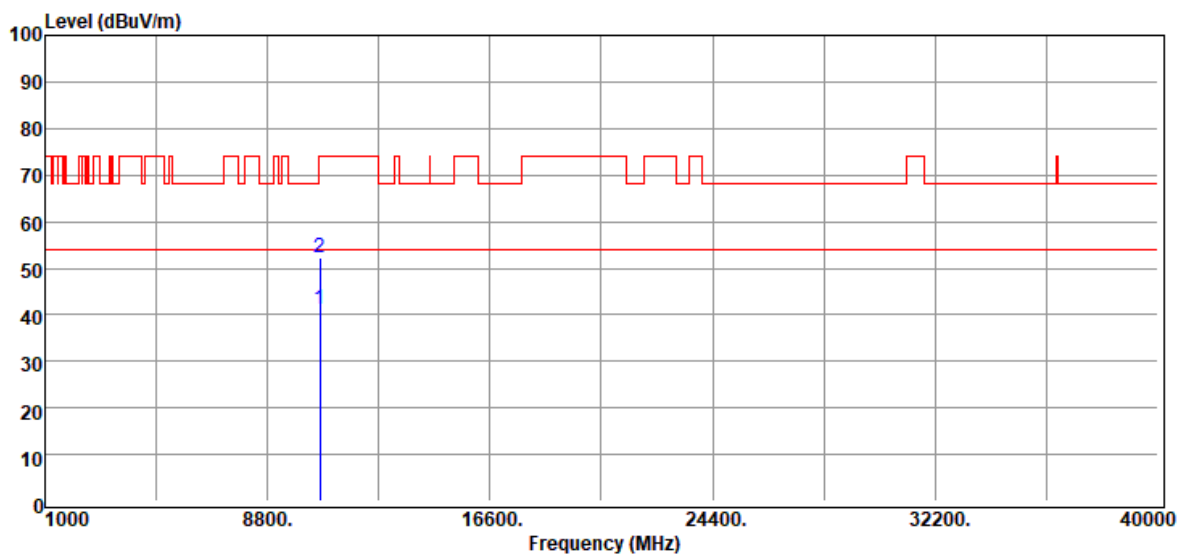
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 2  
 Test Channel :5320 MHz  
 Test Mode :TX CH HIGH  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 10640.00     | Average                      | 17.34                             | 23.75        | 41.09                  | 54.00                  | -12.91       |
| 10640.00     | Peak                         | 28.40                             | 23.75        | 52.15                  | 74.00                  | -21.85       |

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

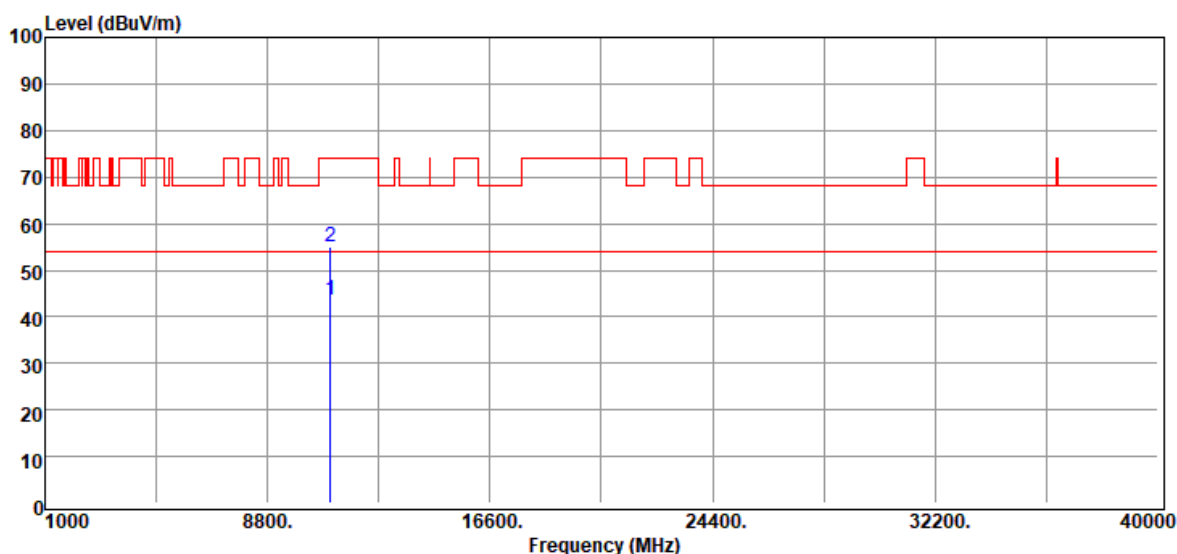
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

## 802.11a 發射模式 1GHz 以上測試 (5470MHz-5725MHz)

Report Number :E2/2019/40032  
Operation Mode :802.11a / Band 3  
Test Channel :5500 MHz  
Test Mode :TX CH LOW  
EUT Pol :E2 Plan

Test Date :2019-10-14  
Temp./Humi. :24.3/50  
Antenna Pol. :VERTICAL  
Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 11000.00     | Average                      | 17.89                             | 25.86        | 43.75                  | 54.00                  | -10.25       |
| 11000.00     | Peak                         | 29.30                             | 25.86        | 55.16                  | 74.00                  | -18.84       |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

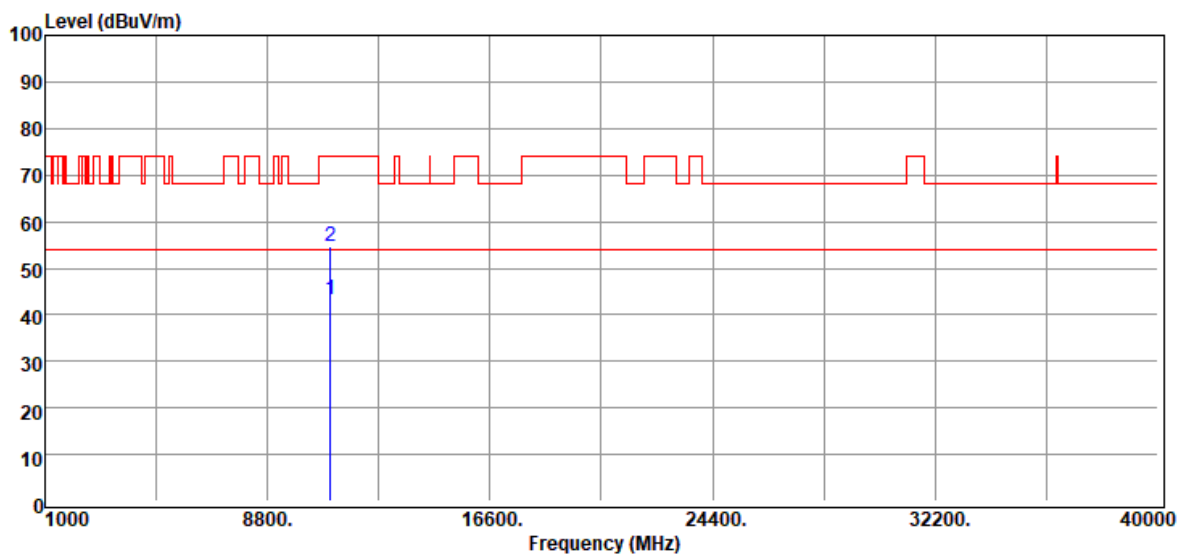
f (886-2) 2298-0488

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

Member of SGS Group

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 3  
 Test Channel :5500 MHz  
 Test Mode :TX CH LOW  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 11000.00     | Average                      | 17.39                             | 25.86        | 43.25                  | 54.00                  | -10.75       |
| 11000.00     | Peak                         | 28.67                             | 25.86        | 54.53                  | 74.00                  | -19.47       |

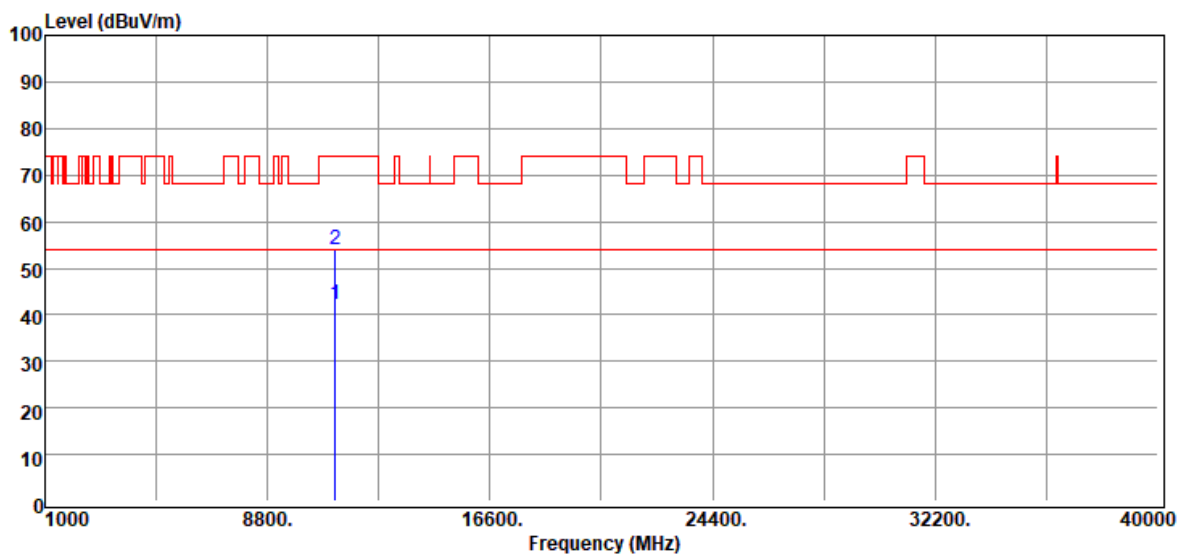
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 3  
 Test Channel :5580 MHz  
 Test Mode :TX CH MID  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :VERTICAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 11160.00     | Average                      | 17.40                             | 24.91        | 42.31                  | 54.00                  | -11.69       |
| 11160.00     | Peak                         | 29.22                             | 24.91        | 54.13                  | 74.00                  | -19.87       |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

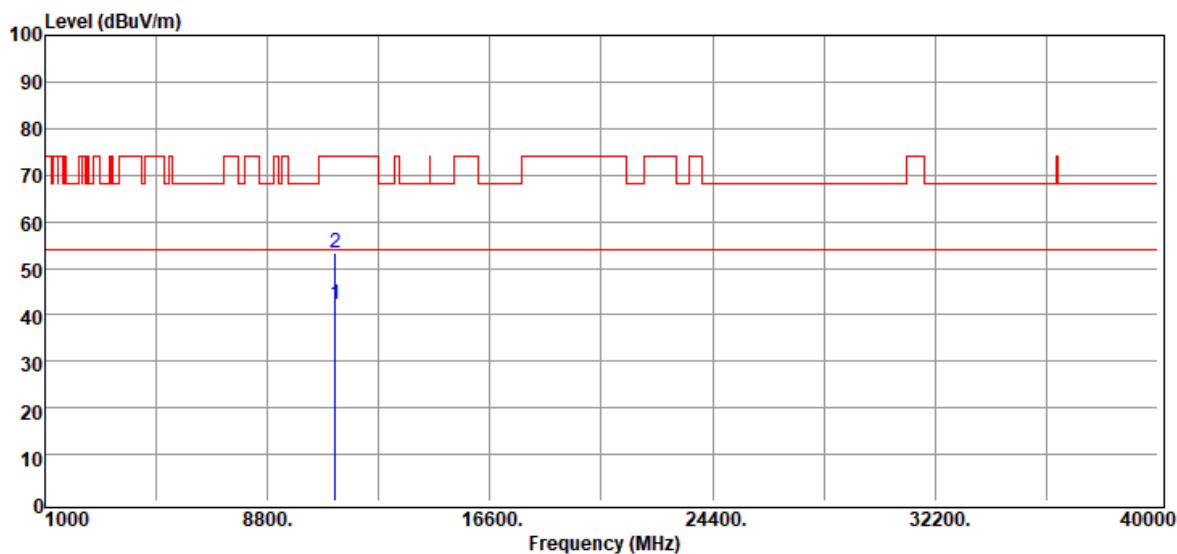
f (886-2) 2298-0488

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

Member of SGS Group

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 3  
 Test Channel :5580 MHz  
 Test Mode :TX CH MID  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 11160.00     | Average                      | 17.27                             | 24.91        | 42.18                  | 54.00                  | -11.82       |
| 11160.00     | Peak                         | 28.29                             | 24.91        | 53.20                  | 74.00                  | -20.80       |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

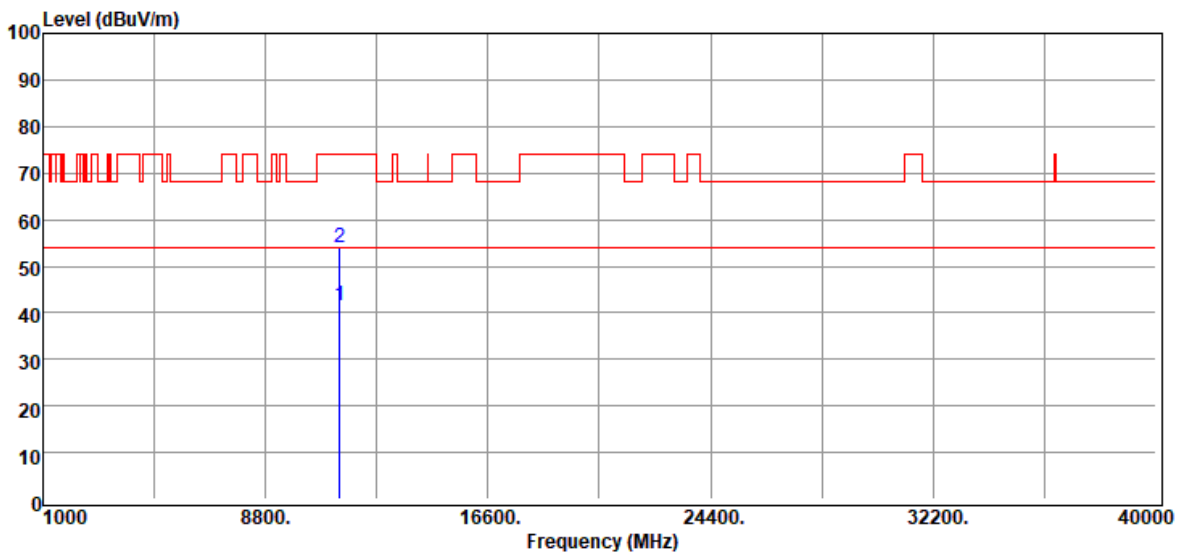
f (886-2) 2298-0488

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

Member of SGS Group

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 3  
 Test Channel :5700 MHz  
 Test Mode :TX CH HIGH  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :VERTICAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 11400.00     | Average                      | 17.69                             | 23.85        | 41.54                  | 54.00                  | -12.46       |
| 11400.00     | Peak                         | 30.10                             | 23.85        | 53.95                  | 74.00                  | -20.05       |

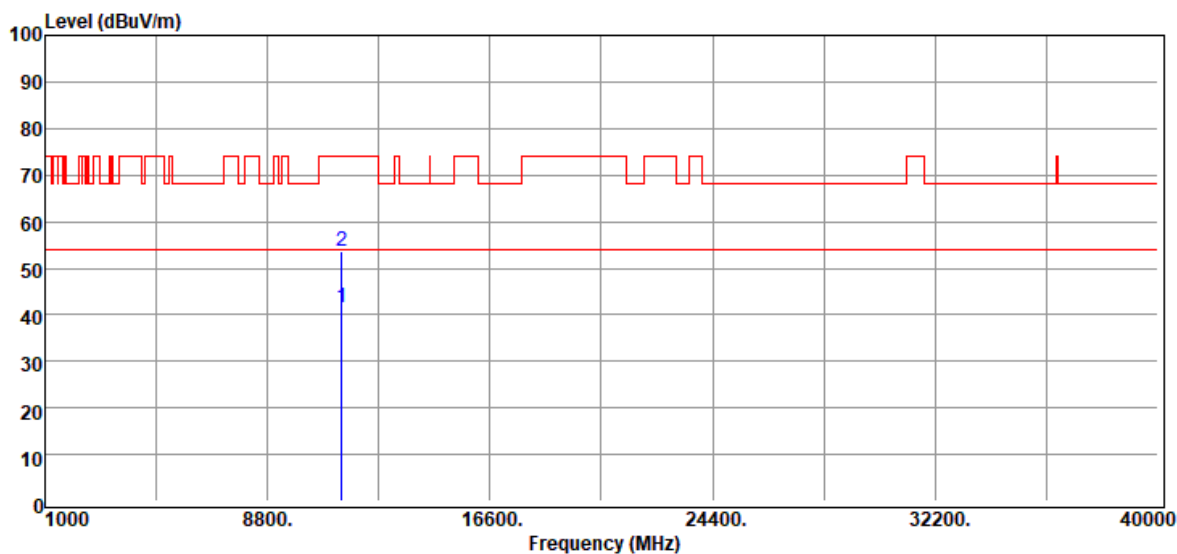
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 3  
 Test Channel :5700 MHz  
 Test Mode :TX CH HIGH  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 11400.00     | Average                      | 17.75                             | 23.85        | 41.60                  | 54.00                  | -12.40       |
| 11400.00     | Peak                         | 29.71                             | 23.85        | 53.56                  | 74.00                  | -20.44       |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 802.11n HT20 發射模式 1GHz 以上測試 (5250MHz-5350MHz)

Report Number :E2/2019/40032

Test Date :2019-10-14

Operation Mode :802.11n20 / Band 2

Temp./Humi. :24.3/50

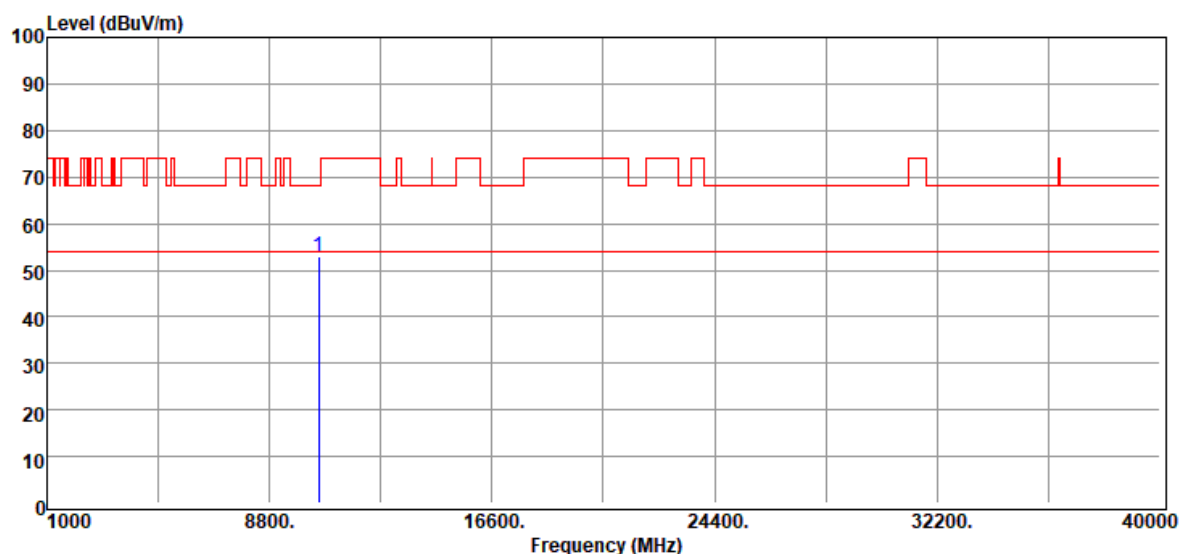
Test Channel :5260 MHz

Antenna Pol. :VERTICAL

Test Mode :TX CH LOW

Engineer :Enzo

EUT Pol :E2 Plan



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 10520.00     | Peak                         | 28.22                             | 24.69        | 52.91                  | 68.20                  | -15.29       |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

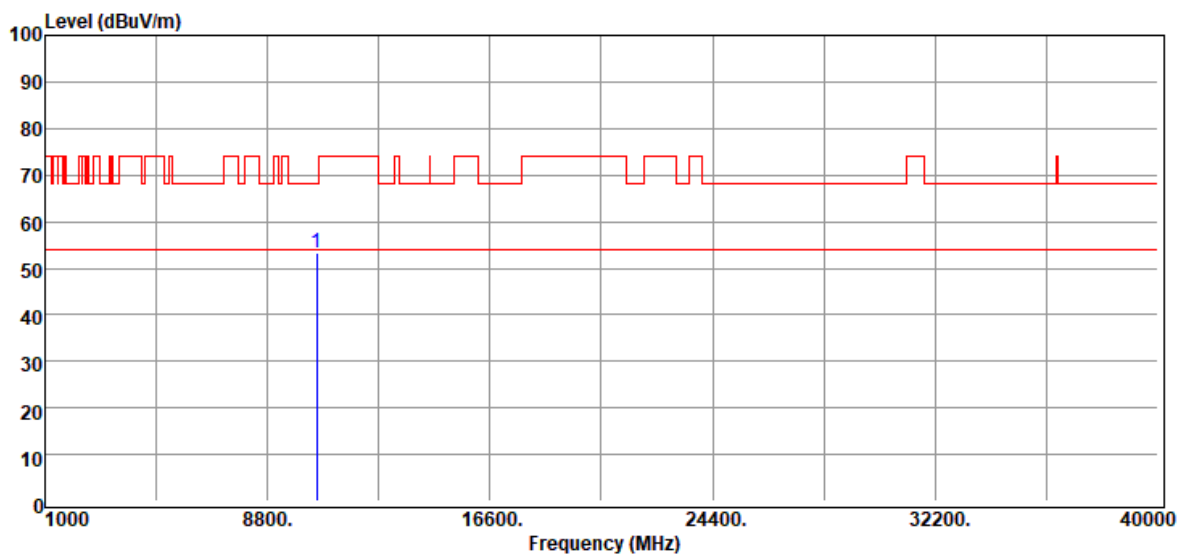
f (886-2) 2298-0488

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

Member of SGS Group

Report Number :E2/2019/40032  
 Operation Mode :802.11n20 / Band 2  
 Test Channel :5260 MHz  
 Test Mode :TX CH LOW  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 10520.00     | Peak                         | 28.46                             | 24.69        | 53.15                  | 68.20                  | -15.05       |

