

# RF Exposure report



The following samples were submitted and identified on behalf of the client as:

**Product Name** Notebook Computer  
**Brand Name** acer  
**Model No.** N22Q5  
**Applicant** Acer Incorporated  
8F., No. 88, Sec. 1, Xintai 5th Rd., Xizhi, New Taipei City  
22181, Taiwan (R.O.C)  
**Standards** IEEE/ANSI C95.1-1992, IEEE 1528-2013  
**FCC ID** HLZAX211NG  
**Date of Receipt** Feb. 16, 2022  
**Date of Test(s)** Mar. 23, 2022 ~ Mar. 28, 2022  
**Date of Issue** Apr. 07, 2022

In the configuration tested, the EUT complied with the standards specified above.

## Remarks:

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS Taiwan Ltd. Central RF Lab or testing done by SGS Taiwan Ltd. Central RF Lab in connection with distribution or use of the product described in this report must be approved by SGS Taiwan Ltd. Central RF Lab in writing.

## Signed on behalf of SGS

| Clerk / Ruby Ou | PM / Jasper Wang | Approved By / John Yeh |
|-----------------|------------------|------------------------|
| Ruby Ou         | Jasper Wang      | John Teh               |

Date: Apr. 07, 2022

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## Revision History

| Report Number | Revision | Description                  | Issue Date    | Revised By | Remark |
|---------------|----------|------------------------------|---------------|------------|--------|
| ES/2022/20014 | Rev.00   | Initial creation of document | Apr. 07, 2022 | Ruby Ou    |        |
|               |          |                              |               |            |        |
|               |          |                              |               |            |        |
|               |          |                              |               |            |        |
|               |          |                              |               |            |        |
|               |          |                              |               |            |        |
|               |          |                              |               |            |        |
|               |          |                              |               |            |        |
|               |          |                              |               |            |        |
|               |          |                              |               |            |        |

**Note:**

1. The mark " \* " is the revised version of the report due to comments submitted by the certification.

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## Contents

|  |            |
|--|------------|
| <b>0. Guidance applied .....</b>   | <b>4</b>   |
| <b>1. General Information.....</b>   | <b>5</b>   |
| 1.1 Testing Laboratory .....   | 5          |
| 1.2 Details of Applicant.....  | 5          |
| 1.3 Description of EUT .....   | 6          |
| 1.4 Test Environment .....   | 39         |
| 1.5 Operation Description .....  | 39         |
| 1.6 EUT Testing Position .....   | 41         |
| 1.7 Evaluation Procedures .....  | 43         |
| 1.8 Probe Calibration Procedures .....   | 45         |
| 1.9 Operating modes validation by power measurement.....                       | 48         |
| 1.10 SAR System Description and Setup .....                                    | 51         |
| 1.10.1 Power density measurement system .....                                  | 53         |
| 1.11 System Components .....   | 60         |
| 1.12 Test Standards and Limits .....   | 62         |
| <b>2. Summary of Results .....</b>   | <b>65</b>  |
| 2.1 Decision rules.....  | 65         |
| 2.2 Summary of SAR Results .....   | 65         |
| 2.3 Summary of PD Results .....  | 71         |
| 2.4 Reporting statements of conformity .....                                   | 71         |
| <b>3. Simultaneous Transmission Analysis.....</b>                              | <b>72</b>  |
| 3.1 Estimated SAR calculation.....   | 73         |
| 3.2 SPLSR evaluation and analysis.....   | 73         |
| <b>4. Instruments List.....</b>  | <b>75</b>  |
| <b>5. Measurements.....</b>  | <b>76</b>  |
| <b>6. SAR System Performance Verification .....</b>                            | <b>124</b> |
| <b>7.Uncertainty Budget.....</b>   | <b>132</b> |
| <b>Appendixes .....</b>  | <b>136</b> |
| ES202220014 SAR_Appendix A Photographs.....                                    | 136        |
| ES202220014 SAR_Appendix B DAE & Probe Cal. Certificate.....                   | 136        |
| ES202220014 SAR_Appendix C Phantom Description & Dipole Cal. Certificate ..... | 136        |

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

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

## 0. Guidance applied

- ANSI/IEEE C95.1-1992
- IEEE 1528-2013
- IEC/IEEE 62209-1528:2020
- SPEAG DASY6 System Handbook
- SPEAG DASY6 Application Note  
(Interim Procedure for Device Operation at 6GHz-10GHz)
- IEC TR 63170:2018
- IEC 62479:2010
- FCC KDB 865664 D01 v01r04
- FCC KDB 865664 D02 v01r02
- FCC KDB 447498 D01 v06
- FCC KDB 616217 D04 v01r02
- FCC KDB 248227 D01 v02r02

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

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

# 1. General Information

## 1.1 Testing Laboratory

|  |   |
|--|---|
| SGS Taiwan Ltd. Central RF Lab   |   |
| No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan |   |
| FCC Designation Number   | TW0027  |
| Tel  | +886-2-2299-3279  |
| Fax  | +886-2-2298-0488  |
| Internet   | <a href="http://www.tw.sgs.com/">http://www.tw.sgs.com/</a> |

## 1.2 Details of Applicant

|                 |   |
|-----------------|---|
| Company Name    | Acer Incorporated   |
| Company Address | 8F., No. 88, Sec. 1, Xintai 5th Rd., Xizhi, New Taipei City 22181, Taiwan (R.O.C) |

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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279


f (886-2) 2298-0488

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

Member of SGS Group

### 1.3 Description of EUT

#### General Information of Host:

|                   |   |  |
|-------------------|---|--|
| Product Name      | Notebook Computer   |  |
| Brand Name        |                |  |
| Model No.         | N22Q5   |  |
| Integrated Module | Brand Name: Intel® Wi-Fi 6E AX211<br>Model Name: AX211NGW                                       |  |
| FCC ID            | HLZAX211NG  |  |
| Mode of Operation | <input checked="" type="checkbox"/> WLAN802.11<br><input checked="" type="checkbox"/> Bluetooth |  |
| Duty Cycle        | WLAN802.11  | Refer to page 33-37  |
|                   | Bluetooth   | 77.1%  |
| Supported Radios  | 802.11b/g/n/ax  | 2.4GHz (2400.0 – 2483.5 MHz)   |
|                   | 802.11a/n/ac/ax   | 5.2GHz (5150.0 – 5350.0 MHz)<br>5.6GHz (5470.0 – 5725.0 MHz)<br>5.8GHz (5725.0 – 5850.0 MHz) |
|                   | 802.11ax  | 6.0GHz (5925.0 - 7125.0MHz)  |
|                   | Bluetooth 5.2   | 2.4GHz (2400.0 – 2483.5 MHz)   |

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

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

| Summary of Maximum SAR and Power Density Value |                           |                                   |                                  |
|--|---------------------------|-----------------------------------|----------------------------------|
| Mode   | Highest SAR1g Body (W/kg) | Highest APD (mW/cm <sup>2</sup> ) | Highest PD (mW/cm <sup>2</sup> ) |
| 2.4G WLAN                                      | 0.35                      | N/A                               | N/A                              |
| 5G WLAN  | 0.89                      | N/A                               | N/A                              |
| 6E WLAN  | 0.15                      | 0.12                              | 0.36                             |
| Bluetooth(GFSK)                                | 0.11                      | N/A                               | N/A                              |

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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## WLAN conducted power table:

### Notebook mode

| Main    |                |         |                 |           |  |                     |
|---------|----------------|---------|-----------------|-----------|--|---------------------|
| Band    | Mode           | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 2.45GHz | 802.11b        | 1       | 2412            | 1Mbps     | 21.00  | 20.70               |
|         |                | 6       | 2437            |           | 21.00  | 20.90               |
|         |                | 11      | 2462            |           | 21.00  | 20.74               |
|         | 802.11g        | 1       | 2412            | 6Mbps     | 18.75  | 18.65               |
|         |                | 6       | 2437            |           | 21.00  | 20.76               |
|         |                | 11      | 2462            |           | 18.75  | 18.58               |
|         | 802.11n20-HT0  | 1       | 2412            | MCS0      | 18.75  | 18.61               |
|         |                | 6       | 2437            |           | 21.00  | 20.78               |
|         |                | 11      | 2462            |           | 18.75  | 18.52               |
|         | 802.11ax20-HE0 | 1       | 2412            | MCS0      | 18.75  | 18.64               |
|         |                | 6       | 2437            |           | 21.00  | 20.88               |
|         |                | 11      | 2462            |           | 18.75  | 18.62               |
|         | 802.11n40-HT0  | 3       | 2422            | MCS0      | 16.50  | 16.30               |
|         |                | 6       | 2437            |           | 21.00  | 20.70               |
|         |                | 9       | 2452            |           | 17.00  | 16.87               |
|         | 802.11ax40-HE0 | 3       | 2422            | MCS0      | 16.50  | 16.39               |
|         |                | 6       | 2437            |           | 21.00  | 20.75               |
|         |                | 9       | 2452            |           | 17.00  | 16.81               |

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

| Main          |                  |         |                 |           |  |                     |
|---------------|------------------|---------|-----------------|-----------|--|---------------------|
| Band          | Mode             | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 5.15-5.25 GHz | 802.11a          | 36      | 5180            | 6Mbps     | 19.25  | 19.04               |
|               |                  | 40      | 5200            |           | 21.00  | 20.94               |
|               |                  | 44      | 5220            |           | 21.00  | 20.93               |
|               |                  | 48      | 5240            |           | 21.00  | 20.88               |
|               | 802.11n20-HT0    | 36      | 5180            | MCS0      | 19.25  | 19.07               |
|               |                  | 40      | 5200            |           | 21.00  | 20.90               |
|               |                  | 44      | 5220            |           | 21.00  | 20.72               |
|               |                  | 48      | 5240            |           | 21.00  | 20.74               |
|               | 802.11ax20-HE0   | 36      | 5180            | MCS0      | 19.25  | 19.07               |
|               |                  | 40      | 5200            |           | 21.00  | 20.81               |
|               |                  | 44      | 5220            |           | 21.00  | 20.88               |
|               |                  | 48      | 5240            |           | 21.00  | 20.84               |
|               | 802.11n40-HT0    | 38      | 5190            | MCS0      | 17.75  | 17.60               |
|               |                  | 46      | 5230            |           | 19.50  | 19.26               |
|               | 802.11ax40-HE0   | 38      | 5190            | MCS0      | 17.75  | 17.55               |
|               |                  | 46      | 5230            |           | 19.50  | 19.21               |
|               | 802.11ac80-VHT0  | 42      | 5210            | MCS0      | 18.75  | 18.47               |
|               | 802.11ax80-HE0   | 42      | 5210            | MCS0      | 18.75  | 18.47               |
|               | 802.11ac160-VHT0 | 50      | 5250            | MCS0      | 15.25  | 15.05               |
|               | 802.11ax160-HE0  | 50      | 5250            | MCS0      | 15.25  | 15.11               |

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

| Main          |                 |         |                 |           |  |                     |
|---------------|-----------------|---------|-----------------|-----------|--|---------------------|
| Band          | Mode            | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 5.25-5.35 GHz | 802.11a         | 52      | 5260            | 6Mbps     | 21.00  | 20.88               |
|               |                 | 56      | 5280            |           | 21.00  | 20.94               |
|               |                 | 60      | 5300            |           | 21.00  | 20.95               |
|               |                 | 64      | 5320            |           | 19.00  | 18.98               |
|               | 802.11n20-HT0   | 52      | 5260            | MCS0      | 21.00  | 20.70               |
|               |                 | 56      | 5280            |           | 21.00  | 20.87               |
|               |                 | 60      | 5300            |           | 21.00  | 20.79               |
|               |                 | 64      | 5320            |           | 19.00  | 18.79               |
|               | 802.11ax20-HE0  | 52      | 5260            | MCS0      | 21.00  | 20.78               |
|               |                 | 56      | 5280            |           | 21.00  | 20.89               |
|               |                 | 60      | 5300            |           | 21.00  | 20.85               |
|               |                 | 64      | 5320            |           | 19.00  | 18.73               |
|               | 802.11n40-HT0   | 54      | 5270            | MCS0      | 20.50  | 20.38               |
|               |                 | 62      | 5310            |           | 17.00  | 16.73               |
|               | 802.11ax40-HE0  | 54      | 5270            | MCS0      | 20.50  | 20.30               |
|               |                 | 62      | 5310            |           | 17.00  | 16.90               |
|               | 802.11ac80-VHT0 | 58      | 5290            | MCS0      | 17.75  | 17.51               |
|               | 802.11ax80-HE0  | 58      | 5290            | MCS0      | 17.75  | 17.60               |

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

| Main   |                  |         |                 |           |  |                     |
|--------|------------------|---------|-----------------|-----------|--|---------------------|
| Band   | Mode             | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 5.6GHz | 802.11a          | 100     | 5500            | 6Mbps     | 20.00  | 19.86               |
|        |                  | 120     | 5600            |           | 21.00  | 20.88               |
|        |                  | 140     | 5700            |           | 21.00  | 20.78               |
|        |                  | 144     | 5720            |           | 21.00  | 20.85               |
|        | 802.11n20-HT0    | 100     | 5500            | MCS0      | 20.00  | 19.84               |
|        |                  | 120     | 5600            |           | 21.00  | 20.74               |
|        |                  | 140     | 5700            |           | 21.00  | 20.74               |
|        |                  | 144     | 5720            |           | 21.00  | 20.77               |
|        | 802.11ax20-HE0   | 100     | 5500            | MCS0      | 20.00  | 19.78               |
|        |                  | 120     | 5600            |           | 21.00  | 20.82               |
|        |                  | 140     | 5700            |           | 21.00  | 20.76               |
|        |                  | 144     | 5720            |           | 21.00  | 20.87               |
|        | 802.11n40-HT0    | 102     | 5510            | MCS0      | 18.00  | 17.73               |
|        |                  | 118     | 5590            |           | 21.00  | 20.86               |
|        |                  | 134     | 5670            |           | 21.00  | 20.89               |
|        |                  | 142     | 5710            |           | 21.00  | 20.87               |
|        | 802.11ax40-HE0   | 102     | 5510            | MCS0      | 18.00  | 17.89               |
|        |                  | 118     | 5590            |           | 21.00  | 20.87               |
|        |                  | 134     | 5670            |           | 21.00  | 20.74               |
|        |                  | 142     | 5710            |           | 21.00  | 20.83               |
|        | 802.11ac80-VHT0  | 106     | 5530            | MCS0      | 18.00  | 17.94               |
|        |                  | 122     | 5610            |           | 21.00  | 20.90               |
|        |                  | 138     | 5690            |           | 21.00  | 20.99               |
|        | 802.11ax80-HE0   | 106     | 5530            | MCS0      | 18.00  | 17.89               |
|        |                  | 122     | 5610            |           | 21.00  | 20.76               |
|        |                  | 138     | 5690            |           | 21.00  | 20.77               |
|        | 802.11ac160-VHT0 | 114     | 5570            | MCS0      | 15.50  | 15.30               |
|        | 802.11ax160-HE0  | 114     | 5570            | MCS0      | 15.50  | 15.30               |

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

| Main   |                 |         |                 |           |  |                     |
|--------|-----------------|---------|-----------------|-----------|--|---------------------|
| Mode   | Mode            | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 5.8GHz | 802.11a         | 149     | 5745            | 6Mbps     | 21.00  | 20.80               |
|        |                 | 157     | 5785            |           | 21.00  | 20.72               |
|        |                 | 165     | 5825            |           | 21.00  | 20.89               |
|        | 802.11n20-HT0   | 149     | 5745            | MCS0      | 21.00  | 20.75               |
|        |                 | 157     | 5785            |           | 21.00  | 20.87               |
|        |                 | 165     | 5825            |           | 21.00  | 20.77               |
|        | 802.11ax20-HE0  | 149     | 5745            | MCS0      | 21.00  | 20.76               |
|        |                 | 157     | 5785            |           | 21.00  | 20.72               |
|        |                 | 165     | 5825            |           | 21.00  | 20.79               |
|        | 802.11n40-HT0   | 151     | 5755            | MCS0      | 21.00  | 20.99               |
|        |                 | 159     | 5795            |           | 21.00  | 20.98               |
|        | 802.11ax40-HE0  | 151     | 5755            | MCS0      | 21.00  | 20.78               |
|        |                 | 159     | 5795            |           | 21.00  | 20.80               |
|        | 802.11ac80-VHT0 | 155     | 5775            | MCS0      | 20.00  | 19.71               |
|        | 802.11ax80-HE0  | 155     | 5775            | MCS0      | 20.00  | 19.74               |

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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

| Main              |                 |         |                 |           |  |                     |
|-------------------|-----------------|---------|-----------------|-----------|--|---------------------|
| Band              | Mode            | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| U-NII-5<br>6.2GHz | 802.11ax20-HE0  | 1       | 5955            | MCS0      | 7.00   | 6.87                |
|                   |                 | 45      | 6175            |           | 7.00   | 6.91                |
|                   |                 | 93      | 6415            |           | 7.00   | 6.87                |
|                   | 802.11ax40-HE0  | 3       | 5965            | MCS0      | 10.00  | 9.93                |
|                   |                 | 43      | 6165            |           | 10.00  | 9.89                |
|                   |                 | 91      | 6405            |           | 10.00  | 9.87                |
|                   | 802.11ax80-HE0  | 7       | 5985            | MCS0      | 13.00  | 12.88               |
|                   |                 | 39      | 6145            |           | 13.00  | 12.94               |
|                   |                 | 87      | 6385            |           | 13.00  | 12.89               |
|                   | 802.11ax160-HE0 | 15      | 6025            | MCS0      | 13.50  | 13.47               |
|                   |                 | 47      | 6185            |           | 13.50  | 13.49               |
|                   |                 | 79      | 6345            |           | 13.50  | 13.42               |
| U-NII-6<br>6.5GHz | 802.11ax20-HE0  | 97      | 6435            | MCS0      | 7.00   | 6.96                |
|                   |                 | 105     | 6475            |           | 7.00   | 6.87                |
|                   |                 | 113     | 6515            |           | 7.00   | 6.88                |
|                   | 802.11ax40-HE0  | 99      | 6445            | MCS0      | 10.00  | 9.97                |
|                   |                 | 107     | 6485            |           | 10.00  | 9.97                |
|                   | 802.11ax80-HE0  | 103     | 6465            | MCS0      | 13.00  | 12.92               |
|                   |                 | 119     | 6545            |           | 13.00  | 12.88               |
|                   | 802.11ax160-HE0 | 111     | 6505            | MCS0      | 13.50  | 13.43               |
| U-NII-7<br>6.7GHz | 802.11ax20-HE0  | 117     | 6535            | MCS0      | 7.00   | 6.89                |
|                   |                 | 149     | 6695            |           | 7.00   | 6.90                |
|                   |                 | 181     | 6855            |           | 7.00   | 6.92                |
|                   | 802.11ax40-HE0  | 115     | 6525            | MCS0      | 10.00  | 9.88                |
|                   |                 | 147     | 6685            |           | 10.00  | 9.91                |
|                   |                 | 179     | 6845            |           | 10.00  | 9.93                |
|                   | 802.11ax80-HE0  | 135     | 6625            | MCS0      | 13.00  | 12.96               |
|                   |                 | 151     | 6705            |           | 13.00  | 12.91               |
|                   |                 | 167     | 6785            |           | 13.00  | 12.89               |
|                   | 802.11ax160-HE0 | 143     | 6665            | MCS0      | 13.50  | 13.44               |
|                   |                 | 175     | 6825            |           | 13.50  | 13.40               |
| U-NII-8<br>7.0GHz | 802.11ax20-HE0  | 185     | 6875            | MCS0      | 7.00   | 6.95                |
|                   |                 | 209     | 6995            |           | 7.00   | 6.88                |
|                   |                 | 233     | 7115            |           | 7.00   | 6.95                |
|                   | 802.11ax40-HE0  | 187     | 6885            | MCS0      | 10.00  | 9.88                |
|                   |                 | 227     | 7085            |           | 10.00  | 9.94                |
|                   | 802.11ax80-HE0  | 183     | 6865            | MCS0      | 13.00  | 12.92               |
|                   |                 | 199     | 6945            |           | 13.00  | 12.92               |
|                   |                 | 215     | 7025            |           | 13.00  | 12.90               |
|                   | 802.11ax160-HE0 | 207     | 6985            | MCS0      | 13.50  | 13.43               |

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

| Aux     |                |         |                 |           |  |                     |
|---------|----------------|---------|-----------------|-----------|--|---------------------|
| Band    | Mode           | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 2.45GHz | 802.11b        | 1       | 2412            | 1Mbps     | 21.00  | 20.57               |
|         |                | 6       | 2437            |           | 21.00  | 20.66               |
|         |                | 11      | 2462            |           | 21.00  | 20.78               |
|         | 802.11g        | 1       | 2412            | 6Mbps     | 19.50  | 19.22               |
|         |                | 6       | 2437            |           | 21.00  | 20.80               |
|         |                | 11      | 2462            |           | 18.75  | 18.48               |
|         | 802.11n20-HT0  | 1       | 2412            | MCS0      | 19.50  | 19.39               |
|         |                | 6       | 2437            |           | 21.00  | 20.85               |
|         |                | 11      | 2462            |           | 18.75  | 18.48               |
|         | 802.11ax20-HE0 | 1       | 2412            | MCS0      | 19.50  | 19.37               |
|         |                | 6       | 2437            |           | 21.00  | 20.75               |
|         |                | 11      | 2462            |           | 18.75  | 18.51               |
|         | 802.11n40-HT0  | 3       | 2422            | MCS0      | 16.25  | 16.09               |
|         |                | 6       | 2437            |           | 21.00  | 20.88               |
|         |                | 9       | 2452            |           | 16.00  | 15.80               |
|         | 802.11ax40-HE0 | 3       | 2422            | MCS0      | 16.25  | 16.07               |
|         |                | 6       | 2437            |           | 21.00  | 20.72               |
|         |                | 9       | 2452            |           | 16.00  | 15.80               |

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

| Aux           |                  |         |                 |           |  |                     |
|---------------|------------------|---------|-----------------|-----------|--|---------------------|
| Band          | Mode             | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 5.15-5.25 GHz | 802.11a          | 36      | 5180            | 6Mbps     | 20.00  | 19.71               |
|               |                  | 40      | 5200            |           | 21.00  | 20.73               |
|               |                  | 44      | 5220            |           | 21.00  | 20.77               |
|               |                  | 48      | 5240            |           | 21.00  | 20.78               |
|               | 802.11n20-HT0    | 36      | 5180            | MCS0      | 20.00  | 19.73               |
|               |                  | 40      | 5200            |           | 21.00  | 20.79               |
|               |                  | 44      | 5220            |           | 21.00  | 20.75               |
|               |                  | 48      | 5240            |           | 21.00  | 20.86               |
|               | 802.11ax20-HE0   | 36      | 5180            | MCS0      | 20.00  | 19.70               |
|               |                  | 40      | 5200            |           | 21.00  | 20.85               |
|               |                  | 44      | 5220            |           | 21.00  | 20.89               |
|               |                  | 48      | 5240            |           | 21.00  | 20.82               |
|               | 802.11n40-HT0    | 38      | 5190            | MCS0      | 19.50  | 18.97               |
|               |                  | 46      | 5230            |           | 21.00  | 20.92               |
|               | 802.11ax40-HE0   | 38      | 5190            | MCS0      | 19.50  | 19.29               |
|               |                  | 46      | 5230            |           | 21.00  | 20.81               |
|               | 802.11ac80-VHT0  | 42      | 5210            | MCS0      | 19.00  | 18.83               |
|               | 802.11ax80-HE0   | 42      | 5210            | MCS0      | 19.00  | 18.75               |
|               | 802.11ac160-VHT0 | 50      | 5250            | MCS0      | 16.00  | 15.76               |
|               | 802.11ax160-HE0  | 50      | 5250            | MCS0      | 16.00  | 15.70               |

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

| Aux           |                 |         |                 |           |  |                     |
|---------------|-----------------|---------|-----------------|-----------|--|---------------------|
| Band          | Mode            | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 5.25-5.35 GHz | 802.11a         | 52      | 5260            | 6Mbps     | 21.00  | 20.82               |
|               |                 | 56      | 5280            |           | 21.00  | 20.77               |
|               |                 | 60      | 5300            |           | 21.00  | 20.75               |
|               |                 | 64      | 5320            |           | 21.00  | 20.86               |
|               | 802.11n20-HT0   | 52      | 5260            | MCS0      | 21.00  | 20.78               |
|               |                 | 56      | 5280            |           | 21.00  | 20.73               |
|               |                 | 60      | 5300            |           | 21.00  | 20.84               |
|               |                 | 64      | 5320            |           | 21.00  | 20.78               |
|               | 802.11ax20-HE0  | 52      | 5260            | MCS0      | 21.00  | 20.80               |
|               |                 | 56      | 5280            |           | 21.00  | 20.85               |
|               |                 | 60      | 5300            |           | 21.00  | 20.90               |
|               |                 | 64      | 5320            |           | 21.00  | 20.81               |
|               | 802.11n40-HT0   | 54      | 5270            | MCS0      | 21.00  | 20.89               |
|               |                 | 62      | 5310            |           | 18.25  | 18.15               |
|               | 802.11ax40-HE0  | 54      | 5270            | MCS0      | 21.00  | 20.71               |
|               |                 | 62      | 5310            |           | 18.25  | 18.15               |
|               | 802.11ac80-VHT0 | 58      | 5290            | MCS0      | 18.50  | 18.36               |
|               | 802.11ax80-HE0  | 58      | 5290            | MCS0      | 18.50  | 18.23               |

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

| Aux    |                  |         |                 |           |  |                     |
|--------|------------------|---------|-----------------|-----------|--|---------------------|
| Band   | Mode             | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 5.6GHz | 802.11a          | 100     | 5500            | 6Mbps     | 21.00  | 20.79               |
|        |                  | 120     | 5600            |           | 21.00  | 20.76               |
|        |                  | 140     | 5700            |           | 21.00  | 20.84               |
|        |                  | 144     | 5720            |           | 21.00  | 20.81               |
|        | 802.11n20-HT0    | 100     | 5500            | MCS0      | 21.00  | 20.88               |
|        |                  | 120     | 5600            |           | 21.00  | 20.76               |
|        |                  | 140     | 5700            |           | 21.00  | 20.71               |
|        |                  | 144     | 5720            |           | 21.00  | 20.77               |
|        | 802.11ax20-HE0   | 100     | 5500            | MCS0      | 21.00  | 20.89               |
|        |                  | 120     | 5600            |           | 21.00  | 20.83               |
|        |                  | 140     | 5700            |           | 21.00  | 20.78               |
|        |                  | 144     | 5720            |           | 21.00  | 20.78               |
|        | 802.11n40-HT0    | 102     | 5510            | MCS0      | 20.00  | 19.89               |
|        |                  | 118     | 5590            |           | 21.00  | 20.85               |
|        |                  | 134     | 5670            |           | 21.00  | 20.77               |
|        |                  | 142     | 5710            |           | 21.00  | 20.77               |
|        | 802.11ax40-HE0   | 102     | 5510            | MCS0      | 20.00  | 19.81               |
|        |                  | 118     | 5590            |           | 21.00  | 20.79               |
|        |                  | 134     | 5670            |           | 21.00  | 20.77               |
|        |                  | 142     | 5710            |           | 21.00  | 20.71               |
|        | 802.11ac80-VHT0  | 106     | 5530            | MCS0      | 18.00  | 17.77               |
|        |                  | 122     | 5610            |           | 21.00  | 20.90               |
|        |                  | 138     | 5690            |           | 21.00  | 20.90               |
|        | 802.11ax80-HE0   | 106     | 5530            | MCS0      | 18.00  | 17.77               |
|        |                  | 122     | 5610            |           | 21.00  | 20.76               |
|        |                  | 138     | 5690            |           | 21.00  | 20.88               |
|        | 802.11ac160-VHT0 | 114     | 5570            | MCS0      | 16.25  | 16.04               |
|        | 802.11ax160-HE0  | 114     | 5570            | MCS0      | 16.25  | 16.09               |

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

| Aux    |                 |         |                 |           |  |                     |
|--------|-----------------|---------|-----------------|-----------|--|---------------------|
| Mode   | Mode            | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 5.8GHz | 802.11a         | 149     | 5745            | 6Mbps     | 21.00  | 20.80               |
|        |                 | 157     | 5785            |           | 21.00  | 20.70               |
|        |                 | 165     | 5825            |           | 21.00  | 20.89               |
|        | 802.11n20-HT0   | 149     | 5745            | MCS0      | 21.00  | 20.90               |
|        |                 | 157     | 5785            |           | 21.00  | 20.88               |
|        |                 | 165     | 5825            |           | 21.00  | 20.88               |
|        | 802.11ax20-HE0  | 149     | 5745            | MCS0      | 21.00  | 20.77               |
|        |                 | 157     | 5785            |           | 21.00  | 20.90               |
|        |                 | 165     | 5825            |           | 21.00  | 20.73               |
|        | 802.11n40-HT0   | 151     | 5755            | MCS0      | 21.00  | 20.96               |
|        |                 | 159     | 5795            |           | 21.00  | 20.90               |
|        | 802.11ax40-HE0  | 151     | 5755            | MCS0      | 21.00  | 20.80               |
|        |                 | 159     | 5795            |           | 21.00  | 20.79               |
|        | 802.11ac80-VHT0 | 155     | 5775            | MCS0      | 20.00  | 19.78               |
|        | 802.11ax80-HE0  | 155     | 5775            | MCS0      | 20.00  | 19.89               |

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

| Aux               |                 |         |                 |           |  |                     |
|-------------------|-----------------|---------|-----------------|-----------|--|---------------------|
| Band              | Mode            | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| U-NII-5<br>6.2GHz | 802.11ax20-HE0  | 1       | 5955            | MCS0      | 7.00   | 6.90                |
|                   |                 | 45      | 6175            |           | 7.00   | 6.88                |
|                   |                 | 93      | 6415            |           | 7.00   | 6.95                |
|                   | 802.11ax40-HE0  | 3       | 5965            | MCS0      | 10.00  | 9.93                |
|                   |                 | 43      | 6165            |           | 10.00  | 9.94                |
|                   |                 | 91      | 6405            |           | 10.00  | 9.95                |
|                   | 802.11ax80-HE0  | 7       | 5985            | MCS0      | 13.00  | 12.91               |
|                   |                 | 39      | 6145            |           | 13.00  | 12.89               |
|                   |                 | 87      | 6385            |           | 13.00  | 12.95               |
|                   | 802.11ax160-HE0 | 15      | 6025            | MCS0      | 13.50  | 13.43               |
|                   |                 | 47      | 6185            |           | 13.50  | 13.38               |
|                   |                 | 79      | 6345            |           | 13.50  | 13.46               |
| U-NII-6<br>6.5GHz | 802.11ax20-HE0  | 97      | 6435            | MCS0      | 7.00   | 6.93                |
|                   |                 | 105     | 6475            |           | 7.00   | 6.92                |
|                   |                 | 113     | 6515            |           | 7.00   | 6.96                |
|                   | 802.11ax40-HE0  | 99      | 6445            | MCS0      | 10.00  | 9.89                |
|                   |                 | 107     | 6485            |           | 10.00  | 9.97                |
|                   | 802.11ax80-HE0  | 103     | 6465            | MCS0      | 13.00  | 12.90               |
|                   |                 | 119     | 6545            |           | 13.00  | 12.87               |
|                   | 802.11ax160-HE0 | 111     | 6505            | MCS0      | 13.50  | 13.43               |
| U-NII-7<br>6.7GHz | 802.11ax20-HE0  | 117     | 6535            | MCS0      | 7.00   | 6.96                |
|                   |                 | 149     | 6695            |           | 7.00   | 6.96                |
|                   |                 | 181     | 6855            |           | 7.00   | 6.96                |
|                   | 802.11ax40-HE0  | 115     | 6525            | MCS0      | 10.00  | 9.94                |
|                   |                 | 147     | 6685            |           | 10.00  | 9.91                |
|                   |                 | 179     | 6845            |           | 10.00  | 9.95                |
|                   | 802.11ax80-HE0  | 135     | 6625            | MCS0      | 13.00  | 12.91               |
|                   |                 | 151     | 6705            |           | 13.00  | 12.93               |
|                   |                 | 167     | 6785            |           | 13.00  | 12.97               |
|                   | 802.11ax160-HE0 | 143     | 6665            | MCS0      | 13.50  | 13.43               |
|                   |                 | 175     | 6825            |           | 13.50  | 13.45               |
| U-NII-8<br>7.0GHz | 802.11ax20-HE0  | 185     | 6875            | MCS0      | 7.00   | 6.95                |
|                   |                 | 209     | 6995            |           | 7.00   | 6.93                |
|                   |                 | 233     | 7115            |           | 7.00   | 6.90                |
|                   | 802.11ax40-HE0  | 187     | 6885            | MCS0      | 10.00  | 9.92                |
|                   |                 | 227     | 7085            |           | 10.00  | 9.95                |
|                   |                 | 251     | 7285            |           | 10.00  | 9.97                |
|                   | 802.11ax80-HE0  | 183     | 6865            | MCS0      | 13.00  | 12.97               |
|                   |                 | 199     | 6945            |           | 13.00  | 12.89               |
|                   |                 | 215     | 7025            |           | 13.00  | 12.94               |
|                   | 802.11ax160-HE0 | 207     | 6985            | MCS0      | 13.50  | 13.40               |

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

# Tablet mode

| Main    |                |         |                 |           |  |                     |
|---------|----------------|---------|-----------------|-----------|--|---------------------|
| Band    | Mode           | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 2.45GHz | 802.11b        | 1       | 2412            | 1Mbps     | 21.00  | 20.70               |
|         |                | 6       | 2437            |           | 21.00  | 20.90               |
|         |                | 11      | 2462            |           | 21.00  | 20.74               |
|         | 802.11g        | 1       | 2412            | 6Mbps     | 18.75  | 18.65               |
|         |                | 6       | 2437            |           | 21.00  | 20.76               |
|         |                | 11      | 2462            |           | 18.75  | 18.58               |
|         | 802.11n20-HT0  | 1       | 2412            | MCS0      | 18.75  | 18.61               |
|         |                | 6       | 2437            |           | 21.00  | 20.78               |
|         |                | 11      | 2462            |           | 18.75  | 18.52               |
|         | 802.11ax20-HE0 | 1       | 2412            | MCS0      | 18.75  | 18.64               |
|         |                | 6       | 2437            |           | 21.00  | 20.88               |
|         |                | 11      | 2462            |           | 18.75  | 18.62               |
|         | 802.11n40-HT0  | 3       | 2422            | MCS0      | 16.50  | 16.30               |
|         |                | 6       | 2437            |           | 21.00  | 20.70               |
|         |                | 9       | 2452            |           | 17.00  | 16.87               |
|         | 802.11ax40-HE0 | 3       | 2422            | MCS0      | 16.50  | 16.39               |
|         |                | 6       | 2437            |           | 21.00  | 20.75               |
|         |                | 9       | 2452            |           | 17.00  | 16.81               |

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

| Main          |                  |         |                 |           |  |                     |
|---------------|------------------|---------|-----------------|-----------|--|---------------------|
| Band          | Mode             | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 5.15-5.25 GHz | 802.11a          | 36      | 5180            | 6Mbps     | 19.25  | 19.04               |
|               |                  | 40      | 5200            |           | 21.00  | 20.94               |
|               |                  | 44      | 5220            |           | 21.00  | 20.93               |
|               |                  | 48      | 5240            |           | 21.00  | 20.88               |
|               | 802.11n20-HT0    | 36      | 5180            | MCS0      | 19.25  | 19.07               |
|               |                  | 40      | 5200            |           | 21.00  | 20.90               |
|               |                  | 44      | 5220            |           | 21.00  | 20.72               |
|               |                  | 48      | 5240            |           | 21.00  | 20.74               |
|               | 802.11ax20-HE0   | 36      | 5180            | MCS0      | 19.25  | 19.07               |
|               |                  | 40      | 5200            |           | 21.00  | 20.81               |
|               |                  | 44      | 5220            |           | 21.00  | 20.88               |
|               |                  | 48      | 5240            |           | 21.00  | 20.84               |
|               | 802.11n40-HT0    | 38      | 5190            | MCS0      | 17.75  | 17.60               |
|               |                  | 46      | 5230            |           | 19.50  | 19.26               |
|               | 802.11ax40-HE0   | 38      | 5190            | MCS0      | 17.75  | 17.55               |
|               |                  | 46      | 5230            |           | 19.50  | 19.21               |
|               | 802.11ac80-VHT0  | 42      | 5210            | MCS0      | 18.75  | 18.47               |
|               | 802.11ax80-HE0   | 42      | 5210            | MCS0      | 18.75  | 18.47               |
|               | 802.11ac160-VHT0 | 50      | 5250            | MCS0      | 15.25  | 15.05               |
|               | 802.11ax160-HE0  | 50      | 5250            | MCS0      | 15.25  | 15.11               |

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

| Main          |                 |         |                 |           |  |                     |
|---------------|-----------------|---------|-----------------|-----------|--|---------------------|
| Band          | Mode            | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 5.25-5.35 GHz | 802.11a         | 52      | 5260            | 6Mbps     | 20.00  | 19.81               |
|               |                 | 56      | 5280            |           | 20.00  | 19.73               |
|               |                 | 60      | 5300            |           | 20.00  | 19.87               |
|               |                 | 64      | 5320            |           | 19.00  | 18.88               |
|               | 802.11n20-HT0   | 52      | 5260            | MCS0      | 20.00  | 19.77               |
|               |                 | 56      | 5280            |           | 20.00  | 19.73               |
|               |                 | 60      | 5300            |           | 20.00  | 19.87               |
|               |                 | 64      | 5320            |           | 19.00  | 18.83               |
|               | 802.11ax20-HE0  | 52      | 5260            | MCS0      | 20.00  | 19.81               |
|               |                 | 56      | 5280            |           | 20.00  | 19.75               |
|               |                 | 60      | 5300            |           | 20.00  | 19.75               |
|               |                 | 64      | 5320            |           | 19.00  | 18.87               |
|               | 802.11n40-HT0   | 54      | 5270            | MCS0      | 20.00  | 19.90               |
|               |                 | 62      | 5310            |           | 17.00  | 16.99               |
|               | 802.11ax40-HE0  | 54      | 5270            | MCS0      | 20.00  | 19.74               |
|               |                 | 62      | 5310            |           | 17.00  | 16.85               |
|               | 802.11ac80-VHT0 | 58      | 5290            | MCS0      | 17.75  | 17.54               |
|               | 802.11ax80-HE0  | 58      | 5290            | MCS0      | 17.75  | 17.50               |

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

| Main   |                  |         |                 |           |  |                     |
|--------|------------------|---------|-----------------|-----------|--|---------------------|
| Band   | Mode             | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 5.6GHz | 802.11a          | 100     | 5500            | 6Mbps     | 20.00  | 19.86               |
|        |                  | 120     | 5600            |           | 21.00  | 20.88               |
|        |                  | 140     | 5700            |           | 21.00  | 20.78               |
|        |                  | 144     | 5720            |           | 21.00  | 20.85               |
|        | 802.11n20-HT0    | 100     | 5500            | MCS0      | 20.00  | 19.84               |
|        |                  | 120     | 5600            |           | 21.00  | 20.74               |
|        |                  | 140     | 5700            |           | 21.00  | 20.74               |
|        |                  | 144     | 5720            |           | 21.00  | 20.77               |
|        | 802.11ax20-HE0   | 100     | 5500            | MCS0      | 20.00  | 19.78               |
|        |                  | 120     | 5600            |           | 21.00  | 20.82               |
|        |                  | 140     | 5700            |           | 21.00  | 20.76               |
|        |                  | 144     | 5720            |           | 21.00  | 20.87               |
|        | 802.11n40-HT0    | 102     | 5510            | MCS0      | 18.00  | 17.73               |
|        |                  | 118     | 5590            |           | 21.00  | 20.86               |
|        |                  | 134     | 5670            |           | 21.00  | 20.89               |
|        |                  | 142     | 5710            |           | 21.00  | 20.87               |
|        | 802.11ax40-HE0   | 102     | 5510            | MCS0      | 18.00  | 17.89               |
|        |                  | 118     | 5590            |           | 21.00  | 20.87               |
|        |                  | 134     | 5670            |           | 21.00  | 20.74               |
|        |                  | 142     | 5710            |           | 21.00  | 20.83               |
|        | 802.11ac80-VHT0  | 106     | 5530            | MCS0      | 18.00  | 17.94               |
|        |                  | 122     | 5610            |           | 21.00  | 20.90               |
|        |                  | 138     | 5690            |           | 21.00  | 20.99               |
|        | 802.11ax80-HE0   | 106     | 5530            | MCS0      | 18.00  | 17.89               |
|        |                  | 122     | 5610            |           | 21.00  | 20.76               |
|        |                  | 138     | 5690            |           | 21.00  | 20.77               |
|        | 802.11ac160-VHT0 | 114     | 5570            | MCS0      | 15.50  | 15.30               |
|        | 802.11ax160-HE0  | 114     | 5570            | MCS0      | 15.50  | 15.30               |