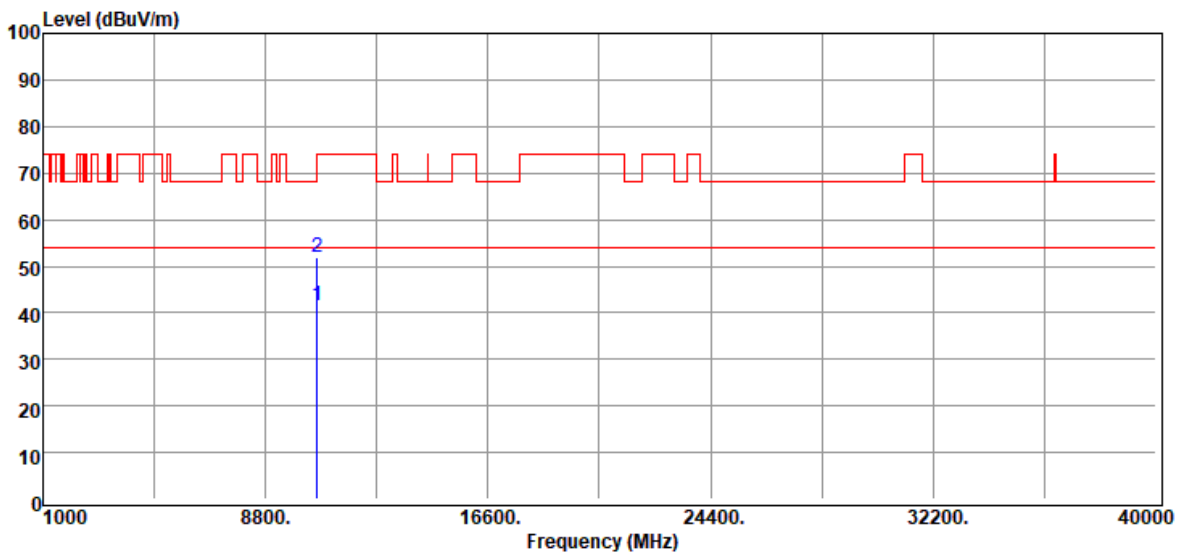
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11n20 / Band 2  
 Test Channel :5300 MHz  
 Test Mode :TX CH MID  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :VERTICAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 10600.00     | Average                      | 17.58                             | 23.85        | 41.43                  | 54.00                  | -12.57       |
| 10600.00     | Peak                         | 28.21                             | 23.85        | 52.06                  | 74.00                  | -21.94       |

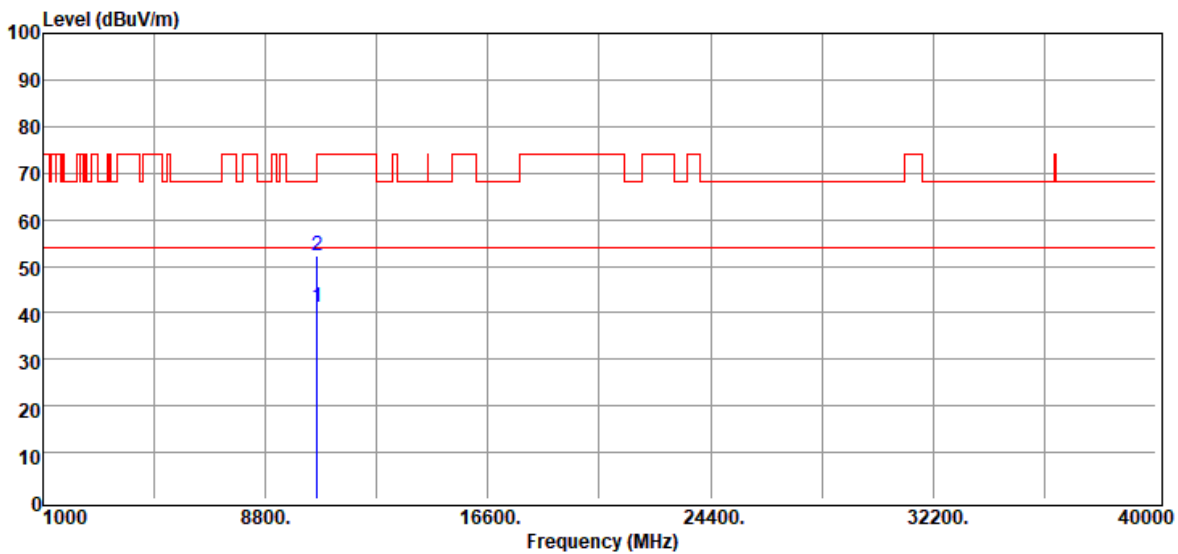
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11n20 / Band 2  
 Test Channel :5300 MHz  
 Test Mode :TX CH MID  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 10600.00     | Average                      | 17.22                             | 23.85        | 41.07                  | 54.00                  | -12.93       |
| 10600.00     | Peak                         | 28.34                             | 23.85        | 52.19                  | 74.00                  | -21.81       |

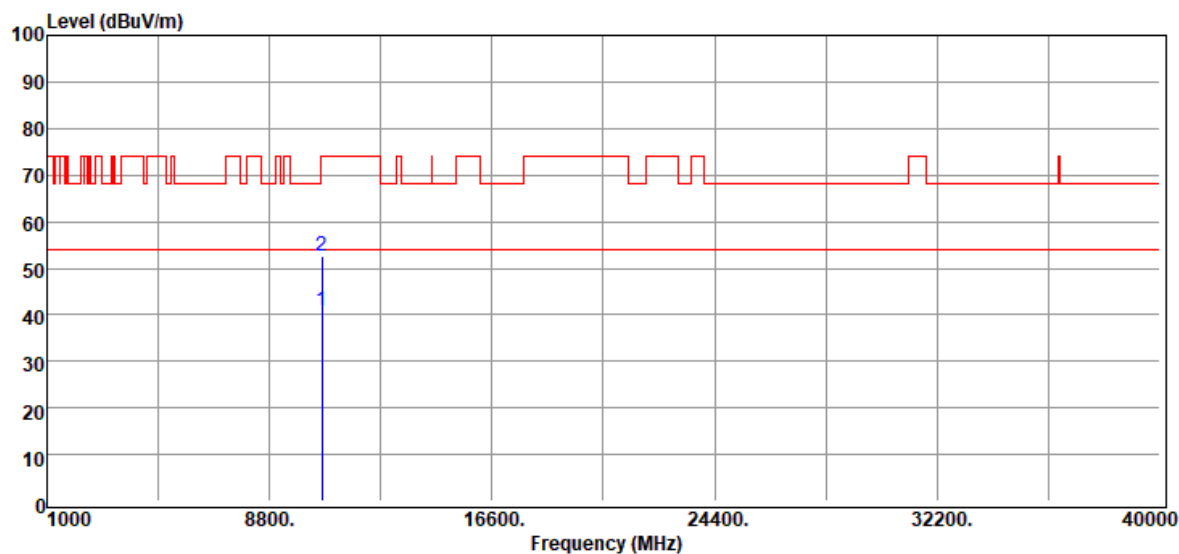
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11n20 / Band 2  
 Test Channel :5320 MHz  
 Test Mode :TX CH HIGH  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :VERTICAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 10640.00     | Average                      | 17.24                             | 23.75        | 40.99                  | 54.00                  | -13.01       |
| 10640.00     | Peak                         | 28.88                             | 23.75        | 52.63                  | 74.00                  | -21.37       |

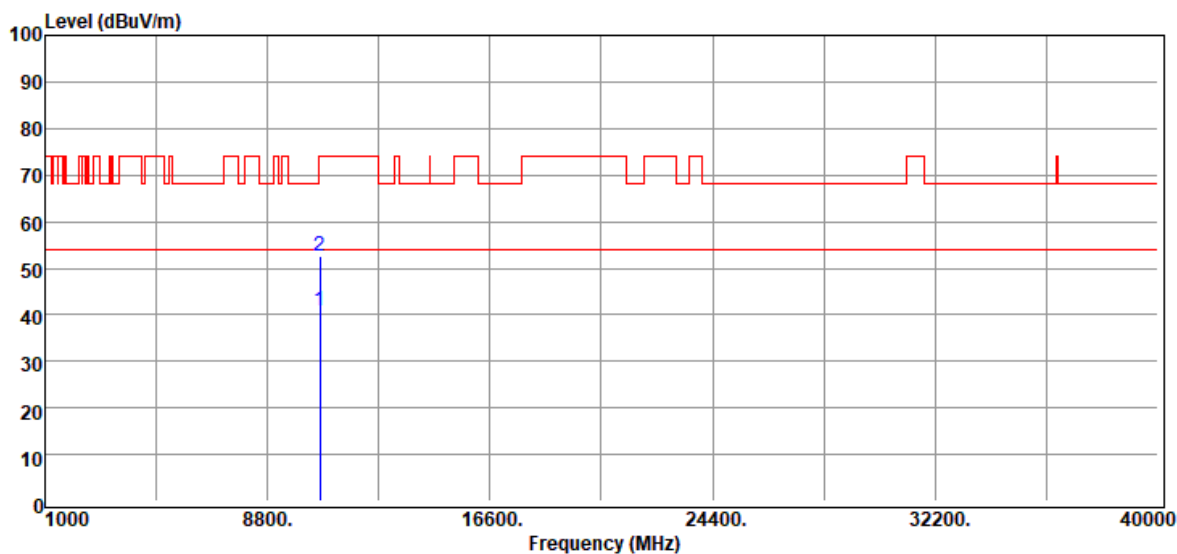
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11n20 / Band 2  
 Test Channel :5320 MHz  
 Test Mode :TX CH HIGH  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 10640.00     | Average                      | 17.22                             | 23.75        | 40.97                  | 54.00                  | -13.03       |
| 10640.00     | Peak                         | 28.73                             | 23.75        | 52.48                  | 74.00                  | -21.52       |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

# 802.11n HT20 發射模式 1GHz 以上測試 (5470MHz-5725MHz)

Report Number :E2/2019/40032

Test Date :2019-10-14

Operation Mode :802.11n20 / Band 3

Temp./Humi. :24.3/50

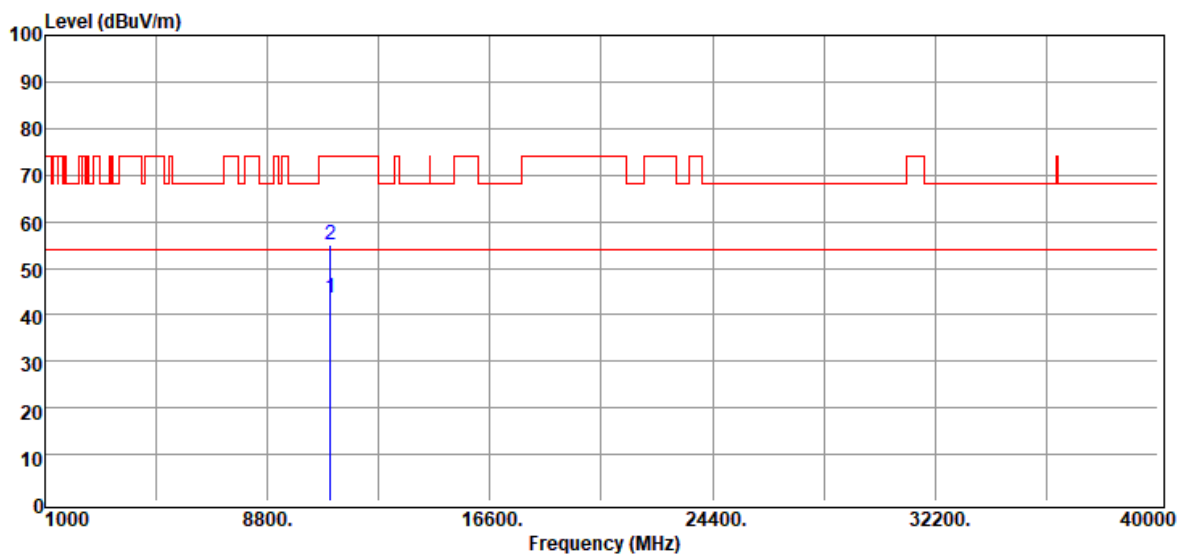
Test Channel :5500 MHz

Antenna Pol. :VERTICAL

Test Mode :TX CH LOW

Engineer :Enzo

EUT Pol :E2 Plan



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 11000.00     | Average                      | 17.82                             | 25.86        | 43.68                  | 54.00                  | -10.32       |
| 11000.00     | Peak                         | 29.15                             | 25.86        | 55.01                  | 74.00                  | -18.99       |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

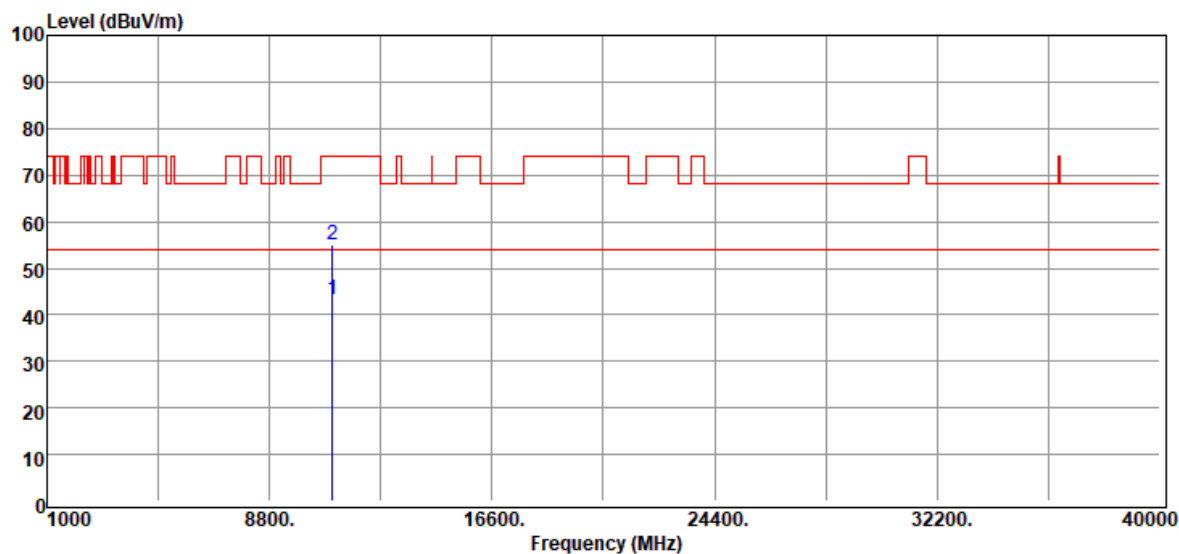
f (886-2) 2298-0488

www.tw.sgs.com

Member of SGS Group

Report Number :E2/2019/40032  
 Operation Mode :802.11n20 / Band 3  
 Test Channel :5500 MHz  
 Test Mode :TX CH LOW  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 11000.00     | Average                      | 17.44                             | 25.86        | 43.30                  | 54.00                  | -10.70       |
| 11000.00     | Peak                         | 29.14                             | 25.86        | 55.00                  | 74.00                  | -19.00       |

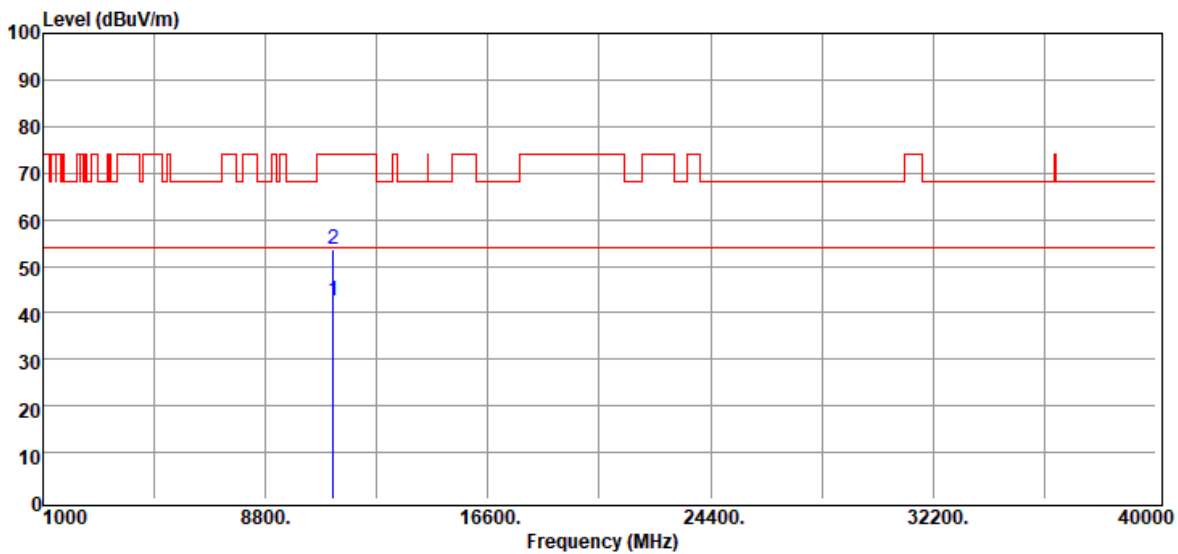
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

Report Number :E2/2019/40032  
Operation Mode :802.11n20 / Band 3  
Test Channel :5580 MHz  
Test Mode :TX CH MID  
EUT Pol :E2 Plan

Test Date :2019-10-14  
Temp./Humi. :24.3/50  
Antenna Pol. :VERTICAL  
Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 11160.00     | Average                      | 17.81                             | 24.91        | 42.72                  | 54.00                  | -11.28       |
| 11160.00     | Peak                         | 28.82                             | 24.91        | 53.73                  | 74.00                  | -20.27       |

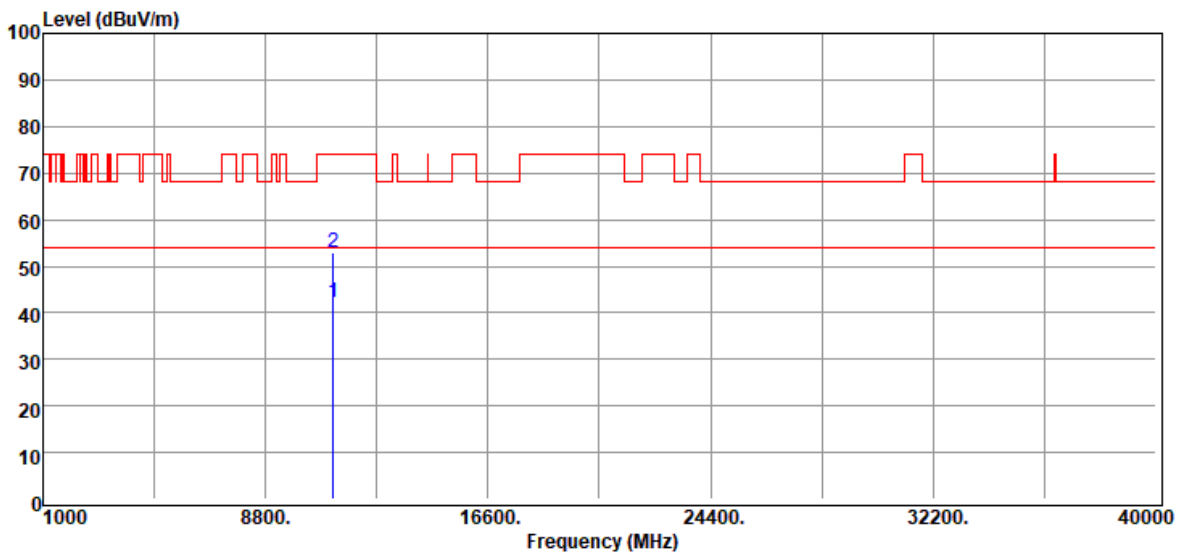
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11n20 / Band 3  
 Test Channel :5580 MHz  
 Test Mode :TX CH MID  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 11160.00     | Average                      | 17.38                             | 24.91        | 42.29                  | 54.00                  | -11.71       |
| 11160.00     | Peak                         | 27.87                             | 24.91        | 52.78                  | 74.00                  | -21.22       |

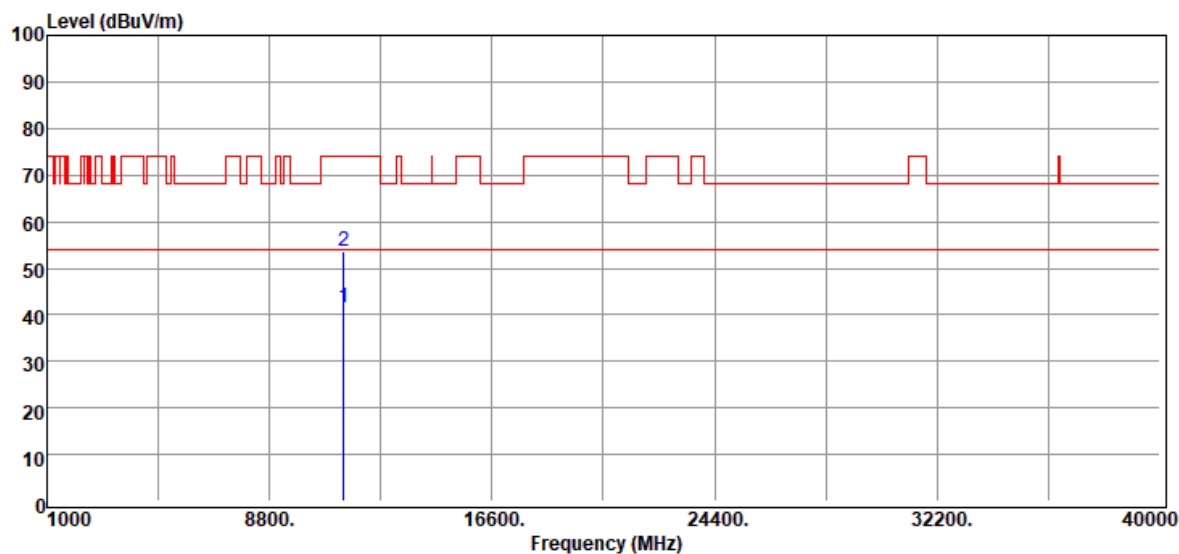
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11n20 / Band 3  
 Test Channel :5700 MHz  
 Test Mode :TX CH HIGH  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :VERTICAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 11400.00     | Average                      | 17.69                             | 23.85        | 41.54                  | 54.00                  | -12.46       |
| 11400.00     | Peak                         | 29.69                             | 23.85        | 53.54                  | 74.00                  | -20.46       |

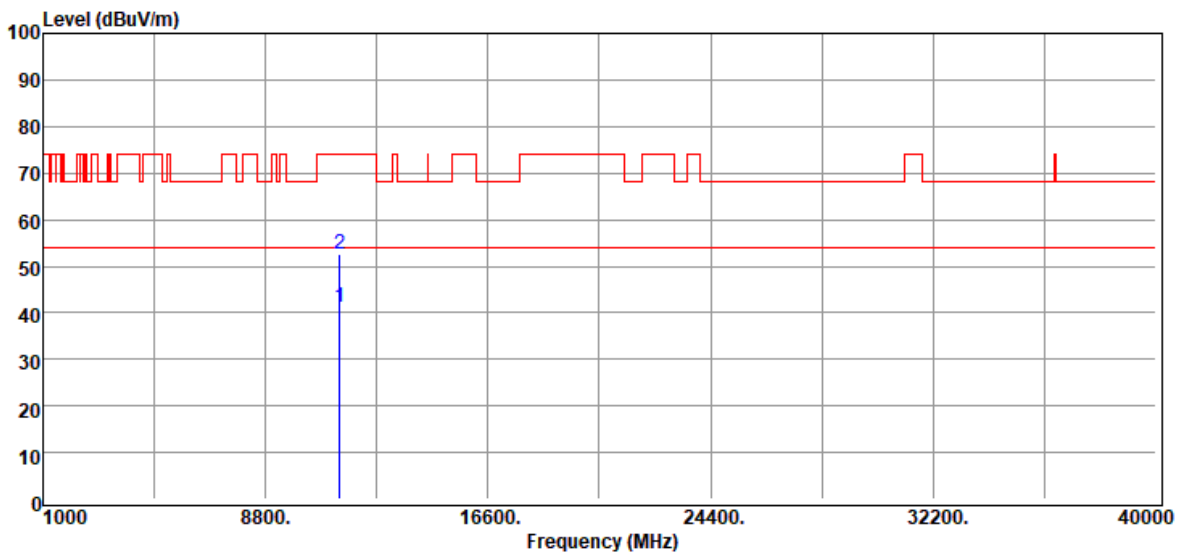
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11n20 / Band 3  
 Test Channel :5700 MHz  
 Test Mode :TX CH HIGH  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 11400.00     | Average                      | 17.37                             | 23.85        | 41.22                  | 54.00                  | -12.78       |
| 11400.00     | Peak                         | 28.88                             | 23.85        | 52.73                  | 74.00                  | -21.27       |

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

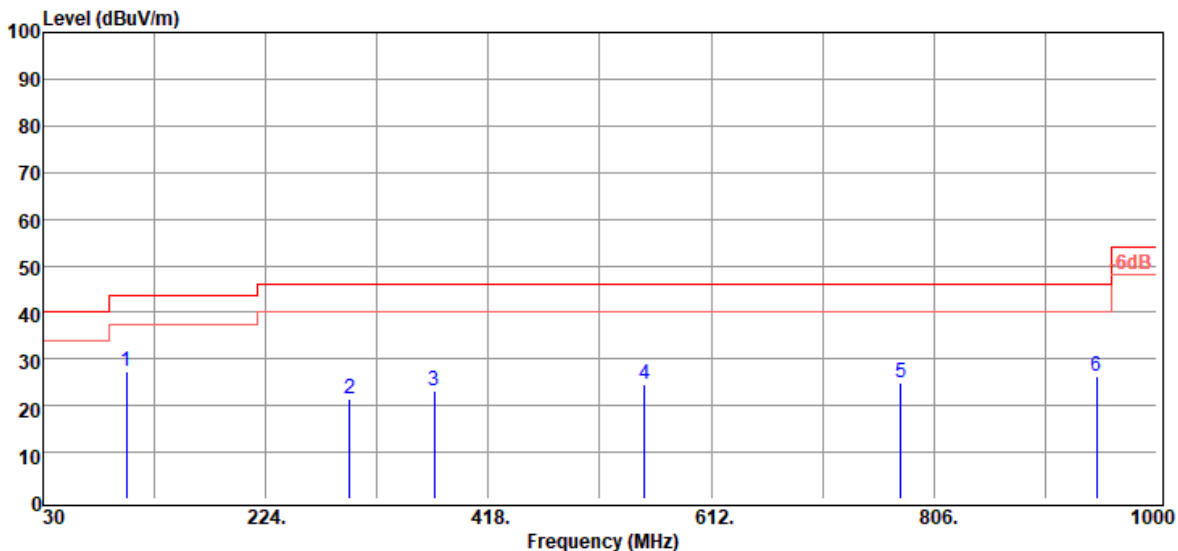
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

# 802.11a 接收機場強輻射之量測結果(1GHz 以下) (最差模式) (5250MHz-5350MHz)

Report Number :E2/2019/40032  
Operation Mode :802.11a / Band 2  
Test Channel :5300 MHz  
Test Mode :RX CH MID  
EUT Pol :E2 Plan

Test Date :2019-10-14  
Temp./Humi. :24.3/50  
Antenna Pol. :VERTICAL  
Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 102.75       | Peak                         | 43.97                             | -16.75       | 27.22                  | 43.50                  | -16.28       |
| 296.75       | Peak                         | 34.80                             | -13.46       | 21.34                  | 46.00                  | -24.66       |
| 370.47       | Peak                         | 35.13                             | -11.94       | 23.19                  | 46.00                  | -22.81       |
| 553.80       | Peak                         | 31.19                             | -6.72        | 24.47                  | 46.00                  | -21.53       |
| 776.90       | Peak                         | 29.85                             | -4.85        | 25.00                  | 46.00                  | -21.00       |
| 947.62       | Peak                         | 29.90                             | -3.76        | 26.14                  | 46.00                  | -19.86       |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

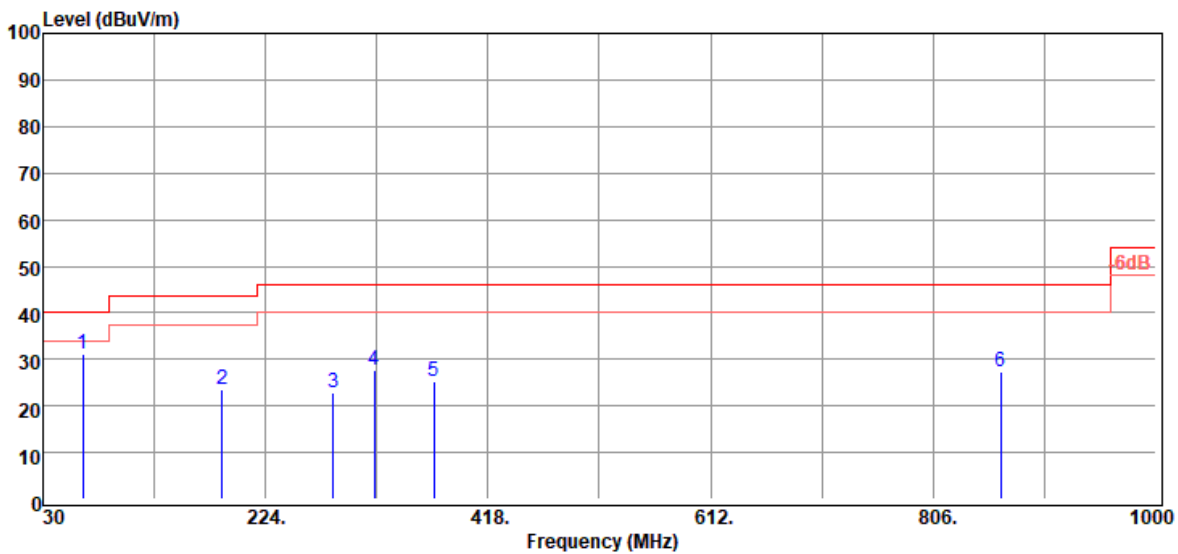
f (886-2) 2298-0488

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

Member of SGS Group

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 2  
 Test Channel :5300 MHz  
 Test Mode :RX CH MID  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 64.92        | Peak                         | 51.75                             | -20.60       | 31.15                  | 40.00                  | -8.85        |
| 186.17       | Peak                         | 41.43                             | -18.01       | 23.42                  | 43.50                  | -20.08       |
| 283.17       | Peak                         | 36.44                             | -13.53       | 22.91                  | 46.00                  | -23.09       |
| 319.06       | Peak                         | 40.13                             | -12.47       | 27.66                  | 46.00                  | -18.34       |
| 370.47       | Peak                         | 37.24                             | -11.94       | 25.30                  | 46.00                  | -20.70       |
| 865.17       | Peak                         | 31.12                             | -3.79        | 27.33                  | 46.00                  | -18.67       |

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

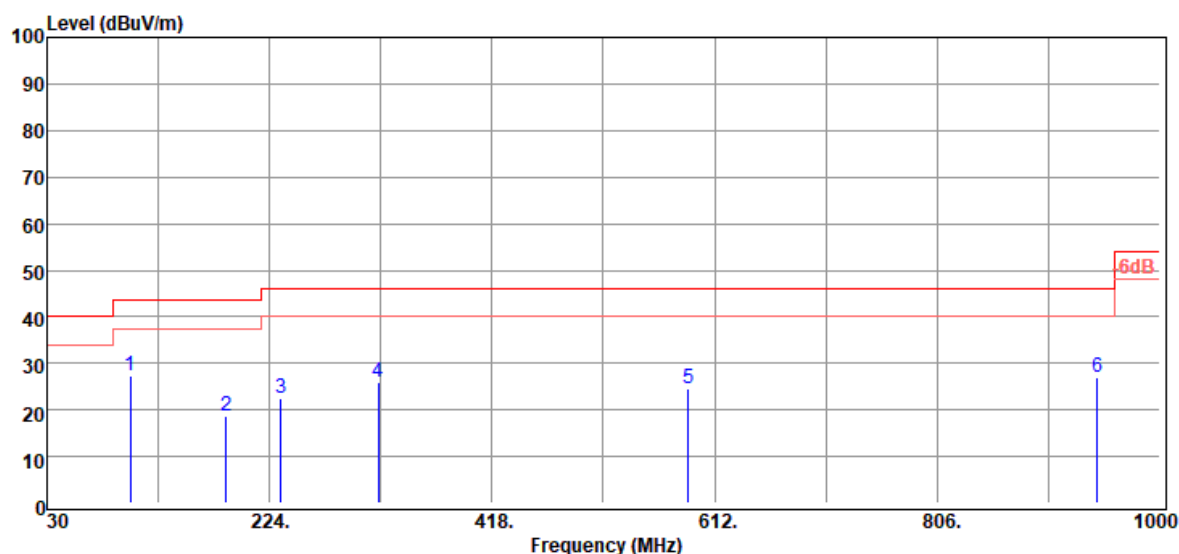
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

# 802.11a 接收機場強輻射之量測結果(1GHz 以下) (最差模式) (5470MHz-5725MHz)

Report Number :E2/2019/40032  
Operation Mode :802.11a / Band 3  
Test Channel :5580 MHz  
Test Mode :RX CH MID  
EUT Pol :E2 Plan

Test Date :2019-10-14  
Temp./Humi. :24.3/50  
Antenna Pol. :VERTICAL  
Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 102.75       | Peak                         | 43.97                             | -16.75       | 27.22                  | 43.50                  | -16.28       |
| 186.17       | Peak                         | 36.55                             | -18.01       | 18.54                  | 43.50                  | -24.96       |
| 233.70       | Peak                         | 38.54                             | -15.95       | 22.59                  | 46.00                  | -23.41       |
| 319.06       | Peak                         | 38.56                             | -12.47       | 26.09                  | 46.00                  | -19.91       |
| 588.72       | Peak                         | 31.92                             | -7.18        | 24.74                  | 46.00                  | -21.26       |
| 945.68       | Peak                         | 30.71                             | -3.73        | 26.98                  | 46.00                  | -19.02       |

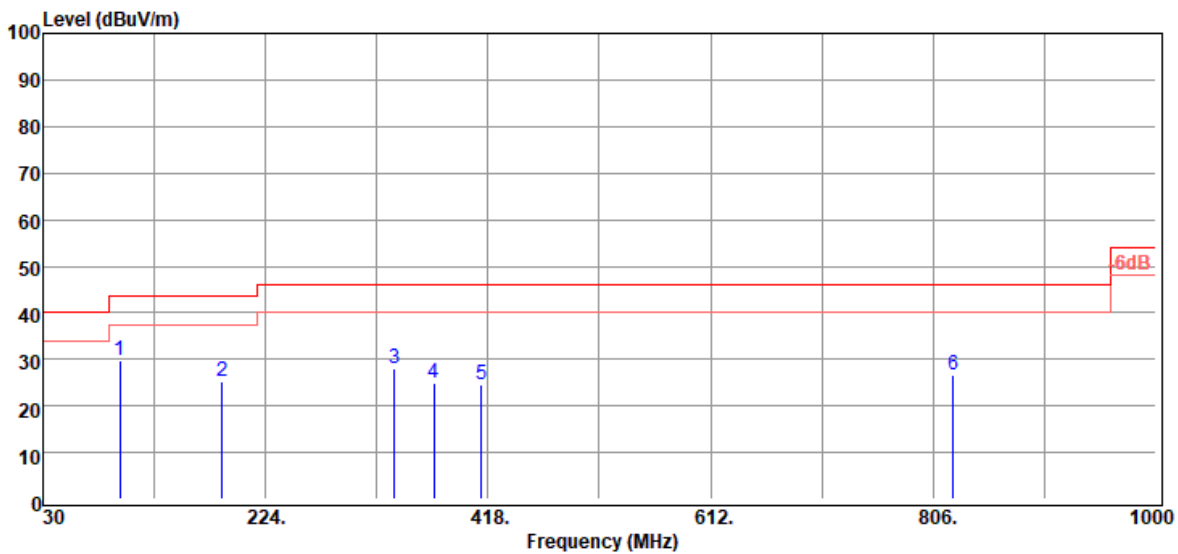
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 3  
 Test Channel :5580 MHz  
 Test Mode :RX CH MID  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 96.93        | Peak                         | 47.36                             | -17.66       | 29.70                  | 43.50                  | -13.80       |
| 186.17       | Peak                         | 43.44                             | -18.01       | 25.43                  | 43.50                  | -18.07       |
| 336.52       | Peak                         | 40.37                             | -12.25       | 28.12                  | 46.00                  | -17.88       |
| 370.47       | Peak                         | 37.00                             | -11.94       | 25.06                  | 46.00                  | -20.94       |
| 412.18       | Peak                         | 34.03                             | -9.62        | 24.41                  | 46.00                  | -21.59       |
| 823.46       | Peak                         | 32.08                             | -5.31        | 26.77                  | 46.00                  | -19.23       |

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

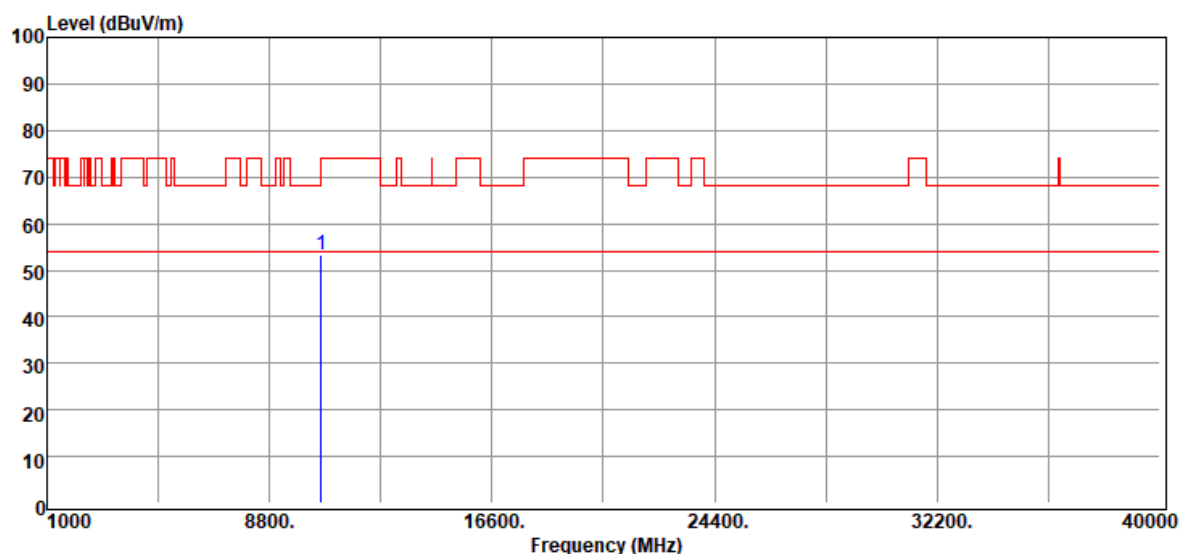
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

## 802.11a 接收機場強輻射之量測結果(1GHz 以上) (最差模式) (5250MHz- 5350MHz)

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 2  
 Test Channel :5300 MHz  
 Test Mode :RX CH MID  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :VERTICAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 10600.00     | Peak                         | 29.61                             | 23.85        | 53.46                  | 74.00                  | -20.54       |

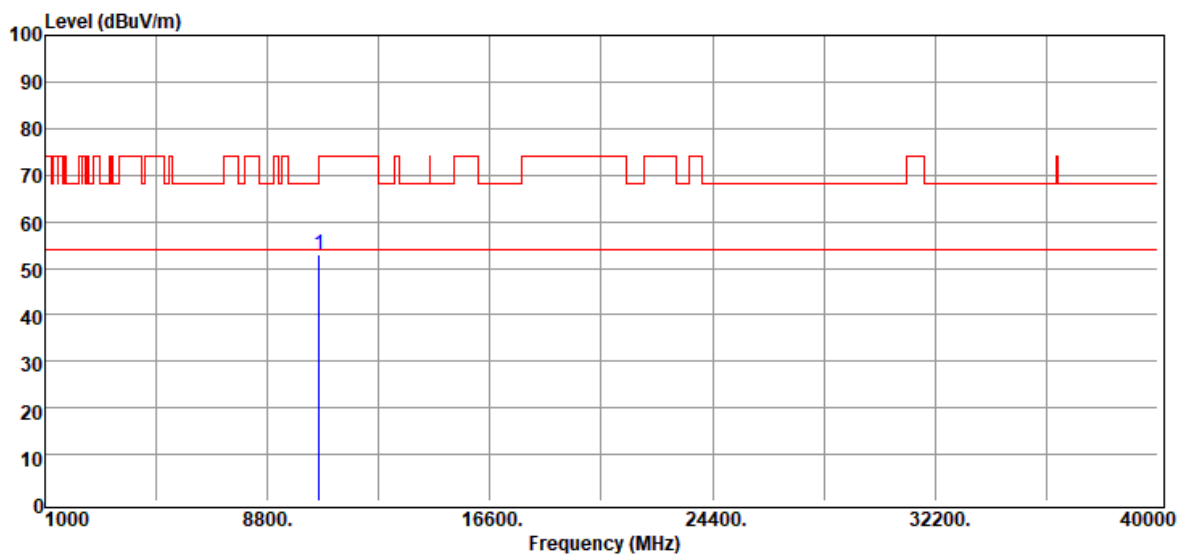
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 2  
 Test Channel :5300 MHz  
 Test Mode :RX CH MID  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 10600.00     | Peak                         | 29.11                             | 23.85        | 52.96                  | 74.00                  | -21.04       |