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

| Main   |                 |         |                 |           |  |                     |
|--------|-----------------|---------|-----------------|-----------|--|---------------------|
| Mode   | Mode            | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 5.8GHz | 802.11a         | 149     | 5745            | 6Mbps     | 21.00  | 20.80               |
|        |                 | 157     | 5785            |           | 21.00  | 20.72               |
|        |                 | 165     | 5825            |           | 21.00  | 20.89               |
|        | 802.11n20-HT0   | 149     | 5745            | MCS0      | 21.00  | 20.75               |
|        |                 | 157     | 5785            |           | 21.00  | 20.87               |
|        |                 | 165     | 5825            |           | 21.00  | 20.77               |
|        | 802.11ax20-HE0  | 149     | 5745            | MCS0      | 21.00  | 20.76               |
|        |                 | 157     | 5785            |           | 21.00  | 20.72               |
|        |                 | 165     | 5825            |           | 21.00  | 20.79               |
|        | 802.11n40-HT0   | 151     | 5755            | MCS0      | 21.00  | 20.99               |
|        |                 | 159     | 5795            |           | 21.00  | 20.98               |
|        | 802.11ax40-HE0  | 151     | 5755            | MCS0      | 21.00  | 20.78               |
|        |                 | 159     | 5795            |           | 21.00  | 20.80               |
|        | 802.11ac80-VHT0 | 155     | 5775            | MCS0      | 20.00  | 19.71               |
|        | 802.11ax80-HE0  | 155     | 5775            | MCS0      | 20.00  | 19.74               |

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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

| Main              |                 |         |                 |           |  |                     |
|-------------------|-----------------|---------|-----------------|-----------|--|---------------------|
| Band              | Mode            | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| U-NII-5<br>6.2GHz | 802.11ax20-HE0  | 1       | 5955            | MCS0      | 7.00   | 6.87                |
|                   |                 | 45      | 6175            |           | 7.00   | 6.91                |
|                   |                 | 93      | 6415            |           | 7.00   | 6.87                |
|                   | 802.11ax40-HE0  | 3       | 5965            | MCS0      | 10.00  | 9.93                |
|                   |                 | 43      | 6165            |           | 10.00  | 9.89                |
|                   |                 | 91      | 6405            |           | 10.00  | 9.87                |
|                   | 802.11ax80-HE0  | 7       | 5985            | MCS0      | 13.00  | 12.88               |
|                   |                 | 39      | 6145            |           | 13.00  | 12.94               |
|                   |                 | 87      | 6385            |           | 13.00  | 12.89               |
|                   | 802.11ax160-HE0 | 15      | 6025            | MCS0      | 13.50  | 13.47               |
|                   |                 | 47      | 6185            |           | 13.50  | 13.49               |
|                   |                 | 79      | 6345            |           | 13.50  | 13.42               |
| U-NII-6<br>6.5GHz | 802.11ax20-HE0  | 97      | 6435            | MCS0      | 7.00   | 6.96                |
|                   |                 | 105     | 6475            |           | 7.00   | 6.87                |
|                   |                 | 113     | 6515            |           | 7.00   | 6.88                |
|                   | 802.11ax40-HE0  | 99      | 6445            | MCS0      | 10.00  | 9.97                |
|                   |                 | 107     | 6485            |           | 10.00  | 9.97                |
|                   | 802.11ax80-HE0  | 103     | 6465            | MCS0      | 13.00  | 12.92               |
|                   |                 | 119     | 6545            |           | 13.00  | 12.88               |
|                   | 802.11ax160-HE0 | 111     | 6505            | MCS0      | 13.50  | 13.43               |
| U-NII-7<br>6.7GHz | 802.11ax20-HE0  | 117     | 6535            | MCS0      | 7.00   | 6.89                |
|                   |                 | 149     | 6695            |           | 7.00   | 6.90                |
|                   |                 | 181     | 6855            |           | 7.00   | 6.92                |
|                   | 802.11ax40-HE0  | 115     | 6525            | MCS0      | 10.00  | 9.88                |
|                   |                 | 147     | 6685            |           | 10.00  | 9.91                |
|                   |                 | 179     | 6845            |           | 10.00  | 9.93                |
|                   | 802.11ax80-HE0  | 135     | 6625            | MCS0      | 13.00  | 12.96               |
|                   |                 | 151     | 6705            |           | 13.00  | 12.91               |
|                   |                 | 167     | 6785            |           | 13.00  | 12.89               |
|                   | 802.11ax160-HE0 | 143     | 6665            | MCS0      | 13.50  | 13.44               |
|                   |                 | 175     | 6825            |           | 13.50  | 13.40               |
| U-NII-8<br>7.0GHz | 802.11ax20-HE0  | 185     | 6875            | MCS0      | 7.00   | 6.95                |
|                   |                 | 209     | 6995            |           | 7.00   | 6.88                |
|                   |                 | 233     | 7115            |           | 7.00   | 6.95                |
|                   | 802.11ax40-HE0  | 187     | 6885            | MCS0      | 10.00  | 9.88                |
|                   |                 | 227     | 7085            |           | 10.00  | 9.94                |
|                   | 802.11ax80-HE0  | 183     | 6865            | MCS0      | 13.00  | 12.92               |
|                   |                 | 199     | 6945            |           | 13.00  | 12.92               |
|                   |                 | 215     | 7025            |           | 13.00  | 12.90               |
|                   | 802.11ax160-HE0 | 207     | 6985            | MCS0      | 13.50  | 13.43               |

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

| Aux     |                |         |                 |           |  |                     |
|---------|----------------|---------|-----------------|-----------|--|---------------------|
| Band    | Mode           | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 2.45GHz | 802.11b        | 1       | 2412            | 1Mbps     | 21.00  | 20.57               |
|         |                | 6       | 2437            |           | 21.00  | 20.66               |
|         |                | 11      | 2462            |           | 21.00  | 20.78               |
|         | 802.11g        | 1       | 2412            | 6Mbps     | 19.50  | 19.22               |
|         |                | 6       | 2437            |           | 21.00  | 20.80               |
|         |                | 11      | 2462            |           | 18.75  | 18.48               |
|         | 802.11n20-HT0  | 1       | 2412            | MCS0      | 19.50  | 19.39               |
|         |                | 6       | 2437            |           | 21.00  | 20.85               |
|         |                | 11      | 2462            |           | 18.75  | 18.48               |
|         | 802.11ax20-HE0 | 1       | 2412            | MCS0      | 19.50  | 19.37               |
|         |                | 6       | 2437            |           | 21.00  | 20.75               |
|         |                | 11      | 2462            |           | 18.75  | 18.51               |
|         | 802.11n40-HT0  | 3       | 2422            | MCS0      | 16.25  | 16.09               |
|         |                | 6       | 2437            |           | 21.00  | 20.88               |
|         |                | 9       | 2452            |           | 16.00  | 15.80               |
|         | 802.11ax40-HE0 | 3       | 2422            | MCS0      | 16.25  | 16.07               |
|         |                | 6       | 2437            |           | 21.00  | 20.72               |
|         |                | 9       | 2452            |           | 16.00  | 15.80               |

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

| Aux           |                  |         |                 |           |  |                     |
|---------------|------------------|---------|-----------------|-----------|--|---------------------|
| Band          | Mode             | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 5.15-5.25 GHz | 802.11a          | 36      | 5180            | 6Mbps     | 18.00  | 17.76               |
|               |                  | 40      | 5200            |           | 18.00  | 17.76               |
|               |                  | 44      | 5220            |           | 18.00  | 17.79               |
|               |                  | 48      | 5240            |           | 18.00  | 17.89               |
|               | 802.11n20-HT0    | 36      | 5180            | MCS0      | 18.00  | 17.76               |
|               |                  | 40      | 5200            |           | 18.00  | 17.83               |
|               |                  | 44      | 5220            |           | 18.00  | 17.86               |
|               |                  | 48      | 5240            |           | 18.00  | 17.74               |
|               | 802.11ax20-HE0   | 36      | 5180            | MCS0      | 18.00  | 17.71               |
|               |                  | 40      | 5200            |           | 18.00  | 17.81               |
|               |                  | 44      | 5220            |           | 18.00  | 17.83               |
|               |                  | 48      | 5240            |           | 18.00  | 17.72               |
|               | 802.11n40-HT0    | 38      | 5190            | MCS0      | 18.00  | 17.83               |
|               |                  | 46      | 5230            |           | 18.00  | 17.75               |
|               | 802.11ax40-HE0   | 38      | 5190            | MCS0      | 18.00  | 17.79               |
|               |                  | 46      | 5230            |           | 18.00  | 17.72               |
|               | 802.11ac80-VHT0  | 42      | 5210            | MCS0      | 18.00  | 17.91               |
|               | 802.11ax80-HE0   | 42      | 5210            | MCS0      | 18.00  | 17.80               |
|               | 802.11ac160-VHT0 | 50      | 5250            | MCS0      | 16.00  | 15.81               |
|               | 802.11ax160-HE0  | 50      | 5250            | MCS0      | 16.00  | 15.83               |

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

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

| Aux           |                 |         |                 |           |  |                     |
|---------------|-----------------|---------|-----------------|-----------|--|---------------------|
| Band          | Mode            | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 5.25-5.35 GHz | 802.11a         | 52      | 5260            | 6Mbps     | 17.50  | 17.24               |
|               |                 | 56      | 5280            |           | 17.50  | 17.30               |
|               |                 | 60      | 5300            |           | 17.50  | 17.32               |
|               |                 | 64      | 5320            |           | 17.50  | 17.24               |
|               | 802.11n20-HT0   | 52      | 5260            | MCS0      | 17.50  | 17.39               |
|               |                 | 56      | 5280            |           | 17.50  | 17.28               |
|               |                 | 60      | 5300            |           | 17.50  | 17.34               |
|               |                 | 64      | 5320            |           | 17.50  | 17.39               |
|               | 802.11ax20-HE0  | 52      | 5260            | MCS0      | 17.50  | 17.28               |
|               |                 | 56      | 5280            |           | 17.50  | 17.34               |
|               |                 | 60      | 5300            |           | 17.50  | 17.23               |
|               |                 | 64      | 5320            |           | 17.50  | 17.36               |
|               | 802.11n40-HT0   | 54      | 5270            | MCS0      | 17.50  | 17.35               |
|               |                 | 62      | 5310            |           | 17.50  | 17.24               |
|               | 802.11ax40-HE0  | 54      | 5270            | MCS0      | 17.50  | 17.30               |
|               |                 | 62      | 5310            |           | 17.50  | 17.35               |
|               | 802.11ac80-VHT0 | 58      | 5290            | MCS0      | 17.50  | 17.48               |
|               | 802.11ax80-HE0  | 58      | 5290            | MCS0      | 17.50  | 17.31               |

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

| Aux    |                  |         |                 |           |  |                     |
|--------|------------------|---------|-----------------|-----------|--|---------------------|
| Band   | Mode             | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 5.6GHz | 802.11a          | 100     | 5500            | 6Mbps     | 21.00  | 20.79               |
|        |                  | 120     | 5600            |           | 21.00  | 20.76               |
|        |                  | 140     | 5700            |           | 21.00  | 20.84               |
|        |                  | 144     | 5720            |           | 21.00  | 20.81               |
|        | 802.11n20-HT0    | 100     | 5500            | MCS0      | 21.00  | 20.88               |
|        |                  | 120     | 5600            |           | 21.00  | 20.76               |
|        |                  | 140     | 5700            |           | 21.00  | 20.71               |
|        |                  | 144     | 5720            |           | 21.00  | 20.77               |
|        | 802.11ax20-HE0   | 100     | 5500            | MCS0      | 21.00  | 20.89               |
|        |                  | 120     | 5600            |           | 21.00  | 20.83               |
|        |                  | 140     | 5700            |           | 21.00  | 20.78               |
|        |                  | 144     | 5720            |           | 21.00  | 20.78               |
|        | 802.11n40-HT0    | 102     | 5510            | MCS0      | 20.00  | 19.89               |
|        |                  | 118     | 5590            |           | 21.00  | 20.85               |
|        |                  | 134     | 5670            |           | 21.00  | 20.77               |
|        |                  | 142     | 5710            |           | 21.00  | 20.77               |
|        | 802.11ax40-HE0   | 102     | 5510            | MCS0      | 20.00  | 19.81               |
|        |                  | 118     | 5590            |           | 21.00  | 20.79               |
|        |                  | 134     | 5670            |           | 21.00  | 20.77               |
|        |                  | 142     | 5710            |           | 21.00  | 20.71               |
|        | 802.11ac80-VHT0  | 106     | 5530            | MCS0      | 18.00  | 17.77               |
|        |                  | 122     | 5610            |           | 21.00  | 20.90               |
|        |                  | 138     | 5690            |           | 21.00  | 20.90               |
|        | 802.11ax80-HE0   | 106     | 5530            | MCS0      | 18.00  | 17.77               |
|        |                  | 122     | 5610            |           | 21.00  | 20.76               |
|        |                  | 138     | 5690            |           | 21.00  | 20.88               |
|        | 802.11ac160-VHT0 | 114     | 5570            | MCS0      | 16.25  | 16.04               |
|        | 802.11ax160-HE0  | 114     | 5570            | MCS0      | 16.25  | 16.09               |

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

| Aux    |                 |         |                 |           |  |                     |
|--------|-----------------|---------|-----------------|-----------|--|---------------------|
| Mode   | Mode            | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| 5.8GHz | 802.11a         | 149     | 5745            | 6Mbps     | 21.00  | 20.80               |
|        |                 | 157     | 5785            |           | 21.00  | 20.70               |
|        |                 | 165     | 5825            |           | 21.00  | 20.89               |
|        | 802.11n20-HT0   | 149     | 5745            | MCS0      | 21.00  | 20.90               |
|        |                 | 157     | 5785            |           | 21.00  | 20.88               |
|        |                 | 165     | 5825            |           | 21.00  | 20.88               |
|        | 802.11ax20-HE0  | 149     | 5745            | MCS0      | 21.00  | 20.77               |
|        |                 | 157     | 5785            |           | 21.00  | 20.90               |
|        |                 | 165     | 5825            |           | 21.00  | 20.73               |
|        | 802.11n40-HT0   | 151     | 5755            | MCS0      | 21.00  | 20.96               |
|        |                 | 159     | 5795            |           | 21.00  | 20.90               |
|        | 802.11ax40-HE0  | 151     | 5755            | MCS0      | 21.00  | 20.80               |
|        |                 | 159     | 5795            |           | 21.00  | 20.79               |
|        | 802.11ac80-VHT0 | 155     | 5775            | MCS0      | 20.00  | 19.78               |
|        | 802.11ax80-HE0  | 155     | 5775            | MCS0      | 20.00  | 19.89               |

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

| Aux               |                 |         |                 |           |  |                     |
|-------------------|-----------------|---------|-----------------|-----------|--|---------------------|
| Band              | Mode            | Channel | Frequency (MHz) | Data Rate | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| U-NII-5<br>6.2GHz | 802.11ax20-HE0  | 1       | 5955            | MCS0      | 7.00   | 6.90                |
|                   |                 | 45      | 6175            |           | 7.00   | 6.88                |
|                   |                 | 93      | 6415            |           | 7.00   | 6.95                |
|                   | 802.11ax40-HE0  | 3       | 5965            | MCS0      | 10.00  | 9.93                |
|                   |                 | 43      | 6165            |           | 10.00  | 9.94                |
|                   |                 | 91      | 6405            |           | 10.00  | 9.95                |
|                   | 802.11ax80-HE0  | 7       | 5985            | MCS0      | 13.00  | 12.91               |
|                   |                 | 39      | 6145            |           | 13.00  | 12.89               |
|                   |                 | 87      | 6385            |           | 13.00  | 12.95               |
|                   | 802.11ax160-HE0 | 15      | 6025            | MCS0      | 13.50  | 13.43               |
|                   |                 | 47      | 6185            |           | 13.50  | 13.38               |
|                   |                 | 79      | 6345            |           | 13.50  | 13.46               |
| U-NII-6<br>6.5GHz | 802.11ax20-HE0  | 97      | 6435            | MCS0      | 7.00   | 6.93                |
|                   |                 | 105     | 6475            |           | 7.00   | 6.92                |
|                   |                 | 113     | 6515            |           | 7.00   | 6.96                |
|                   | 802.11ax40-HE0  | 99      | 6445            | MCS0      | 10.00  | 9.89                |
|                   |                 | 107     | 6485            |           | 10.00  | 9.97                |
|                   | 802.11ax80-HE0  | 103     | 6465            | MCS0      | 13.00  | 12.90               |
|                   |                 | 119     | 6545            |           | 13.00  | 12.87               |
|                   | 802.11ax160-HE0 | 111     | 6505            | MCS0      | 13.50  | 13.43               |
| U-NII-7<br>6.7GHz | 802.11ax20-HE0  | 117     | 6535            | MCS0      | 7.00   | 6.96                |
|                   |                 | 149     | 6695            |           | 7.00   | 6.96                |
|                   |                 | 181     | 6855            |           | 7.00   | 6.96                |
|                   | 802.11ax40-HE0  | 115     | 6525            | MCS0      | 10.00  | 9.94                |
|                   |                 | 147     | 6685            |           | 10.00  | 9.91                |
|                   |                 | 179     | 6845            |           | 10.00  | 9.95                |
|                   | 802.11ax80-HE0  | 135     | 6625            | MCS0      | 13.00  | 12.91               |
|                   |                 | 151     | 6705            |           | 13.00  | 12.93               |
|                   |                 | 167     | 6785            |           | 13.00  | 12.97               |
|                   | 802.11ax160-HE0 | 143     | 6665            | MCS0      | 13.50  | 13.43               |
|                   |                 | 175     | 6825            |           | 13.50  | 13.45               |
|                   |                 | 185     | 6875            |           | 13.50  | 13.45               |
| U-NII-8<br>7.0GHz | 802.11ax20-HE0  | 185     | 6875            | MCS0      | 7.00   | 6.95                |
|                   |                 | 209     | 6995            |           | 7.00   | 6.93                |
|                   |                 | 233     | 7115            |           | 7.00   | 6.90                |
|                   | 802.11ax40-HE0  | 187     | 6885            | MCS0      | 10.00  | 9.92                |
|                   |                 | 227     | 7085            |           | 10.00  | 9.95                |
|                   | 802.11ax80-HE0  | 183     | 6865            | MCS0      | 13.00  | 12.97               |
|                   |                 | 199     | 6945            |           | 13.00  | 12.89               |
|                   |                 | 215     | 7025            |           | 13.00  | 12.94               |
|                   | 802.11ax160-HE0 | 207     | 6985            | MCS0      | 13.50  | 13.40               |
|                   |                 |         |                 |           |  |                     |

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

### Bluetooth conducted power table:

| Mode   | Channel | Frequency (MHz) | 1Mbps  |                     | 2Mbps  |                     | 3Mbps  |                     |
|--------|---------|-----------------|--|---------------------|--|---------------------|--|---------------------|
|        |         |                 | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average power (dBm) |
| BR/EDR | CH 00   | 2402            | 10.50  | 8.71                | 9.50   | 4.61                | 9.50   | 4.66                |
|        | CH 39   | 2441            |  | 8.82                |  | 5.18                |  | 5.14                |
|        | CH 78   | 2480            |  | 8.94                |  | 5.39                |  | 5.47                |

| Mode   | Channel | Frequency (MHz) | GFSK   |                            |
|--------|---------|-----------------|--|----------------------------|
|        |         |                 | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average Output Power (dBm) |
| BLE_1M | CH 00   | 2402            | 9  | 7.12                       |
|        | CH 19   | 2440            |  | 7.48                       |
|        | CH 39   | 2480            |  | 7.92                       |

| Mode   | Channel | Frequency (MHz) | GFSK   |                            |
|--------|---------|-----------------|--|----------------------------|
|        |         |                 | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average Output Power (dBm) |
| BLE_2M | CH 00   | 2402            | 9  | 4.38                       |
|        | CH 19   | 2440            |  | 4.74                       |
|        | CH 39   | 2480            |  | 5.18                       |

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

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

2.4G b duty  
(12.32/12.45=0.989) Scaling Factor=1.011

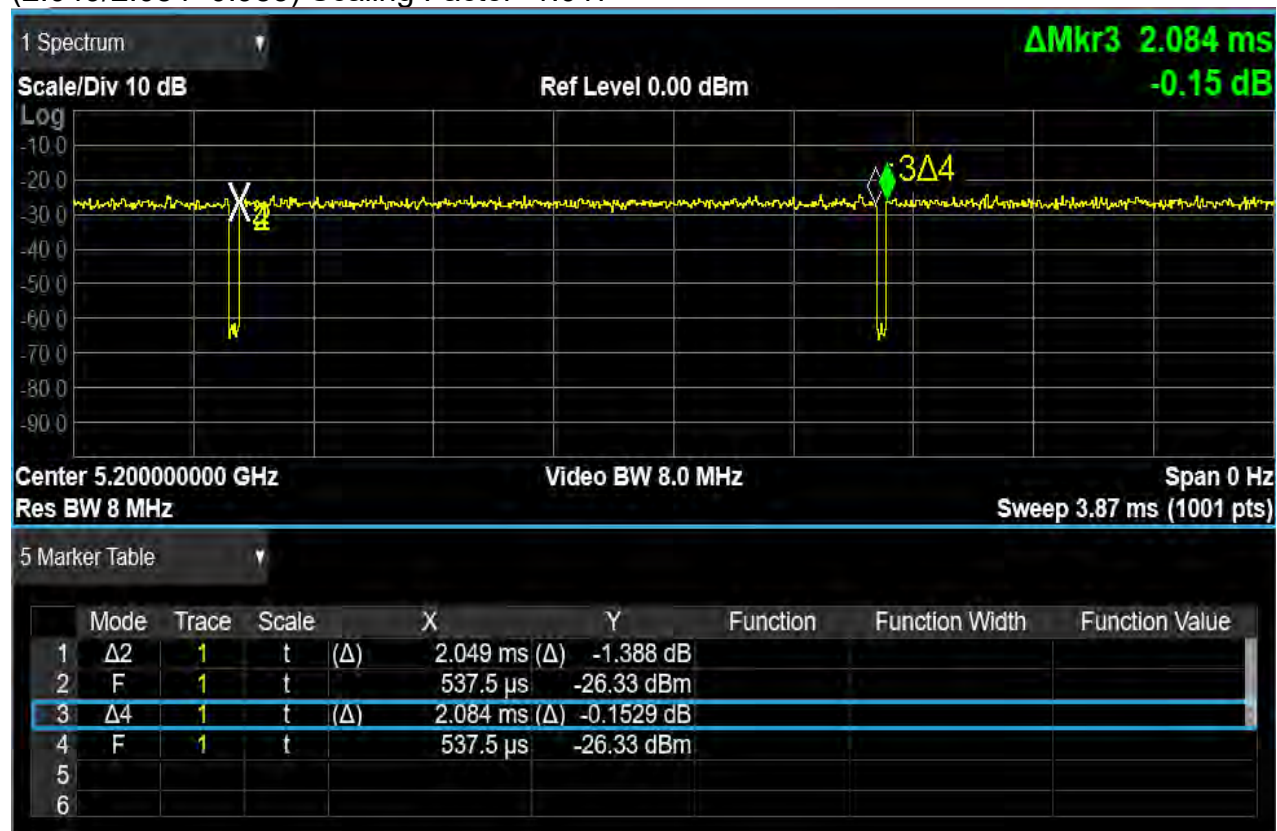


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.  
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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

5G a duty

(2.049/2.084=0.983) Scaling Factor=1.017



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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

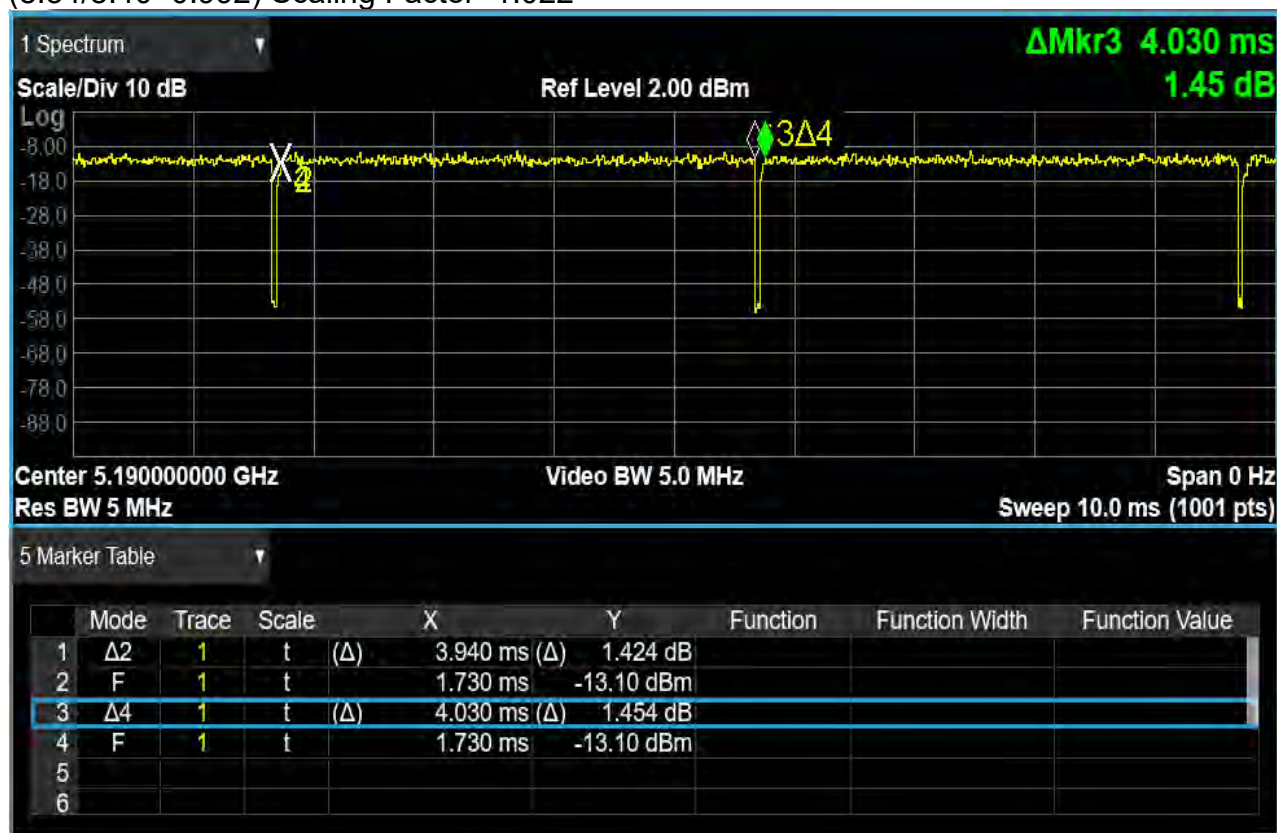
t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

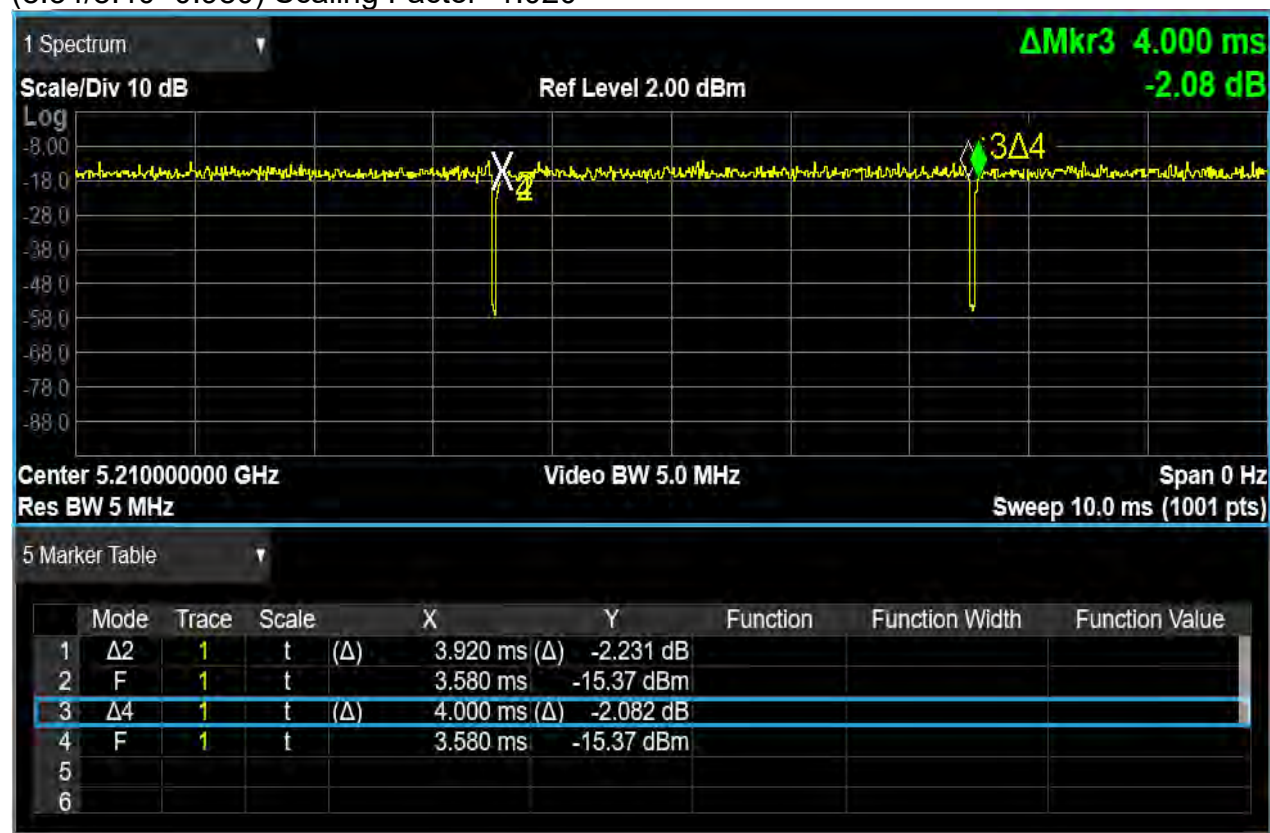
5G n(40M) duty  
(8.34/8.40=0.992) Scaling Factor=1.022



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

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

5G ac(80M) duty  
(8.34/8.40=0.980) Scaling Factor=1.020



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

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

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

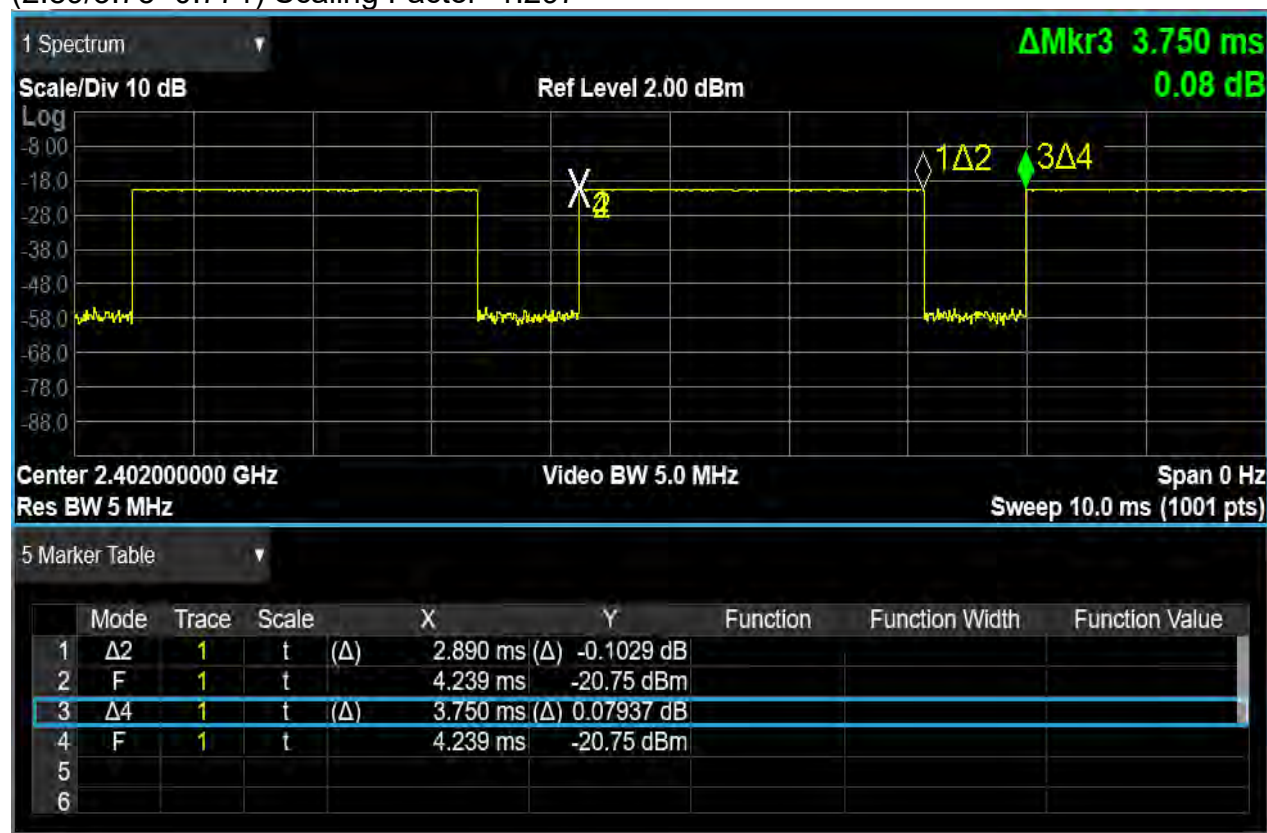
6E ax(160M) duty  
(3.961/4.008=0.988) Scaling Factor=1.012



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

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

BT duty  
(2.89/3.75=0.771) Scaling Factor=1.297



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

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

## 1.4 Test Environment

Ambient Temperature:  $22\pm 2^{\circ}\text{C}$

Tissue Simulating Liquid:  $22\pm 2^{\circ}\text{C}$

## 1.5 Operation Description

1. An initial test configuration is determined for OFDM transmission modes according to the channel bandwidth, modulation and data rate combination(s) with the highest maximum output power specified for production units in each standalone and aggregated frequency band.
2. SAR is measured using the highest measured maximum output power channel. When the reported SAR of the initial test configuration is  $> 0.8\text{ W/kg}$ , SAR measurement is required for the subsequent next highest measured output power channel(s) in the initial test configuration until the reported SAR is  $\leq 1.2\text{ W/kg}$  or all required channels are tested.
3. Since the highest reported SAR for the initial test configuration is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is  $\leq 1.2\text{ W/kg}$ , SAR is not required for subsequent test configuration.
4. Per 201904 TCBC workshops, general principles of FCC KDB Publication 248227 D01 can be applied to determine the SAR Initial Test Configurations and test reduction for 802.11ax SAR testing.
5. In applying the test guidance, the IEEE 802.11 mode with the maximum output power (out of all modes) should be considered for testing. For modes with the same maximum output power, the guidance from section 5.3.2 a) of FCC KDB Publication 248227 D01 should be applied, with 802.11ax being considered as the highest 802.11 mode for the appropriate frequency bands
6. According to KDB865664 D01, SAR measurement variability must be assessed for each frequency band. When the original highest measured SAR is  $\geq 0.8\text{ W/kg}$ , repeated that measurement once. Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is  $> 1.20$  or when the original or repeated measurement is  $\geq 1.45\text{ W/kg}$  ( $\sim 10\%$  from the 1-g SAR limit)
7. WIFI 6E of the device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools.
8. Per October 2020 & April 2021 TCB Workshop Interim procedures and FCC guidance, start instead with a minimum of 5 test channels across the full band, then adapt and apply conducted power and SAR test reduction procedures of KDB Pub. 248227 v02r02.
9. WIFI 6E SAR is measured by using 6-7GHz parameters per IEC/IEEE62209-1528:2020 and report also estimated absorbed PD (for reference purposes only, not specifically for compliance).

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

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

10. For the highest SAR test configurations also measure incident PD (total) using mmW near-field probe and total-field/power-density reconstruction method.
11. The PD test was performed with a 2 mm separation between probe sensor and EUT surface.
12. According to October 2020 TCB Workshop Interim procedures, power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty > 30%. Total expanded uncertainty of 2.67 dB (85%) was used to determine the psPD measurement scaling factor.

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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

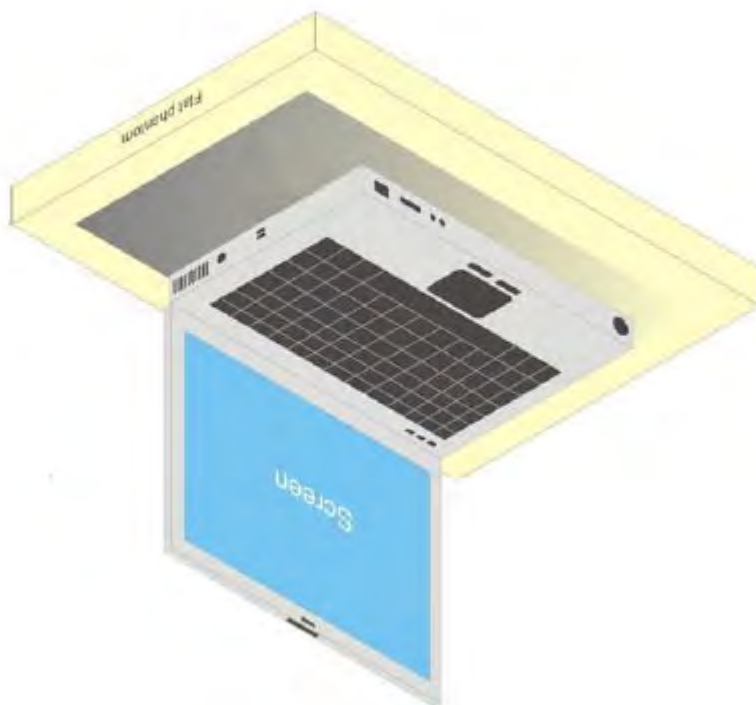
f (886-2) 2298-0488

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

Member of SGS Group

## 1.6 EUT Testing Position

For laptop PC, according to KDB 616217 D04, SAR evaluation is required for the bottom surface of the keyboard. This EUT was tested in the base of EUT directly against the flat phantom. The required minimum test separation distance for incorporating transmitters and antennas into laptop computer display is determined with the display screen opened at an angle of 90° to the keyboard compartment.



**Illustration for Laptop Setup**

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

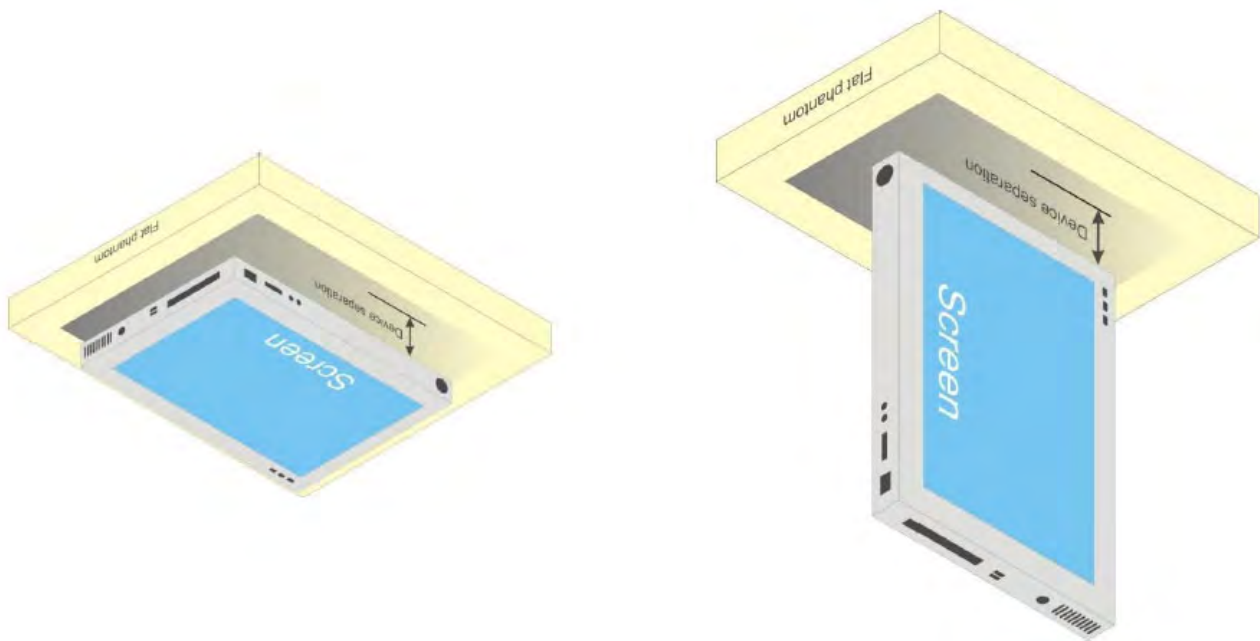
t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

For full-size tablet, according to KDB 616217 D04, SAR evaluation is required for back surface and edges of the devices. The back surface and edges of the tablet are tested with the tablet touching the phantom. Exposures from antennas through the front surface of the display section of a tablet are generally limited to the user's hands. Exposures to hands for typical consumer transmitters used in tablets are not expected to exceed the extremity SAR limit; therefore, SAR evaluation for the front surface of tablet display screens are generally not necessary. When voice mode is supported on a tablet and it is limited to speaker mode or headset operations only, additional SAR testing for this type of voice use is not required.



**Illustration for Tablet Setup**

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

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

## 1.7 Evaluation Procedures

The entire evaluation of the spatial peak values is performed within the Post-processing engine (SEMCAD). The system always gives the maximum values for the 1 g and 10 g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:

1. The extraction of the measured data (grid and values) from the Zoom Scan.
2. The calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters).
3. The generation of a high-resolution mesh within the measured volume.
4. The interpolation of all measured values from the measurement grid to the high-resolution grid.
5. The extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface.
6. The calculation of the averaged SAR within masses of 1g and 10g.