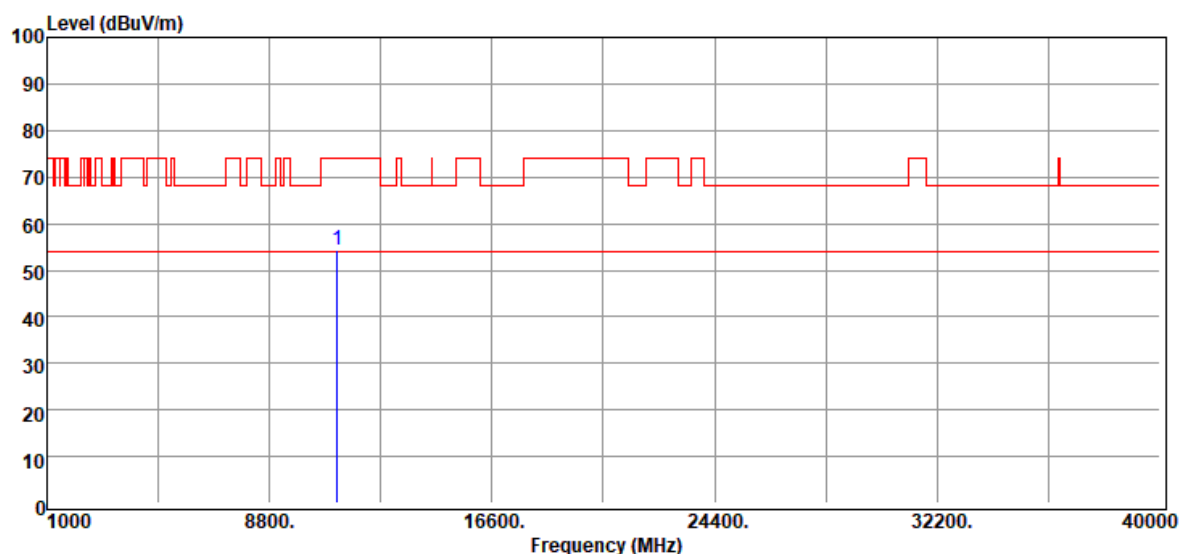
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

# 802.11a 接收機場強輻射之量測結果(1GHz 以上) (最差模式) (5470MHz-5725MHz)

|                |                   |              |             |
|----------------|-------------------|--------------|-------------|
| Report Number  | :E2/2019/40032    | Test Date    | :2019-10-14 |
| Operation Mode | :802.11a / Band 3 | Temp./Humi.  | :24.3/50    |
| Test Channel   | :5580 MHz         | Antenna Pol. | :VERTICAL   |
| Test Mode      | :RX CH MID        | Engineer     | :Enzo       |
| EUT Pol        | :E2 Plan          |              |             |



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 11160.00     | Peak                         | 29.43                             | 24.91        | 54.34                  | 74.00                  | -19.66       |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

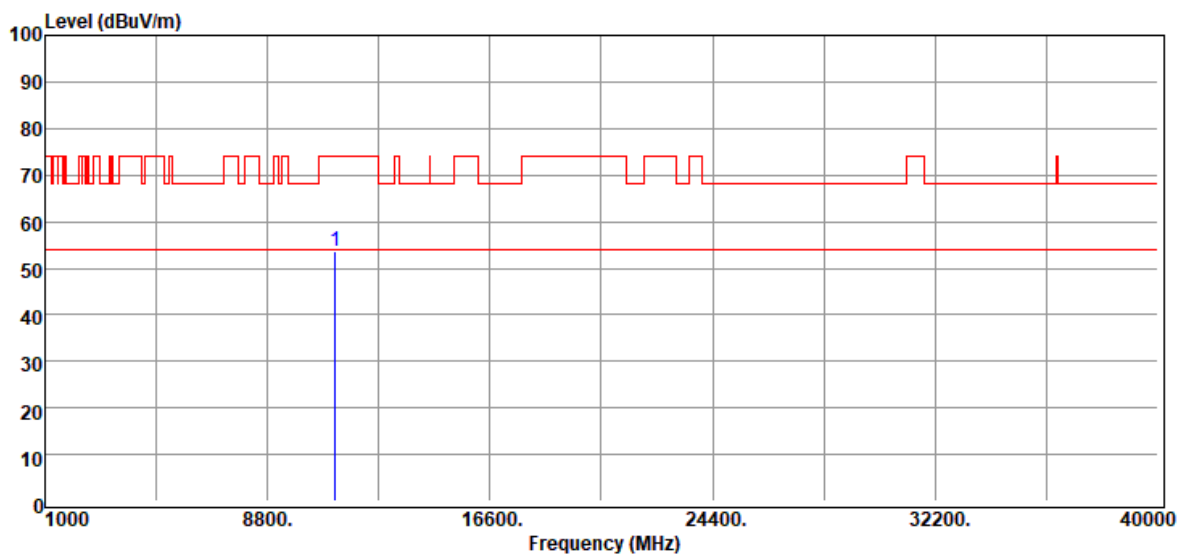
f (886-2) 2298-0488

www.tw.sgs.com

Member of SGS Group

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 3  
 Test Channel :5580 MHz  
 Test Mode :RX CH MID  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 11160.00     | Peak                         | 28.70                             | 24.91        | 53.61                  | 74.00                  | -20.39       |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 6.6 開放頻帶邊緣量測結果

### 頻帶外發射輻射量測值 (802.11a) (5250MHz-5350MHz)

Report Number :E2/2019/40032

Test Date :2019-10-14

Operation Mode :802.11a / Band 2

Temp./Humi. :24.3/50

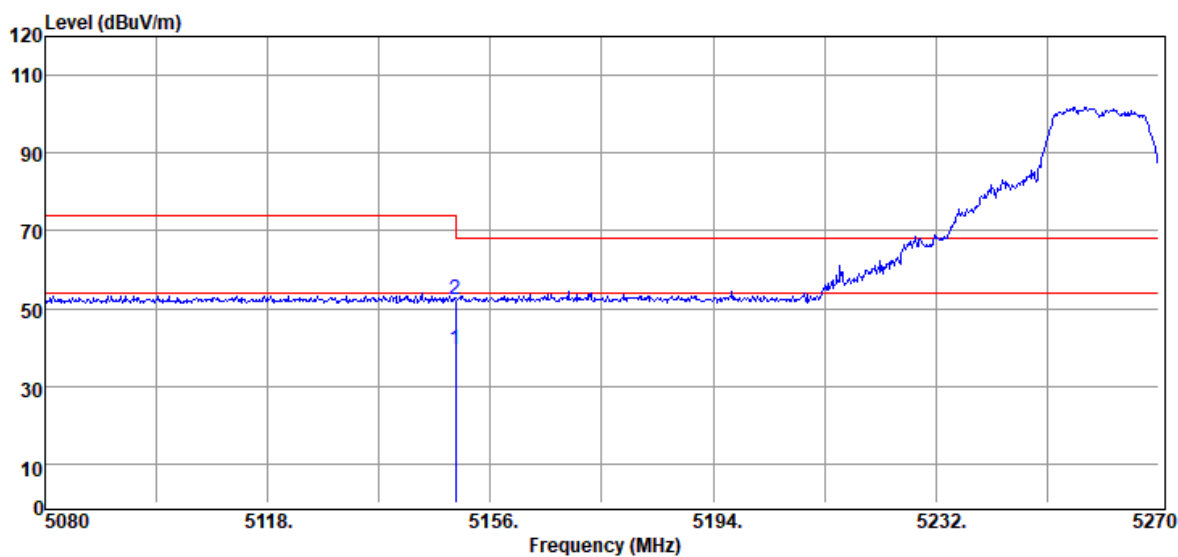
Test Channel :5260 MHz

Antenna Pol. :VERTICAL

Test Mode :BE CH LOW

Engineer :Enzo

EUT Pol :E2 Plan



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 5150.00      | Average                      | 27.32                             | 12.04        | 39.36                  | 54.00                  | -14.64       |
| 5150.00      | Peak                         | 40.24                             | 12.04        | 52.28                  | 74.00                  | -21.72       |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

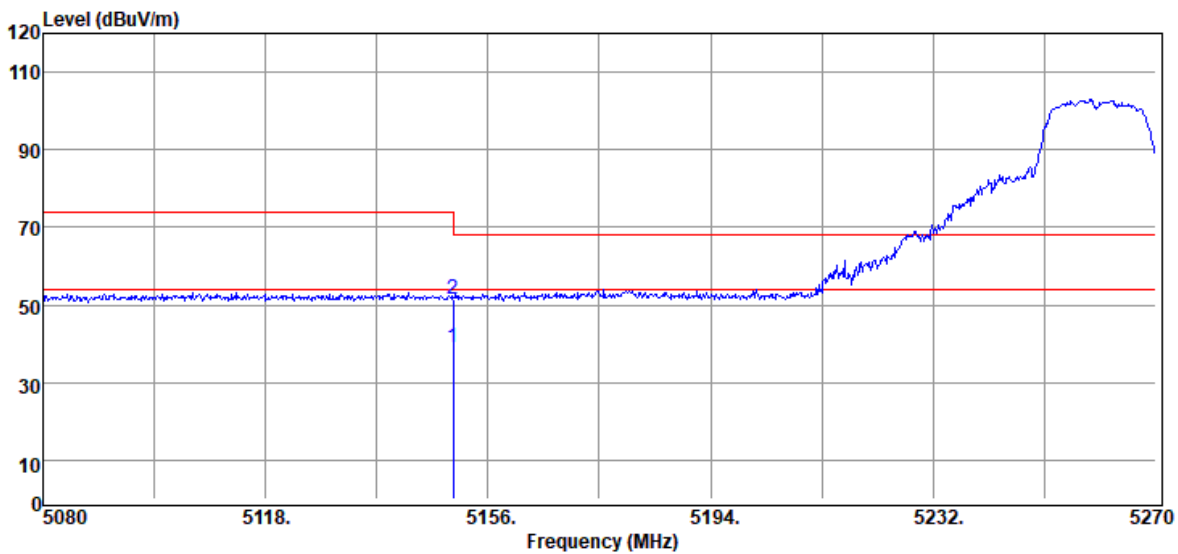
f (886-2) 2298-0488

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

Member of SGS Group

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 2  
 Test Channel :5260 MHz  
 Test Mode :BE CH LOW  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 5150.00      | Average                      | 27.11                             | 12.04        | 39.15                  | 54.00                  | -14.85       |
| 5150.00      | Peak                         | 39.46                             | 12.04        | 51.50                  | 74.00                  | -22.50       |

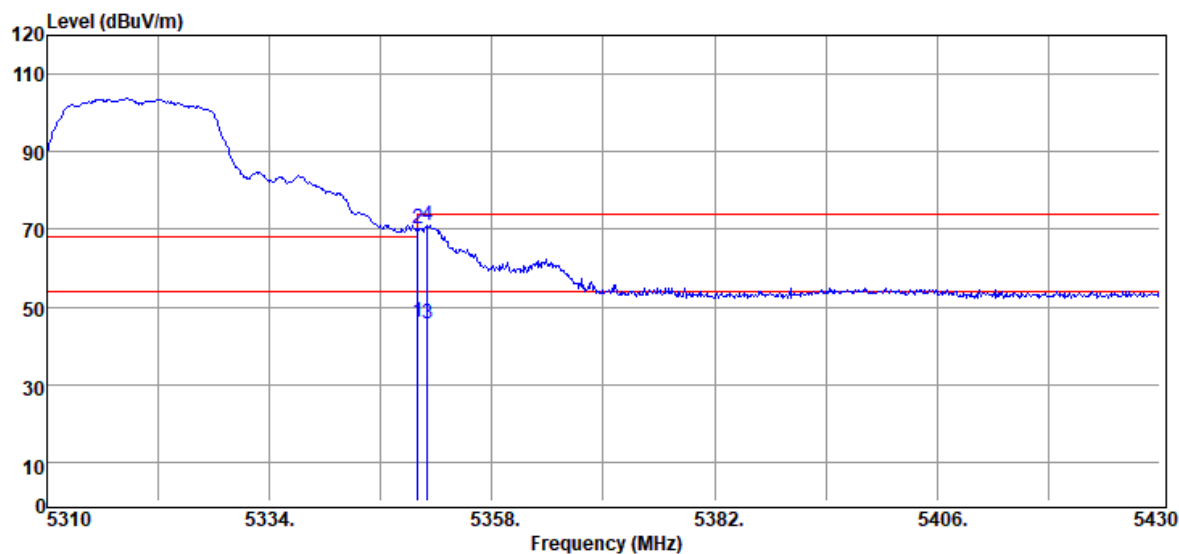
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 2  
 Test Channel :5320 MHz  
 Test Mode :BE CH HIGH  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 5350.00      | Average                      | 34.36                             | 11.76        | 46.12                  | 54.00                  | -7.88        |
| 5350.00      | Peak                         | 58.43                             | 11.76        | 70.19                  | 74.00                  | -3.81        |
| 5351.04      | Average                      | 33.84                             | 11.76        | 45.60                  | 54.00                  | -8.40        |
| 5351.04      | Peak                         | 59.24                             | 11.76        | 71.00                  | 74.00                  | -3.00        |

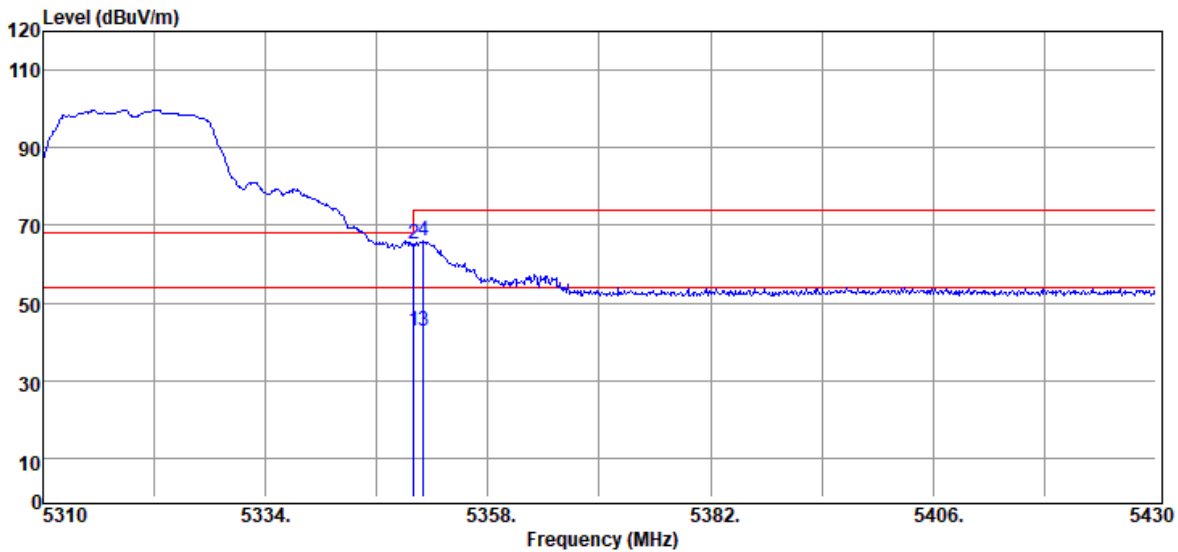
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

Report Number :E2/2019/40032  
Operation Mode :802.11a / Band 2  
Test Channel :5320 MHz  
Test Mode :BE CH HIGH  
EUT Pol :E2 Plan

Test Date :2019-10-14  
Temp./Humi. :24.3/50  
Antenna Pol. :VERTICAL  
Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 5350.00      | Average                      | 31.18                             | 11.76        | 42.94                  | 54.00                  | -11.06       |
| 5350.00      | Peak                         | 53.50                             | 11.76        | 65.26                  | 74.00                  | -8.74        |
| 5351.04      | Average                      | 30.82                             | 11.76        | 42.58                  | 54.00                  | -11.42       |
| 5351.04      | Peak                         | 54.21                             | 11.76        | 65.97                  | 74.00                  | -8.03        |

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

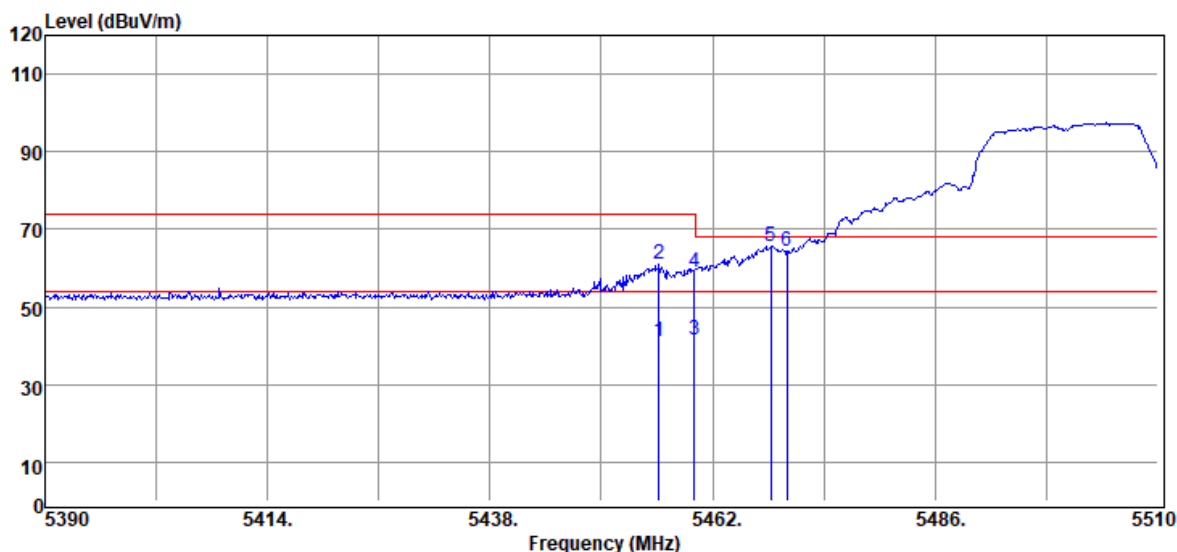
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

**頻帶外發射輻射量測值 (802.11a) (5470MHz-5725MHz)**

Report Number :E2/2019/40032  
Operation Mode :802.11a / Band 3  
Test Channel :5500 MHz  
Test Mode :BE CH LOW  
EUT Pol :E2 Plan

Test Date :2019-10-14  
Temp./Humi. :24.3/50  
Antenna Pol. :VERTICAL  
Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 5456.24      | Average                      | 28.82                             | 12.14        | 40.96                  | 54.00                  | -13.04       |
| 5456.24      | Peak                         | 48.70                             | 12.14        | 60.84                  | 74.00                  | -13.16       |
| 5460.00      | Average                      | 29.45                             | 12.16        | 41.61                  | 54.00                  | -12.39       |
| 5460.00      | Peak                         | 46.67                             | 12.16        | 58.83                  | 74.00                  | -15.17       |
| 5468.24      | Peak                         | 53.54                             | 12.19        | 65.73                  | 68.20                  | -2.47        |
| 5470.00      | Peak                         | 52.16                             | 12.20        | 64.36                  | 68.20                  | -3.84        |

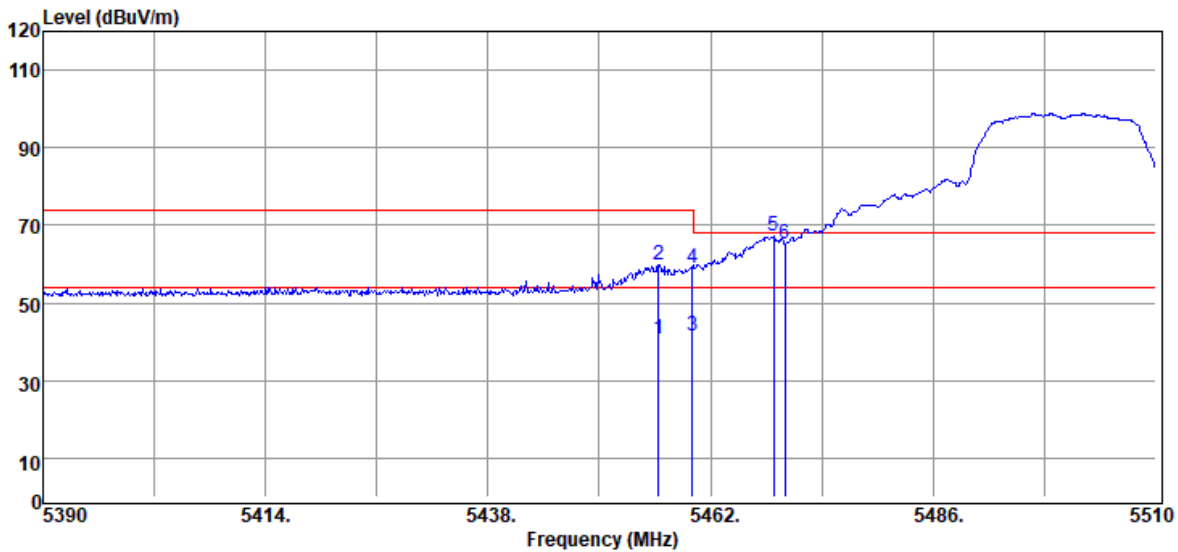
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 3  
 Test Channel :5500 MHz  
 Test Mode :BE CH LOW  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 5456.36      | Average                      | 28.72                             | 12.15        | 40.87                  | 54.00                  | -13.13       |
| 5456.36      | Peak                         | 47.67                             | 12.15        | 59.82                  | 74.00                  | -14.18       |
| 5460.00      | Average                      | 29.34                             | 12.16        | 41.50                  | 54.00                  | -12.50       |
| 5460.00      | Peak                         | 46.64                             | 12.16        | 58.80                  | 74.00                  | -15.20       |
| 5468.84      | Peak                         | 55.06                             | 12.20        | 67.26                  | 68.20                  | -0.94        |
| 5470.00      | Peak                         | 53.11                             | 12.20        | 65.31                  | 68.20                  | -2.89        |