The probe is calibrated at the center of the dipole sensors that is located 1 to 2.7mm away from the probe tip. During measurements, the probe stops shortly above the phantom surface, depending on the probe and the surface detecting system. Both distances are included as parameters in the probe configuration file. The software always knows exactly how far away the measured point is from the surface. As the probe cannot directly measure at the surface, the values between the deepest measured point and the surface must be extrapolated. The angle between the probe axis and the surface normal line is less than 30 degree.

In the Area Scan, the gradient of the interpolation function is evaluated to find all the extreme of the SAR distribution. The uncertainty on the locations of the extreme is less than 1/20 of the grid size. Only local maximum within -2 dB of the global maximum are searched and passed for the Cube Scan measurement. In the Cube Scan, the interpolation function is used to extrapolate the Peak SAR from the lowest measurement points to the inner phantom surface (the extrapolation distance). The uncertainty increases with the extrapolation distance. To keep the uncertainty within 1% for the 1 g and 10 g cubes, the extrapolation distance should not be larger than 5mm.

The maximum search is automatically performed after each area scan measurement. It is based on splines in two or three dimensions. The procedure can find the maximum for most SAR distributions even with relatively large grid spacing. After the area scanning measurement, the probe is automatically moved to a position at the interpolated maximum. The following scan can directly use this position for reference, e.g., for a finer resolution grid or the cube evaluations. The 1g and 10g peak evaluations are only available for the predefined cube 7x7x7 scans.

The routines are verified and optimized for the grid dimensions used in these cube measurements. The measured volume of 30x30x30mm contains about 30g of tissue. The first procedure is an extrapolation (incl. Boundary correction) to get the points between the lowest measured plane and the surface. The next step uses 3D interpolation to get all points within the measured volume. In the last step, a 1g cube is placed numerically into the volume and its averaged SAR is calculated. This cube is

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

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

the moved around until the highest averaged SAR is found.

If the highest SAR is found at the edge of the measured volume, the system will issue a warning: higher SAR values might be found outside of the measured volume. In that case the cube measurement can be repeated, using the new interpolated maximum as the center.

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 1.8 Probe Calibration Procedures

For the calibration of E-field probes in lossy liquids, an electric field with an accurately known field strength must be produced within the measured liquid. For standardization purposes it would be desirable if all measurements which are necessary to assess the correct field strength would be traceable to standardized measurement procedures. In the following two different calibration techniques are summarized:

### 1.8.1 Transfer Calibration with Temperature Probes

In lossy liquids the specific absorption rate (SAR) is related both to the electric field ( $E$ ) and the temperature gradient ( $\delta T / \delta t$ ) in the liquid.

$$SAR = C \frac{\delta T}{\delta t},$$

Whereby  $\sigma$  is the conductivity,  $\rho$  the density and  $c$  the heat capacity of the liquid.

Hence, the electric field in lossy liquid can be measured indirectly by measuring the temperature gradient in the liquid. Non-disturbing temperature probes (optical probes or thermistor probes with resistive lines) with high spatial resolution (<1-2 mm) and fast reaction time (<1 s) are available and can be easily calibrated with high precision [1]. The setup and the exciting source have no influence on the calibration; only the relative positioning uncertainties of the standard temperature probe and the E-field probe to be calibrated must be considered. However, several problems limit the available accuracy of probe calibrations with temperature probes:

1. The temperature gradient is not directly measurable but must be evaluated from temperature measurements at different time steps. Special precaution is necessary to avoid measurement errors caused by temperature gradients due to energy equalizing effects or convection currents in the liquid. Such effects cannot be completely avoided, as the measured field itself destroys the thermal equilibrium in the liquid. With a careful setup these errors can be kept small.
2. The measured volume around the temperature probe is not well defined. It is

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

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

difficult to calculate the energy transfer from a surrounding gradient temperature field into the probe. These effects must be considered, since temperature probes are calibrated in liquid with homogeneous temperatures. There is no traceable standard for temperature rise measurements.

3. The calibration depends on the assessment of the specific density, the heat capacity and the conductivity of the medium. While the specific density and heat capacity can be measured accurately with standardized procedures ( $\sim 2\%$  for  $c$ ; much better for  $\rho$ ), there is no standard for the measurement of the conductivity. Depending on the method and liquid, the error can well exceed  $\pm 5\%$ .
4. Temperature rise measurements are not very sensitive and therefore are often performed at a higher power level than the E-field measurements. The nonlinearities in the system (e.g., power measurements, different components, etc.) must be considered.

Considering these problems, the possible accuracy of the calibration of E-field probes with temperature gradient measurements in a carefully designed setup is about  $\pm 10\%$  (RSS) [2]. Recently, a setup which is a combination of the waveguide techniques and the thermal measurements was presented in [3]. The estimated uncertainty of the setup is  $\pm 5\%$  (RSS) when the same liquid is used for the calibration and for actual measurements and  $\pm 7-9\%$  (RSS) when not, which is in good agreement with the estimates given in [2].

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

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

### 1.8.2 Calibration with Analytical Fields

In this method a technical setup is used in which the field can be calculated analytically from measurements of other physical magnitudes (e.g., input power). This corresponds to the standard field method for probe calibration in air; however, there is no standard defined for fields in lossy liquids.

When using calculated fields in lossy liquids for probe calibration, several points must be considered in the assessment of the uncertainty:

1. The setup must enable accurate determination of the incident power.
2. The accuracy of the calculated field strength will depend on the assessment of the dielectric parameters of the liquid.
3. Due to the small wavelength in liquids with high permittivity, even small setups might be above the resonant cutoff frequencies. The field distribution in the setup must be carefully checked for conformity with the theoretical field distribution.

### References

- (1) N. Kuster, Q. Balzano, and J.C. Lin, Eds., *Mobile Communications Safety*, Chapman & Hall, London, 1997.
- (2) K. Meier, M. Burkhardt, T. Schmid, and N. Kuster, "Broadband calibration of E-field probes in lossy media", *IEEE Transactions on Microwave Theory and Techniques*, vol. 44, no. 10, pp. 1954-1962, Oct. 1996.
- (3) K. Jokela, P. Hyysalo, and L. Puranen, "Calibration of specific absorption rate (SAR) probes in waveguide at 900 MHz", *IEEE Transactions on Instrumentation and Measurements*, vol. 47, no. 2, pp. 432-438, Apr. 1998.

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

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

### 1.9 Operating modes validation by power measurement

The device is a convertible laptop computer with predefined single fixed power to each device modes.

For the operating modes validation, the measured conducted output power is monitored qualitatively to identify the triggering characteristics and recorded quantitatively.

| DUT operating mode | Lid Angle description                                | WLAN TX state       |
|--------------------|--|---------------------|
| Lid-close          | $0^{\circ} \leq \text{Lid angle} < 30^{\circ}$       | No TX transmission  |
| Notebook           | $30^{\circ} \leq \text{Lid angle} < 180^{\circ}$     | Full Power          |
| Tablet             | $180^{\circ} \leq \text{Lid angle} \leq 360^{\circ}$ | Reduced Power Level |

#### 1.6.1 Results and conclusion

The measured output power versus lid angle is tabulated in the following table based on the guidance from 2019-11 TCB workshop, and the triggering verification complies with the device mode / power level declared by the manufacturer.

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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group



## Operating mode validation by power measurement

| Antenna | Operation mode | Lid angle | 802.11b | 802.11a 5.2G | 802.11a 5.3G | 802.11n(40M) 5.3G | 802.11ac(80M) 5.6G | 802.11n(40M) 5.8G | 802.11ax(160M) 6.2G | 802.11ax(160M) 6.5G | 802.11ax(160M) 6.7G | 802.11ax(160M) 7.0G |
|---------|----------------|-----------|---------|--------------|--------------|-------------------|--------------------|-------------------|---------------------|---------------------|---------------------|---------------------|
| Main    | Lid close      | 0°        | n/a     | n/a          | n/a          | n/a               | n/a                | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|         |                | 10°       | n/a     | n/a          | n/a          | n/a               | n/a                | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|         | Laptop         | 20°       | n/a     | n/a          | n/a          | n/a               | n/a                | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|         |                | 30°       | 20.98   | 20.94        | 20.90        | 20.46             | 20.93              | 20.96             | 13.46               | 13.44               | 13.50               | 13.47               |
|         |                | 25°       | n/a     | n/a          | n/a          | n/a               | n/a                | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|         |                | 26°       | n/a     | n/a          | n/a          | n/a               | n/a                | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|         |                | 27°       | n/a     | n/a          | n/a          | n/a               | n/a                | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|         |                | 28°       | n/a     | n/a          | n/a          | n/a               | n/a                | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|         |                | 29°       | n/a     | n/a          | n/a          | n/a               | n/a                | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|         |                | 30°       | 20.91   | 21.00        | 20.96        | 20.44             | 20.94              | 20.94             | 13.49               | 13.40               | 13.46               | 13.43               |
|         |                | 31°       | 20.97   | 20.97        | 20.96        | 20.42             | 20.93              | 20.98             | 13.41               | 13.46               | 13.48               | 13.47               |
|         |                | 32°       | 20.98   | 20.94        | 20.92        | 20.48             | 20.95              | 20.96             | 13.46               | 13.45               | 13.43               | 13.49               |
|         | 33°            | 20.99     | 20.92   | 20.99        | 20.48        | 20.97             | 20.98              | 13.41             | 13.47               | 13.46               | 13.43               |                     |
|         | 34°            | 20.95     | 20.94   | 21.00        | 20.41        | 20.93             | 20.93              | 13.49             | 13.42               | 13.49               | 13.41               |                     |
|         | 35°            | 21.00     | 20.97   | 20.92        | 20.40        | 20.96             | 20.91              | 13.44             | 13.41               | 13.44               | 13.48               |                     |
|         | 36°            | 20.99     | 20.90   | 20.98        | 20.48        | 20.92             | 21.00              | 13.48             | 13.42               | 13.49               | 13.42               |                     |
|         | 37°            | 21.00     | 20.95   | 20.92        | 20.42        | 20.93             | 20.95              | 13.44             | 13.47               | 13.47               | 13.49               |                     |
|         | 38°            | 20.92     | 20.95   | 20.96        | 20.40        | 20.95             | 20.95              | 13.41             | 13.45               | 13.42               | 13.44               |                     |
|         | 39°            | 20.90     | 20.99   | 20.92        | 20.48        | 20.97             | 20.95              | 13.49             | 13.46               | 13.48               | 13.45               |                     |
|         | 40°            | 20.94     | 20.90   | 20.93        | 20.41        | 20.97             | 20.98              | 13.49             | 13.48               | 13.41               | 13.46               |                     |
|         | 50°            | 20.99     | 20.91   | 20.91        | 20.45        | 20.91             | 20.90              | 13.42             | 13.47               | 13.42               | 13.41               |                     |
|         | 60°            | 20.98     | 20.98   | 20.91        | 20.48        | 20.91             | 20.90              | 13.48             | 13.43               | 13.42               | 13.40               |                     |
|         | 70°            | 20.91     | 20.92   | 20.90        | 20.43        | 20.96             | 20.97              | 13.45             | 13.43               | 13.42               | 13.44               |                     |
|         | 80°            | 20.97     | 20.97   | 20.96        | 20.48        | 20.91             | 20.94              | 13.40             | 13.41               | 13.43               | 13.41               |                     |
|         | 90°            | 20.99     | 20.91   | 20.91        | 20.44        | 20.98             | 20.99              | 13.46             | 13.41               | 13.44               | 13.47               |                     |
|         | 100°           | 20.99     | 20.94   | 20.90        | 20.40        | 20.93             | 20.93              | 13.50             | 13.46               | 13.49               | 13.40               |                     |
|         | 110°           | 20.95     | 20.95   | 21.00        | 20.43        | 20.92             | 20.96              | 13.40             | 13.49               | 13.40               | 13.40               |                     |
|         | 120°           | 20.99     | 20.94   | 20.99        | 20.40        | 20.98             | 21.00              | 13.40             | 13.48               | 13.41               | 13.48               |                     |
|         | 130°           | 21.00     | 20.99   | 20.91        | 20.42        | 20.98             | 20.96              | 13.47             | 13.45               | 13.42               | 13.45               |                     |
|         | 140°           | 20.92     | 21.00   | 20.99        | 20.47        | 20.98             | 20.94              | 13.43             | 13.43               | 13.40               | 13.47               |                     |
|         | 150°           | 20.99     | 20.93   | 20.94        | 20.41        | 20.92             | 20.98              | 13.45             | 13.45               | 13.43               | 13.43               |                     |
|         | 160°           | 20.91     | 20.98   | 20.93        | 20.40        | 20.94             | 20.98              | 13.45             | 13.48               | 13.49               | 13.41               |                     |
|         | 170°           | 20.90     | 20.90   | 20.93        | 20.40        | 20.99             | 20.96              | 13.42             | 13.41               | 13.45               | 13.42               |                     |
|         | Tablet         | 180°      | 20.94   | 20.99        | 19.92        | 19.99             | 20.99              | 20.97             | 13.41               | 13.47               | 13.42               | 13.46               |
|         |                | 175°      | 20.95   | 21.00        | 20.93        | 20.45             | 20.97              | 20.93             | 13.48               | 13.45               | 13.42               | 13.47               |
|         | Laptop         | 176°      | 21.00   | 20.92        | 20.91        | 20.44             | 20.93              | 20.93             | 13.48               | 13.49               | 13.45               | 13.46               |
|         |                | 177°      | 20.90   | 20.99        | 20.98        | 20.49             | 20.98              | 20.92             | 13.40               | 13.43               | 13.47               | 13.50               |
|         |                | 178°      | 21.00   | 20.98        | 20.94        | 20.48             | 20.98              | 20.98             | 13.45               | 13.42               | 13.45               | 13.44               |
|         |                | 179°      | 20.96   | 20.97        | 20.99        | 20.45             | 20.93              | 21.00             | 13.43               | 13.50               | 13.46               | 13.48               |
|         |                | 180°      | 20.90   | 20.90        | 19.90        | 19.96             | 20.94              | 20.90             | 13.42               | 13.50               | 13.48               | 13.41               |
|         |                | 181°      | 20.97   | 20.96        | 19.99        | 19.99             | 20.92              | 20.95             | 13.47               | 13.50               | 13.42               | 13.45               |
|         |                | 182°      | 20.94   | 20.94        | 19.91        | 19.92             | 20.97              | 20.98             | 13.44               | 13.50               | 13.43               | 13.49               |
|         |                | 183°      | 20.91   | 20.97        | 19.93        | 20.00             | 20.96              | 20.90             | 13.40               | 13.56               | 13.50               | 13.41               |
|         |                | 184°      | 20.93   | 20.96        | 19.90        | 19.95             | 20.93              | 20.99             | 13.42               | 13.42               | 13.46               | 13.40               |
|         |                | 185°      | 20.99   | 20.97        | 19.91        | 19.94             | 20.92              | 20.98             | 13.46               | 13.48               | 13.50               | 13.47               |
|         | 186°           | 20.94     | 20.99   | 19.97        | 19.91        | 20.95             | 20.90              | 13.50             | 13.49               | 13.46               | 13.47               |                     |
|         | 187°           | 20.94     | 20.98   | 20.00        | 19.93        | 20.95             | 20.91              | 13.49             | 13.42               | 13.41               | 13.50               |                     |
|         | 188°           | 20.99     | 20.92   | 19.91        | 19.94        | 20.99             | 20.90              | 13.50             | 13.45               | 13.40               | 13.50               |                     |
|         | 189°           | 20.96     | 21.00   | 19.97        | 19.90        | 21.00             | 20.98              | 13.45             | 13.41               | 13.46               | 13.50               |                     |
|         | 190°           | 20.99     | 21.00   | 19.97        | 19.93        | 20.90             | 20.98              | 13.42             | 13.44               | 13.50               | 13.48               |                     |
|         | 200°           | 20.93     | 20.99   | 19.94        | 19.95        | 20.92             | 20.96              | 13.42             | 13.47               | 13.47               | 13.44               |                     |
|         | 210°           | 20.98     | 20.99   | 19.98        | 19.97        | 20.99             | 20.97              | 13.45             | 13.50               | 13.41               | 13.41               |                     |
|         | Tablet         | 220°      | 20.98   | 20.91        | 19.95        | 19.94             | 20.92              | 20.90             | 13.47               | 13.40               | 13.48               | 13.48               |
|         |                | 230°      | 20.91   | 20.92        | 19.93        | 19.92             | 20.97              | 20.93             | 13.41               | 13.41               | 13.44               | 13.46               |
|         |                | 240°      | 20.92   | 20.93        | 19.93        | 20.00             | 20.91              | 20.99             | 13.44               | 13.49               | 13.43               | 13.50               |
|         |                | 250°      | 20.94   | 20.91        | 19.98        | 19.97             | 21.00              | 20.96             | 13.41               | 13.49               | 13.49               | 13.40               |
|         |                | 260°      | 20.99   | 20.99        | 20.00        | 19.92             | 20.95              | 21.00             | 13.42               | 13.41               | 13.45               | 13.44               |
|         |                | 270°      | 20.92   | 20.92        | 19.94        | 19.92             | 20.98              | 20.90             | 13.48               | 13.47               | 13.43               | 13.48               |
|         |                | 280°      | 20.92   | 20.90        | 19.94        | 19.98             | 20.97              | 20.96             | 13.43               | 13.46               | 13.50               | 13.41               |
|         |                | 290°      | 20.95   | 20.99        | 19.99        | 19.96             | 20.99              | 20.90             | 13.50               | 13.42               | 13.49               | 13.41               |
|         |                | 300°      | 20.96   | 20.91        | 19.93        | 20.00             | 21.00              | 20.99             | 13.46               | 13.50               | 13.42               | 13.44               |
|         |                | 310°      | 20.95   | 20.98        | 19.97        | 19.99             | 20.93              | 20.94             | 13.44               | 13.44               | 13.47               | 13.44               |
|         | 320°           | 20.95     | 20.93   | 19.90        | 19.90        | 20.96             | 20.94              | 13.49             | 13.48               | 13.45               | 13.49               |                     |
|         | 330°           | 20.91     | 20.94   | 19.97        | 19.92        | 20.98             | 20.98              | 13.46             | 13.49               | 13.50               | 13.49               |                     |
|         | 340°           | 20.93     | 20.93   | 19.93        | 19.95        | 20.97             | 20.98              | 13.47             | 13.41               | 13.40               | 13.47               |                     |
|         | 350°           | 21.00     | 20.92   | 19.93        | 19.98        | 20.93             | 20.98              | 13.40             | 13.43               | 13.43               | 13.45               |                     |
|         | 360°           | 20.98     | 20.95   | 19.97        | 19.93        | 20.99             | 20.92              | 13.40             | 13.47               | 13.50               | 13.43               |                     |
|         | 350°           | 20.94     | 20.92   | 19.92        | 20.00        | 20.96             | 20.98              | 13.48             | 13.47               | 13.48               | 13.48               |                     |
|         | 340°           | 20.97     | 20.98   | 19.90        | 19.95        | 20.95             | 20.98              | 13.41             | 13.40               | 13.43               | 13.41               |                     |
|         | 330°           | 20.96     | 20.90   | 19.92        | 19.98        | 20.92             | 20.96              | 13.46             | 13.46               | 13.45               | 13.47               |                     |
|         | 320°           | 21.00     | 20.98   | 19.98        | 19.91        | 20.92             | 20.93              | 13.49             | 13.42               | 13.45               | 13.43               |                     |
|         | 310°           | 20.94     | 20.98   | 19.97        | 19.95        | 21.00             | 20.92              | 13.49             | 13.41               | 13.44               | 13.45               |                     |
|         | 300°           | 20.90     | 20.94   | 19.93        | 19.93        | 20.91             | 21.00              | 13.48             | 13.47               | 13.43               | 13.49               |                     |
|         | 290°           | 20.96     | 20.94   | 19.99        | 19.96        | 20.94             | 20.91              | 13.42             | 13.49               | 13.49               | 13.45               |                     |
|         | 280°           | 21.00     | 20.95   | 19.99        | 19.92        | 20.96             | 20.90              | 13.50             | 13.44               | 13.46               | 13.48               |                     |
|         | 270°           | 20.95     | 20.92   | 19.96        | 19.96        | 20.98             | 20.98              | 13.45             | 13.41               | 13.47               | 13.41               |                     |
|         | 260°           | 20.92     | 20.90   | 19.92        | 19.90        | 20.98             | 20.90              | 13.47             | 13.42               | 13.44               | 13.42               |                     |
|         | 250°           | 20.97     | 20.97   | 19.97        | 19.95        | 20.96             | 20.95              | 13.41             | 13.49               | 13.42               | 13.40               |                     |
|         | 240°           | 20.92     | 20.91   | 20.00        | 19.96        | 20.97             | 20.93              | 13.42             | 13.42               | 13.47               | 13.41               |                     |
|         | 230°           | 20.96     | 20.94   | 19.94        | 19.99        | 20.96             | 20.98              | 13.42             | 13.43               | 13.44               | 13.49               |                     |
|         | 220°           | 20.98     | 20.90   | 19.90        | 19.94        | 20.94             | 20.98              | 13.40             | 13.43               | 13.46               | 13.48               |                     |
|         | 210°           | 20.90     | 20.95   | 19.93        | 19.94        | 20.94             | 20.95              | 13.48             | 13.40               | 13.47               | 13.45               |                     |
|         | 200°           | 20.98     | 20.95   | 19.97        | 19.90        | 20.95             | 20.94              | 13.48             | 13.44               | 13.50               | 13.47               |                     |
|         | 190°           | 20.96     | 20.97   | 20.00        | 19.95        | 20.95             | 20.95              | 13.44             | 13.50               | 13.50               | 13.50               |                     |
|         | 180°           | 20.93     | 20.99   | 19.93        | 19.90        | 20.91             | 20.90              | 13.45             | 13.43               | 13.41               | 13.49               |                     |
|         | Laptop         | 170°      | 20.99   | 20.94        | 20.90        | 20.40             | 20.99              | 20.99             | 13.42               | 13.42               | 13.48               | 13.43               |
|         |                | 175°      | 20.98   | 20.98        | 20.92        | 20.43             | 20.96              | 20.98             | 13.43               | 13.48               | 13.48               | 13.41               |
|         |                | 180°      | 20.95   | 20.99        | 20.00        | 19.94             | 20.90              | 20.94             | 13.48               | 13.50               | 13.44               | 13.41               |
|         |                | 179°      | 20.91   | 20.93        | 20.94        | 20.44             | 20.96              | 20.91             | 13.48               | 13.42               | 13.50               | 13.47               |
|         |                | 178°      | 20.94   | 20.99        | 20.92        | 20.40             | 20.98              | 20.98             | 13.42               | 13.43               | 13.41               | 13.50               |
|         |                | 177°      | 20.95   | 20.95        | 20.98        | 20.48             | 20.94              | 20.93             | 13.43               | 13.45               | 13.49               | 13.41               |
|         |                | 176°      | 20.99   | 20.91        | 20.96        | 20.45             | 20.98              | 20.99             | 13.41               | 13.43               | 13.40               | 13.48               |
|         |                | 175°      | 20.97   | 20.99        | 20.97        | 20.42             | 20.97              | 20.97             | 13.49               | 13.46               | 13.42               | 13.47               |
|         |                | 174°      | 20.94   | 20.99        | 20.99        | 20.45             | 20.96              | 20.94             | 13.44               | 13.42               | 13.45               | 13.46               |
|         |                | 173°      | 20.97   | 20.99        | 20.90        | 20.43             | 21.00              | 20.97             | 13.45               | 13.42               | 13.49               | 13.48               |
|         | 172°           | 20.98     | 20.96   | 21.00        | 20.42        | 20.97             | 20.99              | 13.44             | 13.43               | 13.48               | 13.46               |                     |
|         | 171°           | 20.99     | 20.92   | 20.90        | 20.49        | 20.93             | 20.99              | 13.49             | 13.45               | 13.42               | 13.43               |                     |
|         | 170°           | 20.98     | 20.94   | 20.92        | 20.48        | 20.95             | 20.98              | 13.43             | 13.50               | 13.43               | 13.43               |                     |
|         | Laptop         | 160°      | 20.95   | 20.91        | 20.99        | 20.45             | 20.91              | 20.91             | 13.45               | 13.44               | 13.47               | 13.42               |
|         |                | 150°      | 20.93   | 20.98        | 20.90        | 20.44             | 20.90              | 20.91             | 13.45               | 13.45               | 13.49               | 13.43               |
| 140°    |                | 20.93     | 20.97   | 20.97        | 20.41        | 20.97             | 21.00              | 13.41             | 13.49               | 13.40               | 13.45               |                     |
| 130°    |                | 20.92     | 20.91   | 20.98        | 20.41        | 20.96             | 21.00              | 13.45             | 13.46               | 13.47               | 13.46               |                     |
| 120°    |                | 20.91     | 20.98   | 20.98        | 20.49        | 20.93             | 20.93              | 13.44             | 13.50               | 13.45               | 13.44               |                     |
| 110°    |                | 20.95     | 20.91   | 20.95        | 20.44        | 20.98             | 20.92              | 13.41             | 13.48               | 13.4                |                     |                     |



| Antenna   | Operation mode | Lid angle | 802.11b | 802.11n(40M) 5.2G | 802.11ac(80M) 5.2G | 802.11n(40M) 5.3G | 802.11ac(80M) 5.3G | 802.11n(40M) 5.6G | 802.11n(40M) 5.8G | 802.11ac(160M) 6.2G | 802.11ac(160M) 6.5G | 802.11ac(160M) 6.7G | 802.11ac(160M) 7.0G |
|-----------|----------------|-----------|---------|-------------------|--------------------|-------------------|--------------------|-------------------|-------------------|---------------------|---------------------|---------------------|---------------------|
| Lid close | Lid close      | 0°        | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 10°       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 20°       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 30°       | 20.96   | 20.93             | 18.94              | 20.91             | 18.46              | 20.96             | 20.94             | 13.47               | 13.45               | 13.48               | 13.49               |
|           |                | 35°       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 40°       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 45°       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 50°       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 55°       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 60°       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 65°       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 70°       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 75°       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 80°       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 85°       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 90°       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 95°       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 100°      | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 105°      | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 110°      | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 115°      | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 120°      | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 125°      | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 130°      | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 135°      | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 140°      | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 145°      | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 150°      | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 155°      | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
|           |                | 160°      | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 | n/a                 | n/a                 |
| 165°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 170°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 175°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 180°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 185°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 190°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 195°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 200°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 205°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 210°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 215°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 220°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 225°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 230°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 235°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 240°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 245°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 250°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 255°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 260°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 265°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 270°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 275°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 280°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 285°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 290°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 295°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 300°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 305°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 310°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 315°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 320°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 325°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 330°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 335°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 340°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 345°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 350°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 355°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 360°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 365°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 370°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 375°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 380°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 385°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 390°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 395°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 400°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 405°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 410°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 415°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 420°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 425°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 430°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 435°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 440°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 445°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 450°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 455°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 460°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 465°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 470°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 475°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 480°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 485°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 490°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 495°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 500°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 505°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 510°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 515°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 520°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 525°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 530°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 535°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 540°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 545°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 550°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 555°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 560°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 565°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 570°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 575°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 580°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 585°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 590°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 595°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 600°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 605°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 610°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 615°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 620°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 625°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 630°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 635°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 640°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 645°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 650°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 655°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 660°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 665°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 670°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 675°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 680°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 685°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 690°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 695°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 700°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 705°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 710°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 715°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 720°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 725°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 730°      | n/a            | n/a       | n/a     | n/a               | n/a                | n/a               | n/a                | n/a               | n/a               | n/a                 | n/a                 |                     |                     |
| 735°      | n/a            | n/a       | n/a     | n/a               | n/a                |                   |                    |                   |                   |                     |                     |                     |                     |

## 1.10 SAR System Description and Setup

The DASY system used for performing compliance tests consists of the following items:

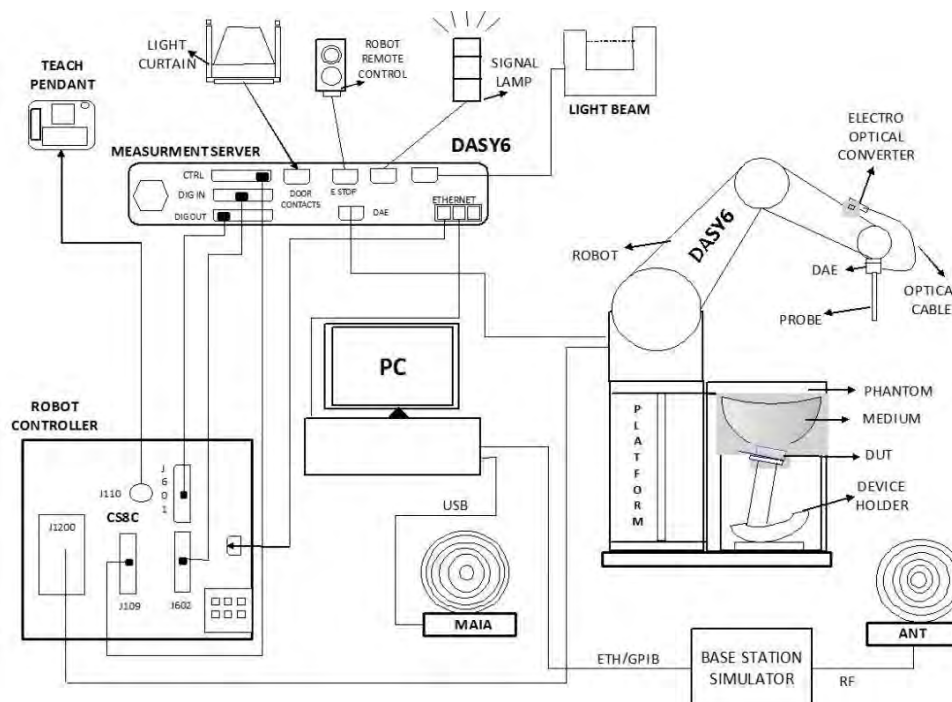


Fig. a A block diagram of the SAR measurement system

- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such

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

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

as signal filtering, control of the robot operation and fast movement interrupts.

- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Windows 10 and the DASY6 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

### 1.10.1 Power density measurement system

#### DASY6 system

Power density measurements for mmWave frequencies were performed using SPEAG DASY6 with cDASY6 5G module. The DASY6 included a high precision robotics system (Staubli), robot controller, desktop computer, near-field probe, probe alignment sensor, and the 5G phantom cover.

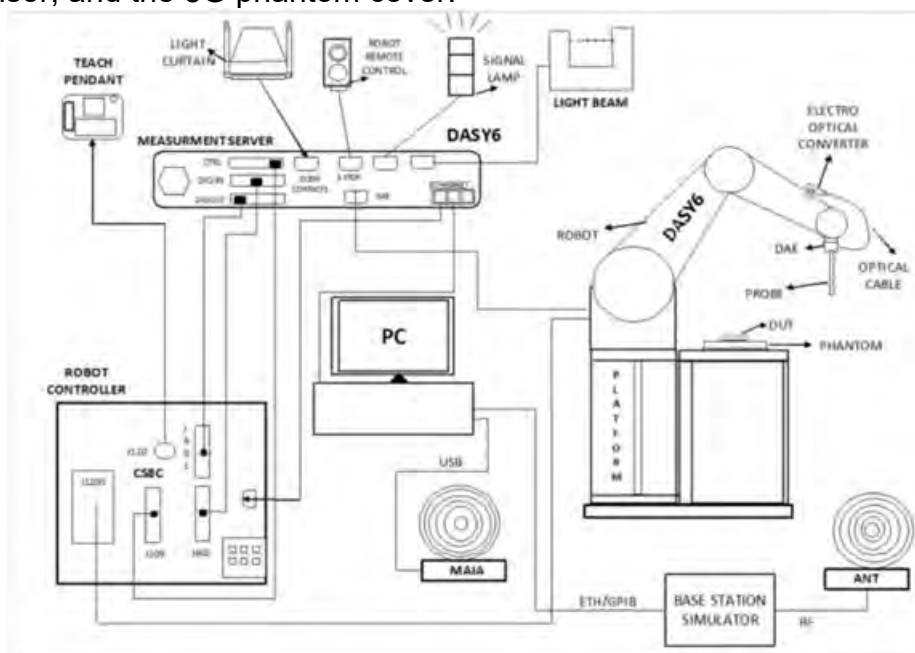


Fig-2.1 SPEAG DASY6 system

#### EUmmWVx probe

The EUmmWVx probe is based on the pseudo-vector probe design, which not only measures the field magnitude but also derives its polarization ellipse. The design entails two small 0.8mm dipole sensors mechanically protected by high-density foam, printed on both sides of a 0.9mm wide and 0.12mm thick glass substrate. The body of the probe is specifically constructed to minimize distortion by the scattered fields. The probe consist of two sensors with different angles (1 and 2) arranged in the same plane in the probe axis. Three or more measurements of the two sensors are taken for different probe rotational angles to derive the amplitude and polarization information. The probe design allows measurements at distances as small as 2mm from the sensors to the surface of the device under test (DUT). The typical sensor to probe tip distance is 1.5 mm. The exact distance is calibrated.

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

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

SGS Taiwan Ltd.

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

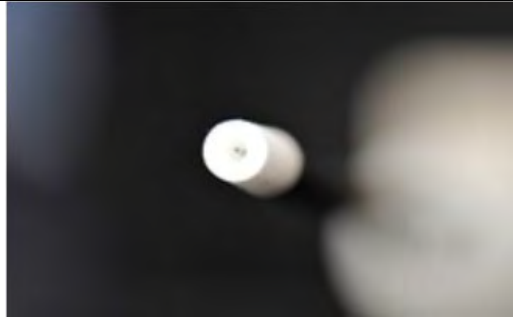
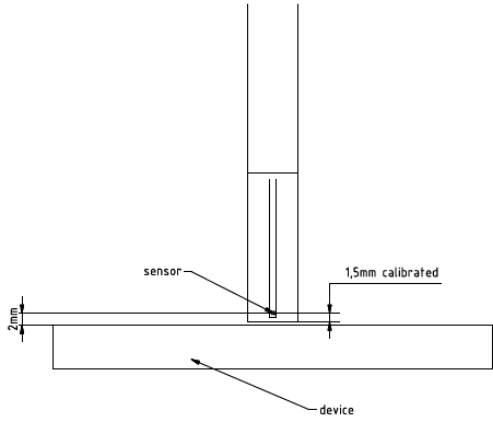
台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

|   |  |
|---|--|
|                        | <p>Two dipoles optimally arranged to obtain pseudo-vector information. Minimum 3 measurements/ point, 120° rotated around probe axis.</p> <p>Sensors (0.8mm length) printed on glass substrate protected by high density foam. Low perturbation of the measured field. Requires positioner which can do accurate probe rotation.</p> |
| <b>Frequency Range</b>  | 750 MHz – 110 GHz  |
| <b>Dynamic Range</b>  | < 20 V/m – 10,000 V/m with PRE-10 (min < 50 V/m - 3000 V/m)  |
| <b>Position Precision</b>   | < 0.2 mm (DASY6)   |
| <b>Dimensions</b>   | <p>Overall length: 337 mm (tip: 20 mm)</p> <p>Tip diameter: encapsulation 8 mm (internal sensor &lt; 1mm)</p> <p>Distance from probe tip to dipole centers: &lt; 2 mm. Sensor displacement to probe's calibration point: &lt; 0.3 mm</p>   |
| <b>Applications</b>  | <p>E-field measurements of 5G devices and other mm-wave transmitters operating above 10GHz in &lt; 2 mm distance from device (free-space). Power density, H-field and far-field analysis using total field reconstruction (cDASY6 5G module required)</p>  |
| <b>Compatibility</b>  | cDASY6 + 5G-Module SW1.0 and higher  |

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

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

### 1.10.2 SAR System Performance Check Results

The microwave circuit arrangement for system verification is sketched in Fig. b. The daily system accuracy verification occurs within the flat section of the SAM phantom. A SAR measurement was performed to see if the measured SAR was within  $\pm 10\%$  (according to KDB865664D01) from the target SAR values.

These tests were done at 2450/5250/5600/5750/6500/7000 MHz. The tests were conducted on the same days as the measurement of the DUT. The obtained results from the system accuracy verification are displayed in the table 1. During the tests, the liquid depth above the ear reference points was above 15 cm in all the cases. It is seen that the system is operating within its specification, as the results are within acceptable tolerance of the reference values.

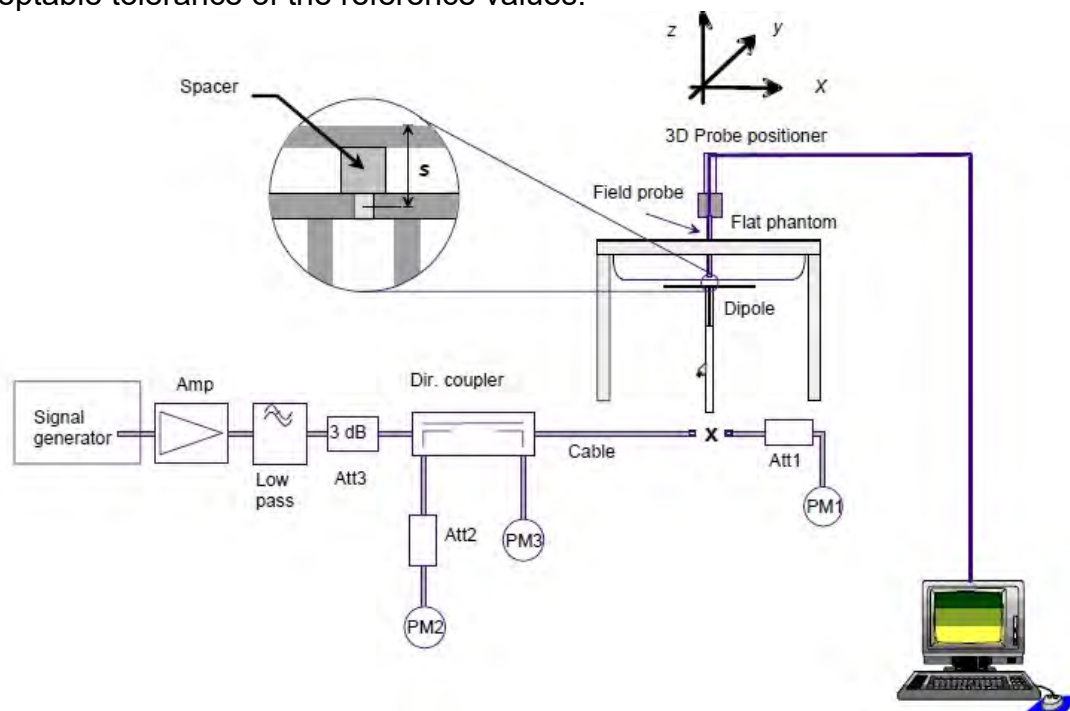


Fig. b The block diagram of system verification

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

| Validation Kit | S/N | Frequency (MHz) |      | 1W Target SAR-1g (mW/g) | pin=250mW Measured SAR-1g (mW/g) | Measured SAR-1g normalized to 1W (mW/g) | Deviation (%) | Measured Date |
|----------------|-----|-----------------|------|-------------------------|----------------------------------|---|---------------|---------------|
| D2450V2        | 727 | 2450            | Head | 53.9                    | 13.60                            | 54.4                                    | 0.93%         | Mar. 25, 2022 |

| Validation Kit | S/N  | Frequency (MHz) |      | 1W Target SAR-1g (mW/g) | Pin=100mW Measured SAR-1g (mW/g) | Measured SAR-1g normalized to 1W (mW/g) | Deviation (%) | Measured Date |
|----------------|------|-----------------|------|-------------------------|----------------------------------|---|---------------|---------------|
| D5GHzV2        | 1023 | 5250            | Head | 81                      | 8.05                             | 80.5                                    | -0.62%        | Mar. 26, 2022 |
|                |      | 5250            | Head | 81                      | 8.23                             | 82.3                                    | 1.60%         | Mar. 27, 2022 |
|                |      | 5600            | Head | 84.4                    | 8.52                             | 85.2                                    | 0.95%         | Mar. 28, 2022 |
|                |      | 5750            | Head | 81                      | 7.97                             | 79.7                                    | -1.60%        | Mar. 28, 2022 |
| D6.5GHzV2      | 1006 | 6500            | Head | 291                     | 30.80                            | 308                                     | 5.84%         | Mar. 23, 2022 |
| D7GHzV2        | 1007 | 7000            | Head | 275                     | 28.30                            | 283                                     | 2.91%         | Mar. 23, 2022 |

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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

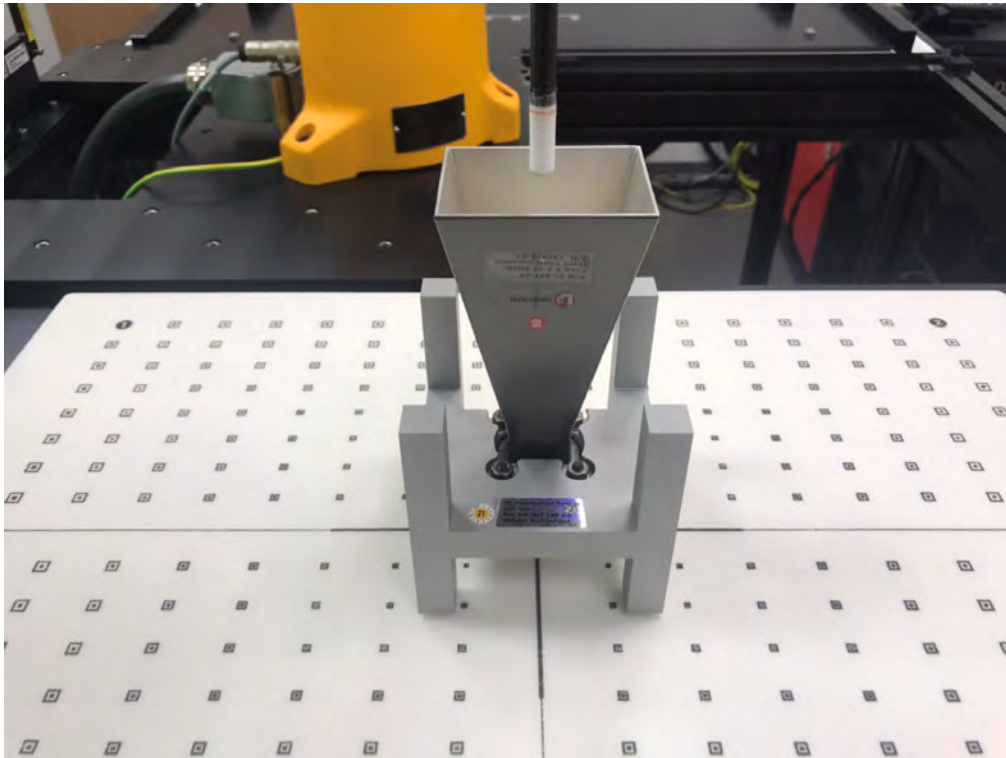
[www.sgs.com.tw](http://www.sgs.com.tw)

Member of SGS Group

## Power Density Test System Verification

The system was verified to be within  $\pm 0.66$  dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check.

The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provided by the manufacturer, per November 2017 TCBC Workshop Notes.



System Verification Setup Photo

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

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

## PD System Verification Results

The system was verified to be within  $\pm 0.66$  dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check. The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provided by the manufacturer, per November 2017 TCBC Workshop Notes.

| Frequency (GHz) | PD Verification Source | Probe S/N | DAE S/N | Distance (mm) | Prad (mW) | Measured 4cm <sup>2</sup> (W/m <sup>2</sup> ) | Target 4cm <sup>2</sup> (W/m <sup>2</sup> ) | Deviation (dB) | Date          |
|-----------------|------------------------|-----------|---------|---------------|-----------|---|---|----------------|---------------|
| 10G             | 10G                    | 9399      | 1665    | 10            | 86.1      | 51.9  | 51.7  | 0.02           | Mar. 24, 2022 |

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

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

### 1.10.3 SAR Tissue Verification

The dielectric properties for this Head-simulant fluid were measured by using the SPEAG Dielectric Assessment Kit (DAKS-3.5)

All dielectric parameters of tissue simulates were measured within 24 hours of SAR measurements. The measured conductivity and permittivity are all within  $\pm 5\%$  of the target values.

The depth of the tissue simulant in the flat section of the phantom was  $\geq 15 \text{ cm} \pm 5 \text{ mm}$  during all tests. (Fig. 2)

| Tissue Type | Measurement Date | Measured Frequency (MHz) | Target Dielectric Constant, $\epsilon_r$ | Target Conductivity, $\sigma$ (S/m) | Measured Dielectric Constant, $\epsilon_r$ | Measured Conductivity, $\sigma$ (S/m) | % dev $\epsilon_r$ | % dev $\sigma$ |
|-------------|------------------|--------------------------|--|-------------------------------------|--|---------------------------------------|--------------------|----------------|
| Head        | Mar, 25. 2022    | 2412                     | 39.268                                   | 1.766                               | 38.867                                     | 1.752                                 | -1.02%             | -0.81%         |
|             |                  | 2437                     | 39.223                                   | 1.788                               | 38.850                                     | 1.773                                 | -0.95%             | -0.86%         |
|             |                  | 2450                     | 39.200                                   | 1.800                               | 38.818                                     | 1.785                                 | -0.97%             | -0.83%         |
|             |                  | 2462                     | 39.185                                   | 1.813                               | 38.809                                     | 1.799                                 | -0.96%             | -0.78%         |
|             |                  | 2480                     | 39.162                                   | 1.833                               | 38.778                                     | 1.819                                 | -0.98%             | -0.75%         |
|             | Mar, 26. 2022    | 5200                     | 35.986                                   | 4.655                               | 35.568                                     | 4.611                                 | -1.16%             | -0.95%         |
|             |                  | 5210                     | 35.974                                   | 4.665                               | 35.550                                     | 4.623                                 | -1.18%             | -0.91%         |
|             |                  | 5230                     | 35.951                                   | 4.686                               | 35.524                                     | 4.641                                 | -1.19%             | -0.96%         |
|             |                  | 5250                     | 35.929                                   | 4.706                               | 35.483                                     | 4.663                                 | -1.24%             | -0.92%         |
|             | Mar, 27. 2022    | 5250                     | 35.929                                   | 4.706                               | 35.512                                     | 4.666                                 | -1.16%             | -0.86%         |
|             |                  | 5270                     | 35.906                                   | 4.727                               | 35.493                                     | 4.686                                 | -1.15%             | -0.86%         |
|             |                  | 5290                     | 35.883                                   | 4.747                               | 35.455                                     | 4.702                                 | -1.19%             | -0.95%         |
|             |                  | 5300                     | 35.871                                   | 4.758                               | 35.448                                     | 4.715                                 | -1.18%             | -0.89%         |
|             | Mar, 28. 2022    | 5600                     | 35.500                                   | 5.070                               | 35.060                                     | 5.027                                 | -1.24%             | -0.85%         |
|             |                  | 5610                     | 35.517                                   | 5.075                               | 35.002                                     | 5.028                                 | -1.45%             | -0.93%         |
|             |                  | 5690                     | 35.426                                   | 5.157                               | 34.994                                     | 5.112                                 | -1.22%             | -0.88%         |
|             |                  | 5750                     | 35.357                                   | 5.219                               | 34.940                                     | 5.172                                 | -1.18%             | -0.90%         |
|             |                  | 5755                     | 35.351                                   | 5.224                               | 34.934                                     | 5.174                                 | -1.18%             | -0.95%         |
|             |                  | 5775                     | 35.329                                   | 5.244                               | 34.898                                     | 5.195                                 | -1.22%             | -0.94%         |
|             | Mar, 23. 2022    | 5795                     | 35.306                                   | 5.265                               | 34.864                                     | 5.217                                 | -1.25%             | -0.91%         |
|             |                  | 6025                     | 35.070                                   | 5.510                               | 34.777                                     | 5.479                                 | -0.84%             | -0.55%         |
|             |                  | 6185                     | 34.878                                   | 5.698                               | 34.672                                     | 5.671                                 | -0.59%             | -0.48%         |
|             |                  | 6345                     | 34.686                                   | 5.887                               | 34.476                                     | 5.862                                 | -0.61%             | -0.43%         |
|             |                  | 6500                     | 34.500                                   | 6.070                               | 34.313                                     | 6.042                                 | -0.54%             | -0.46%         |
|             |                  | 6505                     | 34.494                                   | 6.076                               | 34.304                                     | 6.045                                 | -0.55%             | -0.51%         |
|             |                  | 6665                     | 34.302                                   | 6.261                               | 34.086                                     | 6.228                                 | -0.63%             | -0.53%         |
|             |                  | 6825                     | 34.110                                   | 6.447                               | 33.912                                     | 6.412                                 | -0.58%             | -0.54%         |
|             |                  | 6985                     | 33.918                                   | 6.633                               | 33.718                                     | 6.596                                 | -0.59%             | -0.55%         |
|             |                  | 7000                     | 33.900                                   | 6.650                               | 33.690                                     | 6.618                                 | -0.62%             | -0.48%         |

Table 2. Dielectric Parameters of Tissue Simulant Fluid

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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279


f (886-2) 2298-0488

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

Member of SGS Group

## 1.11 System Components

### EX3DV4 E-Field Probe

|               |  |   |  |
|---------------|--|---|--|
| Construction  | Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)  |  |  |
| Calibration   | Basic Broad Band Calibration in air<br>Conversion Factors (CF) for<br>HSL2450/5250/5600/5750/6500/7000 MHz<br>Additional CF for other liquids and frequencies upon request                                 |   |  |
| Frequency     | 10 MHz to > 6 GHz, Linearity: $\pm 0.6$ dB   |   |  |
| Directivity   | $\pm 0.3$ dB in HSL (rotation around probe axis)<br>$\pm 0.5$ dB in tissue material (rotation normal to probe axis)  |   |  |
| Dynamic Range | 10 $\mu$ W/g to > 100 mW/g<br>Linearity: $\pm 0.2$ dB (noise: typically < 1 $\mu$ W/g)   |   |  |
| Dimensions    | Tip diameter: 2.5 mm   |   |  |
| Application   | High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%. |   |  |

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司


t (886-2) 2299-3279

f (886-2) 2298-0488


www.sgs.com.tw

Member of SGS Group

## PHANTOM

|                 |   |   |
|-----------------|---|---|
| Model           | ELI   |   |
| Construction    | The ELI phantom is used for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI is fully compatible with the IEC 62209-2 standard and all known tissue simulating liquids. ELI has been optimized regarding its performance and can be integrated into our standard phantom tables. A cover prevents evaporation of the liquid. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points. The phantom is compatible with all SPEAG dosimetric probes and dipoles. |   |
| Shell Thickness | 2 ± 0.2 mm  |  |
| Filling Volume  | Approx. 30 liters   |   |
| Dimensions      | Major axis: 600 mm<br>Minor axis: 400 mm  |   |

## DEVICE HOLDER

|              |   |  |
|--------------|---|--|
| Construction | The device holder (Supporter) for Notebook is made by POM (polyoxymethylene resin) , which is non-metal and non-conductive. The height can be adjusted to fit varies kind of notebooks. |  |
|              |   | Device Holder  |

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

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

## 1.12 Test Standards and Limits

According to FCC 47CFR §2.1093(d) The limits to be used for evaluation are based generally on criteria published by the American National Standards Institute (ANSI) for localized specific absorption rate ("SAR") in Section 4.2 of "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," ANSI/IEEE C95.1, By the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017.

These criteria for SAR evaluation are similar to those recommended by the National Council on Radiation Protection and Measurements (NCRP) in "Biological Effects and Exposure Criteria for Radio frequency Electromagnetic Fields," NCRP Report No. 86, Section 17.4.5. Copyright NCRP, 1986, Bethesda, Maryland 20814. SAR is a measure of the rate of energy absorption due to exposure to an RF transmitting source. SAR values have been related to threshold levels for potential biological hazards. The criteria to be used are specified in paragraphs (d)(1) and (d)(2) of this section and shall apply for portable devices transmitting in the frequency range from 100 kHz to 6 GHz. Portable devices that transmit at frequencies above 6 GHz are to be evaluated in terms of the MPE limits specified in § 1.1310 of this chapter.

Measurements and calculations to demonstrate compliance with MPE field strength or power density limits for devices operating above 6 GHz should be made at a minimum distance of 5 cm from the radiating source.

1. Limits for Occupational/Controlled exposure: 0.4 W/kg as averaged over the whole-body and spatial peak SAR not exceeding 8 W/kg as averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the hands, wrists, feet and ankles where the spatial peak SAR shall not exceed 20 W/kg, as averaged over a 10 grams of tissue (defined as a tissue volume in the shape of a cube).

Occupational/Controlled limits apply when persons are exposed as a consequence of their employment provided these persons are fully aware of and exercise control over their exposure. Awareness of exposure can be accomplished by use of warning labels or by specific training or education through appropriate means, such as an RF safety program in a work environment.

2. Limits for General Population/Uncontrolled exposure: 0.08 W/kg as averaged over the whole-body and spatial peak SAR not exceeding 1.6 W/kg as averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube).

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

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

Exceptions are the hands, wrists, feet and ankles where the spatial peak SAR shall not exceed 4 W/kg, as averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube).

General Population/Uncontrolled limits apply when the general public may be exposed, or when persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or do not exercise control over their exposure.

Warning labels placed on consumer devices such as cellular telephones will not be sufficient reason to allow these devices to be evaluated subject to limits for occupational/controlled exposure in paragraph (d)(1) of this section.(Table .6)

| Human Exposure                               | Uncontrolled Environment<br>General Population | Controlled Environment<br>Occupational |
|--|--|--|
| Spatial Peak SAR<br>(Brain)                  | 1.60 W/kg                                      | 8.00 W/kg                              |
| Spatial Average SAR<br>(Whole Body)          | 0.08 W/kg                                      | 0.40 W/kg                              |
| Spatial Peak SAR<br>(Hands/Feet/Ankle/Wrist) | 4.00 W/kg                                      | 20.00 W/kg                             |

### RF Exposure limit for above 6GHz

According to ANSI/IEEE C95.1-1992, the criteria listed in the following Table shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Peak Spatially Averaged Power Density was evaluated over a circular area of 4cm<sup>2</sup> per interim FCC Guidance for near-field power density evaluations per October 2018 TCB Workshop notes

| Frequency range<br>(MHz)                                       | Electric field strength<br>(V/m) | Magnetic field strength<br>(A/m) | Power density<br>(mW/cm <sup>2</sup> ) | Averaging time<br>(minutes) |
|--|----------------------------------|----------------------------------|--|-----------------------------|
| <b>(A) Limits for Occupational/Controlled Exposures</b>        |                                  |                                  |  |                             |
| 0.3-3.0  | 614                              | 1.63                             | *(100)                                 | 6                           |
| 3.0-30   | 1842/f                           | 4.89/f                           | *(900/f <sup>2</sup> )                 | 6                           |
| 30-300   | 61.4                             | 0.163                            | 1.0                                    | 6                           |
| 300-1500   |                                  |                                  | f/300                                  | 6                           |
| 1500-100,000   |                                  |                                  | 5                                      | 6                           |
| <b>(B) Limits for General Population/Uncontrolled Exposure</b> |                                  |                                  |  |                             |
| 0.3-1.34   | 614                              | 1.63                             | *(100)                                 | 30                          |
| 1.34-30  | 824/f                            | 2.19/f                           | *(180/f <sup>2</sup> )                 | 30                          |
| 30-300   | 27.5                             | 0.073                            | 0.2                                    | 30                          |
| 300-1500   |                                  |                                  | f/1500                                 | 30                          |
| 1500-100,000   |                                  |                                  | 1.0                                    | 30                          |

Table. RF exposure limits

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

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

## Notes:

1. Uncontrolled environments are defined as locations where there is potential exposure of individuals who have no knowledge or control of their potential exposure.
2. Controlled environments are defined as locations where there is potential exposure of individuals who have knowledge of their potential exposure and can exercise control over their exposure.

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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 2. Summary of Results

### 2.1 Decision rules

Reported measurement data comply with IEEE 1528-2013 and IEC/IEEE 62209-1528:2020:

Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

### 2.2 Summary of SAR Results Notebook mode

| Mode                     | Antenna | Position       | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|--------------------------|---------|----------------|---------------|-----|-------------|--|---------------------------|--------------------|---------------|-----------------------------|----------|-----------|
|                          |         |                |               |     |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802.11b             | Main    | Bottom Surface | 0             | 1   | 2412        | 21.00  | 20.70                     | 1.011              | 107.15%       | 0.072                       | 0.078    | -         |
|                          | Main    | Bottom Surface | 0             | 6   | 2437        | 21.00  | 20.90                     | 1.011              | 102.33%       | 0.093                       | 0.096    | 76        |
|                          | Main    | Bottom Surface | 0             | 11  | 2462        | 21.00  | 20.74                     | 1.011              | 106.17%       | 0.080                       | 0.086    | -         |
| Mode                     | Antenna | Position       | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|                          |         |                |               |     |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802.11a 5.2G        | Main    | Bottom Surface | 0             | 36  | 5180        | 19.25  | 19.04                     | 1.017              | 104.95%       | 0.313                       | 0.334    | -         |
|                          | Main    | Bottom Surface | 0             | 40  | 5200        | 21.00  | 20.94                     | 1.017              | 101.39%       | 0.329                       | 0.339    | 77        |
|                          | Main    | Bottom Surface | 0             | 44  | 5220        | 21.00  | 20.93                     | 1.017              | 101.62%       | 0.293                       | 0.303    | -         |
|                          | Main    | Bottom Surface | 0             | 48  | 5240        | 21.00  | 20.88                     | 1.017              | 102.80%       | 0.305                       | 0.319    | -         |
| Mode                     | Antenna | Position       | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|                          |         |                |               |     |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802.11a 5.3G        | Main    | Bottom Surface | 0             | 60  | 5300        | 21.00  | 20.95                     | 1.017              | 101.16%       | 0.240                       | 0.247    | 78        |
| Mode                     | Antenna | Position       | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|                          |         |                |               |     |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802.11ac (80M) 5.8G | Main    | Bottom Surface | 0             | 138 | 5690        | 21.00  | 20.99                     | 1.020              | 100.23%       | 0.191                       | 0.195    | 79        |
| Mode                     | Antenna | Position       | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|                          |         |                |               |     |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802.11n (40M) 5.8G  | Main    | Bottom Surface | 0             | 151 | 5755        | 21.00  | 20.99                     | 1.022              | 100.23%       | 0.233                       | 0.239    | 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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

| Mode                     | Antenna | Position       | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|--------------------------|---------|----------------|---------------|-----|-------------|--|---------------------------|--------------------|---------------|-----------------------------|----------|-----------|
|                          |         |                |               |     |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802.11b             | Aux     | Bottom Surface | 0             | 1   | 2412        | 21.00  | 20.57                     | 1.011              | 110.41%       | 0.108                       | 0.121    | -         |
|                          | Aux     | Bottom Surface | 0             | 6   | 2437        | 21.00  | 20.66                     | 1.011              | 108.14%       | 0.113                       | 0.124    | -         |
|                          | Aux     | Bottom Surface | 0             | 11  | 2462        | 21.00  | 20.78                     | 1.011              | 105.20%       | 0.126                       | 0.134    | 81        |
| Mode                     | Antenna | Position       | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | PKot page |
|                          |         |                |               |     |             |  |                           |                    |               | Measured                    | Reported |           |
| Bluetooth(GFSK)          | Aux     | Bottom Surface | 0             | 78  | 2480        | 10.50  | 8.94                      | 1.297              | 143.22%       | 0.057                       | 0.106    | 82        |
| Mode                     | Antenna | Position       | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|                          |         |                |               |     |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802.11n (40M) 5.2G  | Aux     | Bottom Surface | 0             | 46  | 5230        | 21.00  | 20.92                     | 1.022              | 101.86%       | 0.129                       | 0.134    | 83        |
| Mode                     | Antenna | Position       | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|                          |         |                |               |     |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802.11n (40M) 5.3G  | Aux     | Bottom Surface | 0             | 54  | 5270        | 21.00  | 20.89                     | 1.022              | 102.57%       | 0.256                       | 0.268    | 84        |
| Mode                     | Antenna | Position       | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|                          |         |                |               |     |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802.11ac (80M) 5.6G | Aux     | Bottom Surface | 0             | 106 | 5530        | 18.00  | 17.77                     | 1.020              | 105.44%       | 0.302                       | 0.325    | -         |
|                          | Aux     | Bottom Surface | 0             | 122 | 5610        | 21.00  | 20.90                     | 1.020              | 102.33%       | 0.293                       | 0.306    | -         |
|                          | Aux     | Bottom Surface | 0             | 138 | 5690        | 21.00  | 20.90                     | 1.020              | 102.33%       | 0.321                       | 0.335    | 85        |
| Mode                     | Antenna | Position       | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|                          |         |                |               |     |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802.11n (40M) 5.8G  | Aux     | Bottom Surface | 0             | 151 | 5755        | 21.00  | 20.96                     | 1.022              | 100.93%       | 0.319                       | 0.329    | 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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

## Tablet mode

| Mode                            | Antenna | Position     | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|---------------------------------|---------|--------------|---------------|-----|-------------|--|---------------------------|--------------------|---------------|-----------------------------|----------|-----------|
|                                 |         |              |               |     |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802. 11b                   | Main    | Back Surface | 0             | 6   | 2437        | 21.00  | 20.90                     | 1.011              | 102.33%       | 0.001                       | 0.001    | -         |
|                                 | Main    | Top Edge     | 0             | 6   | 2437        | 21.00  | 20.90                     | 1.011              | 102.33%       | 0.145                       | 0.150    | -         |
|                                 | Main    | Bottom Edge  | 0             | 6   | 2437        | 21.00  | 20.90                     | 1.011              | 102.33%       | 0.026                       | 0.027    | -         |
|                                 | Main    | Left Edge    | 0             | 6   | 2437        | 21.00  | 20.90                     | 1.011              | 102.33%       | 0.262                       | 0.271    | -         |
|                                 | Main    | Right Edge   | 0             | 1   | 2412        | 21.00  | 20.70                     | 1.011              | 107.15%       | 0.288                       | 0.312    | -         |
|                                 | Main    | Right Edge   | 0             | 6   | 2437        | 21.00  | 20.90                     | 1.011              | 102.33%       | 0.338                       | 0.350    | 87        |
|                                 | Main    | Right Edge   | 0             | 11  | 2462        | 21.00  | 20.74                     | 1.011              | 106.17%       | 0.314                       | 0.337    | -         |
| Mode                            | Antenna | Position     | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|                                 |         |              |               |     |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802. 11a<br>5.2G           | Main    | Back Surface | 0             | 40  | 5200        | 21.00  | 20.94                     | 1.017              | 101.39%       | 0.001                       | 0.001    | -         |
|                                 | Main    | Top Edge     | 0             | 40  | 5200        | 21.00  | 20.94                     | 1.017              | 101.39%       | 0.401                       | 0.413    | -         |
|                                 | Main    | Bottom Edge  | 0             | 40  | 5200        | 21.00  | 20.94                     | 1.017              | 101.39%       | 0.070                       | 0.072    | -         |
|                                 | Main    | Left Edge    | 0             | 40  | 5200        | 21.00  | 20.94                     | 1.017              | 101.39%       | 0.797                       | 0.822    | 88        |
|                                 | Main    | Left Edge    | 0             | 44  | 5220        | 21.00  | 20.93                     | 1.017              | 101.62%       | 0.706                       | 0.730    | -         |
|                                 | Main    | Right Edge   | 0             | 40  | 5200        | 21.00  | 20.94                     | 1.017              | 101.39%       | 0.205                       | 0.211    | -         |
|                                 | Main    | Right Edge   | 0             | 40  | 5200        | 21.00  | 20.94                     | 1.017              | 101.39%       | 0.205                       | 0.211    | -         |
| Mode                            | Antenna | Position     | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|                                 |         |              |               |     |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802. 11n<br>(40M)<br>5.3G  | Main    | Back Surface | 0             | 54  | 5270        | 20.00  | 19.90                     | 1.022              | 102.33%       | 0.001                       | 0.001    | -         |
|                                 | Main    | Top Edge     | 0             | 54  | 5270        | 20.00  | 19.90                     | 1.022              | 102.33%       | 0.521                       | 0.545    | -         |
|                                 | Main    | Bottom Edge  | 0             | 54  | 5270        | 20.00  | 19.90                     | 1.022              | 102.33%       | 0.093                       | 0.097    | -         |
|                                 | Main    | Left Edge    | 0             | 54  | 5270        | 20.00  | 19.90                     | 1.022              | 102.33%       | 0.854                       | 0.893    | 89        |
|                                 | Main    | Left Edge    | 0             | 62  | 5310        | 17.00  | 16.99                     | 1.022              | 100.23%       | 0.442                       | 0.453    | -         |
|                                 | Main    | Right Edge   | 0             | 54  | 5270        | 20.00  | 19.90                     | 1.022              | 102.33%       | 0.233                       | 0.244    | -         |
|                                 | Repeat  | Main         | Left Edge     | 0   | 54          | 5270   | 20.00                     | 19.90              | 1.022         | 102.33%                     | 0.832    | 0.870     |
| Mode                            | Antenna | Position     | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|                                 |         |              |               |     |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802. 11ac<br>(80M)<br>5.6G | Main    | Back Surface | 0             | 138 | 5690        | 21.00  | 20.99                     | 1.020              | 100.23%       | 0.001                       | 0.001    | -         |
|                                 | Main    | Top Edge     | 0             | 138 | 5690        | 21.00  | 20.99                     | 1.020              | 100.23%       | 0.538                       | 0.550    | -         |
|                                 | Main    | Bottom Edge  | 0             | 138 | 5690        | 21.00  | 20.99                     | 1.020              | 100.23%       | 0.097                       | 0.099    | -         |
|                                 | Main    | Left Edge    | 0             | 138 | 5690        | 21.00  | 20.99                     | 1.020              | 100.23%       | 0.782                       | 0.799    | 90        |
|                                 | Main    | Right Edge   | 0             | 138 | 5690        | 21.00  | 20.99                     | 1.020              | 100.23%       | 0.228                       | 0.233    | -         |
| Mode                            | Antenna | Position     | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|                                 |         |              |               |     |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802. 11n<br>(40M)<br>5.8G  | Main    | Back Surface | 0             | 151 | 5755        | 21.00  | 20.99                     | 1.022              | 100.23%       | 0.001                       | 0.001    | -         |
|                                 | Main    | Top Edge     | 0             | 151 | 5755        | 21.00  | 20.99                     | 1.022              | 100.23%       | 0.386                       | 0.395    | -         |
|                                 | Main    | Bottom Edge  | 0             | 151 | 5755        | 21.00  | 20.99                     | 1.022              | 100.23%       | 0.080                       | 0.082    | -         |
|                                 | Main    | Left Edge    | 0             | 151 | 5755        | 21.00  | 20.99                     | 1.022              | 100.23%       | 0.655                       | 0.671    | 91        |
|                                 | Main    | Right Edge   | 0             | 151 | 5755        | 21.00  | 20.99                     | 1.022              | 100.23%       | 0.188                       | 0.193    | -         |

\* - repeated at the highest SAR measurement according to the KDB 865664 D01

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

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

| Mode         | Antenna | Position     | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|--------------|---------|--------------|---------------|----|-------------|--|---------------------------|--------------------|---------------|-----------------------------|----------|-----------|
|              |         |              |               |    |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802.11b | Aux     | Back Surface | 0             | 11 | 2462        | 21.00  | 20.78                     | 1.011              | 105.20%       | 0.001                       | 0.001    | -         |
|              | Aux     | Top Edge     | 0             | 11 | 2462        | 21.00  | 20.78                     | 1.011              | 105.20%       | 0.169                       | 0.180    | -         |
|              | Aux     | Bottom Edge  | 0             | 11 | 2462        | 21.00  | 20.78                     | 1.011              | 105.20%       | 0.035                       | 0.037    | -         |
|              | Aux     | Left Edge    | 0             | 11 | 2462        | 21.00  | 20.78                     | 1.011              | 105.20%       | 0.105                       | 0.112    | -         |
|              | Aux     | Right Edge   | 0             | 1  | 2412        | 21.00  | 20.57                     | 1.011              | 110.41%       | 0.299                       | 0.334    | -         |
|              | Aux     | Right Edge   | 0             | 6  | 2437        | 21.00  | 20.66                     | 1.011              | 108.14%       | 0.276                       | 0.302    | -         |
|              | Aux     | Right Edge   | 0             | 11 | 2462        | 21.00  | 20.78                     | 1.011              | 105.20%       | 0.315                       | 0.335    | 92        |

| Mode             | Antenna | Position     | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | PKot page |
|------------------|---------|--------------|---------------|----|-------------|--|---------------------------|--------------------|---------------|-----------------------------|----------|-----------|
|                  |         |              |               |    |             |  |                           |                    |               | Measured                    | Reported |           |
| Bluetooth (GFSK) | Aux     | Back Surface | 0             | 78 | 2480        | 10.50  | 8.94                      | 1.297              | 143.22%       | 0.001                       | 0.002    | -         |
|                  | Aux     | Top Edge     | 0             | 78 | 2480        | 10.50  | 8.94                      | 1.297              | 143.22%       | 0.002                       | 0.004    | -         |
|                  | Aux     | Bottom Edge  | 0             | 78 | 2480        | 10.50  | 8.94                      | 1.297              | 143.22%       | 0.001                       | 0.002    | -         |
|                  | Aux     | Left Edge    | 0             | 78 | 2480        | 10.50  | 8.94                      | 1.297              | 143.22%       | 0.001                       | 0.003    | -         |
|                  | Aux     | Right Edge   | 0             | 78 | 2480        | 10.50  | 8.94                      | 1.297              | 143.22%       | 0.006                       | 0.011    | 93        |

| Mode                     | Antenna | Position     | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|--------------------------|---------|--------------|---------------|----|-------------|--|---------------------------|--------------------|---------------|-----------------------------|----------|-----------|
|                          |         |              |               |    |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802.11ac (80M) 5.2G | Aux     | Back Surface | 0             | 42 | 5210        | 18.00  | 17.91                     | 1.020              | 102.09%       | 0.001                       | 0.001    | -         |
|                          | Aux     | Top Edge     | 0             | 42 | 5210        | 18.00  | 17.91                     | 1.020              | 102.09%       | 0.448                       | 0.467    | -         |
|                          | Aux     | Bottom Edge  | 0             | 42 | 5210        | 18.00  | 17.91                     | 1.020              | 102.09%       | 0.097                       | 0.101    | -         |
|                          | Aux     | Left Edge    | 0             | 42 | 5210        | 18.00  | 17.91                     | 1.020              | 102.09%       | 0.058                       | 0.060    | -         |
|                          | Aux     | Right Edge   | 0             | 42 | 5210        | 18.00  | 17.91                     | 1.020              | 102.09%       | 0.782                       | 0.814    | 94        |

| Mode                     | Antenna | Position     | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|--------------------------|---------|--------------|---------------|----|-------------|--|---------------------------|--------------------|---------------|-----------------------------|----------|-----------|
|                          |         |              |               |    |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802.11ac (80M) 5.3G | Aux     | Back Surface | 0             | 58 | 5290        | 17.50  | 17.48                     | 1.020              | 100.46%       | 0.001                       | 0.001    | -         |
|                          | Aux     | Top Edge     | 0             | 58 | 5290        | 17.50  | 17.48                     | 1.020              | 100.46%       | 0.410                       | 0.420    | -         |
|                          | Aux     | Bottom Edge  | 0             | 58 | 5290        | 17.50  | 17.48                     | 1.020              | 100.46%       | 0.090                       | 0.092    | -         |
|                          | Aux     | Left Edge    | 0             | 58 | 5290        | 17.50  | 17.48                     | 1.020              | 100.46%       | 0.054                       | 0.055    | -         |
|                          | Aux     | Right Edge   | 0             | 58 | 5290        | 17.50  | 17.48                     | 1.020              | 100.46%       | 0.727                       | 0.745    | 95        |

| Mode                     | Antenna | Position     | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|--------------------------|---------|--------------|---------------|-----|-------------|--|---------------------------|--------------------|---------------|-----------------------------|----------|-----------|
|                          |         |              |               |     |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802.11ac (80M) 5.6G | Aux     | Back Surface | 0             | 122 | 5610        | 21.00  | 20.90                     | 1.020              | 102.33%       | 0.001                       | 0.001    | -         |
|                          | Aux     | Back Surface | 0             | 138 | 5690        | 21.00  | 20.90                     | 1.020              | 102.33%       | 0.001                       | 0.001    | -         |
|                          | Aux     | Top Edge     | 0             | 122 | 5610        | 21.00  | 20.90                     | 1.020              | 102.33%       | 0.289                       | 0.302    | -         |
|                          | Aux     | Top Edge     | 0             | 138 | 5690        | 21.00  | 20.90                     | 1.020              | 102.33%       | 0.291                       | 0.304    | -         |
|                          | Aux     | Bottom Edge  | 0             | 122 | 5610        | 21.00  | 20.90                     | 1.020              | 102.33%       | 0.076                       | 0.079    | -         |
|                          | Aux     | Bottom Edge  | 0             | 138 | 5690        | 21.00  | 20.90                     | 1.020              | 102.33%       | 0.072                       | 0.075    | -         |
|                          | Aux     | Left Edge    | 0             | 122 | 5610        | 21.00  | 20.90                     | 1.020              | 102.33%       | 0.044                       | 0.046    | -         |
|                          | Aux     | Left Edge    | 0             | 138 | 5690        | 21.00  | 20.90                     | 1.020              | 102.33%       | 0.041                       | 0.043    | -         |
|                          | Aux     | Right Edge   | 0             | 122 | 5610        | 21.00  | 20.90                     | 1.020              | 102.33%       | 0.548                       | 0.572    | -         |
|                          | Aux     | Right Edge   | 0             | 138 | 5690        | 21.00  | 20.90                     | 1.020              | 102.33%       | 0.576                       | 0.601    | 96        |

| Mode                    | Antenna | Position     | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Plot page |
|-------------------------|---------|--------------|---------------|-----|-------------|--|---------------------------|--------------------|---------------|-----------------------------|----------|-----------|
|                         |         |              |               |     |             |  |                           |                    |               | Measured                    | Reported |           |
| WLAN 802.11n (40M) 5.8G | Aux     | Back Surface | 0             | 151 | 5755        | 21.00  | 20.96                     | 1.022              | 100.93%       | 0.001                       | 0.001    | -         |
|                         | Aux     | Top Edge     | 0             | 151 | 5755        | 21.00  | 20.96                     | 1.022              | 100.93%       | 0.323                       | 0.333    | -         |
|                         | Aux     | Bottom Edge  | 0             | 151 | 5755        | 21.00  | 20.96                     | 1.022              | 100.93%       | 0.079                       | 0.081    | -         |
|                         | Aux     | Left Edge    | 0             | 151 | 5755        | 21.00  | 20.96                     | 1.022              | 100.93%       | 0.038                       | 0.039    | -         |
|                         | Aux     | Right Edge   | 0             | 151 | 5755        | 21.00  | 20.96                     | 1.022              | 100.93%       | 0.683                       | 0.704    | 97        |

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

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

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

## WIFI 6E

### Notebook mode

| Mode                                   | Antenna | Position       | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Estimated APD mW/cm <sup>2</sup> (4cm <sup>2</sup> ) | Plot page |
|--|---------|----------------|---------------|-----|-------------|--|---------------------------|--------------------|---------------|-----------------------------|----------|--|-----------|
|  |         |                |               |     |             |  |                           |                    |               | Measured                    | Reported |  |           |
| U-NI-5<br>6.2GHz<br>802.11ax<br>(160M) | Main    | Bottom Surface | 0             | 15  | 6025        | 13.50  | 13.47                     | 1.01               | 100.69%       | 0.018                       | 0.018    | 0.0139   | -         |
|  | Main    | Bottom Surface | 0             | 47  | 6185        | 13.50  | 13.49                     | 1.01               | 100.23%       | 0.022                       | 0.022    | 0.019  | 98        |
| Mode                                   | Antenna | Position       | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Estimated APD mW/cm <sup>2</sup> (4cm <sup>2</sup> ) | Plot page |
|  |         |                |               |     |             |  |                           |                    |               | Measured                    | Reported |  |           |
| U-NI-6<br>6.5GHz<br>802.11ax<br>(160M) | Main    | Bottom Surface | 0             | 111 | 6505        | 13.50  | 13.43                     | 1.01               | 101.62%       | 0.022                       | 0.023    | 0.014  | 99        |
| Mode                                   | Antenna | Position       | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Estimated APD mW/cm <sup>2</sup> (4cm <sup>2</sup> ) | Plot page |
|  |         |                |               |     |             |  |                           |                    |               | Measured                    | Reported |  |           |
| U-NI-7<br>6.7GHz<br>802.11ax<br>(160M) | Main    | Bottom Surface | 0             | 143 | 6665        | 13.50  | 13.44                     | 1.01               | 101.39%       | 0.045                       | 0.046    | 0.0335   | 100       |
| Mode                                   | Antenna | Position       | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Estimated APD mW/cm <sup>2</sup> (4cm <sup>2</sup> ) | Plot page |
|  |         |                |               |     |             |  |                           |                    |               | Measured                    | Reported |  |           |
| U-NI-8<br>7.0GHz<br>802.11ax<br>(160M) | Main    | Bottom Surface | 0             | 207 | 6985        | 13.50  | 13.43                     | 1.01               | 101.62%       | 0.074                       | 0.076    | 0.0563   | 101       |
| Mode                                   | Antenna | Position       | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Estimated APD mW/cm <sup>2</sup> (4cm <sup>2</sup> ) | Plot page |
|  |         |                |               |     |             |  |                           |                    |               | Measured                    | Reported |  |           |
| U-NI-5<br>6.2GHz<br>802.11ax<br>(160M) | Aux     | Bottom Surface | 0             | 15  | 6025        | 13.50  | 13.43                     | 1.01               | 101.62%       | 0.006                       | 0.006    | 0.0026   | -         |
|  | Aux     | Bottom Surface | 0             | 79  | 6345        | 13.50  | 13.46                     | 1.01               | 100.93%       | 0.035                       | 0.036    | 0.0281   | 102       |
| Mode                                   | Antenna | Position       | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Estimated APD mW/cm <sup>2</sup> (4cm <sup>2</sup> ) | Plot page |
|  |         |                |               |     |             |  |                           |                    |               | Measured                    | Reported |  |           |
| U-NI-6<br>6.5GHz<br>802.11ax<br>(160M) | Aux     | Bottom Surface | 0             | 111 | 6505        | 13.50  | 13.43                     | 1.01               | 101.62%       | 0.006                       | 0.006    | 0.0049   | 103       |
| Mode                                   | Antenna | Position       | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Estimated APD mW/cm <sup>2</sup> (4cm <sup>2</sup> ) | Plot page |
|  |         |                |               |     |             |  |                           |                    |               | Measured                    | Reported |  |           |
| U-NI-7<br>6.7GHz<br>802.11ax<br>(160M) | Aux     | Bottom Surface | 0             | 175 | 6825        | 13.50  | 13.45                     | 1.01               | 101.16%       | 0.048                       | 0.049    | 0.0366   | 104       |
| Mode                                   | Antenna | Position       | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Estimated APD mW/cm <sup>2</sup> (4cm <sup>2</sup> ) | Plot page |
|  |         |                |               |     |             |  |                           |                    |               | Measured                    | Reported |  |           |
| U-NI-8<br>7.0GHz<br>802.11ax<br>(160M) | Aux     | Bottom Surface | 0             | 207 | 6985        | 13.50  | 13.40                     | 1.01               | 102.33%       | 0.046                       | 0.048    | 0.0334   | 105       |

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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