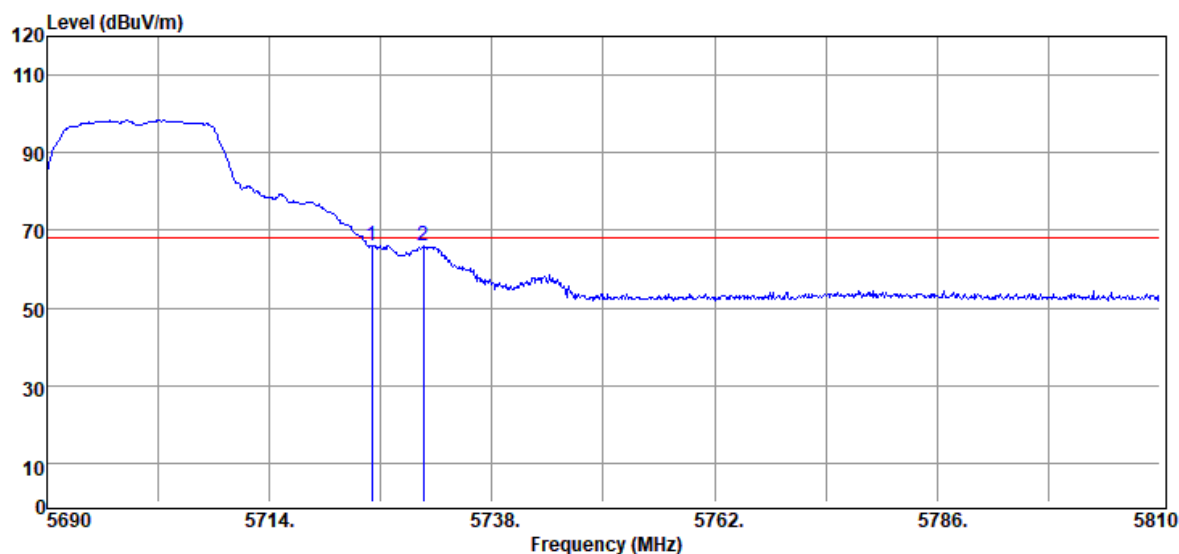
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11a / Band 3  
 Test Channel :5700 MHz  
 Test Mode :BE CH HIGH  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 5725.00      | Peak                         | 53.39                             | 12.58        | 65.97                  | 68.20                  | -2.23        |
| 5730.56      | Peak                         | 53.45                             | 12.60        | 66.05                  | 68.20                  | -2.15        |

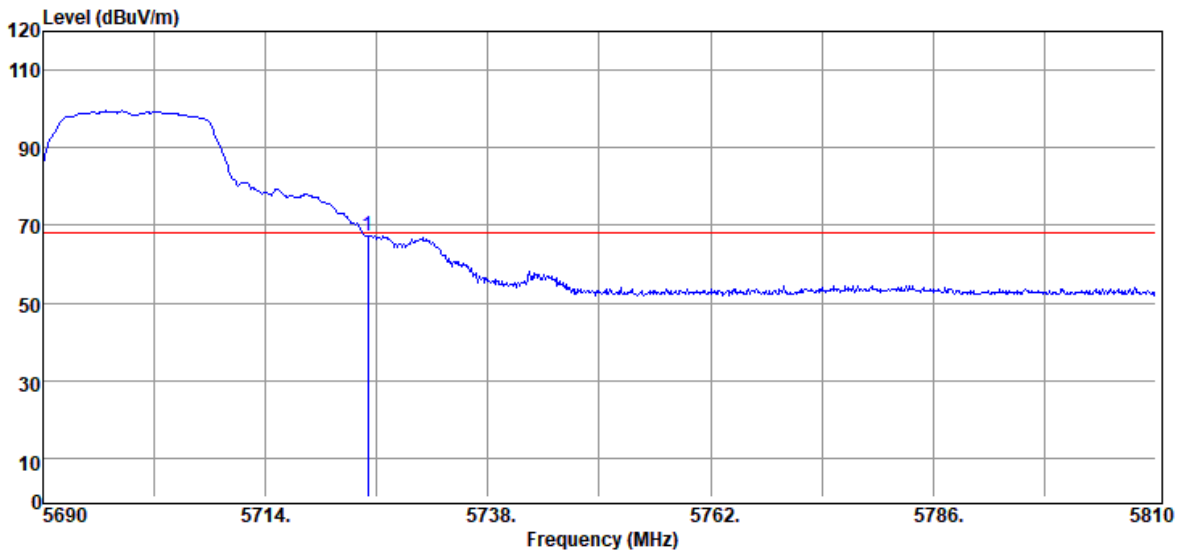
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
Operation Mode :802.11a / Band 3  
Test Channel :5700 MHz  
Test Mode :BE CH HIGH  
EUT Pol :E2 Plan

Test Date :2019-10-14  
Temp./Humi. :24.3/50  
Antenna Pol. :VERTICAL  
Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 5725.00      | Peak                         | 54.70                             | 12.58        | 67.28                  | 68.20                  | -0.92        |

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

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

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

### 頻帶外發射輻射量測值 (802.11n HT20) (5250MHz-5350MHz)

Report Number :E2/2019/40032

Test Date :2019-10-14

Operation Mode :802.11n20 / Band 2

Temp./Humi. :24.3/50

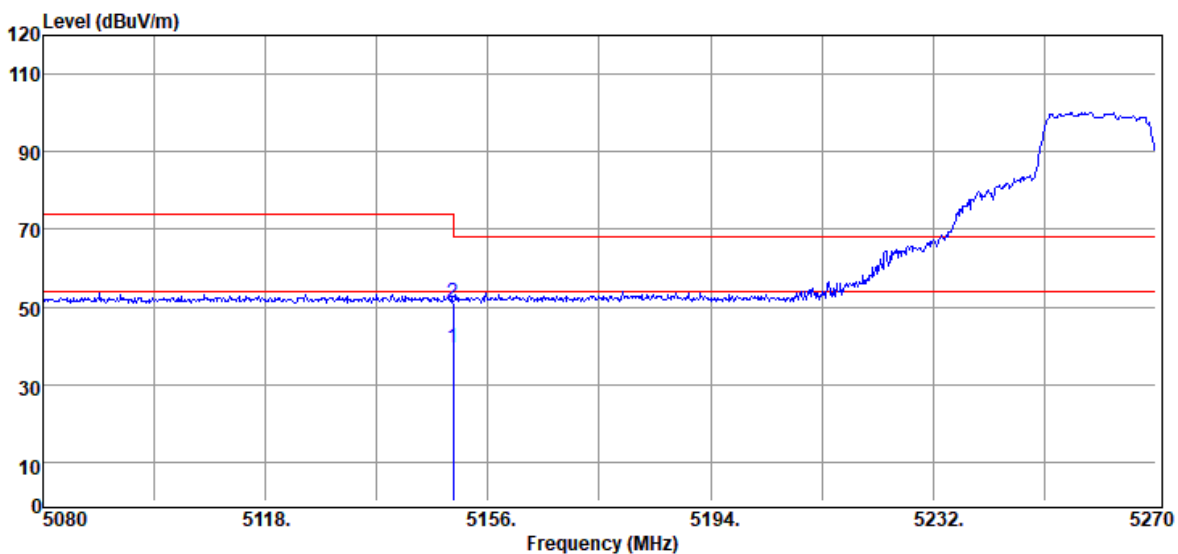
Test Channel :5260 MHz

Antenna Pol. :VERTICAL

Test Mode :BE CH LOW

Engineer :Enzo

EUT Pol :E2 Plan



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 5150.00      | Average                      | 27.46                             | 12.04        | 39.50                  | 54.00                  | -14.50       |
| 5150.00      | Peak                         | 39.17                             | 12.04        | 51.21                  | 74.00                  | -22.79       |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

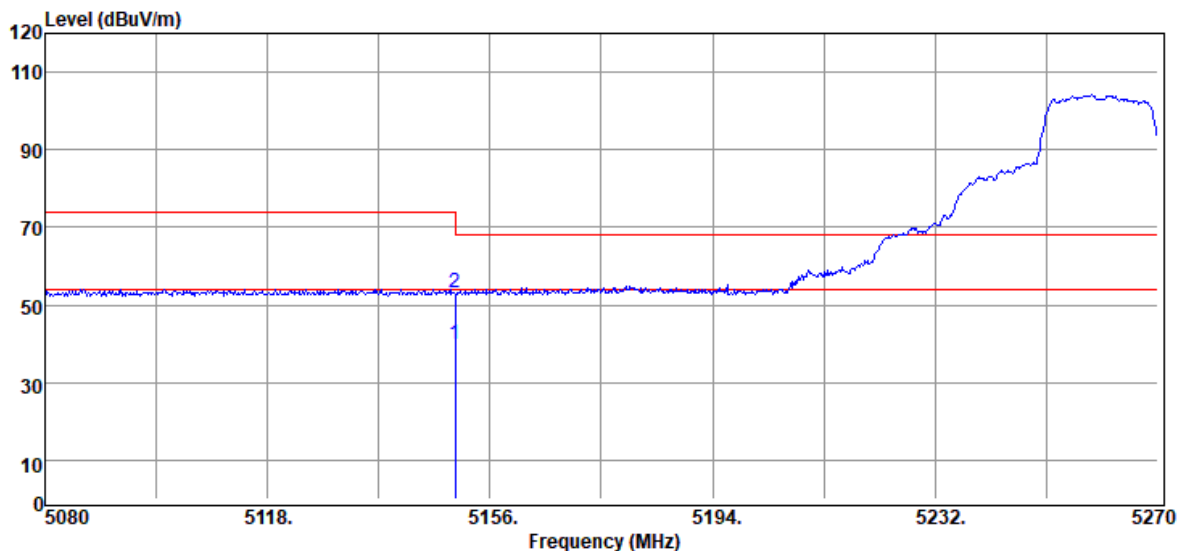
f (886-2) 2298-0488

www.tw.sgs.com

Member of SGS Group

Report Number :E2/2019/40032  
 Operation Mode :802.11n20 / Band 2  
 Test Channel :5260 MHz  
 Test Mode :BE CH LOW  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 5150.00      | Average                      | 27.64                             | 12.04        | 39.68                  | 54.00                  | -14.32       |
| 5150.00      | Peak                         | 41.14                             | 12.04        | 53.18                  | 74.00                  | -20.82       |

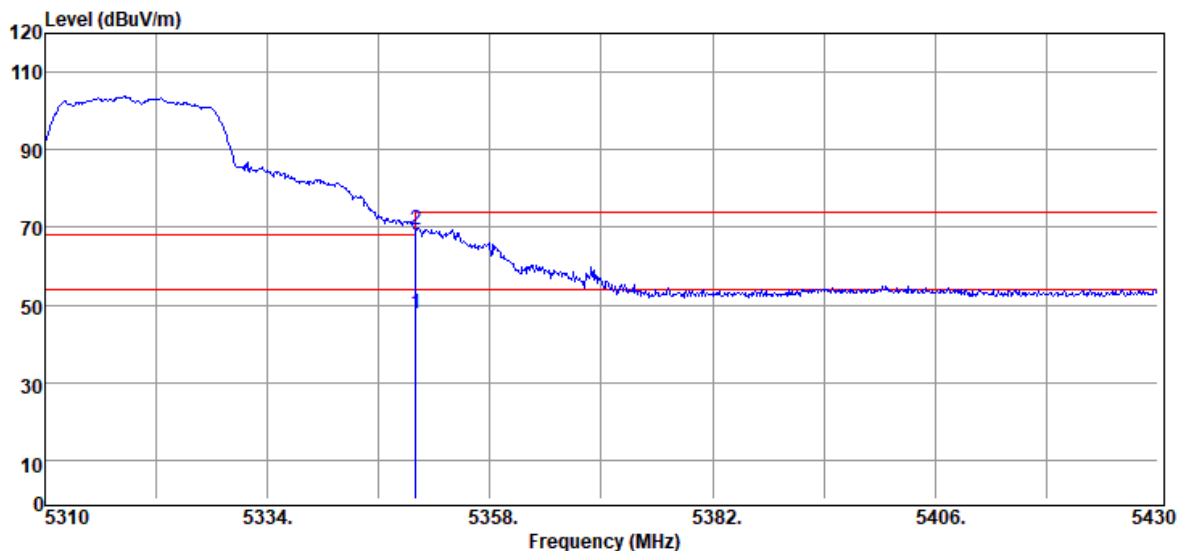
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11n20 / Band 2  
 Test Channel :5320 MHz  
 Test Mode :BE CH HIGH  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 5350.00      | Average                      | 36.14                             | 11.76        | 47.90                  | 54.00                  | -6.10        |
| 5350.00      | Peak                         | 57.79                             | 11.76        | 69.55                  | 74.00                  | -4.45        |

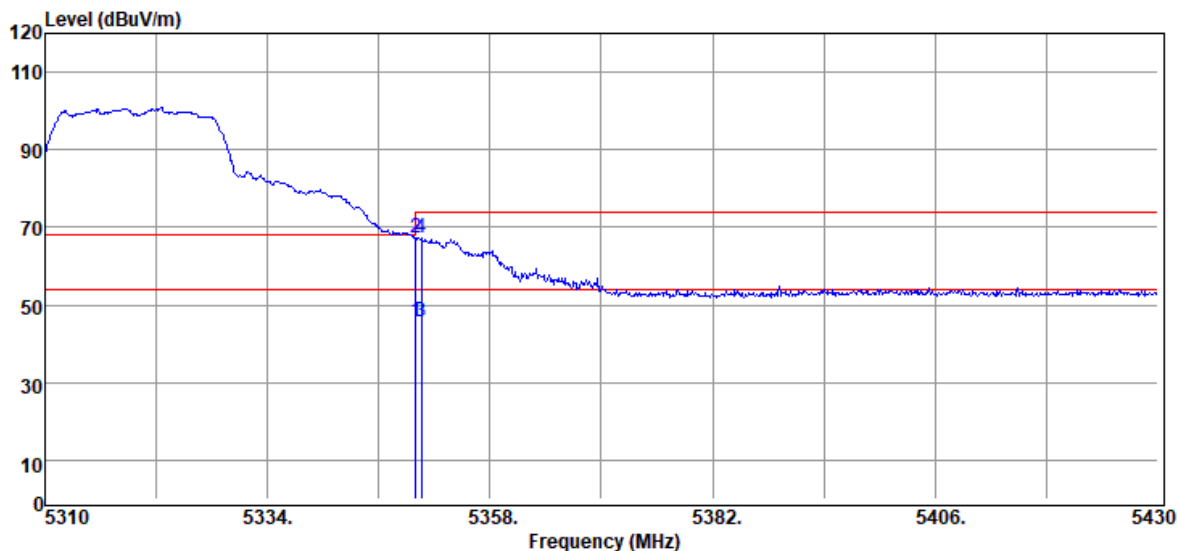
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11n20 / Band 2  
 Test Channel :5320 MHz  
 Test Mode :BE CH HIGH  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :VERTICAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 5350.00      | Average                      | 34.11                             | 11.76        | 45.87                  | 54.00                  | -8.13        |
| 5350.00      | Peak                         | 55.37                             | 11.76        | 67.13                  | 74.00                  | -6.87        |
| 5350.56      | Average                      | 34.05                             | 11.76        | 45.81                  | 54.00                  | -8.19        |
| 5350.56      | Peak                         | 55.62                             | 11.76        | 67.38                  | 74.00                  | -6.62        |

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

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

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

**頻帶外發射輻射量測值 (802.11n HT20) (5470MHz-5725MHz)**

Report Number :E2/2019/40032

Test Date :2019-10-14

Operation Mode :802.11n20 / Band 3

Temp./Humi. :24.3/50

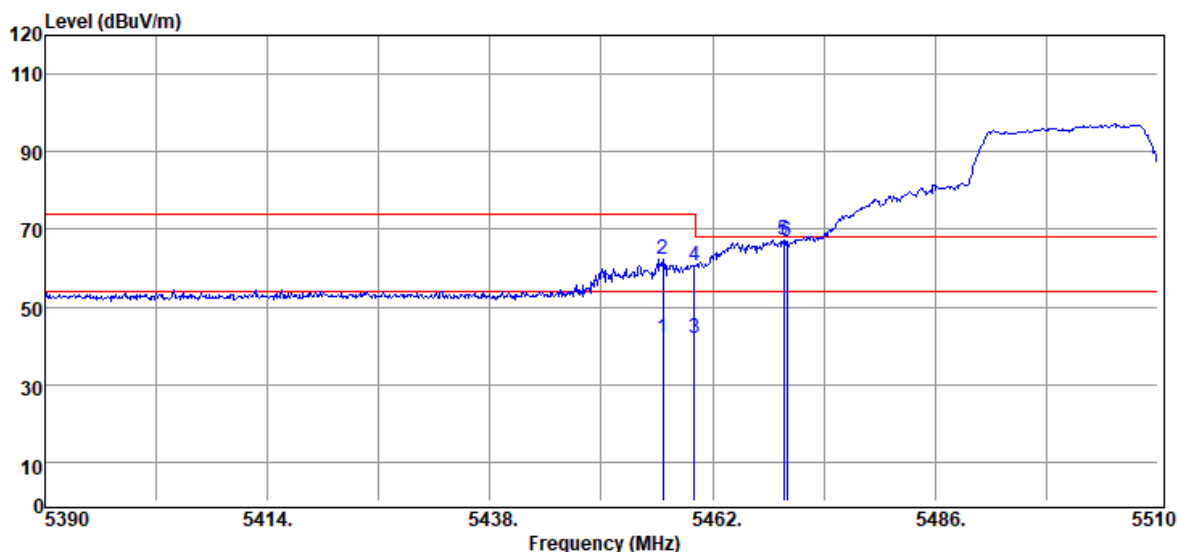
Test Channel :5500 MHz

Antenna Pol. :VERTICAL

Test Mode :BE CH LOW

Engineer :Enzo

EUT Pol :E2 Plan



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 5456.60      | Average                      | 29.76                             | 12.15        | 41.91                  | 54.00                  | -12.09       |
| 5456.60      | Peak                         | 50.09                             | 12.15        | 62.24                  | 74.00                  | -11.76       |
| 5460.00      | Average                      | 29.84                             | 12.16        | 42.00                  | 54.00                  | -12.00       |
| 5460.00      | Peak                         | 48.56                             | 12.16        | 60.72                  | 74.00                  | -13.28       |
| 5469.68      | Peak                         | 55.08                             | 12.20        | 67.28                  | 68.20                  | -0.92        |
| 5470.00      | Peak                         | 54.85                             | 12.20        | 67.05                  | 68.20                  | -1.15        |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

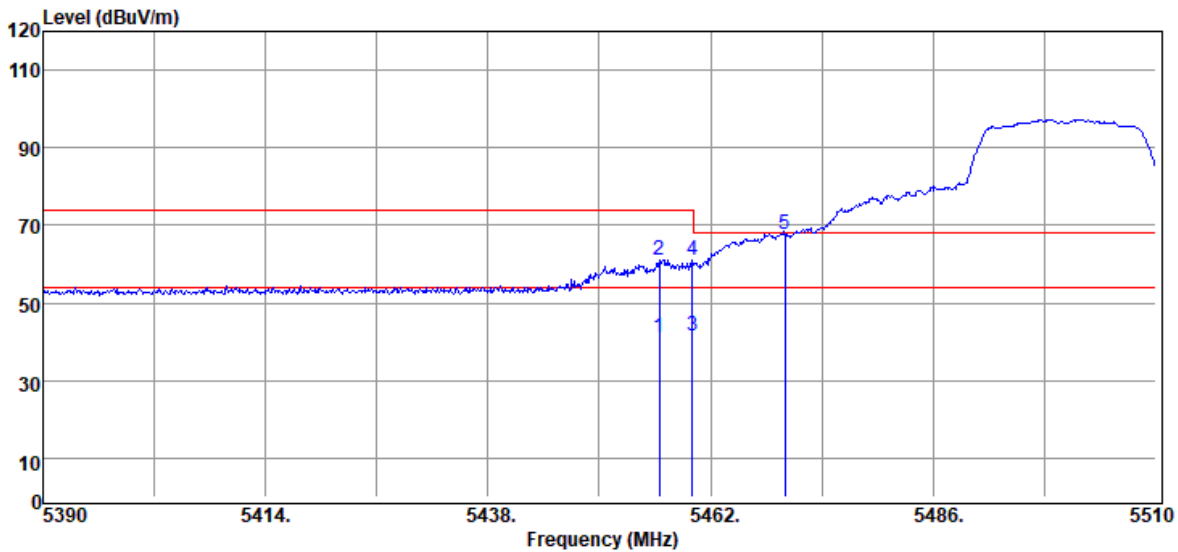
f (886-2) 2298-0488

www.tw.sgs.com

Member of SGS Group

Report Number :E2/2019/40032  
 Operation Mode :802.11n20 / Band 3  
 Test Channel :5500 MHz  
 Test Mode :BE CH LOW  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 5456.48      | Average                      | 28.94                             | 12.15        | 41.09                  | 54.00                  | -12.91       |
| 5456.48      | Peak                         | 49.00                             | 12.15        | 61.15                  | 74.00                  | -12.85       |
| 5460.00      | Average                      | 29.53                             | 12.16        | 41.69                  | 54.00                  | -12.31       |
| 5460.00      | Peak                         | 48.70                             | 12.16        | 60.86                  | 74.00                  | -13.14       |
| 5470.00      | Peak                         | 55.33                             | 12.20        | 67.53                  | 68.20                  | -0.67        |