## Tablet mode

| Mode                                   | Antenna | Position     | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Estimated APD mW/cm <sup>2</sup> (4cm <sup>2</sup> ) | Plot page |
|--|---------|--------------|---------------|----|-------------|--|---------------------------|--------------------|---------------|-----------------------------|----------|--|-----------|
|  |         |              |               |    |             |  |                           |                    |               | Measured                    | Reported |  |           |
| U-NI-5<br>6.2GHz<br>802.11ax<br>(160M) | Main    | Back Surface | 0             | 47 | 6185        | 13.50  | 13.49                     | 1.012              | 100.23%       | 0.003                       | 0.003    | 0.001  | -         |
|  | Main    | Top Edge     | 0             | 15 | 6025        | 13.50  | 13.47                     | 1.012              | 100.69%       | 0.121                       | 0.123    | 0.09   | -         |
|  | Main    | Top Edge     | 0             | 47 | 6185        | 13.50  | 13.49                     | 1.012              | 100.23%       | 0.135                       | 0.137    | 0.101  | 106       |
|  | Main    | Bottom Edge  | 0             | 47 | 6185        | 13.50  | 13.49                     | 1.012              | 100.23%       | 0.029                       | 0.029    | 0.015  | -         |
|  | Main    | Left Edge    | 0             | 47 | 6185        | 13.50  | 13.49                     | 1.012              | 100.23%       | 0.103                       | 0.104    | 0.084  | -         |
|  | Main    | Right Edge   | 0             | 47 | 6185        | 13.50  | 13.49                     | 1.012              | 100.23%       | 0.122                       | 0.124    | 0.093  | -         |

| Mode                                   | Antenna | Position     | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Estimated APD mW/cm <sup>2</sup> (4cm <sup>2</sup> ) | Plot page |
|--|---------|--------------|---------------|-----|-------------|--|---------------------------|--------------------|---------------|-----------------------------|----------|--|-----------|
|  |         |              |               |     |             |  |                           |                    |               | Measured                    | Reported |  |           |
| U-NI-6<br>6.5GHz<br>802.11ax<br>(160M) | Main    | Back Surface | 0             | 111 | 6505        | 13.50  | 13.43                     | 1.012              | 101.62%       | 0.001                       | 0.001    | 0.001  | -         |
|  | Main    | Top Edge     | 0             | 111 | 6505        | 13.50  | 13.43                     | 1.012              | 101.62%       | 0.127                       | 0.131    | 0.103  | 107       |
|  | Main    | Bottom Edge  | 0             | 111 | 6505        | 13.50  | 13.43                     | 1.012              | 101.62%       | 0.022                       | 0.023    | 0.009  | -         |
|  | Main    | Left Edge    | 0             | 111 | 6505        | 13.50  | 13.43                     | 1.012              | 101.62%       | 0.048                       | 0.049    | 0.025  | -         |
|  | Main    | Right Edge   | 0             | 111 | 6505        | 13.50  | 13.43                     | 1.012              | 101.62%       | 0.062                       | 0.064    | 0.044  | -         |

| Mode                                   | Antenna | Position     | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Estimated APD mW/cm <sup>2</sup> (4cm <sup>2</sup> ) | Plot page |
|--|---------|--------------|---------------|-----|-------------|--|---------------------------|--------------------|---------------|-----------------------------|----------|--|-----------|
|  |         |              |               |     |             |  |                           |                    |               | Measured                    | Reported |  |           |
| U-NI-7<br>6.7GHz<br>802.11ax<br>(160M) | Main    | Back Surface | 0             | 143 | 6665        | 13.50  | 13.44                     | 1.012              | 101.39%       | 0.001                       | 0.001    | 0.001  | -         |
|  | Main    | Top Edge     | 0             | 143 | 6665        | 13.50  | 13.44                     | 1.012              | 101.39%       | 0.101                       | 0.104    | 0.0583   | 108       |
|  | Main    | Bottom Edge  | 0             | 143 | 6665        | 13.50  | 13.44                     | 1.012              | 101.39%       | 0.019                       | 0.019    | 0.006  | -         |
|  | Main    | Left Edge    | 0             | 143 | 6665        | 13.50  | 13.44                     | 1.012              | 101.39%       | 0.055                       | 0.056    | 0.022  | -         |
|  | Main    | Right Edge   | 0             | 143 | 6665        | 13.50  | 13.44                     | 1.012              | 101.39%       | 0.075                       | 0.077    | 0.045  | -         |

| Mode                                   | Antenna | Position     | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Estimated APD mW/cm <sup>2</sup> (4cm <sup>2</sup> ) | Plot page |
|--|---------|--------------|---------------|-----|-------------|--|---------------------------|--------------------|---------------|-----------------------------|----------|--|-----------|
|  |         |              |               |     |             |  |                           |                    |               | Measured                    | Reported |  |           |
| U-NI-8<br>7.0GHz<br>802.11ax<br>(160M) | Main    | Back Surface | 0             | 207 | 6985        | 13.50  | 13.43                     | 1.012              | 101.62%       | 0.001                       | 0.001    | 0.001  | -         |
|  | Main    | Top Edge     | 0             | 207 | 6985        | 13.50  | 13.43                     | 1.012              | 101.62%       | 0.086                       | 0.088    | 0.0523   | 109       |
|  | Main    | Bottom Edge  | 0             | 207 | 6985        | 13.50  | 13.43                     | 1.012              | 101.62%       | 0.020                       | 0.021    | 0.009  | -         |
|  | Main    | Left Edge    | 0             | 207 | 6985        | 13.50  | 13.43                     | 1.012              | 101.62%       | 0.030                       | 0.031    | 0.012  | -         |
|  | Main    | Right Edge   | 0             | 207 | 6985        | 13.50  | 13.43                     | 1.012              | 101.62%       | 0.037                       | 0.038    | 0.015  | -         |

| Mode                                   | Antenna | Position     | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Estimated APD mW/cm <sup>2</sup> (4cm <sup>2</sup> ) | Plot page |
|--|---------|--------------|---------------|----|-------------|--|---------------------------|--------------------|---------------|-----------------------------|----------|--|-----------|
|  |         |              |               |    |             |  |                           |                    |               | Measured                    | Reported |  |           |
| U-NI-5<br>6.2GHz<br>802.11ax<br>(160M) | Aux     | Back Surface | 0             | 79 | 6345        | 13.50  | 13.46                     | 1.012              | 100.93%       | 0.001                       | 0.001    | 0.001  | -         |
|  | Aux     | Top Edge     | 0             | 15 | 6025        | 13.50  | 13.43                     | 1.012              | 101.62%       | 0.076                       | 0.078    | 0.062  | -         |
|  | Aux     | Top Edge     | 0             | 79 | 6345        | 13.50  | 13.46                     | 1.012              | 100.93%       | 0.091                       | 0.093    | 0.0621   | 110       |
|  | Aux     | Bottom Edge  | 0             | 79 | 6345        | 13.50  | 13.46                     | 1.012              | 100.93%       | 0.042                       | 0.043    | 0.023  | -         |
|  | Aux     | Left Edge    | 0             | 79 | 6345        | 13.50  | 13.46                     | 1.012              | 100.93%       | 0.010                       | 0.010    | 0.004  | -         |
|  | Aux     | Right Edge   | 0             | 79 | 6345        | 13.50  | 13.46                     | 1.012              | 100.93%       | 0.086                       | 0.088    | 0.046  | -         |

| Mode                                   | Antenna | Position     | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Estimated APD mW/cm <sup>2</sup> (4cm <sup>2</sup> ) | Plot page |
|--|---------|--------------|---------------|-----|-------------|--|---------------------------|--------------------|---------------|-----------------------------|----------|--|-----------|
|  |         |              |               |     |             |  |                           |                    |               | Measured                    | Reported |  |           |
| U-NI-6<br>6.5GHz<br>802.11ax<br>(160M) | Aux     | Back Surface | 0             | 111 | 6505        | 13.50  | 13.43                     | 1.012              | 101.62%       | 0.001                       | 0.001    | 0.001  | -         |
|  | Aux     | Top Edge     | 0             | 111 | 6505        | 13.50  | 13.43                     | 1.012              | 101.62%       | 0.102                       | 0.105    | 0.0843   | 111       |
|  | Aux     | Bottom Edge  | 0             | 111 | 6505        | 13.50  | 13.43                     | 1.012              | 101.62%       | 0.035                       | 0.036    | 0.013  | -         |
|  | Aux     | Left Edge    | 0             | 111 | 6505        | 13.50  | 13.43                     | 1.012              | 101.62%       | 0.012                       | 0.012    | 0.005  | -         |
|  | Aux     | Right Edge   | 0             | 111 | 6505        | 13.50  | 13.43                     | 1.012              | 101.62%       | 0.052                       | 0.053    | 0.029  | -         |

| Mode                                   | Antenna | Position     | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Estimated APD mW/cm <sup>2</sup> (4cm <sup>2</sup> ) | Plot page |
|--|---------|--------------|---------------|-----|-------------|--|---------------------------|--------------------|---------------|-----------------------------|----------|--|-----------|
|  |         |              |               |     |             |  |                           |                    |               | Measured                    | Reported |  |           |
| U-NI-7<br>6.7GHz<br>802.11ax<br>(160M) | Aux     | Back Surface | 0             | 175 | 6825        | 13.50  | 13.45                     | 1.012              | 101.16%       | 0.001                       | 0.001    | 0.001  | -         |
|  | Aux     | Top Edge     | 0             | 175 | 6825        | 13.50  | 13.45                     | 1.012              | 101.16%       | 0.115                       | 0.118    | 0.0939   | 112       |
|  | Aux     | Bottom Edge  | 0             | 175 | 6825        | 13.50  | 13.45                     | 1.012              | 101.16%       | 0.040                       | 0.041    | 0.032  | -         |
|  | Aux     | Left Edge    | 0             | 175 | 6825        | 13.50  | 13.45                     | 1.012              | 101.16%       | 0.011                       | 0.011    | 0.007  | -         |
|  | Aux     | Right Edge   | 0             | 175 | 6825        | 13.50  | 13.45                     | 1.012              | 101.16%       | 0.036                       | 0.037    | 0.026  | -         |

| Mode                                   | Antenna | Position     | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Duty cycle scaling | Power scaling | Averaged SAR over 1g (W/kg) |          | Estimated APD mW/cm <sup>2</sup> (4cm <sup>2</sup> ) | Plot page |
|--|---------|--------------|---------------|-----|-------------|--|---------------------------|--------------------|---------------|-----------------------------|----------|--|-----------|
|  |         |              |               |     |             |  |                           |                    |               | Measured                    | Reported |  |           |
| U-NI-8<br>7.0GHz<br>802.11ax<br>(160M) | Aux     | Back Surface | 0             | 207 | 6985        | 13.50  | 13.40                     | 1.012              | 102.33%       | 0.001                       | 0.001    | 0.001  | -         |
|  | Aux     | Top Edge     | 0             | 207 | 6985        | 13.50  | 13.40                     | 1.012              | 102.33%       | 0.143                       | 0.148    | 0.122  | 113       |
|  | Aux     | Bottom Edge  | 0             | 207 | 6985        | 13.50  | 13.40                     | 1.012              | 102.33%       | 0.041                       | 0.042    | 0.031  | -         |
|  | Aux     | Left Edge    | 0             | 207 | 6985        | 13.50  | 13.40                     | 1.012              | 102.33%       | 0.019                       | 0.020    | 0.012  | -         |
|  | Aux     | Right Edge   | 0             | 207 | 6985        | 13.50  | 13.40                     | 1.012              | 102.33%       | 0.053                       | 0.055    | 0.044  | -         |

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

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

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

## 2.3 Summary of PD Results

| Mode                           | Antenna | Position | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Tune-up Scaling | Duty cycle scaling | Measurement uncertainty | PD result(4cm)                            |   |  |  |
|--------------------------------|---------|----------|---------------|-----|-------------|--|---------------------------|-----------------|--------------------|-------------------------|---|---|--|--|
|                                |         |          |               |     |             |  |                           |                 |                    |                         | Measured Total psPD (mW/cm <sup>2</sup> ) | Reported Total psPD (mW/cm <sup>2</sup> ) | Measured Normal psPD (mW/cm <sup>2</sup> ) | Reported Normal psPD (mW/cm <sup>2</sup> ) |
| WLAN 6E 802.11ax(160M) U-NII-5 | Main    | Top Edge | 2             | 15  | 6025        | 13.50  | 13.47                     | 100.69%         | 1.01               | 1.55                    | 0.213                                     | 0.336                                     | 0.212                                      | 0.335                                      |
|                                | Main    | Top Edge | 2             | 47  | 6185        | 13.50  | 13.49                     | 100.23%         | 1.01               | 1.55                    | 0.193                                     | 0.303                                     | 0.189                                      | 0.297                                      |
| WLAN 6E 802.11ax(160M) U-NII-6 | Main    | Top Edge | 2             | 111 | 6505        | 13.50  | 13.43                     | 101.62%         | 1.01               | 1.55                    | 0.218                                     | 0.348                                     | 0.213                                      | 0.340                                      |
| WLAN 6E 802.11ax(160M) U-NII-7 | Main    | Top Edge | 2             | 143 | 6665        | 13.50  | 13.44                     | 101.39%         | 1.01               | 1.55                    | 0.191                                     | 0.304                                     | 0.187                                      | 0.297                                      |
| WLAN 6E 802.11ax(160M) U-NII-8 | Main    | Top Edge | 2             | 207 | 6985        | 13.50  | 13.43                     | 101.62%         | 1.01               | 1.55                    | 0.187                                     | 0.298                                     | 0.184                                      | 0.293                                      |

| Mode                           | Antenna | Position | Distance (mm) | CH  | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Tune-up Scaling | Duty cycle scaling | Measurement uncertainty | PD result(4cm)                            |   |  |  |
|--------------------------------|---------|----------|---------------|-----|-------------|--|---------------------------|-----------------|--------------------|-------------------------|---|---|--|--|
|                                |         |          |               |     |             |  |                           |                 |                    |                         | Measured Total psPD (mW/cm <sup>2</sup> ) | Reported Total psPD (mW/cm <sup>2</sup> ) | Measured Normal psPD (mW/cm <sup>2</sup> ) | Reported Normal psPD (mW/cm <sup>2</sup> ) |
| WLAN 6E 802.11ax(160M) U-NII-5 | Aux     | Top Edge | 2             | 15  | 6025        | 13.50  | 13.43                     | 101.62%         | 1.01               | 1.55                    | 0.135                                     | 0.215                                     | 0.131                                      | 0.209                                      |
|                                | Aux     | Top Edge | 2             | 79  | 6345        | 13.50  | 13.46                     | 100.93%         | 1.01               | 1.55                    | 0.175                                     | 0.277                                     | 0.172                                      | 0.272                                      |
| WLAN 6E 802.11ax(160M) U-NII-6 | Aux     | Top Edge | 2             | 111 | 6505        | 13.50  | 13.43                     | 101.62%         | 1.01               | 1.55                    | 0.176                                     | 0.281                                     | 0.172                                      | 0.274                                      |
| WLAN 6E 802.11ax(160M) U-NII-7 | Aux     | Top Edge | 2             | 175 | 6825        | 13.50  | 13.45                     | 101.16%         | 1.01               | 1.55                    | 0.180                                     | 0.286                                     | 0.177                                      | 0.281                                      |
| WLAN 6E 802.11ax(160M) U-NII-8 | Aux     | Top Edge | 2             | 207 | 6985        | 13.50  | 13.40                     | 102.33%         | 1.01               | 1.55                    | 0.226                                     | 0.363                                     | 0.223                                      | 0.358                                      |

Note:

$$\text{Scaling} = \frac{\text{reported SAR}}{\text{measured SAR}} = \frac{P_2(\text{mW})}{P_1(\text{mW})} = 10^{\left(\frac{P_2 - P_1}{10}\right)} (\text{dBm})$$

Reported SAR = measured SAR \* (scaling)

Where P2 is maximum specified power, P1 is measured conducted power

## 2.4 Reporting statements of conformity

The conformity statement in this report is based solely on the test results, measurement uncertainty is excluded.

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

### 3. Simultaneous Transmission Analysis

#### Simultaneous Transmission Scenarios:

| Simultaneous Transmit Configurations | Body |
|--------------------------------------|------|
| WLAN 2.4GHz Main + WLAN 2.4GHz Aux   | Yes  |
| WLAN 5GHz Main + WLAN 5GHz Aux       | Yes  |
| WLAN 2.4GHz Main + BT                | Yes  |
| WLAN 5GHz Main + BT                  | Yes  |
| WLAN 5GHz Main + WLAN 5GHz Aux + BT  | Yes  |
| WLAN 6E Main + BT                    | Yes  |
| WLAN 6E Main + WLAN 6E Aux           | Yes  |
| WLAN 6E Main + WLAN 6E Aux + BT      | Yes  |

Note:

1. Bluetooth and Aux share the same antenna path, and BT can transmit with Main simultaneously.
2. For 2.4/5/6GHz WLAN Main and Aux antennas, the maximum output power of each antenna during simultaneous transmission is the same with (or less than) that used in standalone transmission, and we used the sum of 1-g SAR provision in KDB447498D01 to exclude the simultaneous transmitted SAR measurement.

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

### 3.1 Estimated SAR calculation

According to KDB447498 D01v06 – When standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:

$$\text{Estimated SAR} = \frac{\text{Max. tune up power (mW)}}{\text{Min. test separation distance(mm)}} \times \frac{\sqrt{f(\text{GHz})}}{7.5}$$

If the minimum test separation distance is < 5mm, a distance of 5mm is used for estimated SAR calculation. When the test separation distance is >50mm, the 0.4W/kg is used for SAR-1g.

### 3.2 SPLSR evaluation and analysis

Per KDB447498D01, when the sum of SAR is larger than the limit, SAR test exclusion is determined by the SAR sum to peak location separation ratio(SPLSR).

The simultaneous transmitting antennas in each operating mode and exposure condition combination must be considered one pair at a time to determine the SAR to peak location separation ratio to qualify for test exclusion.

The ratio is determined by  $(\text{SAR1} + \text{SAR2})^{1.5}/R_i$ , rounded to two decimal digits, and must be  $\leq 0.04$  for all antenna pairs in the configuration to qualify for 1-g SAR test exclusion.

SAR1 and SAR2 are the highest reported or estimated SAR for each antenna in the pair, and  $R_i$  is the separation distance between the peak SAR locations for the antenna pair in mm.

When standalone test exclusion applies, SAR is estimated; the peak location is assumed to be at the feed-point or geometric center of the antenna.

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

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

## Simultaneous Transmission Combination

| Exposure Position |   | Reported SAR     |                 |                |               |               |                |               | Scenario 1    | Scenario 2    | Scenario 3    | Scenario 4    | Scenario 5    | Scenario 6    | Scenario 7    | Scenario 8    |
|-------------------|---|------------------|-----------------|----------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|                   |   | 2                | 3               | 4              | 5             | 7             | 8              | 9             | 2+3           | 4+5           | 2+7           | 4+7           | 4+5+7         | 7+8           | 8+9           | 7+8+9         |
|                   |   | 2.4GHz WLAN Main | 2.4GHz WLAN Aux | 5GHz WLAN Main | 5GHz WLAN Aux | Bluetooth Aux | 6GHz WLAN Main | 6GHz WLAN Aux | Summed        | Summed        | Summed        | Summed        | Summed        | Summed        | Summed        | Summed        |
|                   |   | 1g SAR (W/kg)    | 1g SAR (W/kg)   | 1g SAR (W/kg)  | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg)  | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) |
| Bottom Surface    | 0 | 0.096            | 0.134           | 0.339          | 0.335         | 0.106         | 0.076          | 0.049         | 0.230         | 0.674         | 0.202         | 0.445         | 0.780         | 0.182         | 0.125         | 0.231         |
| Back Surface      | 0 | 0.001            | 0.001           | 0.001          | 0.001         | 0.002         | 0.003          | 0.001         | 0.002         | 0.002         | 0.003         | 0.003         | 0.004         | 0.005         | 0.004         | 0.006         |
| Top Edge          | 0 | 0.150            | 0.180           | 0.550          | 0.467         | 0.004         | 0.137          | 0.148         | 0.330         | 1.017         | 0.154         | 0.554         | 1.021         | 0.141         | 0.285         | 0.289         |
| Bottom Edge       | 0 | 0.027            | 0.037           | 0.099          | 0.101         | 0.002         | 0.029          | 0.043         | 0.064         | 0.200         | 0.029         | 0.101         | 0.202         | 0.031         | 0.072         | 0.074         |
| Left Edge         | 0 | 0.271            | 0.112           | 0.893          | 0.060         | 0.003         | 0.104          | 0.020         | 0.383         | 0.953         | 0.274         | 0.896         | 0.956         | 0.107         | 0.124         | 0.127         |
| Right Edge        | 0 | 0.350            | 0.335           | 0.244          | 0.814         | 0.011         | 0.124          | 0.088         | 0.685         | 1.058         | 0.361         | 0.255         | 1.069         | 0.135         | 0.212         | 0.223         |

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

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

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

## 4. Instruments List

| Manufacturer | Device                       | Type             | Serial number | Date of last calibration | Date of next calibration |
|--------------|------------------------------|------------------|---------------|--------------------------|--------------------------|
| SPEAG        | Dosimetric E-Field Probe     | EX3DV4           | 7686          | Oct.05,2021              | Oct.04,2022              |
|              |                              | EUmmWV3          | 9399          | Jan.26,2022              | Jan.25,2023              |
| SPEAG        | System Validation Dipole     | D2450V2          | 727           | Apr.14,2021              | Apr.13,2022              |
|              |                              | D5GHzV2          | 1023          | Jan.27,2022              | Jan.26,2023              |
|              |                              | D6.5GHzV2        | 1006          | Aug.26,2021              | Aug.25,2022              |
|              |                              | D7GHzV2          | 1007          | Aug.26,2021              | Aug.25,2022              |
|              |                              | 5G-Veri10        | 1021          | Jan.24,2022              | Jan.23,2023              |
| SPEAG        | Data acquisition Electronics | DAE4             | 1665          | Feb.28,2022              | Feb.27,2023              |
| SPEAG        | Software                     | DASY 52 V52.10.4 | N/A           | Calibration not required | Calibration not required |
| SPEAG        | Phantom                      | ELI              | N/A           | Calibration not required | Calibration not required |
|              |                              | mmWave           |               |                          |                          |
| SPEAG        | Dielectric Assessment Kit    | DAKS-3.5         | 1053          | Feb.28,2022              | Feb.27,2023              |
| Agilent      | Dual-directional coupler     | 772D             | MY46151242    | Aug.16.2021              | Aug.15.2022              |
|              |                              | 778D             | MY48220468    | Aug.16.2021              | Aug.15.2022              |
| Agilent      | Signal Generator             | N5181A           | MY50141235    | May.30,2021              | May.29,2022              |
| R&S          | Power Meter                  | NRX              | 102191        | Jan.22,2022              | Jan.21,2023              |
| R&S          | Power Sensor                 | NRP18S           | 101358        | Jan.22,2022              | Jan.21,2023              |
|              |                              |                  | 109065        | Oct.12,2021              | Oct.11,2022              |
| TECPEL       | Digital thermometer          | DTM-303A         | TP130074      | Apr.26,2021              | Apr.25,2022              |
| R&S          | Power Sensor                 | NRP18S           | 101974        | Oct.12.2021              | Oct.11.2022              |

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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

## 5. Measurements

Date: 2022/3/25

Report No. : ES/2022/20014

**WLAN 802.11b\_Body\_Bottom Surface\_CH 6\_Main\_0mm**

Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1.011

Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.773$  S/m;  $\epsilon_r = 38.85$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient temperature: 22.6°C; Liquid temperature: 22.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(8.32, 8.32, 8.32); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (71x101x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.131 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.267 V/m; Power Drift = 0.17 dB

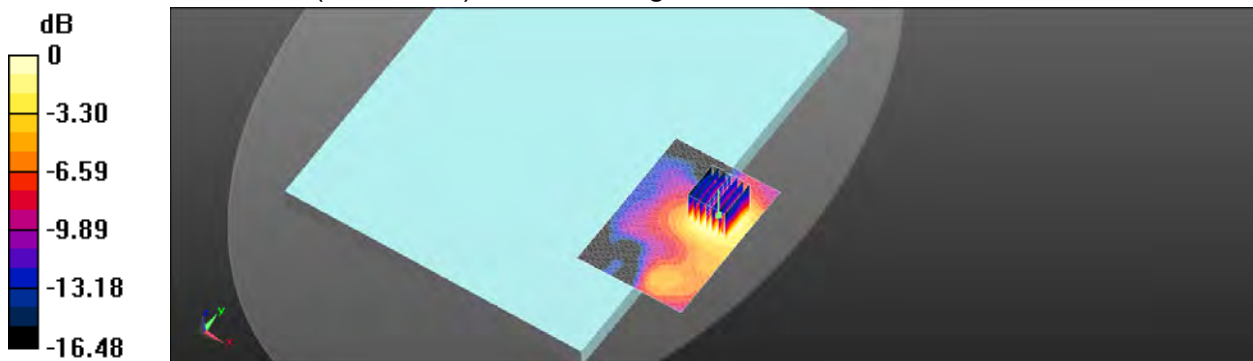
Peak SAR (extrapolated) = 0.171 W/kg

**SAR(1 g) = 0.093 W/kg; SAR(10 g) = 0.042 W/kg**

Smallest distance from peaks to all points 3 dB below = 13.2 mm

Ratio of SAR at M2 to SAR at M1 = 54.8%

Maximum value of SAR (measured) = 0.130 W/kg



0 dB = 0.130 W/kg = -8.86 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/26

## Report No. :ES/2022/20014

### WLAN 802.11a 5.2G\_Body\_Bottom Surface\_CH 40\_0mm\_Main

Communication System: WLAN; Frequency: 5200 MHz; Duty Cycle: 1:1.017

Medium parameters used:  $f = 5200 \text{ MHz}$ ;  $\sigma = 4.611 \text{ S/m}$ ;  $\epsilon_r = 35.568$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature:  $22.5^\circ\text{C}$ ; Liquid temperature:  $22.8^\circ\text{C}$ 

#### DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.81, 5.81, 5.81); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

#### Area Scan (91x121x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.386 W/kg

#### Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 6.062 V/m; Power Drift = -0.15 dB

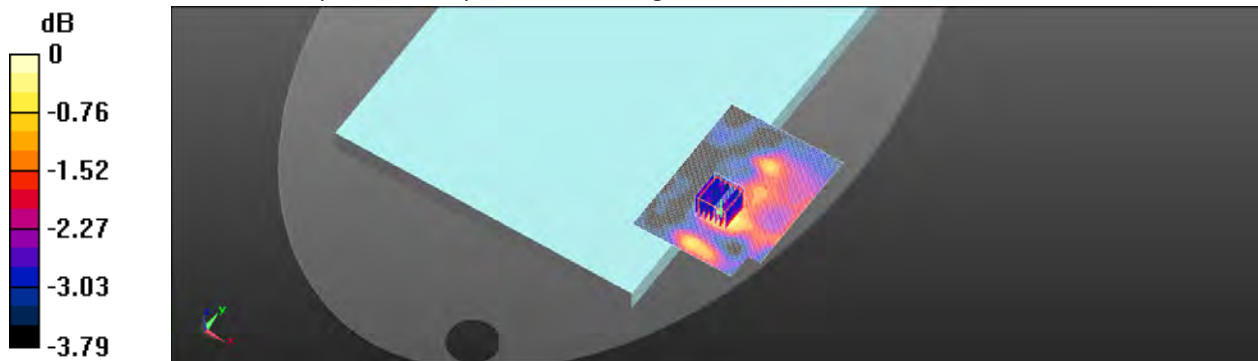
Peak SAR (extrapolated) = 0.774 W/kg

**SAR(1 g) = 0.329 W/kg; SAR(10 g) = 0.125 W/kg**

Smallest distance from peaks to all points 3 dB below = 12.6 mm

Ratio of SAR at M2 to SAR at M1 = 71.8%

Maximum value of SAR (measured) = 0.355 W/kg



0 dB = 0.355 W/kg = -4.49 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/27

## Report No. :ES/2022/20014

### WLAN 802.11a 5.3G\_Body\_Bottom Surface\_CH 60\_0mm\_Main

Communication System: WLAN; Frequency: 5300 MHz; Duty Cycle: 1:1.017

Medium parameters used:  $f = 5300 \text{ MHz}$ ;  $\sigma = 4.715 \text{ S/m}$ ;  $\epsilon_r = 35.448$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature:  $22.7^\circ\text{C}$ ; Liquid temperature:  $22.6^\circ\text{C}$ 

#### DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.81, 5.81, 5.81); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

#### Area Scan (91x121x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.316 W/kg

#### Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.380 V/m; Power Drift = 0.15 dB

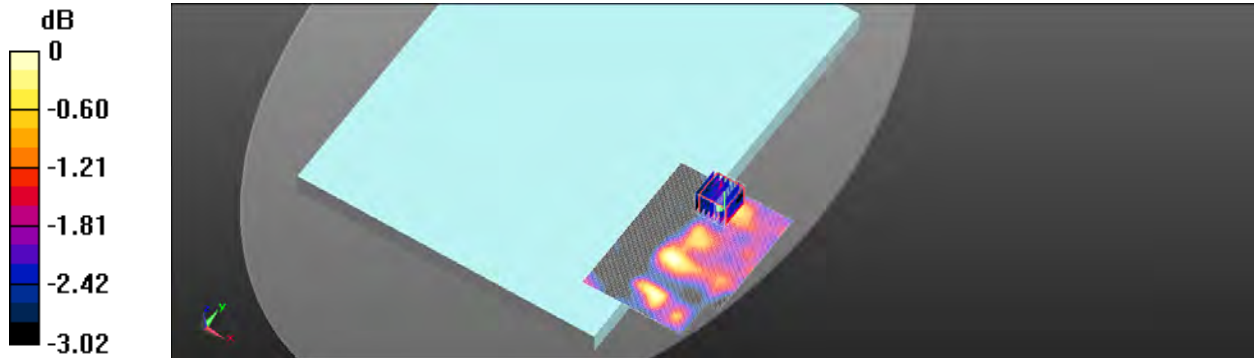
Peak SAR (extrapolated) = 0.353 W/kg

**SAR(1 g) = 0.240 W/kg; SAR(10 g) = 0.101 W/kg**

Smallest distance from peaks to all points 3 dB below = 13.3 mm

Ratio of SAR at M2 to SAR at M1 = 86.3%

Maximum value of SAR (measured) = 0.314 W/kg



0 dB = 0.314 W/kg = -5.03 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/28

## Report No. :ES/2022/20014

### WLAN 802.11ac(80M) 5.6G\_Body\_Bottom Surface\_CH 138\_0mm\_Main

Communication System: WLAN; Frequency: 5690 MHz; Duty Cycle: 1:1.02

Medium parameters used:  $f = 5690 \text{ MHz}$ ;  $\sigma = 5.112 \text{ S/m}$ ;  $\epsilon_r = 34.994$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature:  $22.7^\circ\text{C}$ ; Liquid temperature:  $22.8^\circ\text{C}$ 

#### DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.16, 5.16, 5.16); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

#### Area Scan (91x161x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.373 W/kg

#### Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.742 V/m; Power Drift = 0.12 dB

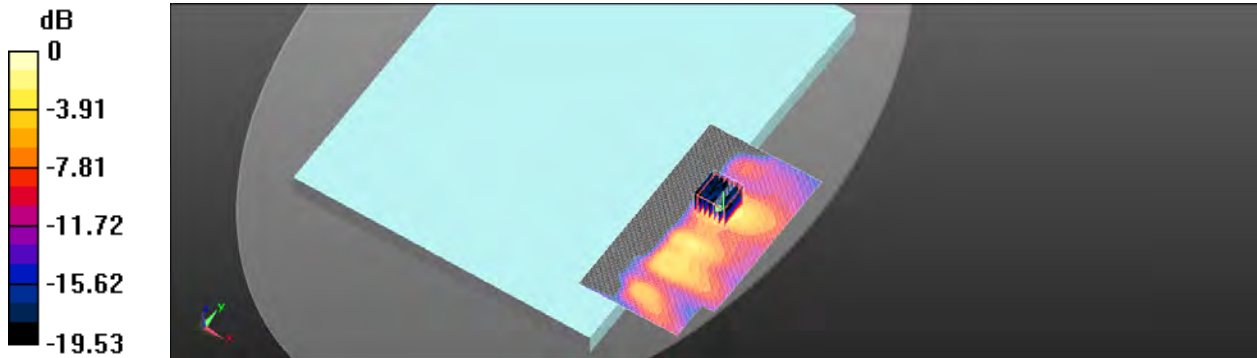
Peak SAR (extrapolated) = 0.700 W/kg

**SAR(1 g) = 0.191 W/kg; SAR(10 g) = 0.075 W/kg**

Smallest distance from peaks to all points 3 dB below = 11.8 mm

Ratio of SAR at M2 to SAR at M1 = 54%

Maximum value of SAR (measured) = 0.344 W/kg



0 dB = 0.344 W/kg = -2.29 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/28

## Report No. :ES/2022/20014

### WLAN 802.11n(40M) 5.8G\_Body\_Bottom Surface\_CH 151\_0mm\_Main

Communication System: WLAN; Frequency: 5755 MHz; Duty Cycle: 1:1.022

Medium parameters used:  $f = 5755 \text{ MHz}$ ;  $\sigma = 5.174 \text{ S/m}$ ;  $\epsilon_r = 34.934$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature: 22.5°C; Liquid temperature: 22.3°C

#### DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.3, 5.3, 5.3); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

#### Area Scan (91x121x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.443 W/kg

#### Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.580 V/m; Power Drift = 0.16 dB

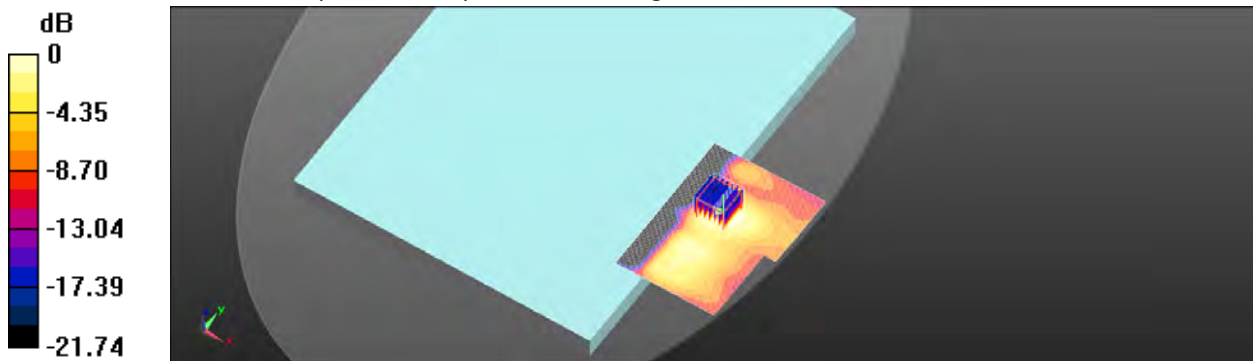
Peak SAR (extrapolated) = 0.846 W/kg

**SAR(1 g) = 0.233 W/kg; SAR(10 g) = 0.092 W/kg**

Smallest distance from peaks to all points 3 dB below = 12.4 mm

Ratio of SAR at M2 to SAR at M1 = 54.7%

Maximum value of SAR (measured) = 0.419 W/kg



0 dB = 0.419 W/kg = -3.78 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/25

## Report No. :ES/2022/20014

### WLAN 802.11b\_Body\_Bottom Surface\_CH 11\_0mm\_Aux

Communication System: WLAN; Frequency: 2462 MHz; Duty Cycle: 1:1.011

Medium parameters used:  $f = 2462 \text{ MHz}$ ;  $\sigma = 1.799 \text{ S/m}$ ;  $\epsilon_r = 38.809$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature:  $22.6^\circ\text{C}$ ; Liquid temperature:  $22.4^\circ\text{C}$ 

#### DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(8.32, 8.32, 8.32); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

#### Area Scan (71x101x1): Interpolated grid: $dx=12 \text{ mm}$ , $dy=12 \text{ mm}$

Maximum value of SAR (interpolated) =  $0.193 \text{ W/kg}$ 

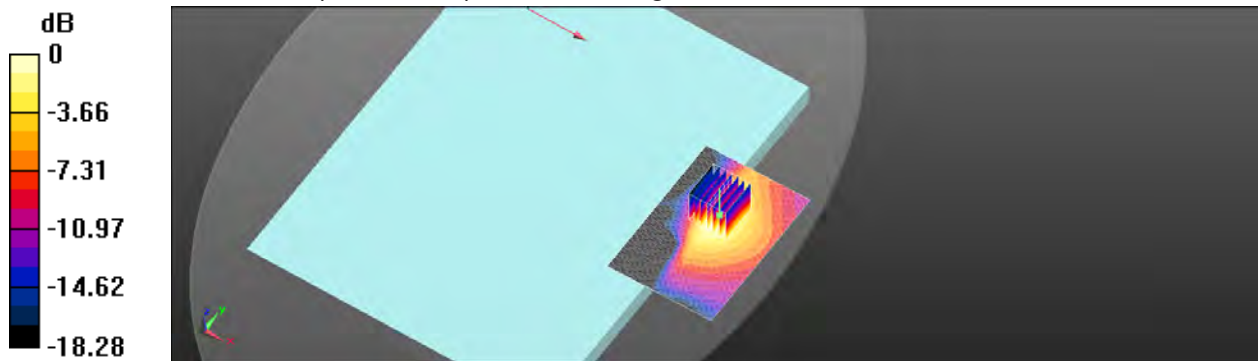
#### Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$ , $dy=5\text{mm}$ , $dz=5\text{mm}$

Reference Value =  $2.526 \text{ V/m}$ ; Power Drift =  $0.14 \text{ dB}$ 

Peak SAR (extrapolated) =  $0.237 \text{ W/kg}$ 
**SAR(1 g) =  $0.126 \text{ W/kg}$ ; SAR(10 g) =  $0.067 \text{ W/kg}$** 

Smallest distance from peaks to all points 3 dB below =  $12 \text{ mm}$ 

Ratio of SAR at M2 to SAR at M1 =  $53.1\%$ 

Maximum value of SAR (measured) =  $0.180 \text{ W/kg}$ 


0 dB =  $0.180 \text{ W/kg}$  =  $-7.45 \text{ dBW/kg}$

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/25

**Report No. :ES/2022/20014****Bluetooth(GFSK)\_Body\_Bottom Surface\_CH 78\_0mm\_Aux**

Communication System: Bluetooth; Frequency: 2480 MHz; Duty Cycle: 1:1.297

Medium parameters used:  $f = 2480$  MHz;  $\sigma = 1.819$  S/m;  $\epsilon_r = 38.778$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient temperature: 22.6°C; Liquid temperature: 22.4°C

**DASY5 Configuration:**

- Probe: EX3DV4 - SN7686; ConvF(8.32, 8.32, 8.32); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (101x161x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.0601 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.657 V/m; Power Drift = 0.17 dB

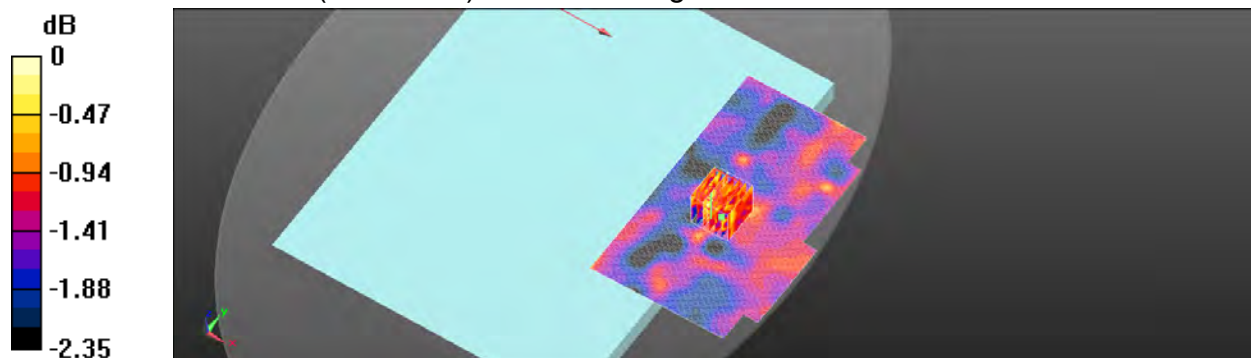
Peak SAR (extrapolated) = 0.0650 W/kg

**SAR(1 g) = 0.057 W/kg; SAR(10 g) = 0.021 W/kg**

Smallest distance from peaks to all points 3 dB below = 14.1 mm

Ratio of SAR at M2 to SAR at M1 = 79.2%

Maximum value of SAR (measured) = 0.0649 W/kg



0 dB = 0.0649 W/kg = -11.87 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

Date: 2022/3/26

## Report No. :ES/2022/20014

### WLAN 802.11n(40M) 5.2G\_Body\_Bottom Surface\_CH 46\_0mm\_Aux

Communication System: WLAN; Frequency: 5230 MHz; Duty Cycle: 1:1.022

Medium parameters used:  $f = 5230 \text{ MHz}$ ;  $\sigma = 4.641 \text{ S/m}$ ;  $\epsilon_r = 35.524$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature: 22.5°C; Liquid temperature: 22.8°C

#### DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.81, 5.81, 5.81); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

#### Area Scan (91x151x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.234 W/kg

#### Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.184 V/m; Power Drift = 0.12 dB

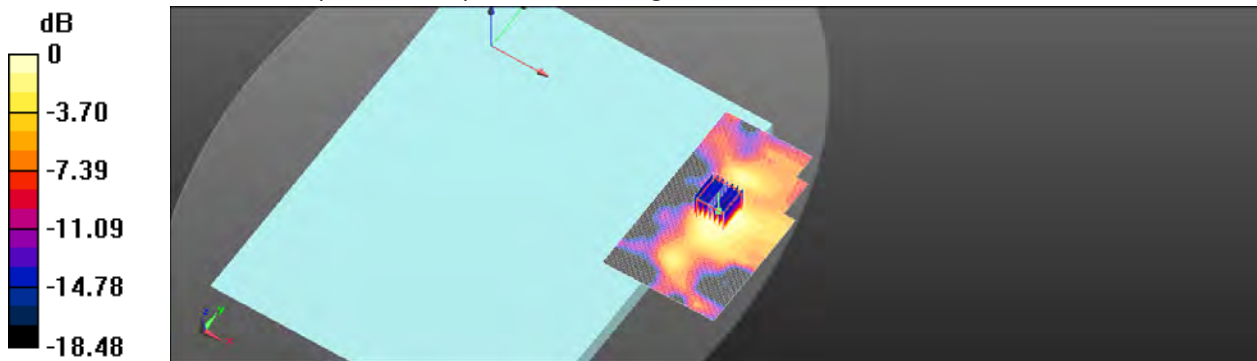
Peak SAR (extrapolated) = 0.410 W/kg

**SAR(1 g) = 0.129 W/kg; SAR(10 g) = 0.053 W/kg**

Smallest distance from peaks to all points 3 dB below = 12 mm

Ratio of SAR at M2 to SAR at M1 = 58.9%

Maximum value of SAR (measured) = 0.220 W/kg



0 dB = 0.220 W/kg = -6.58 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/27

## Report No. :ES/2022/20014

### WLAN 802.11n(40M) 5.3G\_Body\_Bottom Surface\_CH 54\_0mm\_Aux

Communication System: WLAN; Frequency: 5270 MHz; Duty Cycle: 1:1.022

Medium parameters used:  $f = 5270 \text{ MHz}$ ;  $\sigma = 4.686 \text{ S/m}$ ;  $\epsilon_r = 35.493$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature:  $22.7^\circ\text{C}$ ; Liquid temperature:  $22.6^\circ\text{C}$ 

#### DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.81, 5.81, 5.81); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

#### Area Scan (91x131x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.318 W/kg

#### Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 6.001 V/m; Power Drift = 0.19 dB

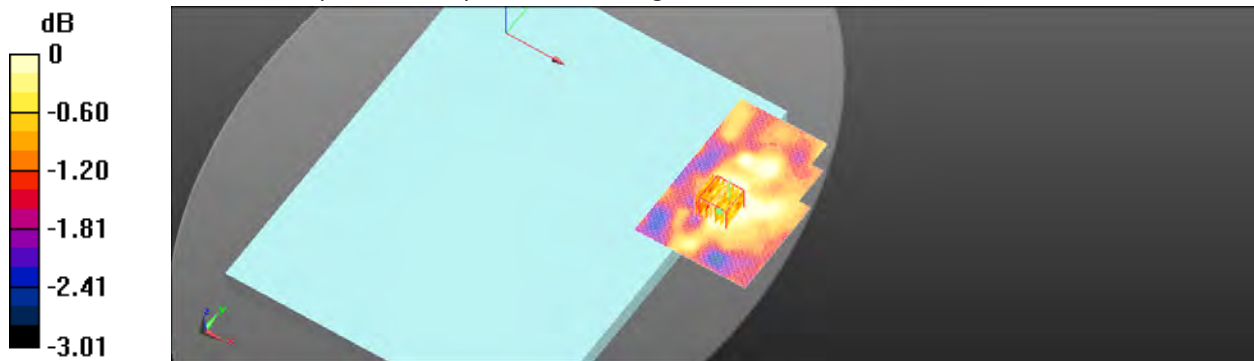
Peak SAR (extrapolated) = 0.536 W/kg

**SAR(1 g) = 0.256 W/kg; SAR(10 g) = 0.088 W/kg**

Smallest distance from peaks to all points 3 dB below = 16.9 mm

Ratio of SAR at M2 to SAR at M1 = 78.2%

Maximum value of SAR (measured) = 0.323 W/kg



0 dB = 0.323 W/kg = -6.12 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/28

## Report No. :ES/2022/20014

### WLAN 802.11ac(80M) 5.6G\_Body\_Bottom Surface\_CH 138\_0mm\_Aux

Communication System: WLAN; Frequency: 5690 MHz; Duty Cycle: 1:1.02

Medium parameters used:  $f = 5690 \text{ MHz}$ ;  $\sigma = 5.112 \text{ S/m}$ ;  $\epsilon_r = 34.994$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature:  $22.7^\circ\text{C}$ ; Liquid temperature:  $22.8^\circ\text{C}$ 

#### DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.16, 5.16, 5.16); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

#### Area Scan (91x151x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.405 W/kg

#### Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 6.080 V/m; Power Drift = 0.17 dB

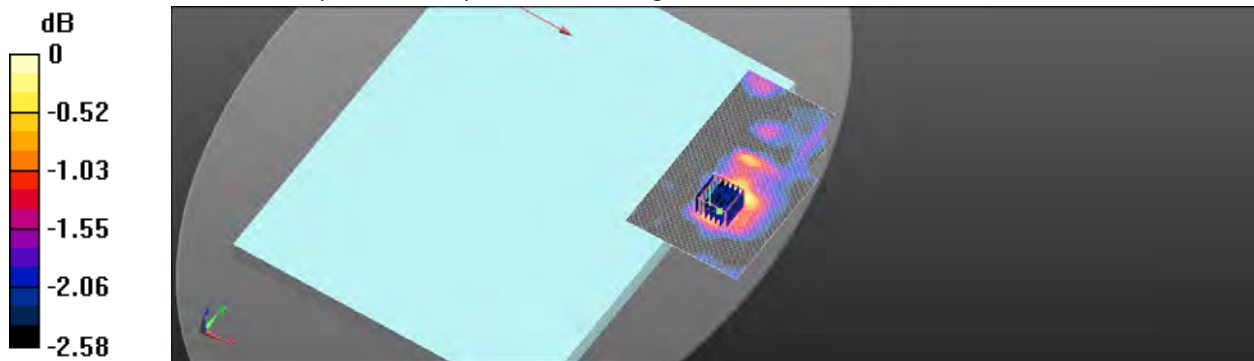
Peak SAR (extrapolated) = 0.687 W/kg

**SAR(1 g) = 0.321 W/kg; SAR(10 g) = 0.111 W/kg**

Smallest distance from peaks to all points 3 dB below = 16.6 mm

Ratio of SAR at M2 to SAR at M1 = 76.2%

Maximum value of SAR (measured) = 0.384 W/kg



0 dB = 0.384 W/kg = -3.75 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/28

## Report No. :ES/2022/20014

### WLAN 802.11n(40M) 5.8G\_Body\_Bottom Surface\_CH 151\_0mm\_Aux

Communication System: WLAN; Frequency: 5755 MHz; Duty Cycle: 1:1.022

Medium parameters used:  $f = 5755 \text{ MHz}$ ;  $\sigma = 5.174 \text{ S/m}$ ;  $\epsilon_r = 34.934$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature: 22.5°C; Liquid temperature: 22.3°C

#### DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.3, 5.3, 5.3); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

#### Area Scan (91x131x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.360 W/kg

#### Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.537 V/m; Power Drift = -0.06 dB

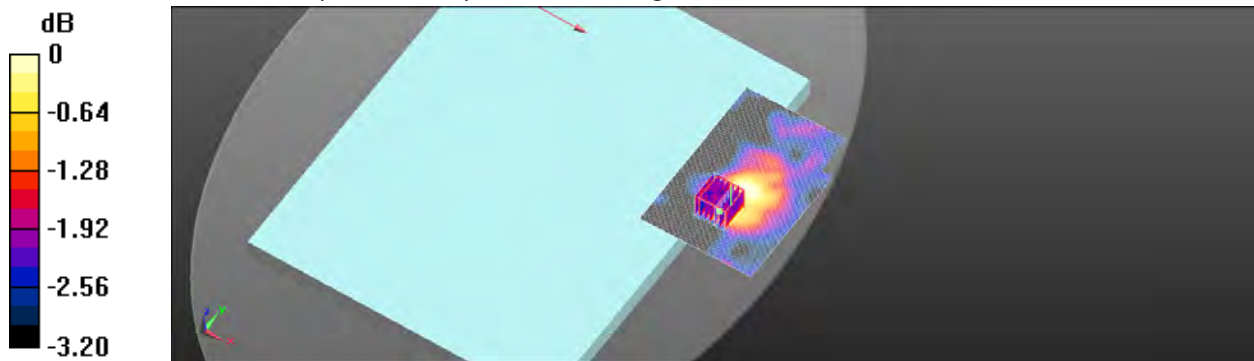
Peak SAR (extrapolated) = 1.11 W/kg

**SAR(1 g) = 0.319 W/kg; SAR(10 g) = 0.106 W/kg**

Smallest distance from peaks to all points 3 dB below = 16.8 mm

Ratio of SAR at M2 to SAR at M1 = 77.8%

Maximum value of SAR (measured) = 0.387 W/kg



0 dB = 0.387 W/kg = -4.50 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/25

**Report No. : ES/2022/20014****WLAN 802.11b\_Body\_Right Edge\_CH 6\_0mm\_Main**

Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1.011

Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.773 \text{ S/m}$ ;  $\epsilon_r = 38.85$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature: 22.6°C; Liquid temperature: 22.4°C

**DASY5 Configuration:**

- Probe: EX3DV4 - SN7686; ConvF(8.32, 8.32, 8.32); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (71x101x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.557 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.577 V/m; Power Drift = 0.17 dB

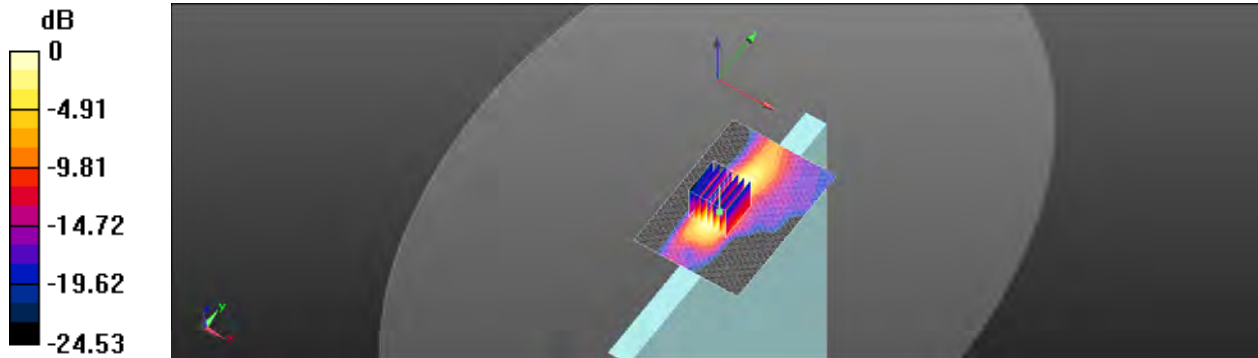
Peak SAR (extrapolated) = 0.835 W/kg

**SAR(1 g) = 0.338 W/kg; SAR(10 g) = 0.139 W/kg**

Smallest distance from peaks to all points 3 dB below = 7 mm

Ratio of SAR at M2 to SAR at M1 = 41.9%

Maximum value of SAR (measured) = 0.561 W/kg



0 dB = 0.561 W/kg = -2.51 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/26

## Report No. :ES/2022/20014

### WLAN 802.11a 5.2G\_Body\_Left Edge\_CH 40\_0mm\_Main

Communication System: WLAN; Frequency: 5200 MHz; Duty Cycle: 1:1.017

Medium parameters used:  $f = 5200 \text{ MHz}$ ;  $\sigma = 4.611 \text{ S/m}$ ;  $\epsilon_r = 35.568$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature: 22.5°C; Liquid temperature: 22.8°C

#### DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.81, 5.81, 5.81); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

#### Area Scan (81x121x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 1.88 W/kg

#### Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.267 V/m; Power Drift = 0.15 dB

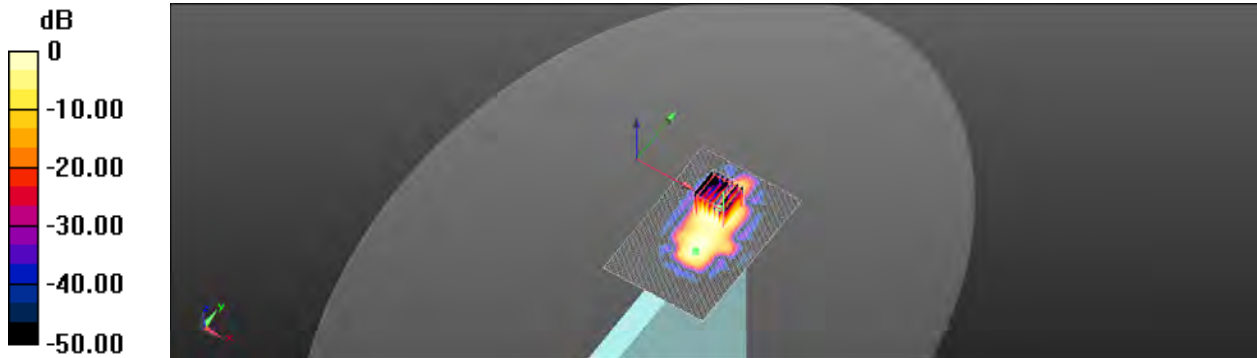
Peak SAR (extrapolated) = 3.22 W/kg

**SAR(1 g) = 0.797 W/kg; SAR(10 g) = 0.228 W/kg**

Smallest distance from peaks to all points 3 dB below = 6.4 mm

Ratio of SAR at M2 to SAR at M1 = 57.2%

Maximum value of SAR (measured) = 1.54 W/kg



0 dB = 1.54 W/kg = 1.88 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/27

## Report No. :ES/2022/20014

### WLAN 802.11n(40M) 5.3G\_Body\_Left Edge\_CH 54\_0mm\_Main

Communication System: WLAN; Frequency: 5270 MHz; Duty Cycle: 1:1.022

Medium parameters used:  $f = 5270 \text{ MHz}$ ;  $\sigma = 4.686 \text{ S/m}$ ;  $\epsilon_r = 35.493$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature:  $22.7^\circ\text{C}$ ; Liquid temperature:  $22.6^\circ\text{C}$ 

#### DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.81, 5.81, 5.81); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

#### Area Scan (71x101x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 2.87 W/kg

#### Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.715 V/m; Power Drift = 0.07 dB

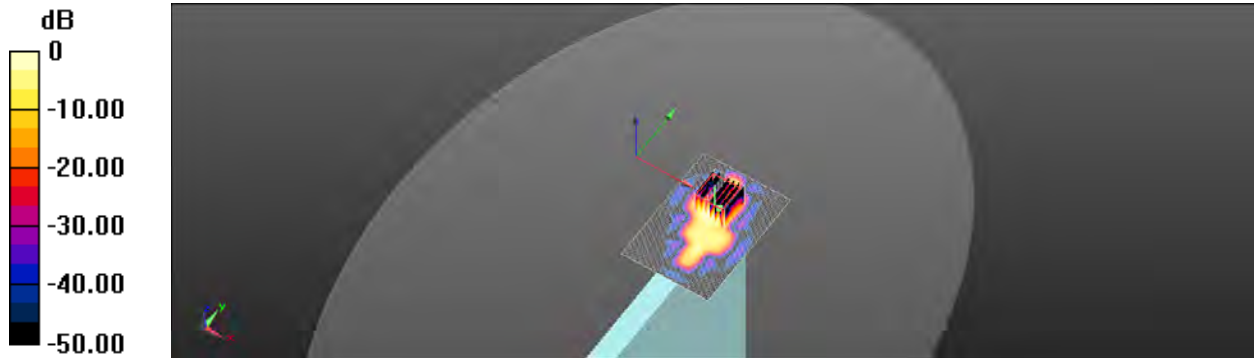
Peak SAR (extrapolated) = 3.52 W/kg

**SAR(1 g) = 0.854 W/kg; SAR(10 g) = 0.232 W/kg**

Smallest distance from peaks to all points 3 dB below = 5.8 mm

Ratio of SAR at M2 to SAR at M1 = 47.1%

Maximum value of SAR (measured) = 1.88 W/kg



0 dB = 1.88 W/kg = 2.76 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/28

## Report No. :ES/2022/20014

### WLAN 802.11ac(80M) 5.6G\_Body\_Left Edge\_CH 138\_0mm\_Main

Communication System: WLAN; Frequency: 5690 MHz; Duty Cycle: 1:1.02

Medium parameters used:  $f = 5690 \text{ MHz}$ ;  $\sigma = 5.112 \text{ S/m}$ ;  $\epsilon_r = 34.994$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature:  $22.7^\circ\text{C}$ ; Liquid temperature:  $22.8^\circ\text{C}$ 

#### DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.16, 5.16, 5.16); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

#### Area Scan (81x101x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 1.49 W/kg

#### Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.658 V/m; Power Drift = 0.11 dB

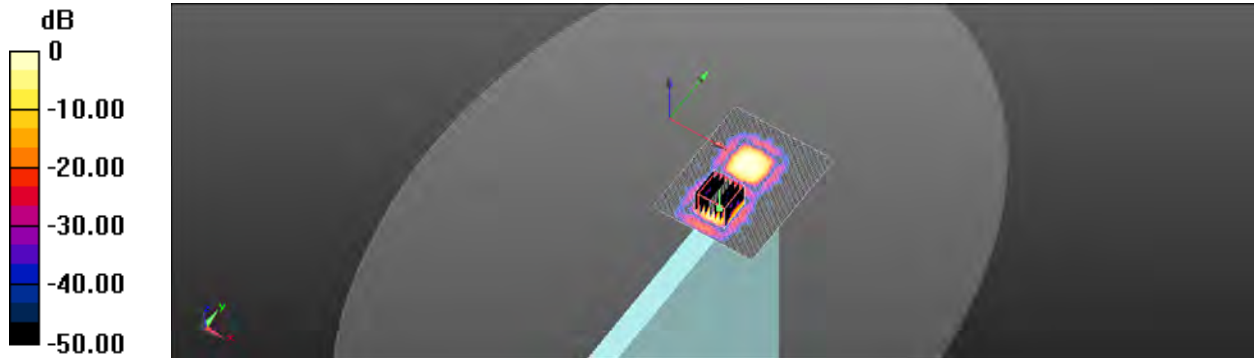
Peak SAR (extrapolated) = 3.45 W/kg

**SAR(1 g) = 0.782 W/kg; SAR(10 g) = 0.226 W/kg**

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 40.4%

Maximum value of SAR (measured) = 1.44 W/kg



0 dB = 1.44 W/kg = 1.58 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/28

**Report No. :ES/2022/20014**
**WLAN 802.11n(40M) 5.8G\_Body\_Left Edge\_CH 151\_0mm\_Main**

Communication System: WLAN; Frequency: 5755 MHz; Duty Cycle: 1:1.022

Medium parameters used:  $f = 5755 \text{ MHz}$ ;  $\sigma = 5.174 \text{ S/m}$ ;  $\epsilon_r = 34.934$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature: 22.5°C; Liquid temperature: 22.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.3, 5.3, 5.3); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (71x91x1):** Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 2.14 W/kg

**Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.364 V/m; Power Drift = 0.03 dB

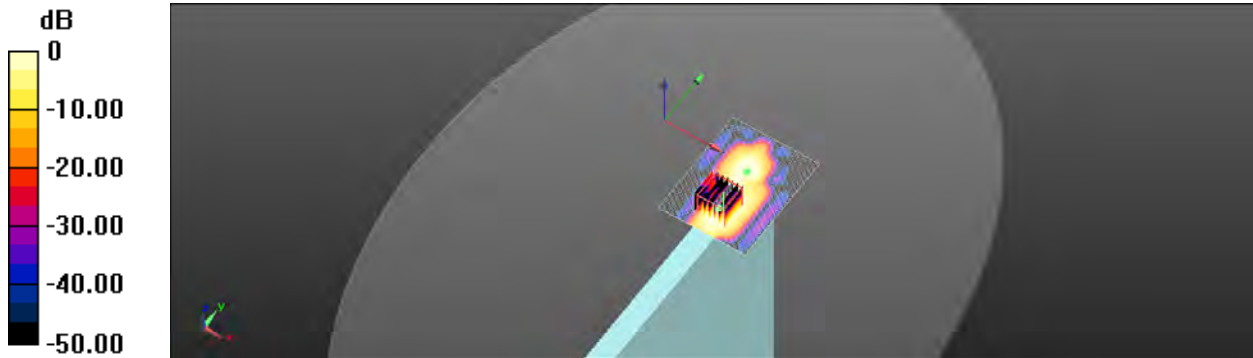
Peak SAR (extrapolated) = 2.99 W/kg

**SAR(1 g) = 0.655 W/kg; SAR(10 g) = 0.199 W/kg**

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 46.9%

Maximum value of SAR (measured) = 1.29 W/kg



0 dB = 1.29 W/kg = 1.12 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/25

**Report No. :ES/2022/20014****WLAN 802.11b\_Body\_Right Edge\_CH 11\_0mm\_Aux**

Communication System: WLAN; Frequency: 2462 MHz; Duty Cycle: 1:1.011

Medium parameters used:  $f = 2462 \text{ MHz}$ ;  $\sigma = 1.799 \text{ S/m}$ ;  $\epsilon_r = 38.809$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature: 22.6°C; Liquid temperature: 22.4°C

**DASY5 Configuration:**

- Probe: EX3DV4 - SN7686; ConvF(8.32, 8.32, 8.32); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (71x101x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.534 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.914 V/m; Power Drift = 0.12 dB

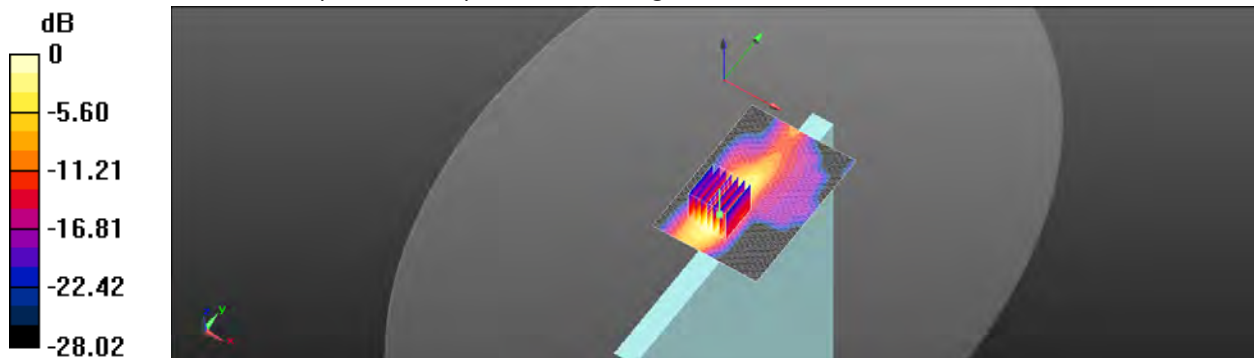
Peak SAR (extrapolated) = 0.762 W/kg

**SAR(1 g) = 0.315 W/kg; SAR(10 g) = 0.125 W/kg**

Smallest distance from peaks to all points 3 dB below = 7 mm

Ratio of SAR at M2 to SAR at M1 = 43.5%

Maximum value of SAR (measured) = 0.524 W/kg



0 dB = 0.524 W/kg = -2.81 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/25

## Report No. :ES/2022/20014

### Bluetooth(GFSK)\_Body\_Right Edge\_CH 78\_0mm\_Aux

Communication System: Bluetooth; Frequency: 2480 MHz; Duty Cycle: 1:1.297

Medium parameters used:  $f = 2480 \text{ MHz}$ ;  $\sigma = 1.819 \text{ S/m}$ ;  $\epsilon_r = 38.778$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature:  $22.6^\circ\text{C}$ ; Liquid temperature:  $22.4^\circ\text{C}$ 

#### DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(8.32, 8.32, 8.32); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

#### Area Scan (71x121x1): Interpolated grid: $dx=12 \text{ mm}$ , $dy=12 \text{ mm}$

Maximum value of SAR (interpolated) =  $0.0158 \text{ W/kg}$ 

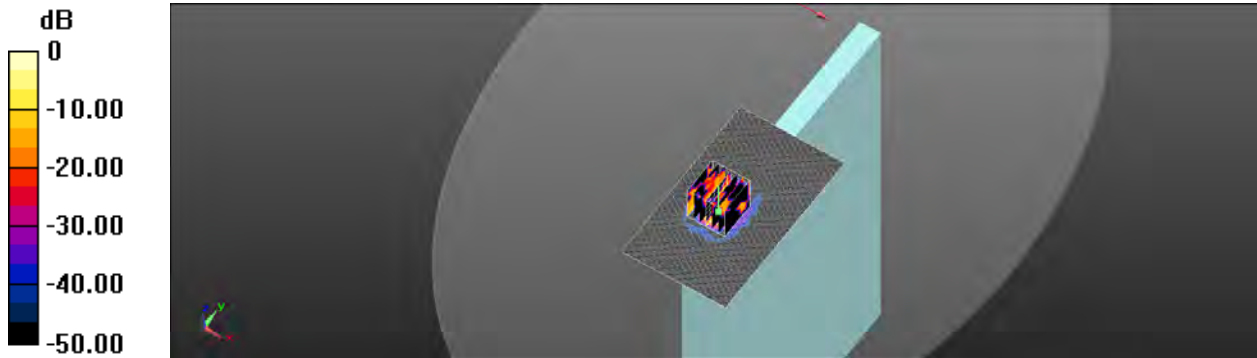
#### Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$ , $dy=5\text{mm}$ , $dz=5\text{mm}$

Reference Value =  $2.357 \text{ V/m}$ ; Power Drift =  $0.12 \text{ dB}$ 

Peak SAR (extrapolated) =  $0.0400 \text{ W/kg}$ 
**SAR(1 g) =  $0.00586 \text{ W/kg}$ ; SAR(10 g) =  $0.000964 \text{ W/kg}$** 

Smallest distance from peaks to all points 3 dB below =  $9 \text{ mm}$ 

Ratio of SAR at M2 to SAR at M1 =  $47.5\%$ 

Maximum value of SAR (measured) =  $0.0165 \text{ W/kg}$ 


0 dB =  $0.0165 \text{ W/kg}$  =  $-17.83 \text{ dBW/kg}$

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/26

## Report No. :ES/2022/20014

### WLAN 802.11ac(80M) 5.2G\_Body\_Right Edge\_CH 42\_0mm\_Aux

Communication System: WLAN; Frequency: 5210 MHz; Duty Cycle: 1:1.02

Medium parameters used:  $f = 5210 \text{ MHz}$ ;  $\sigma = 4.623 \text{ S/m}$ ;  $\epsilon_r = 35.55$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature: 22.5°C; Liquid temperature: 22.8°C

#### DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.81, 5.81, 5.81); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

#### Area Scan (81x121x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 1.54 W/kg

#### Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 9.355 V/m; Power Drift = 0.18 dB

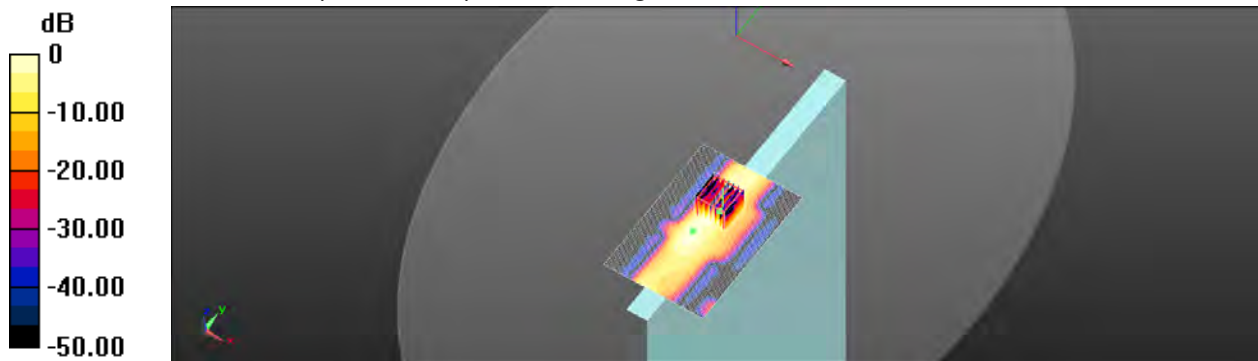
Peak SAR (extrapolated) = 3.88 W/kg

**SAR(1 g) = 0.782 W/kg; SAR(10 g) = 0.201 W/kg**

Smallest distance from peaks to all points 3 dB below = 4.4 mm

Ratio of SAR at M2 to SAR at M1 = 55.6%

Maximum value of SAR (measured) = 1.66 W/kg



0 dB = 1.66 W/kg = 2.22 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/27

## Report No. :ES/2022/20014

### WLAN 802.11ac(80M) 5.3G\_Body\_Right Edge\_CH 58\_0mm\_Aux

Communication System: WLAN; Frequency: 5290 MHz; Duty Cycle: 1:1.02

Medium parameters used:  $f = 5290 \text{ MHz}$ ;  $\sigma = 4.702 \text{ S/m}$ ;  $\epsilon_r = 35.455$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature:  $22.7^\circ\text{C}$ ; Liquid temperature:  $22.6^\circ\text{C}$ 

#### DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.81, 5.81, 5.81); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

#### Area Scan (91x121x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 1.55 W/kg

#### Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 6.565 V/m; Power Drift = 0.13 dB

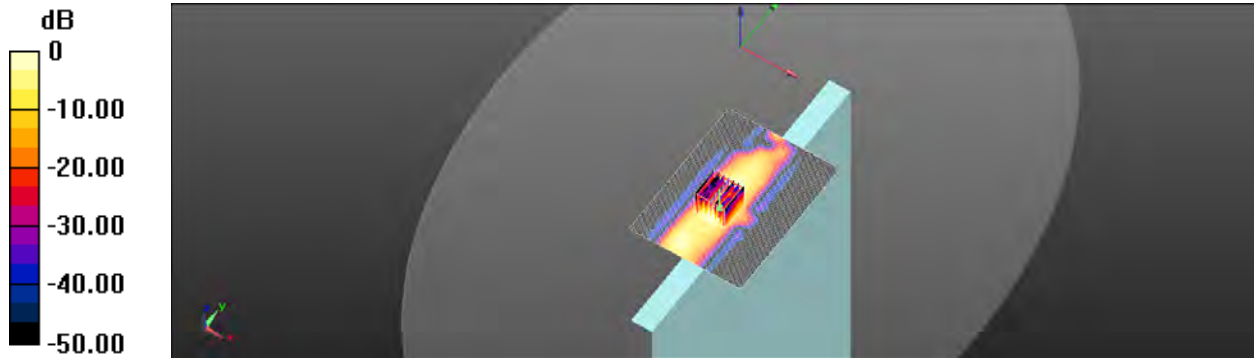
Peak SAR (extrapolated) = 3.38 W/kg

**SAR(1 g) = 0.727 W/kg; SAR(10 g) = 0.196 W/kg**

Smallest distance from peaks to all points 3 dB below = 4.7 mm

Ratio of SAR at M2 to SAR at M1 = 55.5%

Maximum value of SAR (measured) = 1.53 W/kg



0 dB = 1.53 W/kg = 1.85 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/28

## Report No. :ES/2022/20014

### WLAN 802.11ac(80M) 5.6G\_Body\_Right Edge\_CH 138\_0mm\_Aux

Communication System: WLAN; Frequency: 5690 MHz; Duty Cycle: 1:1.02

Medium parameters used:  $f = 5690 \text{ MHz}$ ;  $\sigma = 5.112 \text{ S/m}$ ;  $\epsilon_r = 34.994$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature:  $22.7^\circ\text{C}$ ; Liquid temperature:  $22.8^\circ\text{C}$ 

#### DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.16, 5.16, 5.16); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

#### Area Scan (71x131x1): Interpolated grid: $dx=10 \text{ mm}$ , $dy=10 \text{ mm}$

Maximum value of SAR (interpolated) =  $1.52 \text{ W/kg}$ 

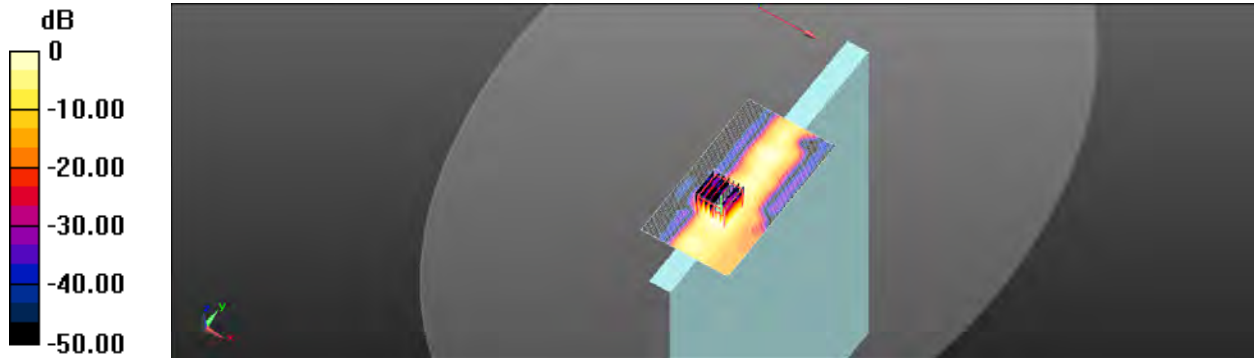
#### Zoom Scan (7x7x12)/Cube 0: Measurement grid: $dx=4\text{mm}$ , $dy=4\text{mm}$ , $dz=2\text{mm}$

Reference Value =  $6.356 \text{ V/m}$ ; Power Drift =  $0.18 \text{ dB}$ 

Peak SAR (extrapolated) =  $2.79 \text{ W/kg}$ 
**SAR(1 g) =  $0.576 \text{ W/kg}$ ; SAR(10 g) =  $0.177 \text{ W/kg}$** 

Smallest distance from peaks to all points 3 dB below =  $4.3 \text{ mm}$ 

Ratio of SAR at M2 to SAR at M1 =  $47.2\%$ 

Maximum value of SAR (measured) =  $1.41 \text{ W/kg}$ 

 $0 \text{ dB} = 1.41 \text{ W/kg} = 1.32 \text{ dBW/kg}$ 

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/28

**Report No. :ES/2022/20014**
**WLAN 802.11n(40M) 5.8G\_Body\_Right Edge\_CH 151\_0mm\_Aux**

Communication System: WLAN; Frequency: 5755 MHz; Duty Cycle: 1:1.022

Medium parameters used:  $f = 5755 \text{ MHz}$ ;  $\sigma = 5.174 \text{ S/m}$ ;  $\epsilon_r = 34.934$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature: 22.5°C; Liquid temperature: 22.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.3, 5.3, 5.3); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (71x181x1):** Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 1.53 W/kg

**Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.629 V/m; Power Drift = 0.07 dB

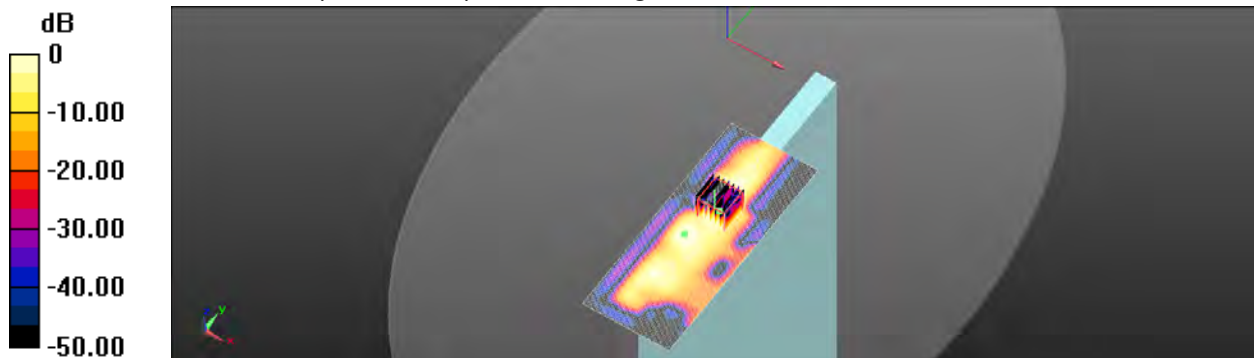
Peak SAR (extrapolated) = 3.23 W/kg

**SAR(1 g) = 0.683 W/kg; SAR(10 g) = 0.185 W/kg**

Smallest distance from peaks to all points 3 dB below = 4.3 mm

Ratio of SAR at M2 to SAR at M1 = 46.6%

Maximum value of SAR (measured) = 1.51 W/kg



0 dB = 1.51 W/kg = 1.54 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, BOTTOM SURFACE, U-NII-5, IEEE 802.11ax (160MHz), Channel 47 (6185.0 MHz)\_Main

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device,             | 322.0 x 240.0 x 10.0 |      | Laptop   |

## Exposure Conditions

|                      |                              |         |                |                                 |                   |                        |                  |
|----------------------|------------------------------|---------|----------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL | Position, Test Distance [mm] | Band    | Group, UID     | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, HSL            | BOTTOM SURFACE, 0.00         | U-NII-5 | WLAN,10755-AAC | 6185.0,47                       | 6.2               | 5.671                  | 34.672           |

## Hardware Setup

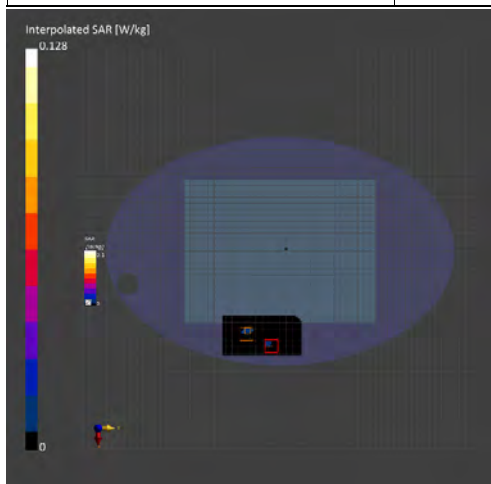
|                                    |                    |                             |                         |
|------------------------------------|--------------------|-----------------------------|-------------------------|
| Phantom                            | TSL, Measured Date | Probe, Calibration Date     | DAE, Calibration Date   |
| ELI V5.0 (20deg probe tilt) - 1141 | HBBL-600-10000     | EX3DV4 - SN7686, 2021-10-05 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 68.0 x 136.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm]     | 8.5 x 8.5    | 3.4 x 3.4 x 1.4    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | Yes          | Yes                |
| Grading Ratio       | 1.5          | 1.4                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

## Measurement Results

|                            | Area Scan         | Zoom Scan         |
|----------------------------|-------------------|-------------------|
| Date                       | 2022-03-23, 02:09 | 2022-03-23, 02:26 |
| psSAR1g [W/Kg]             | 0.016             | 0.022             |
| psSAR10g [W/Kg]            | 0.005             | 0.009             |
| psPDab (1.0cm2, sq) [W/m2] |                   | 0.219             |
| psPDab (4.0cm2, sq) [W/m2] |                   | 0.190             |
| Power Drift [dB]           | 0.04              | 0.03              |
| Power Scaling              | Disabled          | Disabled          |
| Scaling Factor [dB]        |                   |                   |
| TSL Correction             | No correction     | No correction     |
| M2/M1 [%]                  |                   | 63.2              |
| Dist 3dB Peak [mm]         |                   | 8.5               |



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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

## Report No. : ES/2022/20014

Measurement Report for Device, BOTTOM SURFACE, U-NII-6, IEEE 802.11ax (160MHz), Channel 111 (6505.0 MHz)\_Main

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device,             | 322.0 x 240.0 x 10.0 |      | Laptop   |

## Exposure Conditions

|                      |                              |         |                 |                                 |                   |                        |                  |
|----------------------|------------------------------|---------|-----------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, HSL            | BOTTOM SURFACE, 0.00         | U-NII-6 | WLAN, 10755-AAC | 6505.0, 111                     | 6.2               | 6.045                  | 34.304           |

## Hardware Setup

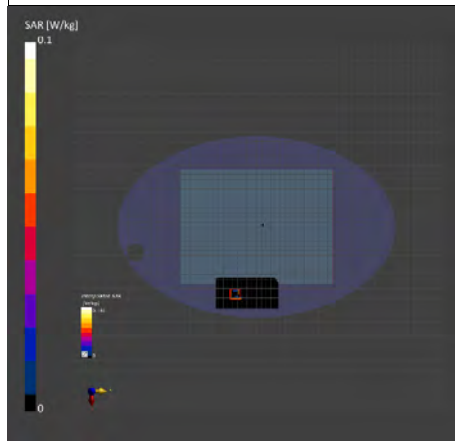
|                                    |                    |                             |                         |
|------------------------------------|--------------------|-----------------------------|-------------------------|
| Phantom                            | TSL, Measured Date | Probe, Calibration Date     | DAE, Calibration Date   |
| ELI V5.0 (20deg probe tilt) - 1141 | HBBL-600-10000     | EX3DV4 - SN7686, 2021-10-05 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 68.0 x 136.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm]     | 8.5 x 8.5    | 3.4 x 3.4 x 1.4    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | Yes          | Yes                |
| Grading Ratio       | 1.5          | 1.4                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

## Measurement Results

|                            | Area Scan         | Zoom Scan         |
|----------------------------|-------------------|-------------------|
| Date                       | 2022-03-23, 02:45 | 2022-03-23, 02:56 |
| psSAR1g [W/Kg]             | 0.020             | 0.022             |
| psSAR10g [W/Kg]            | 0.004             | 0.006             |
| psPDab (1.0cm2, sq) [W/m2] |                   | 0.221             |
| psPDab (4.0cm2, sq) [W/m2] |                   | 0.140             |
| Power Drift [dB]           | 0.03              | 0.01              |
| Power Scaling              | Disabled          | Disabled          |
| Scaling Factor [dB]        |                   |                   |
| TSL Correction             | No correction     | No correction     |
| M2/M1 [%]                  |                   | 74.0              |
| Dist 3dB Peak [mm]         |                   | 4.1               |



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

Report No. : ES/2022/20014

Measurement Report for Device, BOTTOM SURFACE, U-NII-7, IEEE 802.11ax (160MHz), Channel 143 (6665.0 MHz)\_Main

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device,             | 322.0 x 240.0 x 10.0 |      | Laptop   |

## Exposure Conditions

|                      |                              |         |                 |                                 |                   |                        |                  |
|----------------------|------------------------------|---------|-----------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, HSL            | BOTTOM SURFACE, 0.00         | U-NII-7 | WLAN, 10755-AAC | 6665.0, 143                     | 6.2               | 6.228                  | 34.086           |

## Hardware Setup

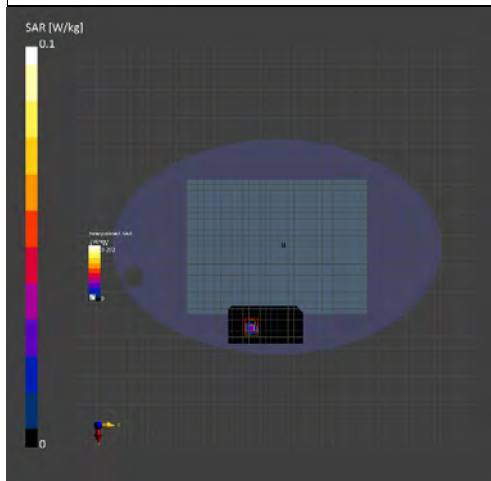
|                                    |                    |                             |                         |
|------------------------------------|--------------------|-----------------------------|-------------------------|
| Phantom                            | TSL, Measured Date | Probe, Calibration Date     | DAE, Calibration Date   |
| ELI V5.0 (20deg probe tilt) - 1141 | HBBL-600-10000     | EX3DV4 - SN7686, 2021-10-05 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 68.0 x 136.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm]     | 8.5 x 8.5    | 3.4 x 3.4 x 1.4    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | Yes          | Yes                |
| Grading Ratio       | 1.5          | 1.4                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

## Measurement Results

|                            | Area Scan         | Zoom Scan         |
|----------------------------|-------------------|-------------------|
| Date                       | 2022-03-23, 03:18 | 2022-03-23, 03:31 |
| psSAR1g [W/Kg]             | 0.040             | 0.045             |
| psSAR10g [W/Kg]            | 0.011             | 0.014             |
| psPDab (1.0cm2, sq) [W/m2] |                   | 0.451             |
| psPDab (4.0cm2, sq) [W/m2] |                   | 0.335             |
| Power Drift [dB]           | 0.02              | 0.04              |
| Power Scaling              | Disabled          | Disabled          |
| Scaling Factor [dB]        |                   |                   |
| TSL Correction             | No correction     | No correction     |
| M2/M1 [%]                  |                   | 56.0              |
| Dist 3dB Peak [mm]         |                   | 4.1               |