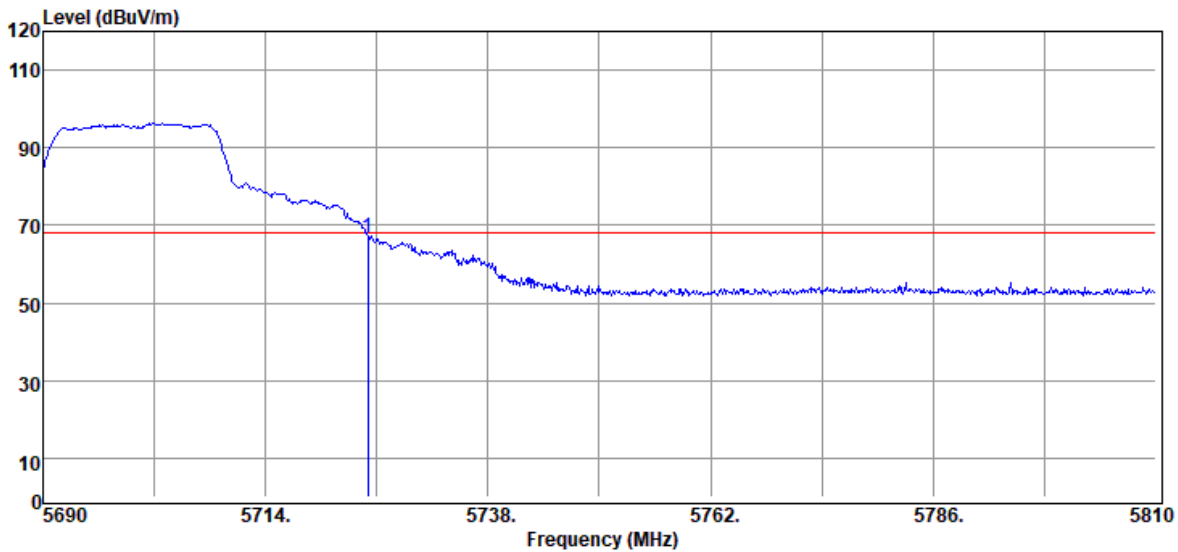
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11n20 / Band 3  
 Test Channel :5700 MHz  
 Test Mode :BE CH HIGH  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :HORIZONTAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 5725.00      | Peak                         | 54.47                             | 12.58        | 67.05                  | 68.20                  | -1.15        |

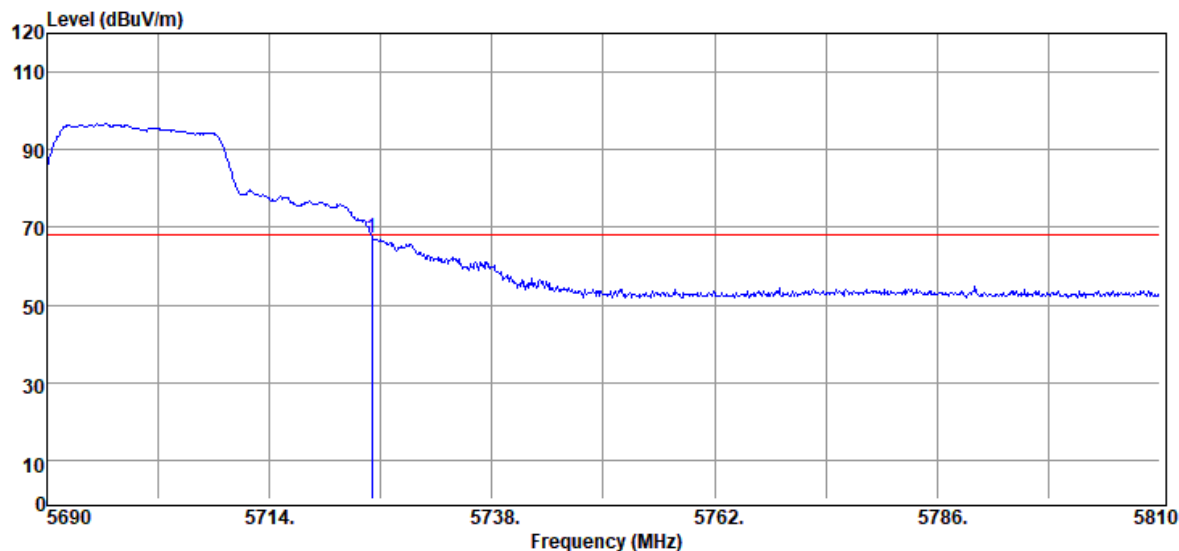
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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

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

Report Number :E2/2019/40032  
 Operation Mode :802.11n20 / Band 3  
 Test Channel :5700 MHz  
 Test Mode :BE CH HIGH  
 EUT Pol :E2 Plan

Test Date :2019-10-14  
 Temp./Humi. :24.3/50  
 Antenna Pol. :VERTICAL  
 Engineer :Enzo



| Freq.<br>MHz | Detector<br>Mode<br>PK/QP/AV | Spectrum<br>Reading Level<br>dBμV | Factor<br>dB | Actual<br>FS<br>dBμV/m | Limit<br>@3m<br>dBμV/m | Margin<br>dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 5725.00      | Peak                         | 54.51                             | 12.58        | 67.09                  | 68.20                  | -1.11        |

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

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

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

## 7 天線增益之要求

### 7.1 適用標準

依據NCC低功率射頻電機技術規範4.7.3節之要求，

#### 4.7.3.1 使用於5.15 GHz~5.25 GHz 頻段

(1) 供戶外操作使用：

(C) 使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

(D) 在水平面仰角超過30 度時，其最大EIRP 應小於或等於21 dBm。

(2) 供室內操作使用：

(C) 使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

(3) 供固定式點對點操作使用：

(C) 使用超過23 dBi方向增益之指向性天線時，應依超過23 dBi天線方向增益的dBi總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

(D) 固定式點對點操作，不包括點對多點系統、全方向性應用及多台共站發射機傳送相同資訊。

(4) 供用戶端裝置(Client Device)操作使用：

(C) 使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

#### 4.7.3.2 使用頻率於5.25 GHz~5.35 GHz 與5.470 GHz~5.725 GHz 頻段

(3) 使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

#### 4.7.3.3 使用頻率於5.725 GHz~5.850 GHz 頻段

(3) 供固定式點對點操作時，使用方向增益超過6 dBi 之發射天線，可不需對應減少發射器之傳導輸出功率限制值。

(4) 除(3)外，使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

### 7.2 天線增益

此裝置使用天線如下，詳細規格請參考附件天線規格書。

| 天線型式 | Supplier                     | Model No.            | 發射頻帶(MHz) | 天線增益(dBi) |
|------|------------------------------|----------------------|-----------|-----------|
| Chip | FRACTUS<br>ANTENNAS,<br>S.L. | FR05-S1-NO-<br>1-004 | 5250~5350 | 4.9       |
|      |                              |                      | 5470~5725 | 4.9       |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

No. 134, WuKung Road, New Taipei Industrial Park, WuKung District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 8 26DB & 6DB 頻寬之測試

### 8.1 適用標準

(1) 5.15 GHz~5.25 GHz、5.25 GHz~5.35 GHz 及 5.47 GHz~5.725 GHz 頻段，測試儀器之頻寬應設定為 1 MHz 頻寬或待測物之 26 dB 發射頻寬，兩者取較小者。

(2) 5.725 GHz~5.850 GHz 頻段，測試儀器之頻寬應設定為 500 kHz 或待測物之 26dB 發射頻寬，兩者取較小者。

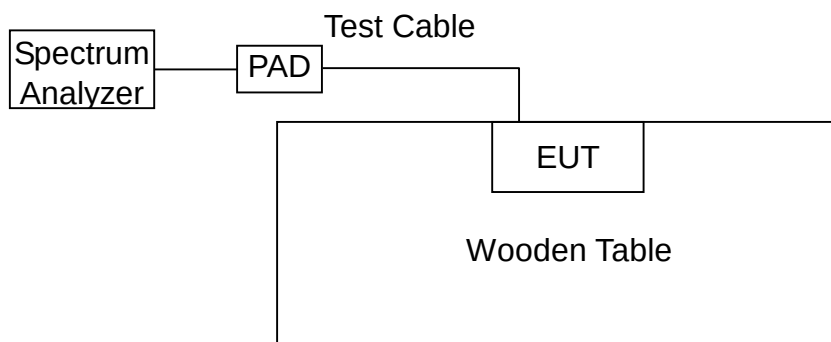
解析頻寬小於(1)或(2)時，應以補償方式計算總功率頻譜密度。

### 8.2 量測方法

將發射機之天線埠經由適當之衰減直接連至測試儀器。

設定儀器之解析頻寬為 100KHz, 視訊頻寬  $\geq$  解析頻寬, 頻率掃描範圍(span)大於解析頻寬

### 8.3 測試配置



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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 8.4 量測結果

802.11a\_Ch0

| Freq.<br>(MHz) | 26dB BW<br>(MHz) | 10 Log (B)<br>(dB) | Freq.<br>(MHz) | 26dB BW<br>(MHz) | 10 Log (B)<br>(dB) |
|----------------|------------------|--------------------|----------------|------------------|--------------------|
| 5260           | 29.28            | 14.6657107         | 5260           | 27.34            | 14.3679851         |
| 5300           | 29.2             | 14.6538285         | 5300           | 29.98            | 14.7683163         |
| 5320           | 29.4             | 14.6834733         | 5320           | 29.64            | 14.718782          |
| 5500           | 29.22            | 14.6568021         | 5500           | 22.18            | 13.4596154         |
| 5580           | 29.74            | 14.7334096         | 5580           | 29.37            | 14.6790395         |
| 5700           | 29.48            | 14.6952748         | 5700           | 23.73            | 13.7529774         |

802.11a\_Ch1

802.11n\_HT20\_Ch0

| Freq.<br>(MHz) | 26dB BW<br>(MHz) | 10 Log (B)<br>(dB) | Freq.<br>(MHz) | 26dB BW<br>(MHz) | 10 Log (B)<br>(dB) |
|----------------|------------------|--------------------|----------------|------------------|--------------------|
| 5260           | 29.91            | 14.7581641         | 5260           | 29.81            | 14.7436198         |
| 5300           | 29.93            | 14.7610672         | 5300           | 29.9             | 14.7567119         |
| 5320           | 29.9             | 14.7567119         | 5320           | 29.6             | 14.7129171         |
| 5500           | 29.58            | 14.7099817         | 5500           | 28.76            | 14.5878888         |
| 5580           | 29.95            | 14.7639683         | 5580           | 29.78            | 14.7392469         |
| 5700           | 26.04            | 14.1564098         | 5700           | 26.27            | 14.1946007         |

802.11n\_HT20\_Ch1

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

No. 134, WuKung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

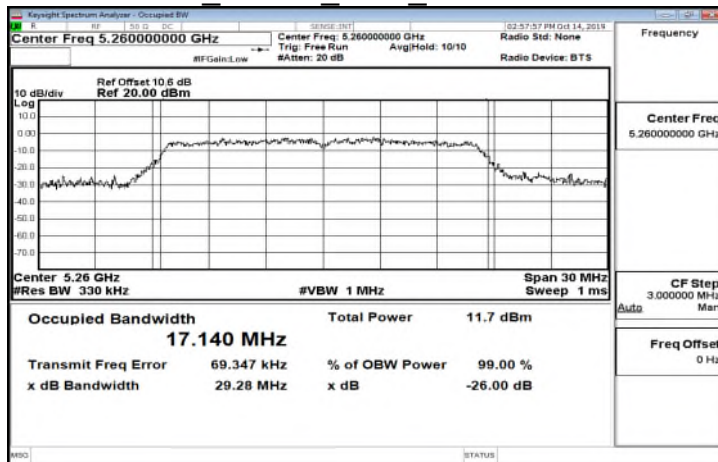
t (886-2) 2299-3279

f (886-2) 2298-0488

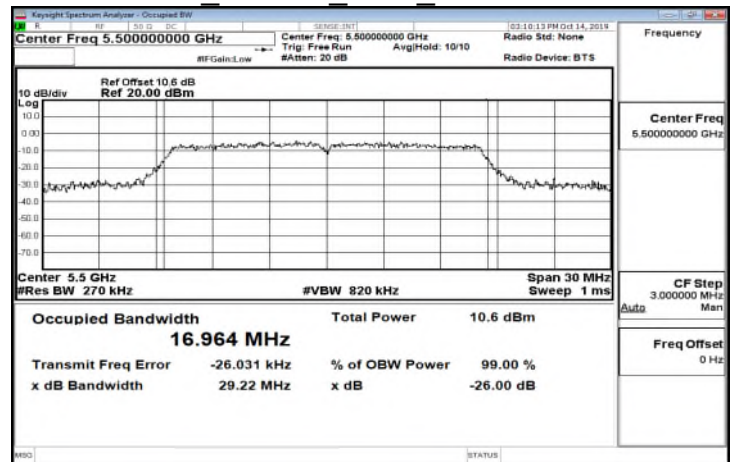
www.tw.sgs.com

Member of SGS Group

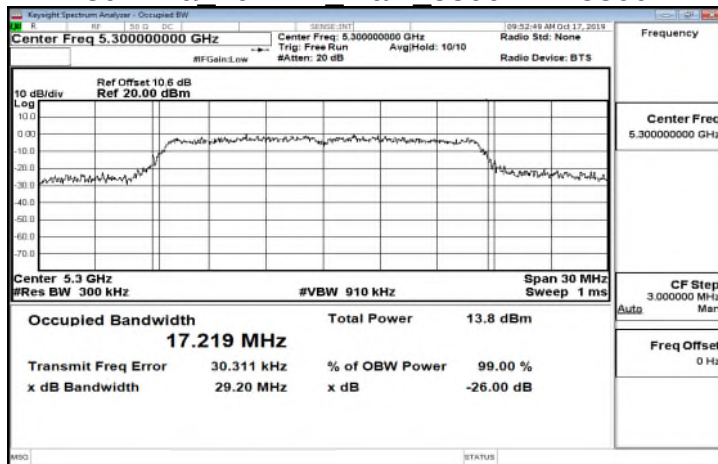
802.11a 20MHz Main 5260MHz-5260



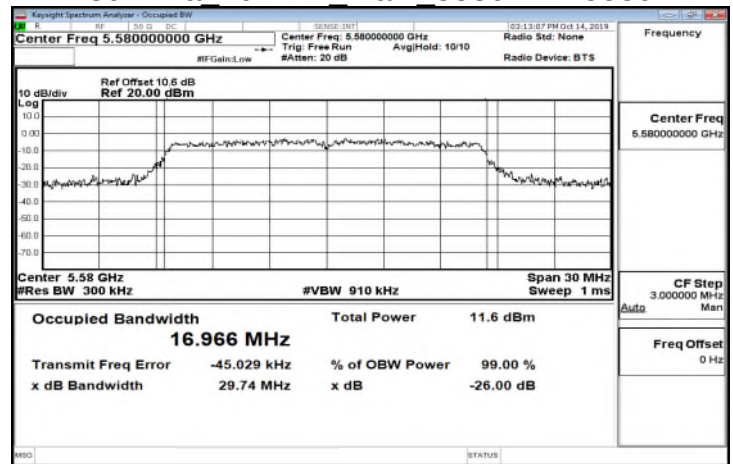
802.11a 20MHz Main 5500MHz-5500



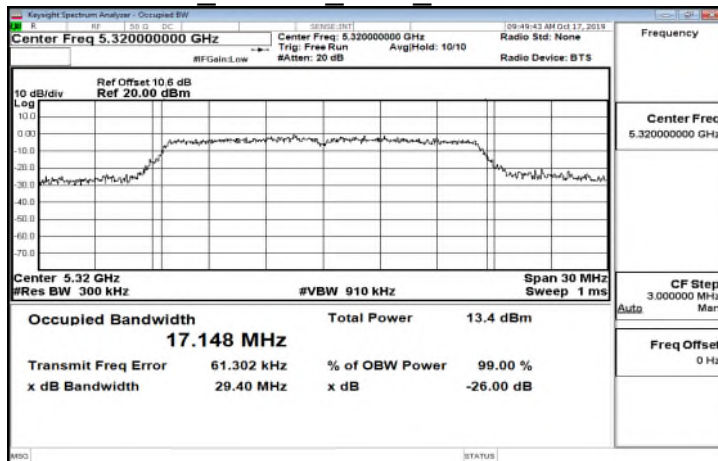
802.11a 20MHz Main 5300MHz-5300



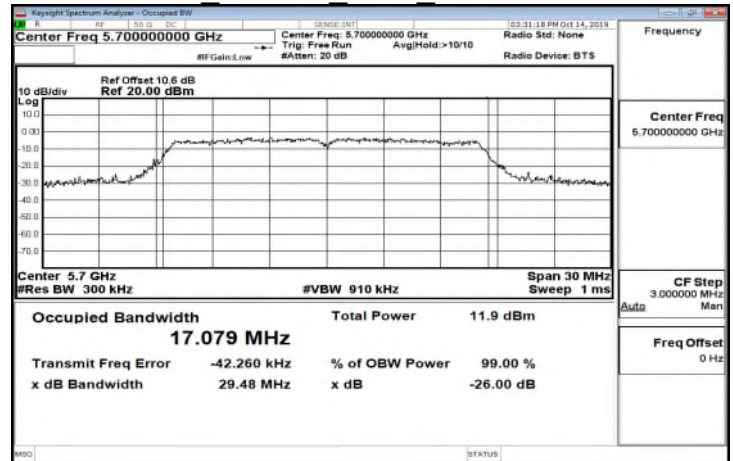
802.11a 20MHz Main 5580MHz-5580



802.11a 20MHz Main 5320MHz-5320



802.11a 20MHz Main 5700MHz-5700

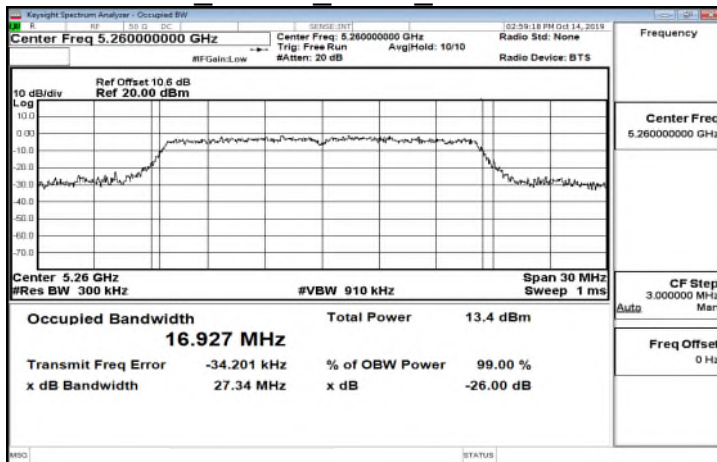


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

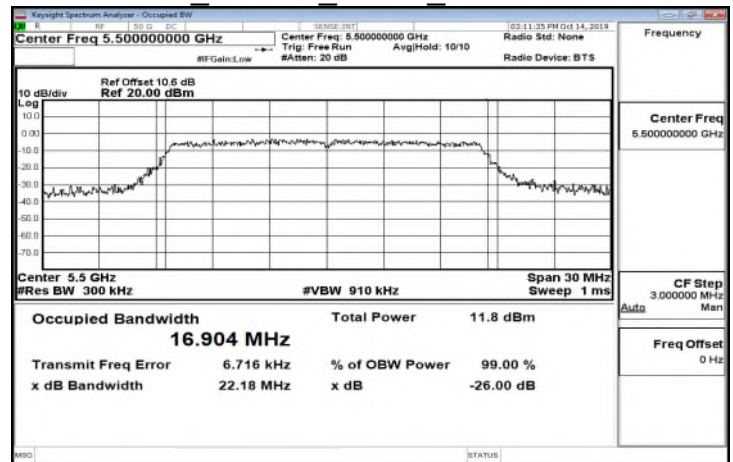
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