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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, BOTTOM SURFACE, U-NII-8, IEEE 802.11ax (160MHz), Channel 207 (6985.0 MHz)\_Main

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device,             | 322.0 x 240.0 x 10.0 |      | Laptop   |

## Exposure Conditions

|                      |                              |         |                 |                                 |                   |                        |                  |
|----------------------|------------------------------|---------|-----------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, HSL            | BOTTOM SURFACE, 0.00         | U-NII-8 | WLAN, 10755-AAC | 6985.0, 207                     | 6.14              | 6.596                  | 33.718           |

## Hardware Setup

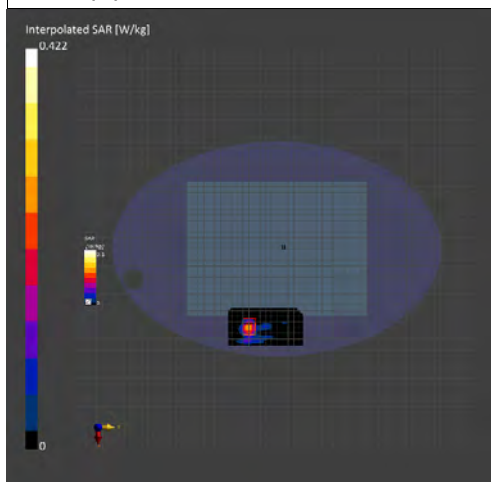
|                                    |                    |                             |                         |
|------------------------------------|--------------------|-----------------------------|-------------------------|
| Phantom                            | TSL, Measured Date | Probe, Calibration Date     | DAE, Calibration Date   |
| ELI V5.0 (20deg probe tilt) - 1141 | HBBL-600-10000     | EX3DV4 - SN7686, 2021-10-05 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 68.0 x 136.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm]     | 8.5 x 8.5    | 3.4 x 3.4 x 1.4    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | Yes          | Yes                |
| Grading Ratio       | 1.5          | 1.4                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

## Measurement Results

|                            | Area Scan         | Zoom Scan         |
|----------------------------|-------------------|-------------------|
| Date                       | 2022-03-23, 03:52 | 2022-03-23, 03:59 |
| psSAR1g [W/Kg]             | 0.066             | 0.074             |
| psSAR10g [W/Kg]            | 0.026             | 0.024             |
| psPDab (1.0cm2, sq) [W/m2] |                   | 0.739             |
| psPDab (4.0cm2, sq) [W/m2] |                   | 0.563             |
| Power Drift [dB]           | -0.12             | -0.13             |
| Power Scaling              | Disabled          | Disabled          |
| Scaling Factor [dB]        |                   |                   |
| TSL Correction             | No correction     | No correction     |
| M2/M1 [%]                  |                   | 56.3              |
| Dist 3dB Peak [mm]         |                   | 6.7               |



Report No. : ES/2022/20014

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

**Measurement Report for Device, BOTTOM SURFACE, U-NII-5, IEEE 802.11ax (160MHz), Channel 79 (6345.0 MHz)\_Aux  
Device Under Test Properties**

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device,             | 322.0 x 240.0 x 10.0 |      | Laptop   |

**Exposure Conditions**

|                      |                              |         |                |                                 |                   |                        |                  |
|----------------------|------------------------------|---------|----------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL | Position, Test Distance [mm] | Band    | Group, UID     | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, HSL            | BOTTOM SURFACE, 0.00         | U-NII-5 | WLAN,10755-AAC | 6345.0,79                       | 6.2               | 5.862                  | 34.476           |

**Hardware Setup**

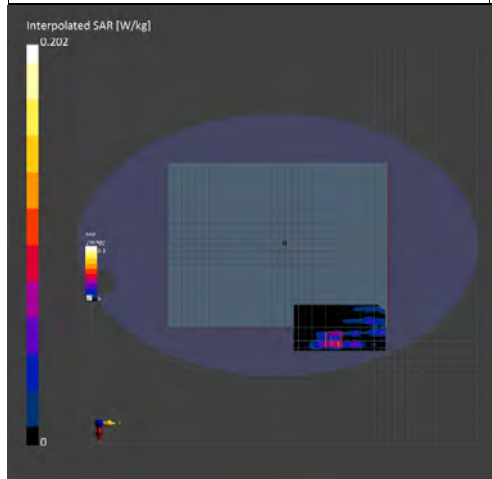
|                                    |                    |                             |                         |
|------------------------------------|--------------------|-----------------------------|-------------------------|
| Phantom                            | TSL, Measured Date | Probe, Calibration Date     | DAE, Calibration Date   |
| ELI V5.0 (20deg probe tilt) - 1141 | HBBL-600-10000     | EX3DV4 - SN7686, 2021-10-05 | DAE4 Sn1665, 2022-02-28 |

**Scans Setup**

|                     |              |                    |
|---------------------|--------------|--------------------|
|                     | Area Scan    | Zoom Scan          |
| Grid Extents [mm]   | 68.0 x 136.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm]     | 8.5 x 8.5    | 3.4 x 3.4 x 1.4    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | Yes          | Yes                |
| Grading Ratio       | 1.5          | 1.4                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

**Measurement Results**

|                            |                   |                   |
|----------------------------|-------------------|-------------------|
|                            | Area Scan         | Zoom Scan         |
| Date                       | 2022-03-23, 04:48 | 2022-03-23, 04:59 |
| psSAR1g [W/Kg]             | 0.037             | 0.035             |
| psSAR10g [W/Kg]            | 0.011             | 0.012             |
| psPDab (1.0cm2, sq) [W/m2] |                   | 0.354             |
| psPDab (4.0cm2, sq) [W/m2] |                   | 0.281             |
| Power Drift [dB]           | 0.14              | 0.16              |
| Power Scaling              | Disabled          | Disabled          |
| Scaling Factor [dB]        |                   |                   |
| TSL Correction             | No correction     | No correction     |
| M2/M1 [%]                  |                   | 69.9              |
| Dist 3dB Peak [mm]         |                   | 6.4               |



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

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

Report No. : ES/2022/20014

Measurement Report for Device, BOTTOM SURFACE, U-NII-6, IEEE 802.11ax (160MHz), Channel 111 (6505.0 MHz)\_Aux

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device,             | 322.0 x 240.0 x 10.0 |      | Laptop   |

## Exposure Conditions

|                      |                              |         |                 |                                 |                   |                        |                  |
|----------------------|------------------------------|---------|-----------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, HSL            | BOTTOM SURFACE, 0.00         | U-NII-6 | WLAN, 10755-AAC | 6505.0, 111                     | 6.2               | 6.045                  | 34.304           |

## Hardware Setup

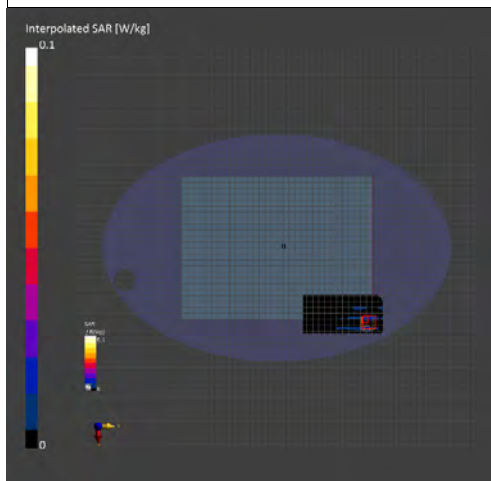
|                                    |                    |                             |                         |
|------------------------------------|--------------------|-----------------------------|-------------------------|
| Phantom                            | TSL, Measured Date | Probe, Calibration Date     | DAE, Calibration Date   |
| ELI V5.0 (20deg probe tilt) - 1141 | HBBL-600-10000     | EX3DV4 - SN7686, 2021-10-05 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 68.0 x 136.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm]     | 8.5 x 8.5    | 3.4 x 3.4 x 1.4    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | Yes          | Yes                |
| Grading Ratio       | 1.5          | 1.4                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

## Measurement Results

|                            | Area Scan         | Zoom Scan         |
|----------------------------|-------------------|-------------------|
| Date                       | 2022-03-23, 05:12 | 2022-03-23, 05:28 |
| psSAR1g [W/Kg]             | 0.016             | 0.006             |
| psSAR10g [W/Kg]            | 0.006             | 0.002             |
| psPDab (1.0cm2, sq) [W/m2] |                   | 0.059             |
| psPDab (4.0cm2, sq) [W/m2] |                   | 0.049             |
| Power Drift [dB]           | 0.02              | 0.01              |
| Power Scaling              | Disabled          | Disabled          |
| Scaling Factor [dB]        |                   |                   |
| TSL Correction             | No correction     | No correction     |
| M2/M1 [%]                  |                   | 68.2              |
| Dist 3dB Peak [mm]         |                   | 8                 |



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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, BOTTOM SURFACE, U-NII-7, IEEE 802.11ax (160MHz), Channel 175 (6825.0 MHz)\_Aux

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device,             | 322.0 x 240.0 x 10.0 |      | Laptop   |

## Exposure Conditions

|                      |                              |         |                 |                                 |                   |                        |                  |
|----------------------|------------------------------|---------|-----------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, HSL            | BOTTOM SURFACE, 0.00         | U-NII-7 | WLAN, 10755-AAC | 6825.0, 175                     | 6.2               | 6.412                  | 33.912           |

## Hardware Setup

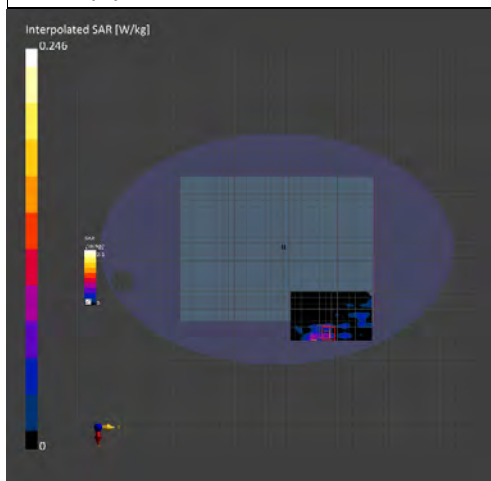
|                                    |                    |                             |                         |
|------------------------------------|--------------------|-----------------------------|-------------------------|
| Phantom                            | TSL, Measured Date | Probe, Calibration Date     | DAE, Calibration Date   |
| ELI V5.0 (20deg probe tilt) - 1141 | HBBL-600-10000     | EX3DV4 - SN7686, 2021-10-05 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 85.0 x 136.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm]     | 8.5 x 8.5    | 3.4 x 3.4 x 1.4    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | Yes          | Yes                |
| Grading Ratio       | 1.5          | 1.4                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

## Measurement Results

|                            | Area Scan         | Zoom Scan         |
|----------------------------|-------------------|-------------------|
| Date                       | 2022-03-23, 05:46 | 2022-03-23, 05:53 |
| psSAR1g [W/Kg]             | 0.051             | 0.048             |
| psSAR10g [W/Kg]            | 0.016             | 0.016             |
| psPDab (1.0cm2, sq) [W/m2] |                   | 0.484             |
| psPDab (4.0cm2, sq) [W/m2] |                   | 0.366             |
| Power Drift [dB]           | 0.08              | 0.07              |
| Power Scaling              | Disabled          | Disabled          |
| Scaling Factor [dB]        |                   |                   |
| TSL Correction             | No correction     | No correction     |
| M2/M1 [%]                  |                   | 65.2              |
| Dist 3dB Peak [mm]         |                   | 6.4               |



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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, BOTTOM SURFACE, U-NII-8, IEEE 802.11ax (160MHz), Channel 207 (6985.0 MHz)\_Aux

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device,             | 322.0 x 240.0 x 10.0 |      | Laptop   |

## Exposure Conditions

|                      |                              |         |                 |                                 |                   |                        |                  |
|----------------------|------------------------------|---------|-----------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, HSL            | BOTTOM SURFACE, 0.00         | U-NII-8 | WLAN, 10755-AAC | 6985.0, 207                     | 6.14              | 6.596                  | 33.718           |

## Hardware Setup

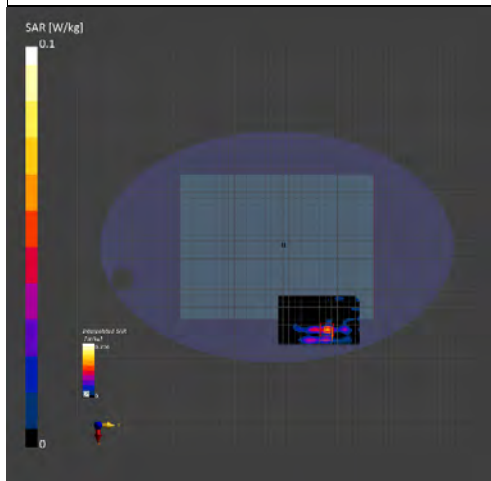
|                                    |                    |                             |                         |
|------------------------------------|--------------------|-----------------------------|-------------------------|
| Phantom                            | TSL, Measured Date | Probe, Calibration Date     | DAE, Calibration Date   |
| ELI V5.0 (20deg probe tilt) - 1141 | HBBL-600-10000     | EX3DV4 - SN7686, 2021-10-05 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 85.0 x 136.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm]     | 8.5 x 8.5    | 3.4 x 3.4 x 1.4    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | Yes          | Yes                |
| Grading Ratio       | 1.5          | 1.4                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

## Measurement Results

|                            | Area Scan         | Zoom Scan         |
|----------------------------|-------------------|-------------------|
| Date                       | 2022-03-23, 06:04 | 2022-03-23, 06:17 |
| psSAR1g [W/Kg]             | 0.048             | 0.046             |
| psSAR10g [W/Kg]            | 0.015             | 0.014             |
| psPDab (1.0cm2, sq) [W/m2] |                   | 0.456             |
| psPDab (4.0cm2, sq) [W/m2] |                   | 0.334             |
| Power Drift [dB]           | 0.11              | -0.08             |
| Power Scaling              | Disabled          | Disabled          |
| Scaling Factor [dB]        |                   |                   |
| TSL Correction             | No correction     | No correction     |
| M2/M1 [%]                  |                   | 70.6              |
| Dist 3dB Peak [mm]         |                   | 7.6               |



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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, TOP EDGE, U-NII-5, IEEE 802.11ax (160MHz), Channel 47 (6185.0 MHz)\_Main

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device,             | 322.0 x 25.0 x 240.0 |      | Tablet   |

## Exposure Conditions

|                      |                              |         |                |                                 |                   |                        |                  |
|----------------------|------------------------------|---------|----------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL | Position, Test Distance [mm] | Band    | Group, UID     | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, HSL            | TOP EDGE, 0.00               | U-NII-5 | WLAN,10755-AAC | 6185.0,47                       | 6.2               | 5.671                  | 34.672           |

## Hardware Setup

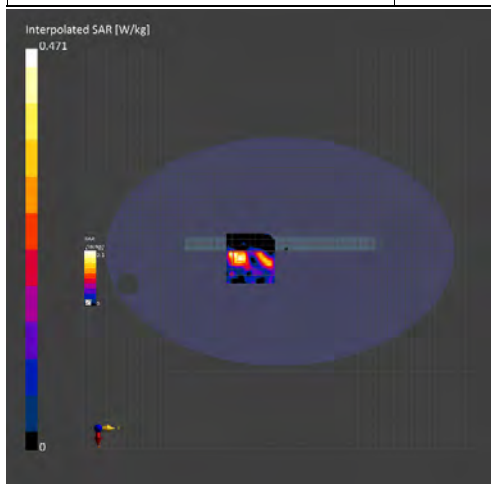
|                                    |                    |                             |                         |
|------------------------------------|--------------------|-----------------------------|-------------------------|
| Phantom                            | TSL, Measured Date | Probe, Calibration Date     | DAE, Calibration Date   |
| ELI V5.0 (20deg probe tilt) - 1141 | HBBL-600-10000     | EX3DV4 - SN7686, 2021-10-05 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     | Area Scan   | Zoom Scan          |
|---------------------|-------------|--------------------|
| Grid Extents [mm]   | 85.0 x 85.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm]     | 8.5 x 8.5   | 3.4 x 3.4 x 1.4    |
| Sensor Surface [mm] | 3.0         | 1.4                |
| Graded Grid         | Yes         | Yes                |
| Grading Ratio       | 1.5         | 1.4                |
| MAIA                | N/A         | N/A                |
| Surface Detection   | VMS + 6p    | VMS + 6p           |
| Scan Method         | Measured    | Measured           |

## Measurement Results

|                            | Area Scan         | Zoom Scan         |
|----------------------------|-------------------|-------------------|
| Date                       | 2022-03-23, 09:03 | 2022-03-23, 09:14 |
| psSAR1g [W/Kg]             | 0.123             | 0.135             |
| psSAR10g [W/Kg]            | 0.044             | 0.046             |
| psPDab (1.0cm2, sq) [W/m2] |                   | 1.35              |
| psPDab (4.0cm2, sq) [W/m2] |                   | 1.01              |
| Power Drift [dB]           | 0.05              | 0.03              |
| Power Scaling              | Disabled          | Disabled          |
| Scaling Factor [dB]        |                   |                   |
| TSL Correction             | No correction     | No correction     |
| M2/M1 [%]                  |                   | 58.3              |
| Dist 3dB Peak [mm]         |                   | 8.2               |



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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, TOP EDGE, U-NII-6, IEEE 802.11ax (160MHz), Channel 111 (6505.0 MHz)\_Main

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device,             | 322.0 x 25.0 x 240.0 |      | Tablet   |

## Exposure Conditions

|                      |                              |         |                 |                                 |                   |                        |                  |
|----------------------|------------------------------|---------|-----------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, HSL            | TOP EDGE, 0.00               | U-NII-6 | WLAN, 10755-AAC | 6505.0, 111                     | 6.2               | 6.045                  | 34.304           |

## Hardware Setup

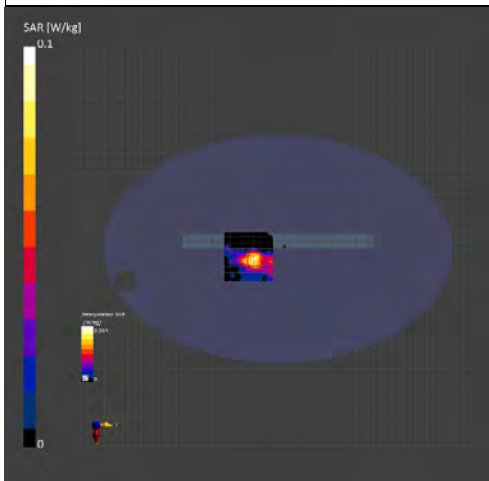
|                                    |                    |                             |                         |
|------------------------------------|--------------------|-----------------------------|-------------------------|
| Phantom                            | TSL, Measured Date | Probe, Calibration Date     | D&E, Calibration Date   |
| ELI V5.0 (20deg probe tilt) - 1141 | HBBL-600-10000     | EX3DV4 - SN7686, 2021-10-05 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     | Area Scan   | Zoom Scan          |
|---------------------|-------------|--------------------|
| Grid Extents [mm]   | 85.0 x 85.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm]     | 8.5 x 8.5   | 3.4 x 3.4 x 1.4    |
| Sensor Surface [mm] | 3.0         | 1.4                |
| Graded Grid         | Yes         | Yes                |
| Grading Ratio       | 1.5         | 1.4                |
| MAIA                | N/A         | N/A                |
| Surface Detection   | VMS + 6p    | VMS + 6p           |
| Scan Method         | Measured    | Measured           |

## Measurement Results

|                            | Area Scan         | Zoom Scan         |
|----------------------------|-------------------|-------------------|
| Date                       | 2022-03-23, 10:21 | 2022-03-23, 10:29 |
| psSAR1g [W/Kg]             | 0.124             | 0.127             |
| psSAR10g [W/Kg]            | 0.047             | 0.045             |
| psPDab (1.0cm2, sq) [W/m2] |                   | 1.27              |
| psPDab (4.0cm2, sq) [W/m2] |                   | 1.03              |
| Power Drift [dB]           | -0.11             | -0.15             |
| Power Scaling              | Disabled          | Disabled          |
| Scaling Factor [dB]        |                   |                   |
| TSL Correction             | No correction     | No correction     |
| M2/M1 [%]                  |                   | 55.3              |
| Dist 3dB Peak [mm]         |                   | 10.4              |



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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, TOP EDGE, U-NII-7, IEEE 802.11ax (160MHz), Channel 143 (6665.0 MHz)\_Main

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device,             | 322.0 x 25.0 x 240.0 |      | Tablet   |

## Exposure Conditions

|                      |                              |         |                 |                                 |                   |                        |                  |
|----------------------|------------------------------|---------|-----------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, HSL            | TOP EDGE, 0.00               | U-NII-7 | WLAN, 10755-AAC | 6665.0, 143                     | 6.2               | 6.228                  | 34.086           |

## Hardware Setup

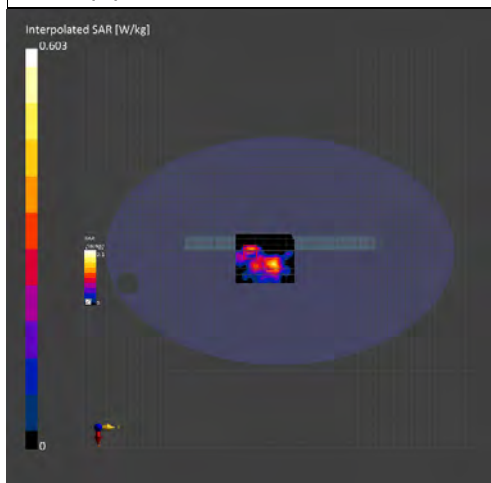
|                                    |                    |                             |                         |
|------------------------------------|--------------------|-----------------------------|-------------------------|
| Phantom                            | TSL, Measured Date | Probe, Calibration Date     | DAE, Calibration Date   |
| ELI V5.0 (20deg probe tilt) - 1141 | HBBL-600-10000     | EX3DV4 - SN7686, 2021-10-05 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 85.0 x 102.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm]     | 8.5 x 8.5    | 3.1 x 3.1 x 1.2    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | Yes          | Yes                |
| Grading Ratio       | 1.5          | 1.2                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

## Measurement Results

|                            | Area Scan         | Zoom Scan         |
|----------------------------|-------------------|-------------------|
| Date                       | 2022-03-23, 10:51 | 2022-03-23, 11:03 |
| psSAR1g [W/Kg]             | 0.096             | 0.101             |
| psSAR10g [W/Kg]            | 0.035             | 0.025             |
| psPDab (1.0cm2, sq) [W/m2] |                   | 1.01              |
| psPDab (4.0cm2, sq) [W/m2] |                   | 0.583             |
| Power Drift [dB]           | 0.02              | -0.08             |
| Power Scaling              | Disabled          | Disabled          |
| Scaling Factor [dB]        |                   |                   |
| TSL Correction             | No correction     | No correction     |
| M2/M1 [%]                  |                   | 61.9              |
| Dist 3dB Peak [mm]         |                   | 4.3               |



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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, TOP EDGE, U-NII-8, IEEE 802.11ax (160MHz), Channel 207 (6985.0 MHz)\_Main

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device,             | 322.0 x 25.0 x 240.0 |      | Tablet   |

## Exposure Conditions

| Phantom Section, TSL | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
|----------------------|------------------------------|---------|-----------------|---------------------------------|-------------------|------------------------|------------------|
| Flat, HSL            | TOP EDGE, 0.00               | U-NII-8 | WLAN, 10755-AAC | 6985.0, 207                     | 6.14              | 6.596                  | 33.718           |

## Hardware Setup

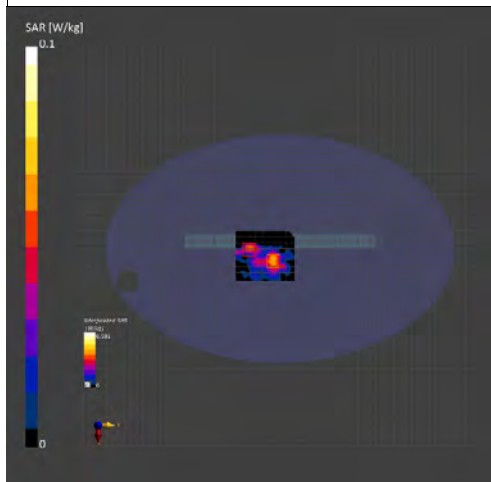
|                                    |                    |                             |                         |
|------------------------------------|--------------------|-----------------------------|-------------------------|
| Phantom                            | TSL, Measured Date | Probe, Calibration Date     | DAE, Calibration Date   |
| ELI V5.0 (20deg probe tilt) - 1141 | HBBL-600-10000     | EX3DV4 - SN7686, 2021-10-05 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 85.0 x 102.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm]     | 8.5 x 8.5    | 3.4 x 3.4 x 1.4    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | Yes          | Yes                |
| Grading Ratio       | 1.5          | 1.4                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

## Measurement Results

|  | Area Scan         | Zoom Scan         |
|--|-------------------|-------------------|
| Date   | 2022-03-23, 11:37 | 2022-03-23, 11:46 |
| psSAR1g [W/Kg]                                       | 0.081             | 0.086             |
| psSAR10g [W/Kg]                                      | 0.034             | 0.022             |
| psPDab (1.0cm <sup>2</sup> , sq) [W/m <sup>2</sup> ] |                   | 0.863             |
| psPDab (4.0cm <sup>2</sup> , sq) [W/m <sup>2</sup> ] |                   | 0.523             |
| Power Drift [dB]                                     | 0.04              | 0.02              |
| Power Scaling  | Disabled          | Disabled          |
| Scaling Factor [dB]                                  |                   |                   |
| TSL Correction                                       | No correction     | No correction     |
| M2/M1 [%]  |                   | 56.8              |
| Dist 3dB Peak [mm]                                   |                   | 3.4               |



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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

## Report No. :ES/2022/20014

Measurement Report for Device, TOP EDGE, U-NII-5, IEEE 802.11ax (160MHz), Channel 79 (6345.0 MHz)\_Aux  
Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device,             | 322.0 x 25.0 x 240.0 |      | Tablet   |

## Exposure Conditions

|                      |                              |         |                |                                 |                   |                        |                  |
|----------------------|------------------------------|---------|----------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL | Position, Test Distance [mm] | Band    | Group, UID     | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, HSL            | TOP EDGE, 0.00               | U-NII-5 | WLAN,10755-AAC | 6345.0,79                       | 6.2               | 5.862                  | 34.476           |

## Hardware Setup

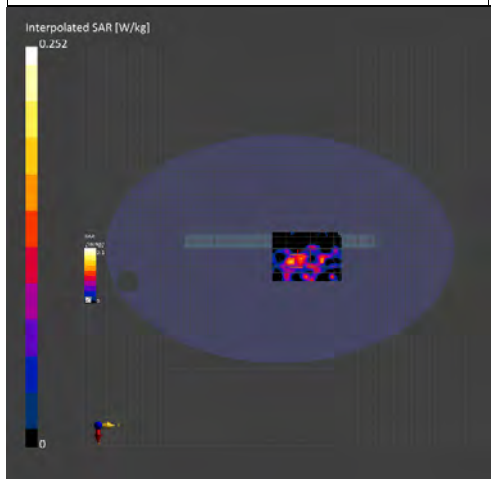
|                                    |                    |                             |                         |
|------------------------------------|--------------------|-----------------------------|-------------------------|
| Phantom                            | TSL, Measured Date | Probe, Calibration Date     | DAE, Calibration Date   |
| ELI V5.0 (20deg probe tilt) - 1141 | HBBL-600-10000     | EX3DV4 - SN7686, 2021-10-05 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 85.0 x 119.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm]     | 8.5 x 8.5    | 3.4 x 3.4 x 1.4    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | Yes          | Yes                |
| Grading Ratio       | 1.5          | 1.4                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

## Measurement Results

|                            | Area Scan         | Zoom Scan         |
|----------------------------|-------------------|-------------------|
| Date                       | 2022-03-23, 14:29 | 2022-03-23, 14:47 |
| psSAR1g [W/Kg]             | 0.086             | 0.091             |
| psSAR10g [W/Kg]            | 0.036             | 0.038             |
| psPDab (1.0cm2, sq) [W/m2] |                   | 0.913             |
| psPDab (4.0cm2, sq) [W/m2] |                   | 0.621             |
| Power Drift [dB]           | 0.02              | 0.07              |
| Power Scaling              | Disabled          | Disabled          |
| Scaling Factor [dB]        |                   |                   |
| TSL Correction             | No correction     | No correction     |
| M2/M1 [%]                  |                   | 55.4              |
| Dist 3dB Peak [mm]         |                   | 7.0               |



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

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

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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, TOP EDGE, U-NII-6, IEEE 802.11ax (160MHz), Channel 111 (6505.0 MHz)\_Aux

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device,             | 322.0 x 25.0 x 240.0 |      | Tablet   |

## Exposure Conditions

|                      |                              |         |                 |                                 |                   |                        |                  |
|----------------------|------------------------------|---------|-----------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, HSL            | TOP EDGE, 0.00               | U-NII-6 | WLAN, 10755-AAC | 6505.0, 111                     | 6.2               | 6.045                  | 34.304           |

## Hardware Setup

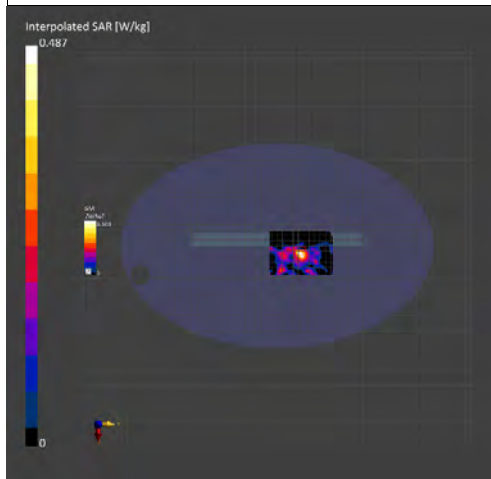
|                                    |                    |                             |                         |
|------------------------------------|--------------------|-----------------------------|-------------------------|
| Phantom                            | TSL, Measured Date | Probe, Calibration Date     | DAE, Calibration Date   |
| ELI V5.0 (20deg probe tilt) - 1141 | HBBL-600-10000     | EX3DV4 - SN7686, 2021-10-05 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 85.0 x 119.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm]     | 8.5 x 8.5    | 3.4 x 3.4 x 1.4    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | Yes          | Yes                |
| Grading Ratio       | 1.5          | 1.4                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

## Measurement Results

|                            | Area Scan         | Zoom Scan         |
|----------------------------|-------------------|-------------------|
| Date                       | 2022-03-23, 13:47 | 2022-03-23, 13:55 |
| psSAR1g [W/Kg]             | 0.101             | 0.102             |
| psSAR10g [W/Kg]            | 0.036             | 0.034             |
| psPDab (1.0cm2, sq) [W/m2] |                   | 1.02              |
| psPDab (4.0cm2, sq) [W/m2] |                   | 0.843             |
| Power Drift [dB]           | 0.01              | 0.05              |
| Power Scaling              | Disabled          | Disabled          |
| Scaling Factor [dB]        |                   |                   |
| TSL Correction             | No correction     | No correction     |
| M2/M1 [%]                  |                   | 61.5              |
| Dist 3dB Peak [mm]         |                   | 5.8               |



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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, TOP EDGE, U-NII-7, IEEE 802.11ax (160MHz), Channel 175 (6825.0 MHz)\_Aux

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device,             | 322.0 x 25.0 x 240.0 |      | Tablet   |

## Exposure Conditions

|                      |                              |         |                 |                                 |                   |                        |                  |
|----------------------|------------------------------|---------|-----------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, HSL            | TOP EDGE, 0.00               | U-NII-7 | WLAN, 10755-AAC | 6825.0, 175                     | 6.2               | 6.412                  | 33.912           |

## Hardware Setup

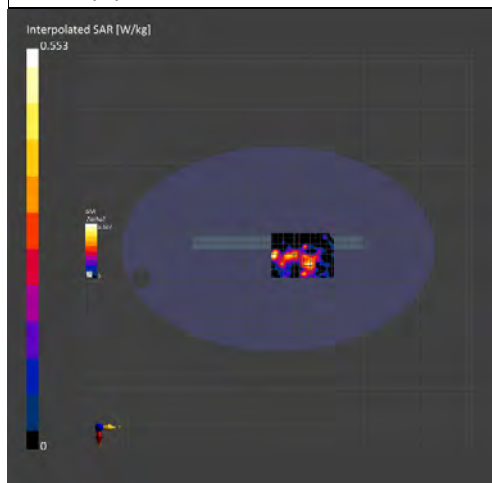
|                                    |                    |                             |                         |
|------------------------------------|--------------------|-----------------------------|-------------------------|
| Phantom                            | TSL, Measured Date | Probe, Calibration Date     | D&E, Calibration Date   |
| ELI V5.0 (20deg probe tilt) - 1141 | HBBL-600-10000     | EX3DV4 - SN7686, 2021-10-05 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 85.0 x 119.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm]     | 8.5 x 8.5    | 3.4 x 3.4 x 1.4    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | Yes          | Yes                |
| Grading Ratio       | 1.5          | 1.4                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

## Measurement Results

|                            | Area Scan         | Zoom Scan         |
|----------------------------|-------------------|-------------------|
| Date                       | 2022-03-23, 13:21 | 2022-03-23, 13:34 |
| psSAR1g [W/Kg]             | 0.119             | 0.115             |
| psSAR10g [W/Kg]            | 0.048             | 0.044             |
| psPDab (1.0cm2, sq) [W/m2] |                   | 1.15              |
| psPDab (4.0cm2, sq) [W/m2] |                   | 0.939             |
| Power Drift [dB]           | 0.05              | 0.04              |
| Power Scaling              | Disabled          | Disabled          |
| Scaling Factor [dB]        |                   |                   |
| TSL Correction             | No correction     | No correction     |
| M2/M1 [%]                  |                   | 52.0              |
| Dist 3dB Peak [mm]         |                   | 12.3              |



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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, TOP EDGE, U-NII-8, IEEE 802.11ax (160MHz), Channel 207 (6985.0 MHz)\_Aux

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device,             | 322.0 x 25.0 x 240.0 |      | Tablet   |

## Exposure Conditions

|                      |                              |         |                 |                                 |                   |                        |                  |
|----------------------|------------------------------|---------|-----------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, HSL            | TOP EDGE, 0.00               | U-NII-8 | WLAN, 10755-AAC | 6985.0, 207                     | 6.14              | 6.596                  | 33.718           |

## Hardware Setup

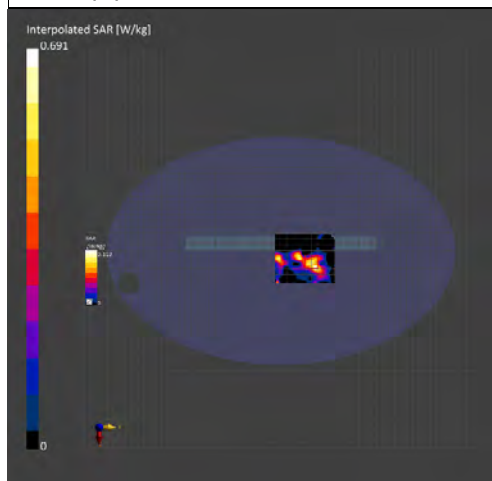
|                                    |                    |                             |                         |
|------------------------------------|--------------------|-----------------------------|-------------------------|
| Phantom                            | TSL, Measured Date | Probe, Calibration Date     | DAE, Calibration Date   |
| ELI V5.0 (20deg probe tilt) - 1141 | HBBL-600-10000     | EX3DV4 - SN7686, 2021-10-05 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 85.0 x 102.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm]     | 8.5 x 8.5    | 3.4 x 3.4 x 1.4    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | Yes          | Yes                |
| Grading Ratio       | 1.5          | 1.4                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

## Measurement Results

|                            | Area Scan         | Zoom Scan         |
|----------------------------|-------------------|-------------------|
| Date                       | 2022-03-23, 12:02 | 2022-03-23, 12:11 |
| psSAR1g [W/Kg]             | 0.142             | 0.143             |
| psSAR10g [W/Kg]            | 0.056             | 0.054             |
| psPDab (1.0cm2, sq) [W/m2] |                   | 1.43              |
| psPDab (4.0cm2, sq) [W/m2] |                   | 1.22              |
| Power Drift [dB]           | 0.07              | 0.02              |
| Power Scaling              | Disabled          | Disabled          |
| Scaling Factor [dB]        |                   |                   |
| TSL Correction             | No correction     | No correction     |
| M2/M1 [%]                  |                   | 51.3              |
| Dist 3dB Peak [mm]         |                   | 10.9              |



Report No. : ES/2022/20014

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

**Measurement Report for Device, TOP EDGE, U-NII-5, IEEE 802.11ax (160MHz), Channel 15 (6025.0 MHz) \_Main**  
**Device Under Test Properties**

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device              | 322.0 x 25.0 x 240.0 |      | Tablet   |

**Exposure Conditions**

|                 |                              |         |                 |                                 |                   |
|-----------------|------------------------------|---------|-----------------|---------------------------------|-------------------|
| Phantom Section | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor |
| 5G Air          | TOP EDGE, 2.00               | U-NII-5 | WLAN, 10755-AAC | 6025.0, 15                      | 1.0               |

**Hardware Setup**

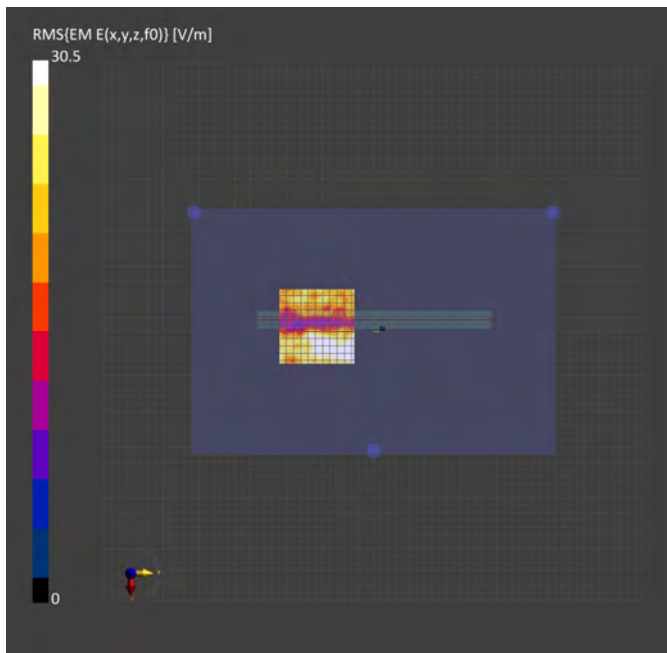
|               |        |                                       |                         |
|---------------|--------|---------------------------------------|-------------------------|
| Phantom       | Medium | Probe, Calibration Date               | DAE, Calibration Date   |
| mmWave - 1076 | Air -  | EUmmWV3 - SN9399_F1-78GHz, 2022-01-26 | DAE4 Sn1665, 2022-02-28 |

**Scans Setup**

|                     |                 |
|---------------------|-----------------|
| Scan Type           | 5G Scan         |
| Grid Extents [mm]   | 100.0 x 100.0   |
| Grid Steps [lambda] | 0.0625 x 0.0625 |
| Sensor Surface [mm] | 2.0             |
| MAIA                | N/A             |

**Measurement Results**

|                              |                   |
|------------------------------|-------------------|
| Scan Type                    | 5G Scan           |
| Date                         | 2022-03-24, 15:52 |
| Avg. Area [cm <sup>2</sup> ] | 4.00              |
| psPDn+ [W/m <sup>2</sup> ]   | 2.12              |
| psPDtot+ [W/m <sup>2</sup> ] | 2.13              |
| psPDmod+ [W/m <sup>2</sup> ] | 2.17              |
| E <sub>max</sub> [V/m]       | 30.5              |
| Power Drift [dB]             | -0.02             |



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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, TOP EDGE, U-NII-5, IEEE 802.11ax (160MHz), Channel 47 (6185.0 MHz) Main  
Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device              | 322.0 x 25.0 x 240.0 |      | Tablet   |

## Exposure Conditions

|                 |                              |         |                 |                                 |                   |
|-----------------|------------------------------|---------|-----------------|---------------------------------|-------------------|
| Phantom Section | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor |
| 5G Air          | TOP EDGE, 2.00               | U-NII-5 | WLAN, 10755-AAC | 6185.0, 47                      | 1.0               |