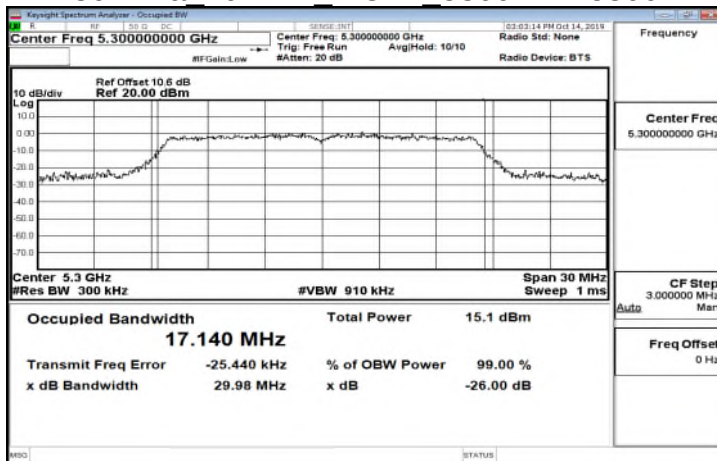
802.11a 20MHz AUX1 5260MHz-5260



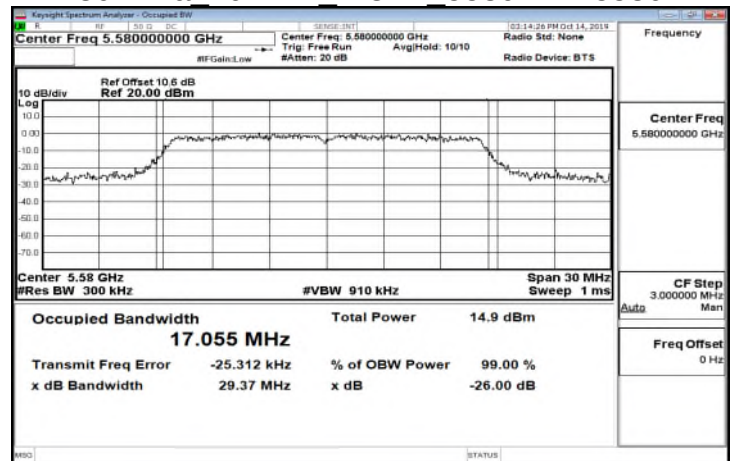
802.11a 20MHz AUX1 5500MHz-5500



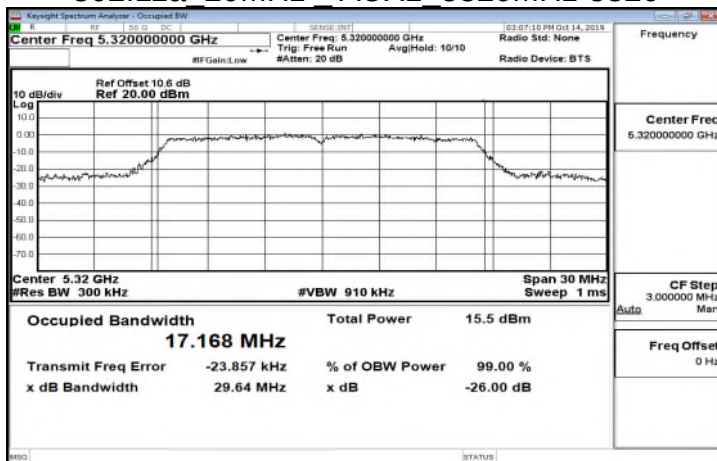
802.11a 20MHz AUX1 5300MHz-5300



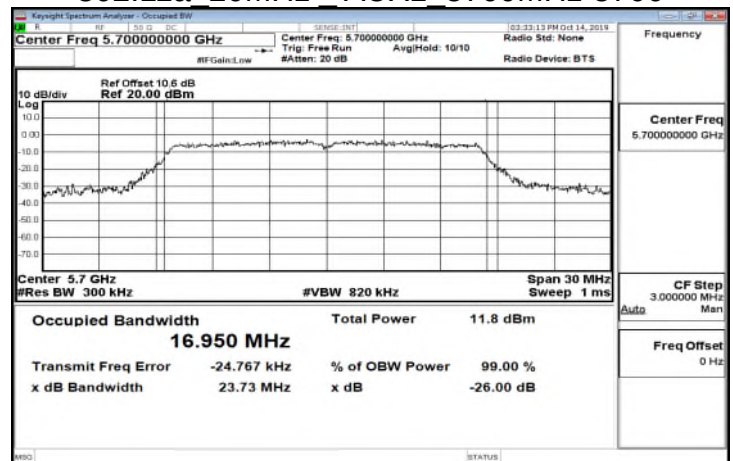
802.11a 20MHz AUX1 5580MHz-5580



802.11a 20MHz AUX1 5320MHz-5320



802.11a 20MHz AUX1 5700MHz-5700

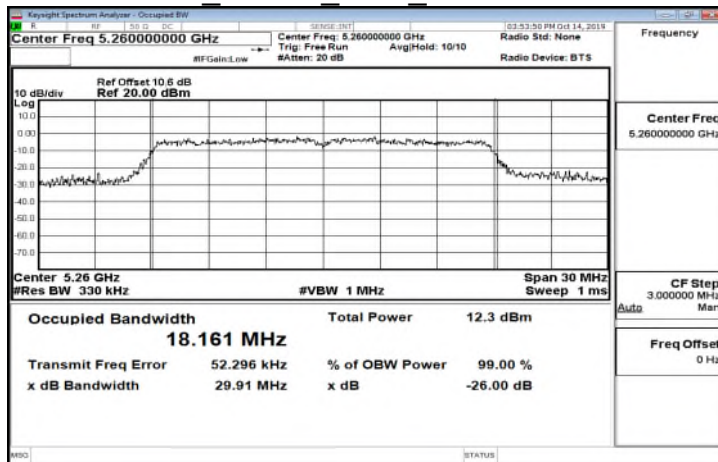


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

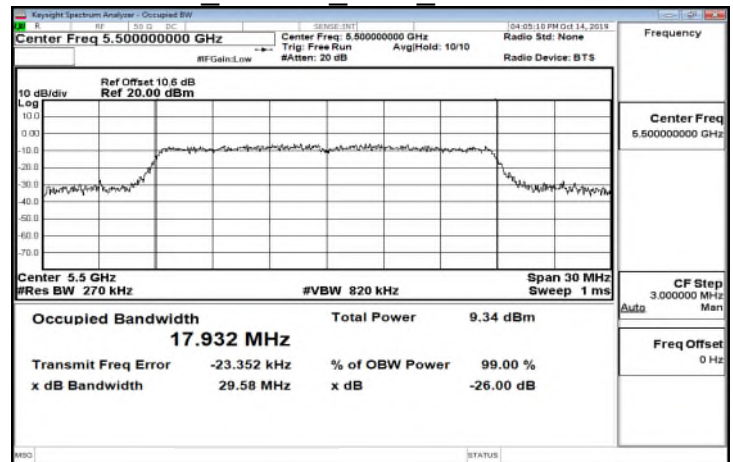
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

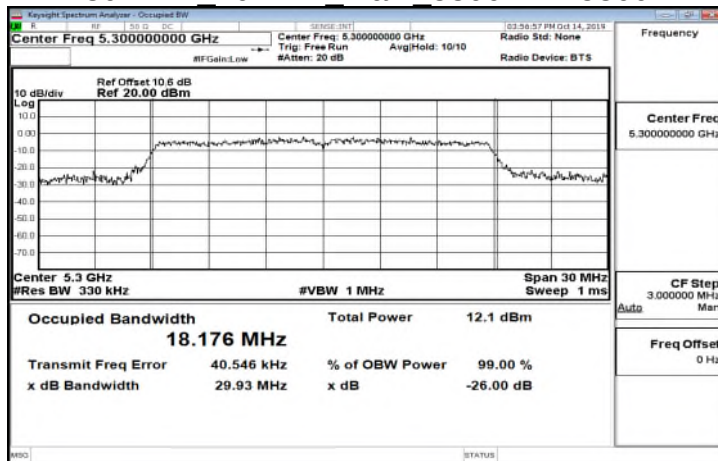
802.11n 20MHz Main 5260MHz-5260



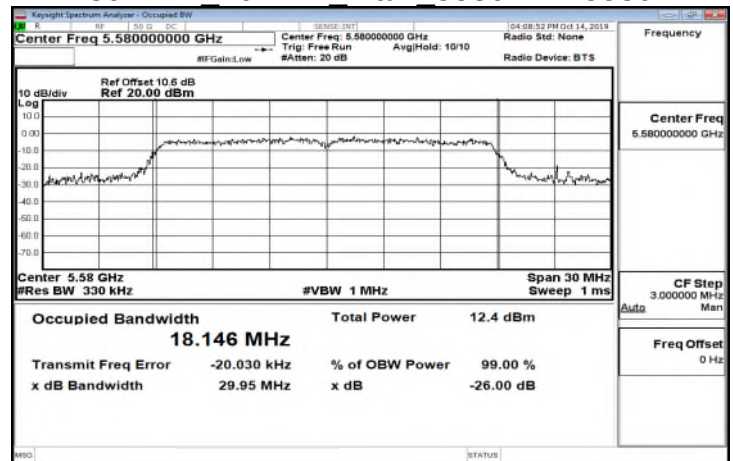
802.11n 20MHz Main 5500MHz-5500



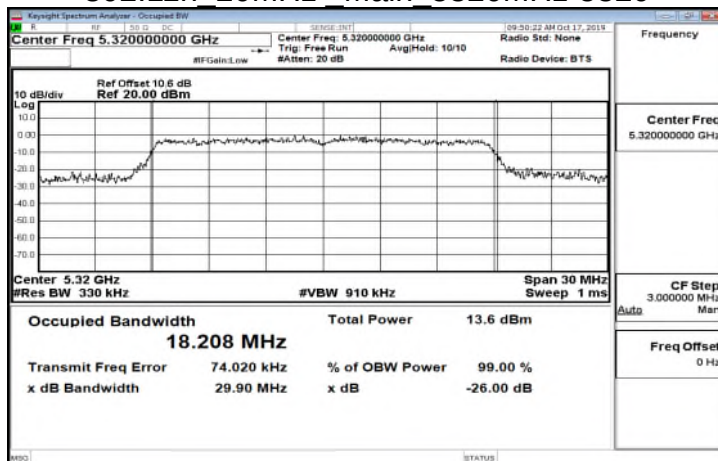
802.11n 20MHz Main 5300MHz-5300



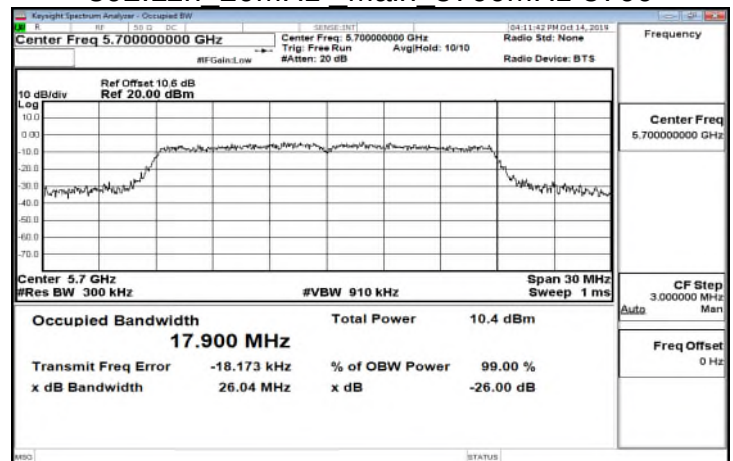
802.11n 20MHz Main 5580MHz-5580



802.11n 20MHz Main 5320MHz-5320



802.11n 20MHz Main 5700MHz-5700

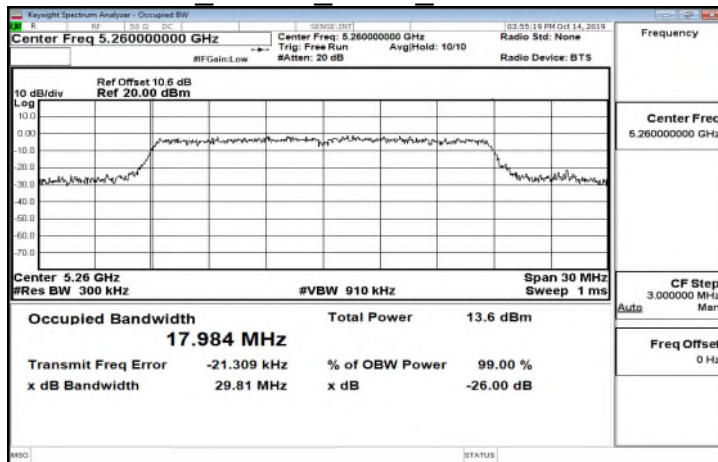


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

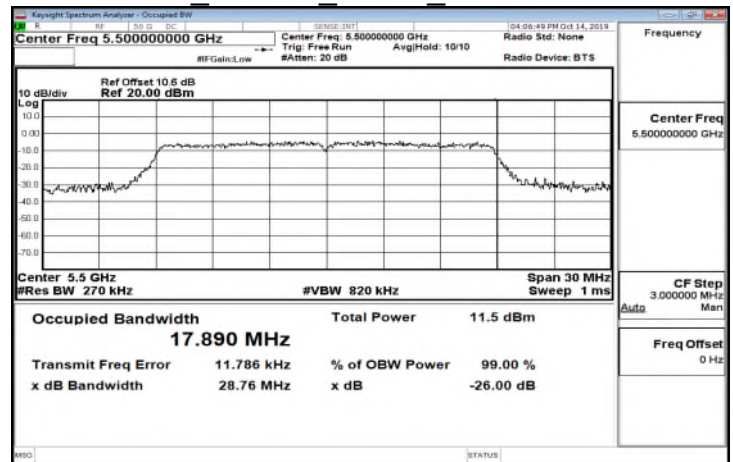
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

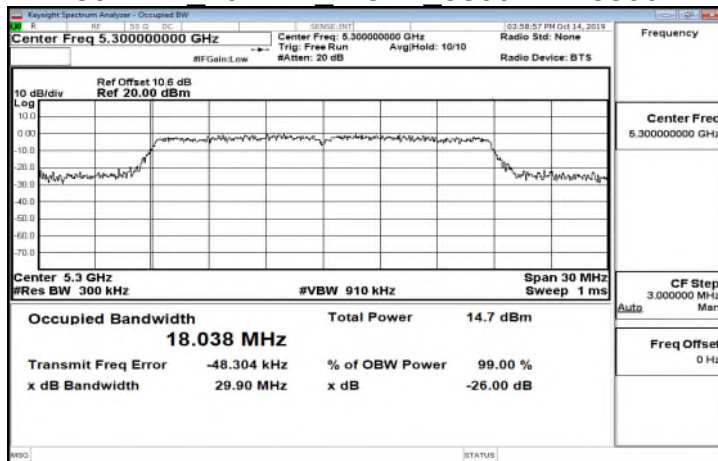
802.11n 20MHz AUX1 5260MHz-5260



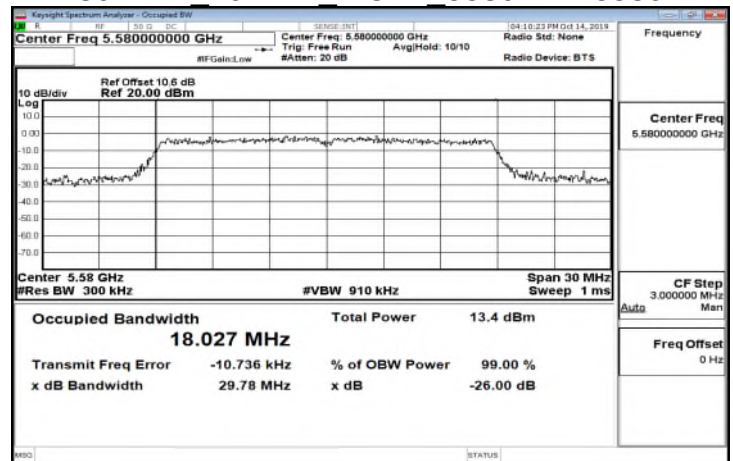
802.11n 20MHz AUX1 5500MHz-5500



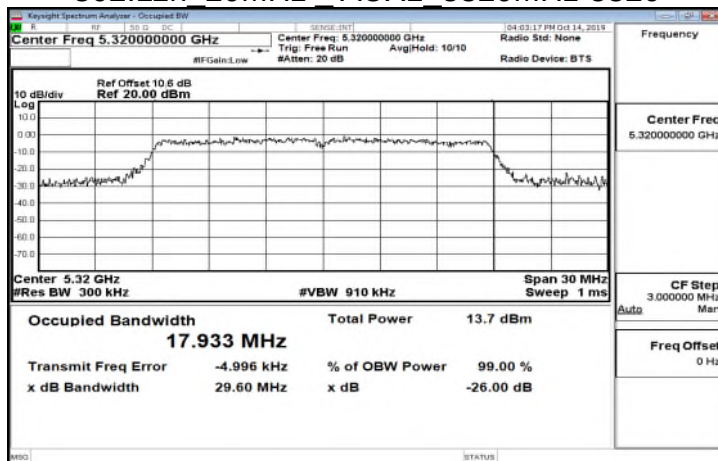
802.11n 20MHz AUX1 5300MHz-5300



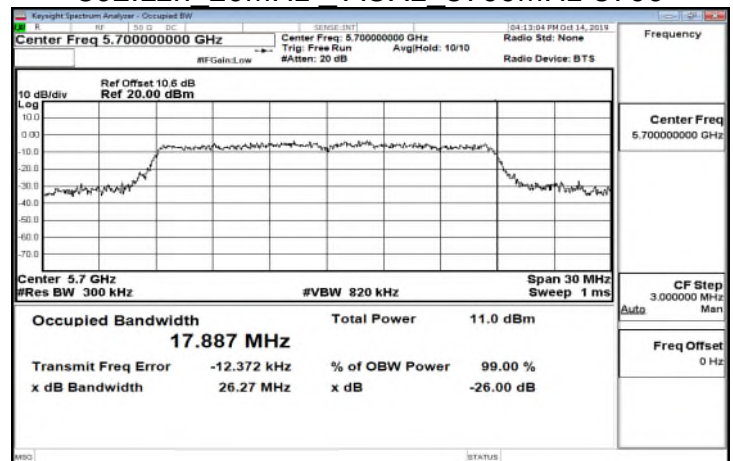
802.11n 20MHz AUX1 5580MHz-5580



802.11n 20MHz AUX1 5320MHz-5320



802.11n 20MHz AUX1 5700MHz-5700



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

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

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

## 9 輸出峰值功率之量測

### 9.1 適用標準

依據NCC低功率射頻電機技術規範4.7.3節之要求，使用於5.15 GHz~5.25 GHz 頻段

(1) 供戶外操作使用：

- (A) 最大傳導輸出功率應小於或等於1 W。
- (B) 在任何1 MHz 頻帶中最大功率頻譜密度應小於或等於17 dBm。
- (C) 使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。
- (D) 在水平面仰角超過30 度時，其最大EIRP 應小於或等於21 dBm。

(2) 供室內操作使用：

- (A) 最大傳導輸出功率應小於或等於1 W。
- (B) 在任何1 MHz 頻帶中最大功率頻譜密度應小於或等於17 dBm。
- (C) 使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

(3) 供固定式點對點操作使用：

- (A) 最大傳導輸出功率應小於或等於1 W。
- (B) 在任何1 MHz 頻帶中最大功率頻譜密度應小於或等於17 dBm。
- (C) 使用超過23 dBi方向增益之指向性天線時，應依超過23 dBi天線方向增益的dBi總量，等量減少最大傳導輸出功率及最大功率頻譜密度。
- (D) 固定式點對點操作，不包括點對多點系統、全方向性應用及多台共站發射機傳送相同資訊。

(4) 供用戶端裝置(Client Device)操作使用：

- (A) 最大傳導輸出功率應小於或等於250 mW。
- (B) 在任何1 MHz 頻帶中最大功率頻譜密度應小於或等於11 dBm。
- (C) 使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

使用頻率於5.25 GHz~5.35 GHz 與5.470 GHz~5.725 GHz 頻段

- (1) 最大傳導輸出功率應小於或等於250 mW或11dBm+10log B (B是26 dB發射頻寬，單位MHz)之較小者。
- (2) 最大功率頻譜密度在任何1 MHz 頻帶中應小於或等於11 dBm。
- (3) 使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

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

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

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

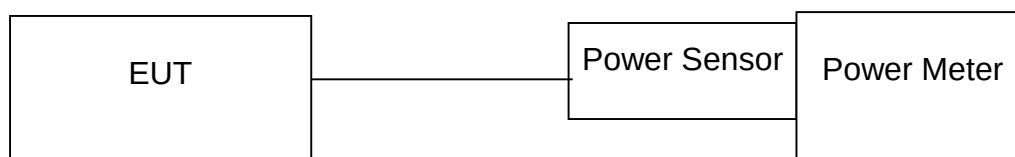
使用頻率於5.725 GHz~5.850 GHz 頻段

- (1) 最大傳導輸出功率應小於或等於1 W。
- (2) 在任何500 kHz 頻帶中最大功率頻譜密度應小於或等於30 dBm。
- (3) 供固定式點對點操作時，使用方向增益超過6 dBi 之發射天線，可不需對應減少發射器之傳導輸出功率限制值。
- (4) 除(3)外，使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

## 9.2 測試方法

1. Place the EUT on the table and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the power meter
3. Set the offset  $10 \cdot \log(1/x)$  ( $x=0.99$ ), 0.04 approximately
4. Record the max. reading.
5. Repeat above procedures until all frequency (low, middle, and high channel) measured were complete.

## 9.3 輸出功率之測試配置



## 9.4 量測儀器設備

同本報告 4.3 節傳導配置圖

\*註: 經評估後，比較 802.11n20 和 802.11ac20 測試值後發現 802.11n20 為最差模式，故附上最差模式 802.11n20 數據。

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 9.5 輸出功率之量測結果

## 802.11a\_Ch0

| CH  | Freq. (MHz) | Data Rate | TOTAL POWER (dBm) | REQUIRED LIMIT (dBm)            | RESULT |
|-----|-------------|-----------|-------------------|---------------------------------|--------|
| 52  | 5260        | 6         | 9.31              | 23.98 or $11+10\log(B) = 23.34$ | PASS   |
| 60  | 5300        | 6         | <b>9.52</b>       | 23.98 or $11+10\log(B) = 23.36$ | PASS   |
| 64  | 5320        | 6         | 9.46              | 23.98 or $11+10\log(B) = 23.34$ | PASS   |
| 100 | 5500        | 6         | 6.58              | 23.98 or $11+10\log(B) = 23.30$ | PASS   |
| 116 | 5580        | 6         | <b>9.21</b>       | 23.98 or $11+10\log(B) = 23.30$ | PASS   |
| 140 | 5700        | 6         | 6.78              | 23.98 or $11+10\log(B) = 23.32$ | PASS   |

## 802.11a\_Ch1

| CH  | Freq. (MHz) | Data Rate | TOTAL POWER (dBm) | REQUIRED LIMIT (dBm)            | RESULT |
|-----|-------------|-----------|-------------------|---------------------------------|--------|
| 52  | 5260        | 6         | <b>10.09</b>      | 23.98 or $11+10\log(B) = 23.29$ | PASS   |
| 60  | 5300        | 6         | 9.87              | 23.98 or $11+10\log(B) = 23.34$ | PASS   |
| 64  | 5320        | 6         | 9.79              | 23.98 or $11+10\log(B) = 23.35$ | PASS   |
| 100 | 5500        | 6         | 9.68              | 23.98 or $11+10\log(B) = 23.28$ | PASS   |
| 116 | 5580        | 6         | <b>10.14</b>      | 23.98 or $11+10\log(B) = 23.32$ | PASS   |
| 140 | 5700        | 6         | 6.82              | 23.98 or $11+10\log(B) = 23.29$ | PASS   |

## 802.11n\_HT20\_Ch0

| CH  | Freq. (MHz) | Data Rate | TOTAL POWER (dBm) | REQUIRED LIMIT (dBm)            | RESULT |
|-----|-------------|-----------|-------------------|---------------------------------|--------|
| 52  | 5260        | MCS0      | 9.12              | 23.98 or $11+10\log(B) = 23.59$ | PASS   |
| 60  | 5300        | MCS0      | 9.37              | 23.98 or $11+10\log(B) = 23.59$ | PASS   |
| 64  | 5320        | MCS0      | <b>9.53</b>       | 23.98 or $11+10\log(B) = 23.60$ | PASS   |
| 100 | 5500        | MCS0      | 7.19              | 23.98 or $11+10\log(B) = 23.54$ | PASS   |
| 116 | 5580        | MCS0      | <b>9.47</b>       | 23.98 or $11+10\log(B) = 23.59$ | PASS   |
| 140 | 5700        | MCS0      | 6.73              | 23.98 or $11+10\log(B) = 23.53$ | PASS   |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

No. 134, WuKung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 802.11n\_HT20\_Ch1

| CH  | Freq.<br>(MHz) | Data<br>Rate | TOTAL<br>POWER<br>(dBm) | REQUIRED<br>LIMIT<br>(dBm) |                     |       | RESULT |
|-----|----------------|--------------|-------------------------|----------------------------|---------------------|-------|--------|
| 52  | 5260           | MCS0         | <b>9.86</b>             | 23.98                      | or $11+10\log(B) =$ | 23.55 | PASS   |
| 60  | 5300           | MCS0         | 9.78                    | 23.98                      | or $11+10\log(B) =$ | 23.56 | PASS   |
| 64  | 5320           | MCS0         | 8.98                    | 23.98                      | or $11+10\log(B) =$ | 23.54 | PASS   |
| 100 | 5500           | MCS0         | 7.73                    | 23.98                      | or $11+10\log(B) =$ | 23.53 | PASS   |
| 116 | 5580           | MCS0         | <b>10.08</b>            | 23.98                      | or $11+10\log(B) =$ | 23.56 | PASS   |
| 140 | 5700           | MCS0         | 7.07                    | 23.98                      | or $11+10\log(B) =$ | 23.53 | PASS   |

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 10 功率密度之限制

### 10.1 適用標準

依據NCC低功率射頻電機技術規範4.7.3節之要求，使用於5.15 GHz~5.25 GHz 頻段

(1) 供戶外操作使用：

- (A) 最大傳導輸出功率應小於或等於1 W。
- (B) 在任何1 MHz 頻帶中最大功率頻譜密度應小於或等於17 dBm。
- (C) 使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。
- (D) 在水平面仰角超過30 度時，其最大EIRP 應小於或等於21 dBm。

(2) 供室內操作使用：

- (A) 最大傳導輸出功率應小於或等於1 W。
- (B) 在任何1 MHz 頻帶中最大功率頻譜密度應小於或等於17 dBm。
- (C) 使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

(3) 供固定式點對點操作使用：

- (A) 最大傳導輸出功率應小於或等於1 W。
- (B) 在任何1 MHz 頻帶中最大功率頻譜密度應小於或等於17 dBm。
- (C) 使用超過23 dBi方向增益之指向性天線時，應依超過23 dBi天線方向增益的dBi總量，等量減少最大傳導輸出功率及最大功率頻譜密度。
- (D) 固定式點對點操作，不包括點對多點系統、全方向性應用及多台共站發射機傳送相同資訊。

(4) 供用戶端裝置(Client Device)操作使用：

- (A) 最大傳導輸出功率應小於或等於250 mW。
- (B) 在任何1 MHz 頻帶中最大功率頻譜密度應小於或等於11 dBm。
- (C) 使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

使用頻率於5.25 GHz~5.35 GHz 與5.470 GHz~5.725 GHz 頻段

- (1) 最大傳導輸出功率應小於或等於250 mW或11dBm+10log B (B是26 dB發射頻寬，單位MHz)之較小者。
- (2) 最大功率頻譜密度在任何1 MHz 頻帶中應小於或等於11 dBm。
- (3) 使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

No. 134, WuKung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

使用頻率於5.725 GHz~5.850 GHz 頻段

- (1) 最大傳導輸出功率應小於或等於1 W。
- (2) 在任何500 kHz 頻帶中最大功率頻譜密度應小於或等於30 dBm。
- (3) 供固定式點對點操作時，使用方向增益超過6 dBi 之發射天線，可不需對應減少發射器之傳導輸出功率限制值。
- (4) 除(3)外，使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的 dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。

## 10.2 測試方式

將發射機之天線埠經由適當之衰減直接連至測試儀器。找出發射峰值並擴展於通帶內，設定解析頻寬為 1 MHz，視訊頻寬大於解析頻寬，掃描時間為頻率掃描範圍除以 1 MHz。

## 10.3 測試配置

同本報告 8.3 節傳導配置圖

\*註: 經評估後，比較 802.11n20 和 802.11ac20 測試值後發現 802.11n20 為最差模式，故附上最差模式 802.11n20 數據。

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 10.4 功率密度量測結果

| POWER DENSITY 802.11a MODE      |                            |             |                             |             |             |
|---------------------------------|----------------------------|-------------|-----------------------------|-------------|-------------|
| Frequency (MHz)                 | PPSD W/O Duty Factor (dBm) | Duty Factor | PPSD With Duty Factor (dBm) | Limit (dBm) | Margin (dB) |
| 5260                            | -3.79                      | -           | -3.79                       | 11.00       | -14.79      |
| 5300                            | -5.70                      | -           | -5.70                       | 11.00       | -16.70      |
| 5320                            | -7.34                      | -           | -7.34                       | 11.00       | -18.34      |
| 5500                            | -5.52                      | -           | -5.52                       | 11.00       | -16.52      |
| 5580                            | -4.02                      | -           | -4.02                       | 11.00       | -15.02      |
| 5700                            | -4.33                      | -           | -4.33                       | 11.00       | -15.33      |
| POWER DENSITY 802.11n HT20 MODE |                            |             |                             |             |             |
| Frequency (MHz)                 | PPSD W/O Duty Factor (dBm) | Duty Factor | PPSD With Duty Factor (dBm) | Limit (dBm) | Margin (dB) |
| 5260                            | -3.89                      | -           | -3.89                       | 11.00       | -14.89      |
| 5300                            | -3.87                      | -           | -3.87                       | 11.00       | -14.87      |
| 5320                            | -3.46                      | -           | -3.46                       | 11.00       | -14.46      |
| 5500                            | -6.97                      | -           | -6.97                       | 11.00       | -17.97      |
| 5580                            | -3.79                      | -           | -3.79                       | 11.00       | -14.79      |
| 5700                            | -5.65                      | -           | -5.65                       | 11.00       | -16.65      |

### Note:

offset 11.20 dB

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

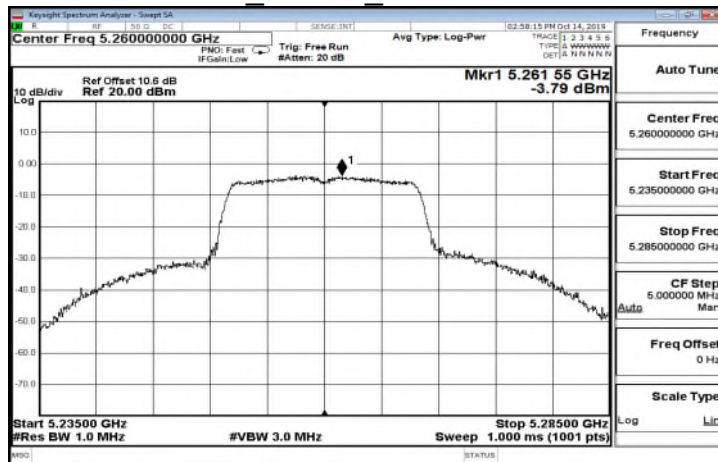
t (886-2) 2299-3279

f (886-2) 2298-0488

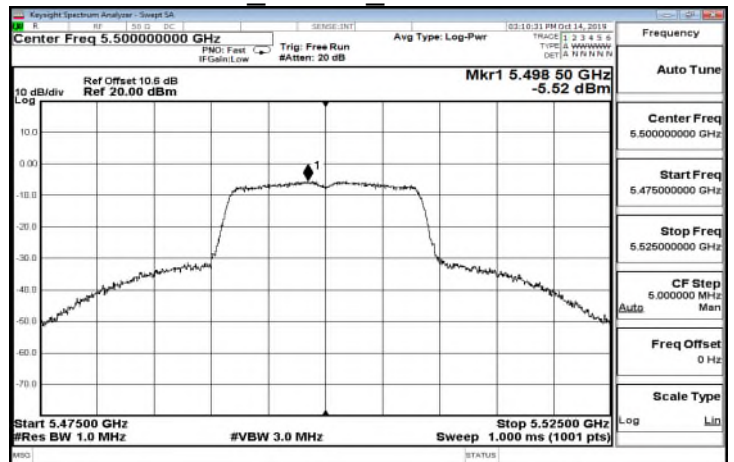
[www.tw.sgs.com](http://www.tw.sgs.com)

Member of SGS Group

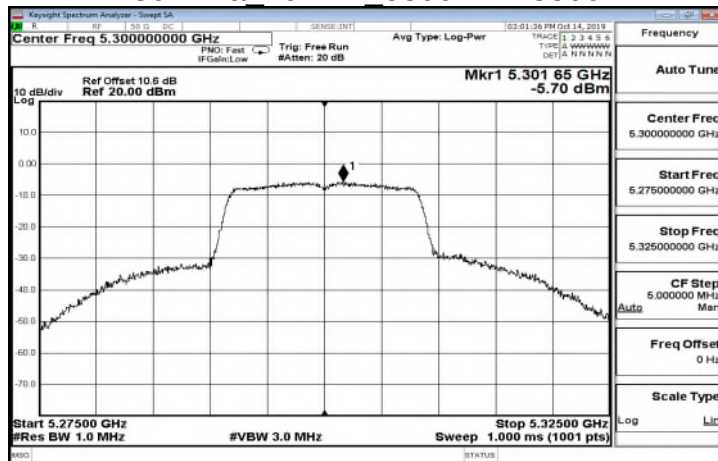
802.11a 20MHz 5260MHz-5260



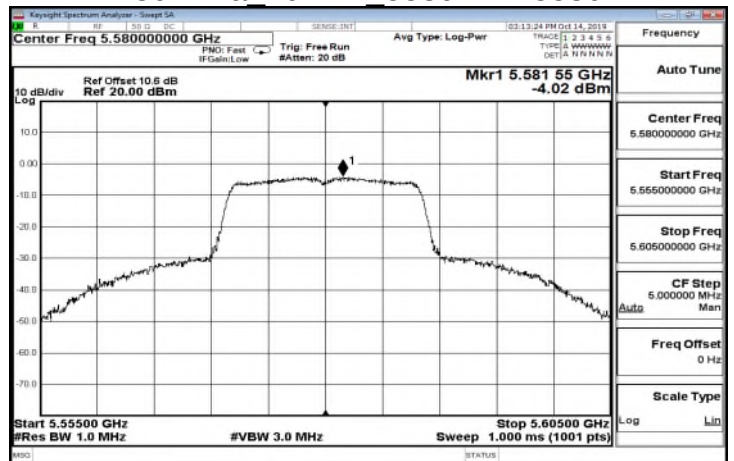
802.11a 20MHz 5500MHz-5500



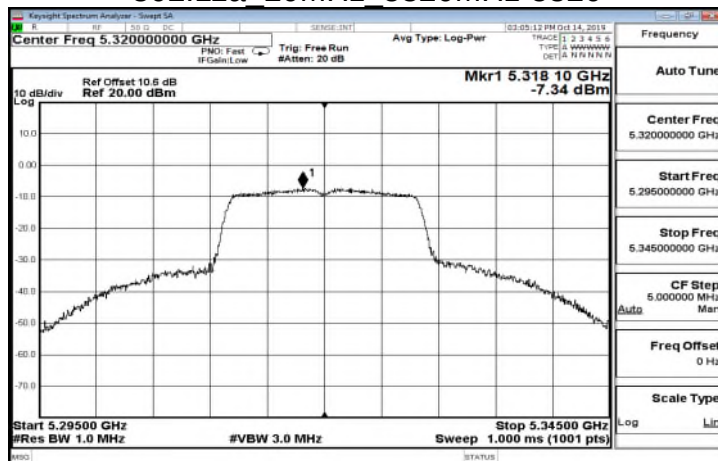
802.11a 20MHz 5300MHz-5300



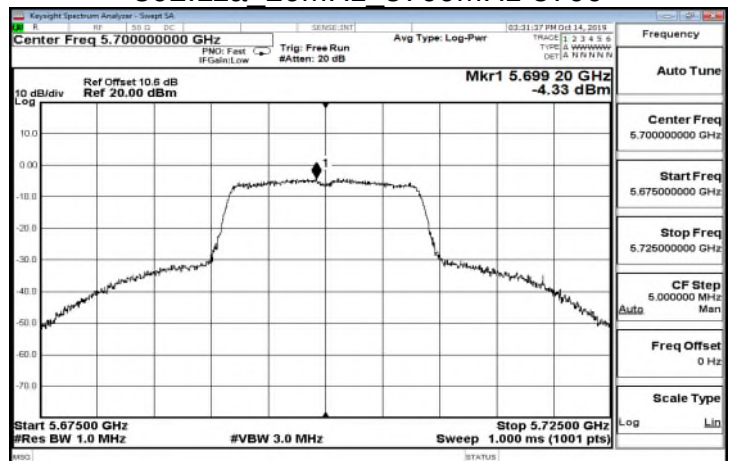
802.11a 20MHz 5580MHz-5580



802.11a 20MHz 5320MHz-5320



802.11a 20MHz 5700MHz-5700

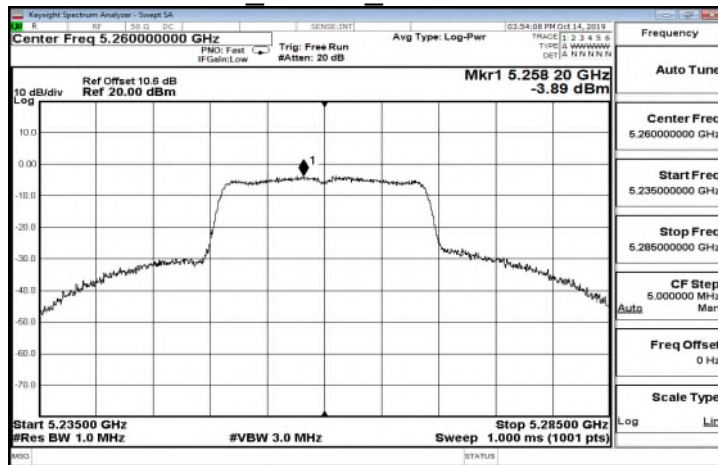


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

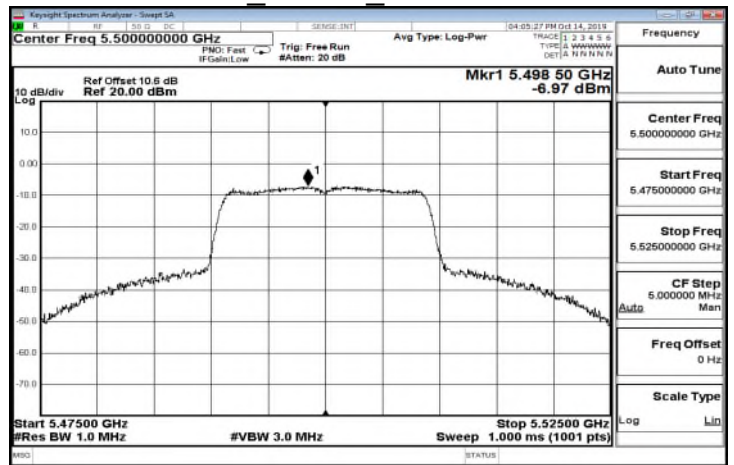
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

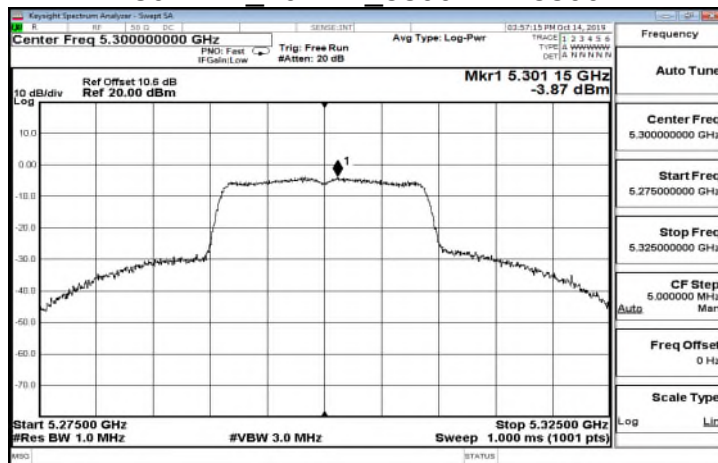
802.11n 20MHz 5260MHz-5260



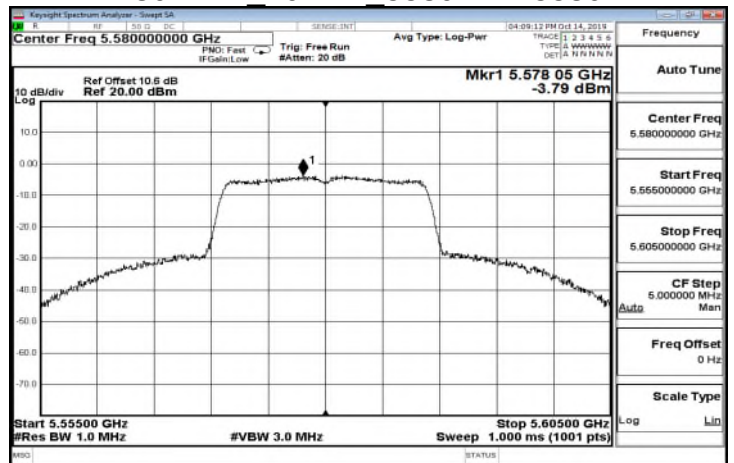
802.11n 20MHz 5500MHz-5500



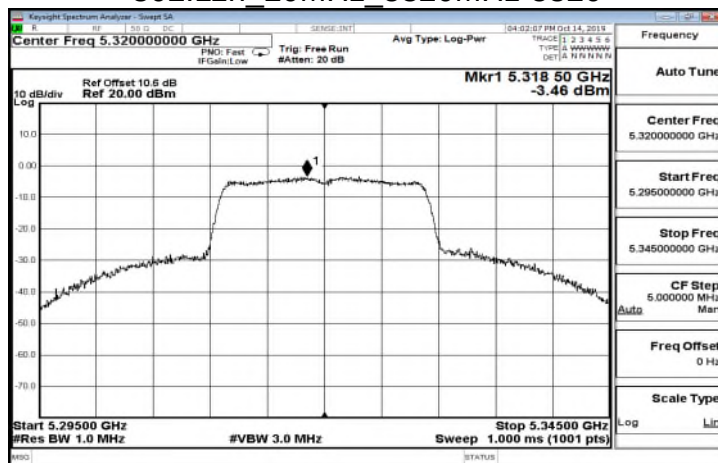
802.11n 20MHz 5300MHz-5300



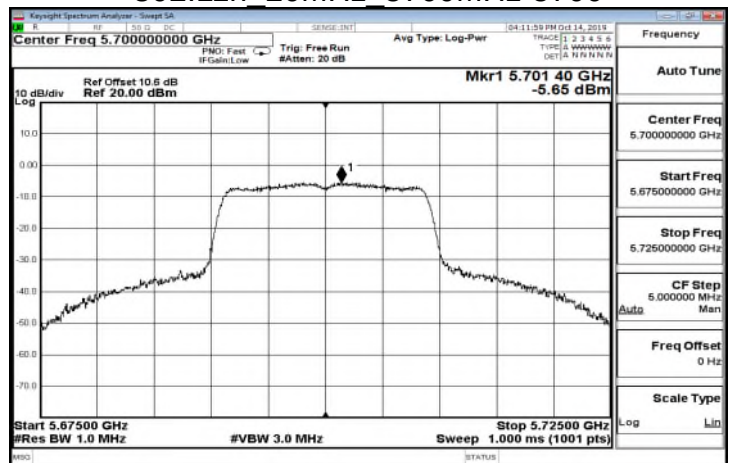
802.11n 20MHz 5580MHz-5580



802.11n 20MHz 5320MHz-5320



802.11n 20MHz 5700MHz-5700



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

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

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

~ End of Report ~

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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group