## Hardware Setup

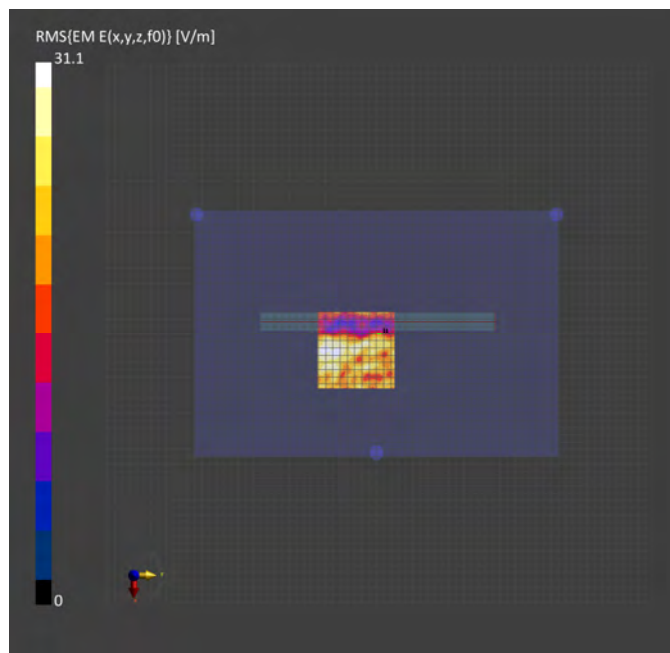
|               |        |                                       |                         |
|---------------|--------|---------------------------------------|-------------------------|
| Phantom       | Medium | Probe, Calibration Date               | DAE, Calibration Date   |
| mmWave - 1076 | Air -  | EUmmWV3 - SN9399_F1-78GHz, 2022-01-26 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     |                 |
|---------------------|-----------------|
| Scan Type           | 5G Scan         |
| Grid Extents [mm]   | 100.0 x 100.0   |
| Grid Steps [lambda] | 0.0625 x 0.0625 |
| Sensor Surface [mm] | 2.0             |
| MAIA                | N/A             |

## Measurement Results

|                              |                   |
|------------------------------|-------------------|
| Scan Type                    | 5G Scan           |
| Date                         | 2022-03-24, 17:14 |
| Avg. Area [cm <sup>2</sup> ] | 4.00              |
| psPDn+ [W/m <sup>2</sup> ]   | 1.89              |
| psPDtot+ [W/m <sup>2</sup> ] | 1.93              |
| psPDmod+ [W/m <sup>2</sup> ] | 2.00              |
| E <sub>max</sub> [V/m]       | 31.1              |
| Power Drift [dB]             | -0.11             |



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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, TOP EDGE, U-NII-6, IEEE 802.11ax (160MHz), Channel 111 (6505.0 MHz). Main

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device              | 322.0 x 25.0 x 240.0 |      | Tablet   |

## Exposure Conditions

|                 |                              |         |                 |                                 |                   |
|-----------------|------------------------------|---------|-----------------|---------------------------------|-------------------|
| Phantom Section | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor |
| 5G Air          | TOP EDGE, 2.00               | U-NII-6 | WLAN, 10755-AAC | 6505.0, 111                     | 1.0               |

## Hardware Setup

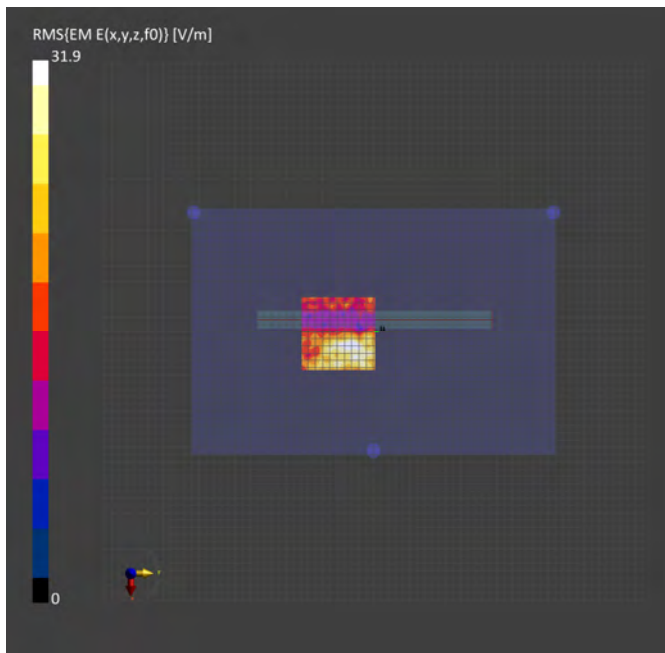
|               |        |                                       |                         |
|---------------|--------|---------------------------------------|-------------------------|
| Phantom       | Medium | Probe, Calibration Date               | DAE, Calibration Date   |
| mmWave - 1076 | Air -  | EUmmWV3 - SN9399_F1-78GHz, 2022-01-26 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     |                 |
|---------------------|-----------------|
| Scan Type           | 5G Scan         |
| Grid Extents [mm]   | 100.0 x 100.0   |
| Grid Steps [lambda] | 0.0625 x 0.0625 |
| Sensor Surface [mm] | 2.0             |
| MAIA                | N/A             |

## Measurement Results

|                              |                   |
|------------------------------|-------------------|
| Scan Type                    | 5G Scan           |
| Date                         | 2022-03-24, 01:20 |
| Avg. Area [cm <sup>2</sup> ] | 4.00              |
| psPDn+ [W/m <sup>2</sup> ]   | 2.13              |
| psPDtot+ [W/m <sup>2</sup> ] | 2.18              |
| psPDmod+ [W/m <sup>2</sup> ] | 2.23              |
| E <sub>max</sub> [V/m]       | 31.9              |
| Power Drift [dB]             | -0.05             |



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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, TOP EDGE, U-NII-7, IEEE 802.11ax (160MHz), Channel 143 (6665.0 MHz), Main

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device              | 322.0 x 25.0 x 240.0 |      | Tablet   |

## Exposure Conditions

|                 |                              |         |                 |                                 |                   |
|-----------------|------------------------------|---------|-----------------|---------------------------------|-------------------|
| Phantom Section | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor |
| 5G Air          | TOP EDGE, 2.00               | U-NII-7 | WLAN, 10755-AAC | 6665.0, 143                     | 1.0               |

## Hardware Setup

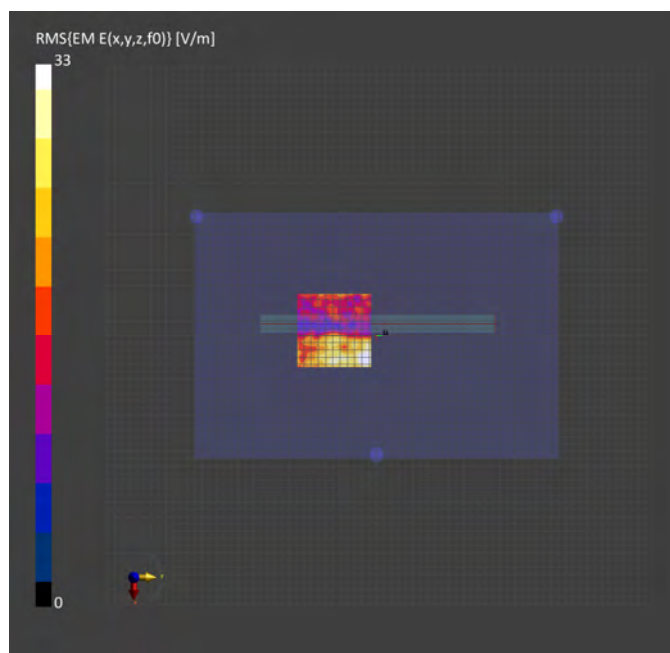
|               |        |                                       |                         |
|---------------|--------|---------------------------------------|-------------------------|
| Phantom       | Medium | Probe, Calibration Date               | DAE, Calibration Date   |
| mmWave - 1076 | Air -  | EUmmWV3 - SN9399_F1-78GHz, 2022-01-26 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     |                 |
|---------------------|-----------------|
| Scan Type           | 5G Scan         |
| Grid Extents [mm]   | 100.0 x 100.0   |
| Grid Steps [lambda] | 0.0625 x 0.0625 |
| Sensor Surface [mm] | 2.0             |
| MAIA                | N/A             |

## Measurement Results

|                              |                   |
|------------------------------|-------------------|
| Scan Type                    | 5G Scan           |
| Date                         | 2022-03-24, 02:58 |
| Avg. Area [cm <sup>2</sup> ] | 4.00              |
| psPDn+ [W/m <sup>2</sup> ]   | 1.87              |
| psPDtot+ [W/m <sup>2</sup> ] | 1.91              |
| psPDmod+ [W/m <sup>2</sup> ] | 2.00              |
| E <sub>max</sub> [V/m]       | 33.0              |
| Power Drift [dB]             | -0.17             |



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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, TOP EDGE, U-NII-8, IEEE 802.11ax (160MHz), Channel 207 (6985.0 MHz), Main

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device              | 322.0 x 25.0 x 240.0 |      | Tablet   |

## Exposure Conditions

|                 |                              |         |                 |                                 |                   |
|-----------------|------------------------------|---------|-----------------|---------------------------------|-------------------|
| Phantom Section | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor |
| 5G Air          | TOP EDGE, 2.00               | U-NII-8 | WLAN, 10755-AAC | 6985.0, 207                     | 1.0               |

## Hardware Setup

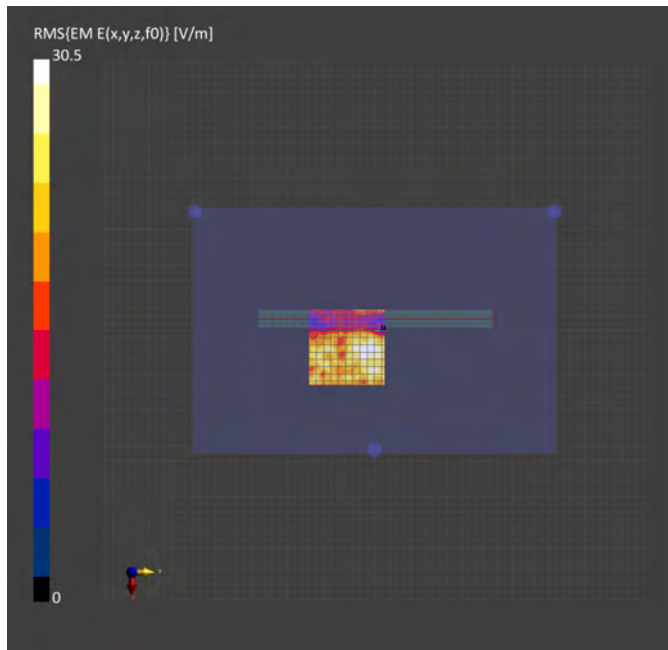
|               |        |                                       |                         |
|---------------|--------|---------------------------------------|-------------------------|
| Phantom       | Medium | Probe, Calibration Date               | DAE, Calibration Date   |
| mmWave - 1076 | Air -  | EUmmWV3 - SN9399_F1-78GHz, 2022-01-26 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     |                 |
|---------------------|-----------------|
| Scan Type           | 5G Scan         |
| Grid Extents [mm]   | 100.0 x 100.0   |
| Grid Steps [lambda] | 0.0625 x 0.0625 |
| Sensor Surface [mm] | 2.0             |
| MAIA                | N/A             |

## Measurement Results

|                              |                   |
|------------------------------|-------------------|
| Scan Type                    | 5G Scan           |
| Date                         | 2022-03-24, 04:44 |
| Avg. Area [cm <sup>2</sup> ] | 4.00              |
| psPDn+ [W/m <sup>2</sup> ]   | 1.84              |
| psPDtot+ [W/m <sup>2</sup> ] | 1.87              |
| psPDmod+ [W/m <sup>2</sup> ] | 1.90              |
| E <sub>max</sub> [V/m]       | 30.5              |
| Power Drift [dB]             | -0.15             |



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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, TOP EDGE, U-NII-5, IEEE 802.11ax (160MHz), Channel 15 (6025.0 MHz)\_Aux

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device              | 322.0 x 25.0 x 240.0 |      | Tablet   |

## Exposure Conditions

|                 |                              |         |                 |                                 |                   |
|-----------------|------------------------------|---------|-----------------|---------------------------------|-------------------|
| Phantom Section | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor |
| 5G Air          | TOP EDGE, 2.00               | U-NII-5 | WLAN, 10755-AAC | 6025.0, 15                      | 1.0               |

## Hardware Setup

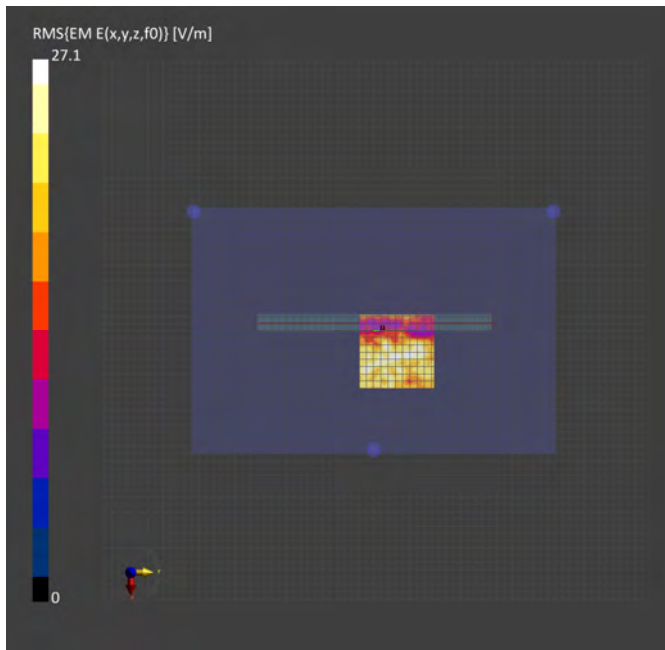
|               |        |                                       |                         |
|---------------|--------|---------------------------------------|-------------------------|
| Phantom       | Medium | Probe, Calibration Date               | DAE, Calibration Date   |
| mmWave - 1076 | Air -  | EUmmWV3 - SN9399_F1-78GHz, 2022-01-26 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     |                 |
|---------------------|-----------------|
| Scan Type           | 5G Scan         |
| Grid Extents [mm]   | 100.0 x 100.0   |
| Grid Steps [lambda] | 0.0625 x 0.0625 |
| Sensor Surface [mm] | 2.0             |
| MAIA                | N/A             |

## Measurement Results

|                              |                   |
|------------------------------|-------------------|
| Scan Type                    | 5G Scan           |
| Date                         | 2022-03-24, 07:49 |
| Avg. Area [cm <sup>2</sup> ] | 4.00              |
| psPDn+ [W/m <sup>2</sup> ]   | 1.31              |
| psPDtot+ [W/m <sup>2</sup> ] | 1.35              |
| psPDmod+ [W/m <sup>2</sup> ] | 1.50              |
| E <sub>max</sub> [V/m]       | 27.1              |
| Power Drift [dB]             | 0.04              |



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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, TOP EDGE, U-NII-5, IEEE 802.11ax (160MHz), Channel 79 (6345.0 MHz)\_Aux

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device              | 322.0 x 25.0 x 240.0 |      | Tablet   |

## Exposure Conditions

|                 |                              |         |                 |                                 |                   |
|-----------------|------------------------------|---------|-----------------|---------------------------------|-------------------|
| Phantom Section | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor |
| 5G Air          | TOP EDGE, 2.00               | U-NII-5 | WLAN, 10755-AAC | 6345.0, 79                      | 1.0               |

## Hardware Setup

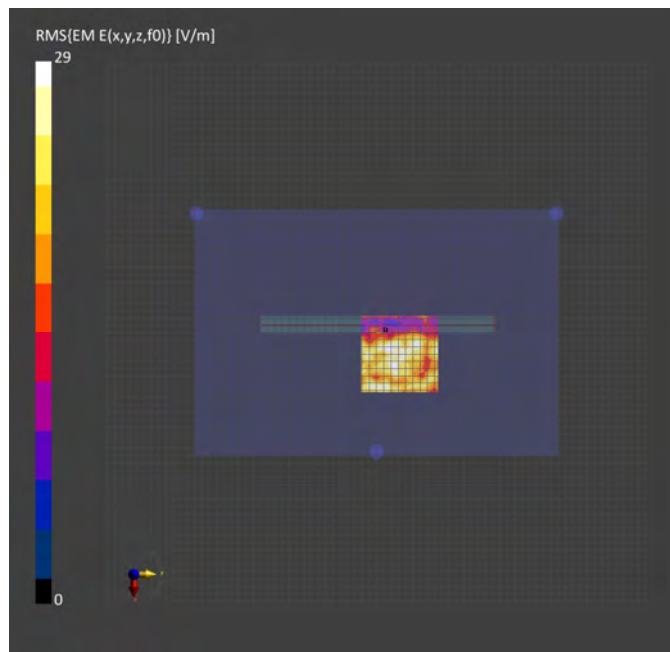
|               |        |                                       |                         |
|---------------|--------|---------------------------------------|-------------------------|
| Phantom       | Medium | Probe, Calibration Date               | DAE, Calibration Date   |
| mmWave - 1076 | Air -  | EUmmWV3 - SN9399_F1-78GHz, 2022-01-26 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     |                 |
|---------------------|-----------------|
| Scan Type           | 5G Scan         |
| Grid Extents [mm]   | 100.0 x 100.0   |
| Grid Steps [lambda] | 0.0625 x 0.0625 |
| Sensor Surface [mm] | 2.0             |
| MAIA                | N/A             |

## Measurement Results

|                              |                   |
|------------------------------|-------------------|
| Scan Type                    | 5G Scan           |
| Date                         | 2022-03-24, 09:14 |
| Avg. Area [cm <sup>2</sup> ] | 4.00              |
| psPDn+ [W/m <sup>2</sup> ]   | 1.72              |
| psPDtot+ [W/m <sup>2</sup> ] | 1.75              |
| psPDmod+ [W/m <sup>2</sup> ] | 1.79              |
| E <sub>max</sub> [V/m]       | 29.0              |
| Power Drift [dB]             | 0.13              |



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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, TOP EDGE, U-NII-6, IEEE 802.11ax (160MHz), Channel 111 (6505.0 MHz)\_Aux

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device              | 322.0 x 25.0 x 240.0 |      | Tablet   |

## Exposure Conditions

|                 |                              |         |                 |                                 |                   |
|-----------------|------------------------------|---------|-----------------|---------------------------------|-------------------|
| Phantom Section | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor |
| 5G Air          | TOP EDGE, 2.00               | U-NII-6 | WLAN, 10755-AAC | 6505.0, 111                     | 1.0               |

## Hardware Setup

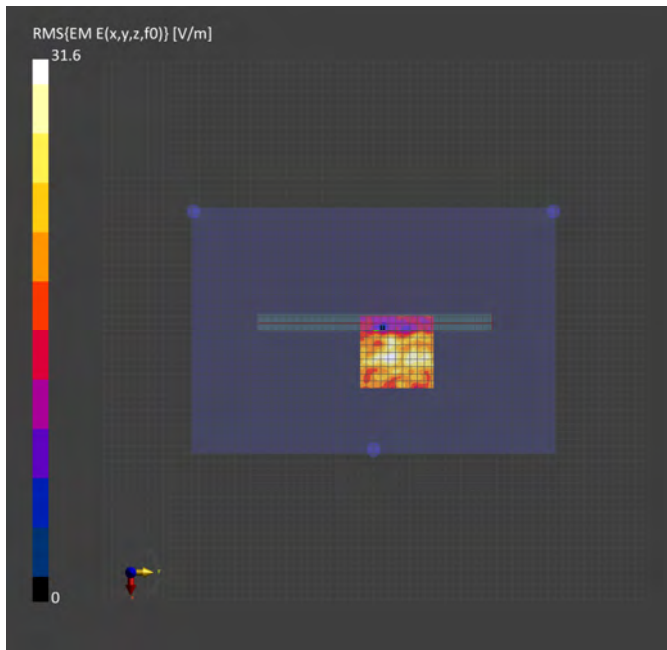
|               |        |                                       |                         |
|---------------|--------|---------------------------------------|-------------------------|
| Phantom       | Medium | Probe, Calibration Date               | DAE, Calibration Date   |
| mmWave - 1076 | Air -  | EUmmWV3 - SN9399_F1-78GHz, 2022-01-26 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     |                 |
|---------------------|-----------------|
| Scan Type           | 5G Scan         |
| Grid Extents [mm]   | 100.0 x 100.0   |
| Grid Steps [lambda] | 0.0625 x 0.0625 |
| Sensor Surface [mm] | 2.0             |
| MAIA                | N/A             |

## Measurement Results

|                              |                   |
|------------------------------|-------------------|
| Scan Type                    | 5G Scan           |
| Date                         | 2022-03-24, 10:45 |
| Avg. Area [cm <sup>2</sup> ] | 4.00              |
| psPDn+ [W/m <sup>2</sup> ]   | 1.72              |
| psPDtot+ [W/m <sup>2</sup> ] | 1.76              |
| psPDmod+ [W/m <sup>2</sup> ] | 1.87              |
| E <sub>max</sub> [V/m]       | 31.6              |
| Power Drift [dB]             | 0.15              |



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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, TOP EDGE, U-NII-7, IEEE 802.11ax (160MHz), Channel 175 (6825.0 MHz), Aux  
Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device              | 322.0 x 25.0 x 240.0 |      | Tablet   |

## Exposure Conditions

|                 |                              |         |                 |                                 |                   |
|-----------------|------------------------------|---------|-----------------|---------------------------------|-------------------|
| Phantom Section | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor |
| 5G Air          | TOP EDGE, 2.00               | U-NII-7 | WLAN, 10755-AAC | 6825.0, 175                     | 1.0               |

## Hardware Setup

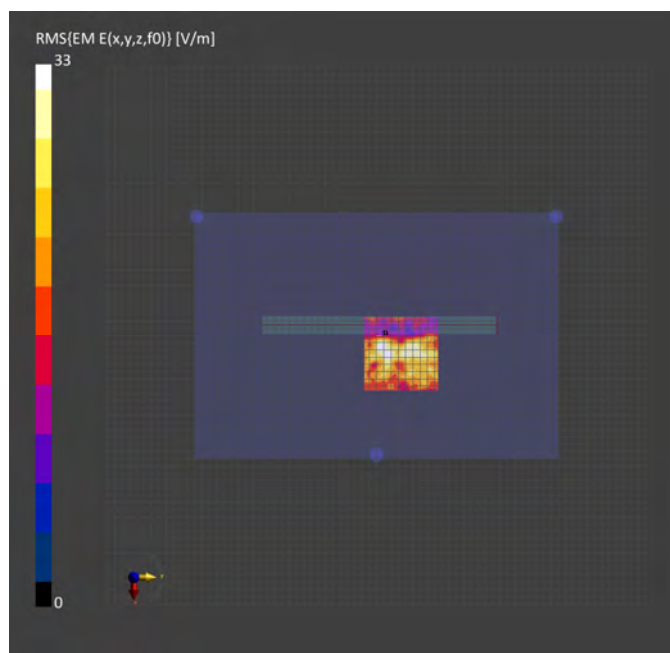
|               |        |                                       |                         |
|---------------|--------|---------------------------------------|-------------------------|
| Phantom       | Medium | Probe, Calibration Date               | DAE, Calibration Date   |
| mmWave - 1076 | Air -  | EUmmWV3 - SN9399_F1-78GHz, 2022-01-26 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     |                 |
|---------------------|-----------------|
| Scan Type           | 5G Scan         |
| Grid Extents [mm]   | 100.0 x 100.0   |
| Grid Steps [lambda] | 0.0625 x 0.0625 |
| Sensor Surface [mm] | 2.0             |
| MAIA                | N/A             |

## Measurement Results

|                              |                   |
|------------------------------|-------------------|
| Scan Type                    | 5G Scan           |
| Date                         | 2022-03-24, 12:17 |
| Avg. Area [cm <sup>2</sup> ] | 4.00              |
| psPDn+ [W/m <sup>2</sup> ]   | 1.77              |
| psPDtot+ [W/m <sup>2</sup> ] | 1.80              |
| psPDmod+ [W/m <sup>2</sup> ] | 1.86              |
| E <sub>max</sub> [V/m]       | 33.0              |
| Power Drift [dB]             | -0.11             |



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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, TOP EDGE, U-NII-8, IEEE 802.11ax (160MHz), Channel 207 (6985.0 MHz), Aux

## Device Under Test Properties

|                     |                      |      |          |
|---------------------|----------------------|------|----------|
| Model, Manufacturer | Dimensions [mm]      | IMEI | DUT Type |
| Device              | 322.0 x 25.0 x 240.0 |      | Tablet   |

## Exposure Conditions

|                 |                              |         |                 |                                 |                   |
|-----------------|------------------------------|---------|-----------------|---------------------------------|-------------------|
| Phantom Section | Position, Test Distance [mm] | Band    | Group, UID      | Frequency [MHz], Channel Number | Conversion Factor |
| 5G Air          | TOP EDGE, 2.00               | U-NII-8 | WLAN, 10755-AAC | 6985.0, 207                     | 1.0               |

## Hardware Setup

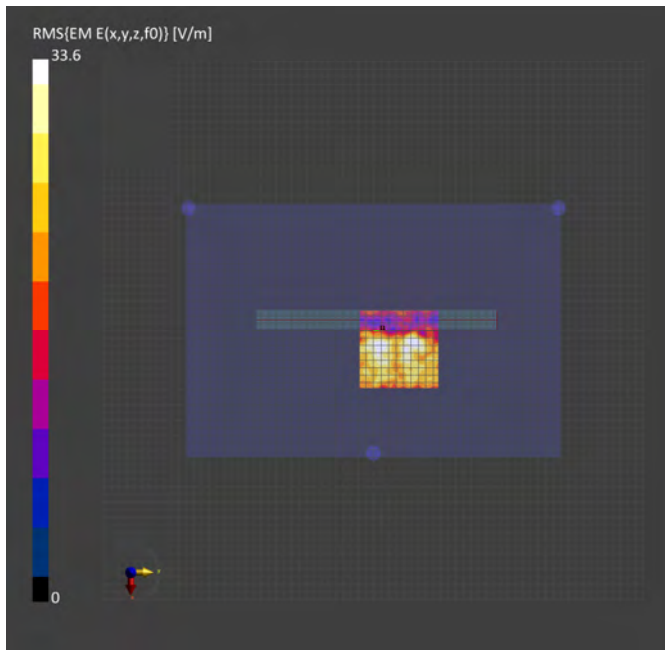
|               |        |                                       |                         |
|---------------|--------|---------------------------------------|-------------------------|
| Phantom       | Medium | Probe, Calibration Date               | DAE, Calibration Date   |
| mmWave - 1076 | Air -  | EImmWV3 - SN9399_F1-78GHz, 2022-01-26 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     |                 |
|---------------------|-----------------|
| Scan Type           | 5G Scan         |
| Grid Extents [mm]   | 100.0 x 100.0   |
| Grid Steps [lambda] | 0.0625 x 0.0625 |
| Sensor Surface [mm] | 2.0             |
| MAIA                | N/A             |

## Measurement Results

|                              |                   |
|------------------------------|-------------------|
| Scan Type                    | 5G Scan           |
| Date                         | 2022-03-24, 13:54 |
| Avg. Area [cm <sup>2</sup> ] | 4.00              |
| psPDn+ [W/m <sup>2</sup> ]   | 2.23              |
| psPDtot+ [W/m <sup>2</sup> ] | 2.26              |
| psPDmod+ [W/m <sup>2</sup> ] | 2.30              |
| E <sub>max</sub> [V/m]       | 33.6              |
| Power Drift [dB]             | 0.05              |



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

SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

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

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

## 6. SAR System Performance Verification

Date: 2022/3/25

Report No. : ES/2022/20014

Dipole 2450 MHz\_SN:727

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.785$  S/m;  $\epsilon_r = 38.818$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient temperature: 22.6°C; Liquid temperature: 22.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(8.32, 8.32, 8.32); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (51x61x1): Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 26.7 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 105.4 V/m; Power Drift = -0.08 dB

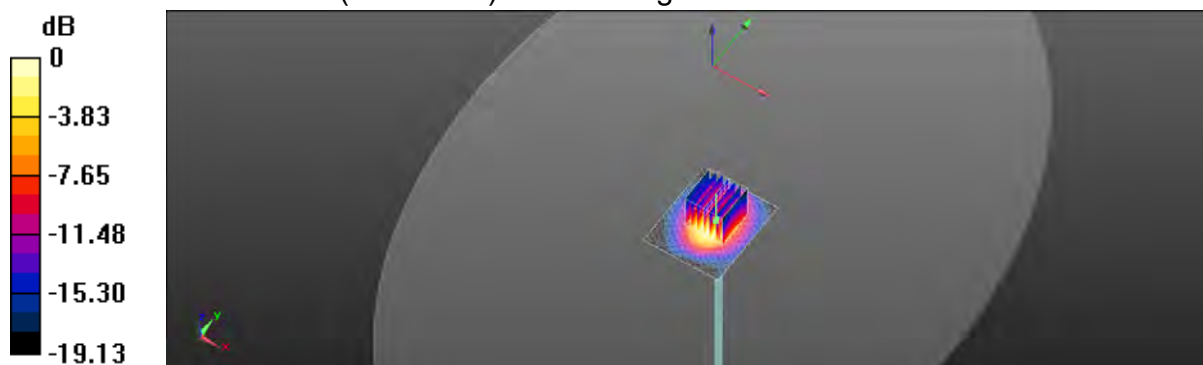
Peak SAR (extrapolated) = 33.7 W/kg

**SAR(1 g) = 13.6 W/kg; SAR(10 g) = 6.41 W/kg**

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 52.5%

Maximum value of SAR (measured) = 24.8 W/kg



0 dB = 24.8 W/kg = 13.76 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/26

**Report No. :ES/2022/20014**

**Dipole 5250 MHz\_SN:1023**

Communication System: CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5250 \text{ MHz}$ ;  $\sigma = 4.663 \text{ S/m}$ ;  $\epsilon_r = 35.483$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient temperature:  $22.5^\circ\text{C}$ ; Liquid temperature:  $22.8^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.81, 5.81, 5.81); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x51x1):** Interpolated grid:  $dx=10 \text{ mm}$ ,  $dy=10 \text{ mm}$

Maximum value of SAR (interpolated) =  $16.9 \text{ W/kg}$

**Zoom Scan (7x7x12)/Cube 0:** Measurement grid:  $dx=4\text{mm}$ ,  $dy=4\text{mm}$ ,  $dz=2\text{mm}$

Reference Value =  $63.30 \text{ V/m}$ ; Power Drift =  $0.01 \text{ dB}$

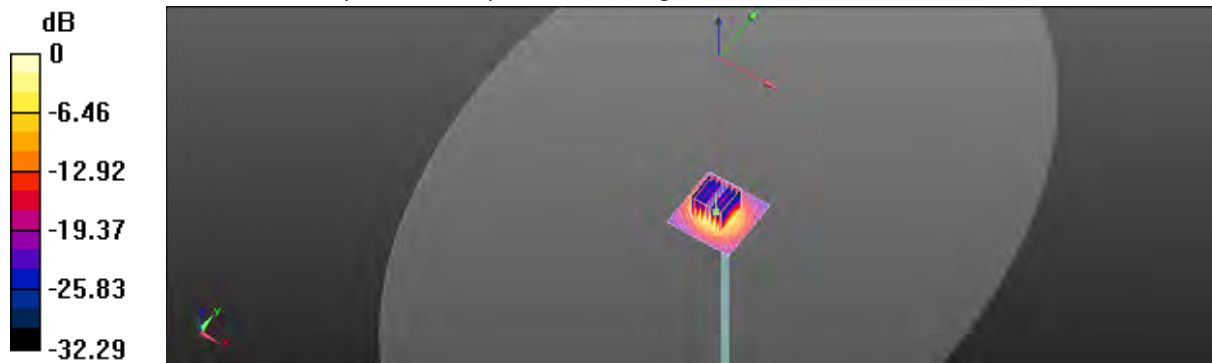
Peak SAR (extrapolated) =  $32.6 \text{ W/kg}$

**SAR(1 g) =  $8.05 \text{ W/kg}$ ; SAR(10 g) =  $2.29 \text{ W/kg}$**

Smallest distance from peaks to all points 3 dB below =  $7.2 \text{ mm}$

Ratio of SAR at M2 to SAR at M1 =  $55.4\%$

Maximum value of SAR (measured) =  $16.7 \text{ W/kg}$



0 dB =  $16.7 \text{ W/kg}$  =  $12.24 \text{ dBW/kg}$

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

Date: 2022/3/27

**Report No. :ES/2022/20014**

**Dipole 5250 MHz\_SN:1023**

Communication System: CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5250 \text{ MHz}$ ;  $\sigma = 4.666 \text{ S/m}$ ;  $\epsilon_r = 35.512$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient temperature:  $22.7^\circ\text{C}$ ; Liquid temperature:  $22.6^\circ\text{C}$

**DASY5 Configuration:**

- Probe: EX3DV4 - SN7686; ConvF(5.81, 5.81, 5.81); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (61x91x1):** Interpolated grid:  $dx=10 \text{ mm}$ ,  $dy=10 \text{ mm}$

Maximum value of SAR (interpolated) =  $17.2 \text{ W/kg}$

**Zoom Scan (7x7x12)/Cube 0:** Measurement grid:  $dx=4\text{mm}$ ,  $dy=4\text{mm}$ ,  $dz=2\text{mm}$

Reference Value =  $62.94 \text{ V/m}$ ; Power Drift =  $-0.02 \text{ dB}$

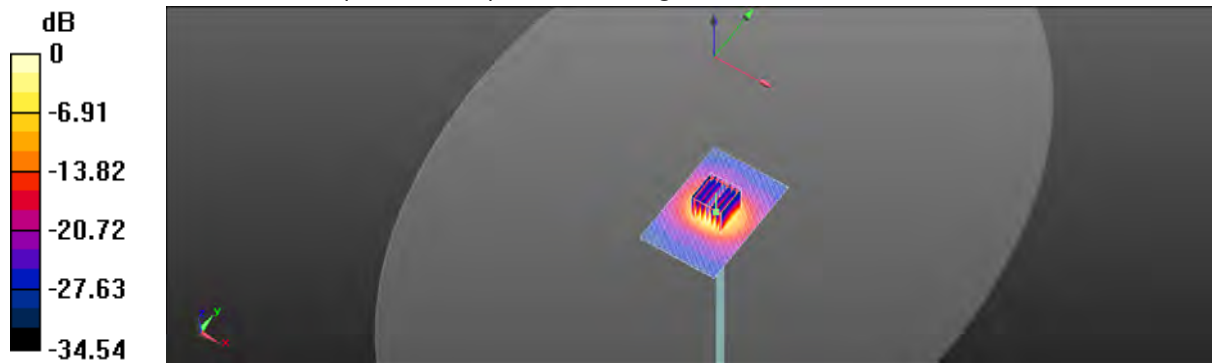
Peak SAR (extrapolated) =  $31.7 \text{ W/kg}$

**SAR(1 g) =  $8.23 \text{ W/kg}$ ; SAR(10 g) =  $2.28 \text{ W/kg}$**

Smallest distance from peaks to all points 3 dB below =  $7.4 \text{ mm}$

Ratio of SAR at M2 to SAR at M1 =  $55.3\%$

Maximum value of SAR (measured) =  $16.4 \text{ W/kg}$



0 dB =  $16.4 \text{ W/kg}$  =  $12.56 \text{ dBW/kg}$

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

Date: 2022/3/28

**Report No. :ES/2022/20014****Dipole 5600 MHz\_SN:1023**

Communication System: CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.027$  S/m;  $\epsilon_r = 35.06$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient temperature: 22.7°C; Liquid temperature: 22.8°C

**DASY5 Configuration:**

- Probe: EX3DV4 - SN7686; ConvF(5.16, 5.16, 5.16); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (61x91x1):** Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 17.9 W/kg

**Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 61.84 V/m; Power Drift = -0.03 dB

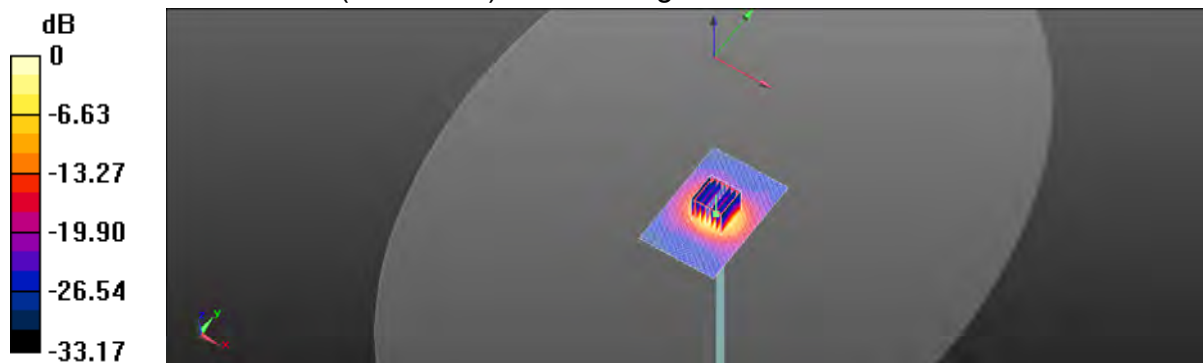
Peak SAR (extrapolated) = 24.7 W/kg

**SAR(1 g) = 8.52 W/kg; SAR(10 g) = 2.41 W/kg**

Smallest distance from peaks to all points 3 dB below = 7.4 mm

Ratio of SAR at M2 to SAR at M1 = 51.9%

Maximum value of SAR (measured) = 17.5 W/kg



0 dB = 17.5 W/kg = 12.43 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Date: 2022/3/28

**Report No. :ES/2022/20014**
**Dipole 5750 MHz\_SN:1023**

Communication System: CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5750 \text{ MHz}$ ;  $\sigma = 5.172 \text{ S/m}$ ;  $\epsilon_r = 34.94$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature: 22.5°C; Liquid temperature: 22.3°C

**DASY5 Configuration:**

- Probe: EX3DV4 - SN7686; ConvF(5.3, 5.3, 5.3); Calibrated: 2021/10/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1665; Calibrated: 2022/02/28
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (61x91x1):** Interpolated grid:  $dx=10 \text{ mm}$ ,  $dy=10 \text{ mm}$ 

Maximum value of SAR (interpolated) = 17.9 W/kg

**Zoom Scan (7x7x12)/Cube 0:** Measurement grid:  $dx=4\text{mm}$ ,  $dy=4\text{mm}$ ,  $dz=2\text{mm}$ 

Reference Value = 61.96 V/m; Power Drift = -0.01 dB

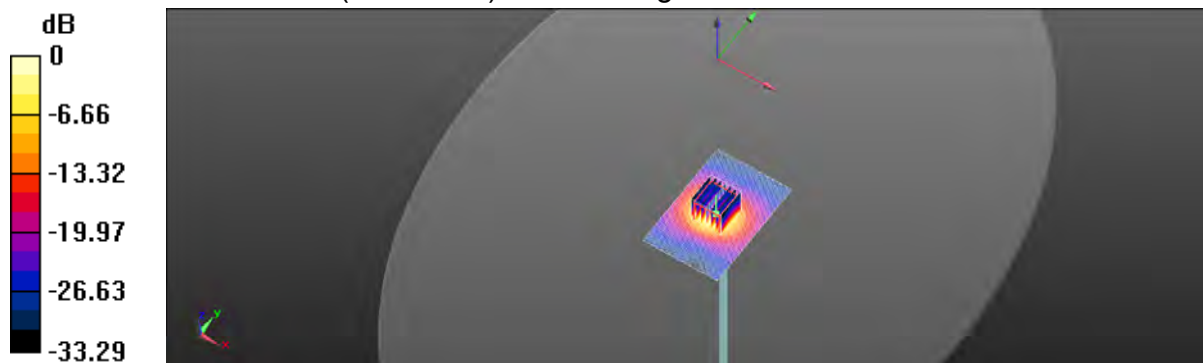
Peak SAR (extrapolated) = 25.2 W/kg

**SAR(1 g) = 7.97 W/kg; SAR(10 g) = 2.26 W/kg**

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 50.4%

Maximum value of SAR (measured) = 16.9 W/kg



0 dB = 16.9 W/kg = 12.12 dBW/kg

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, FRONT, Validation band, CW, Channel 6500 (6500.0 MHz)

## Device Under Test Properties

|                     |                    |         |          |
|---------------------|--------------------|---------|----------|
| Model, Manufacturer | Dimensions [mm]    | IMEI    | DUT Type |
| Device,             | 16.0 x 6.0 x 300.0 | SN:1006 | Dipole   |

## Exposure Conditions

|                      |                              |                 |            |                                 |                   |                        |                  |
|----------------------|------------------------------|-----------------|------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL | Position, Test Distance [mm] | Band            | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, HSL            | FRONT, 5.00                  | Validation band | CW, 0~     | 6500.0, 6500                    | 6.2               | 6.042                  | 34.313           |

## Hardware Setup

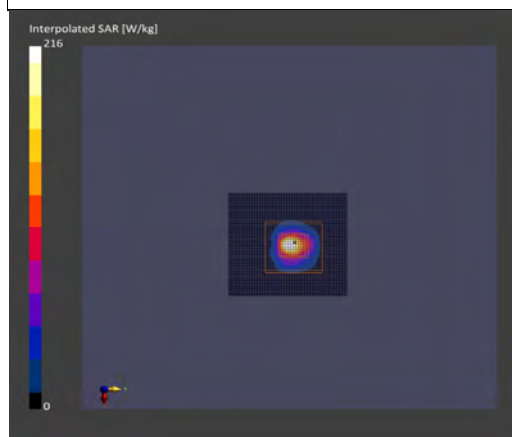
|                                    |                    |                             |                         |
|------------------------------------|--------------------|-----------------------------|-------------------------|
| Phantom                            | TSL, Measured Date | Probe, Calibration Date     | DAE, Calibration Date   |
| ELI V5.0 (20deg probe tilt) - 1141 | HBBL-600-10000     | EX3DV4 - SN7686, 2021-10-05 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     | Area Scan   | Zoom Scan          |
|---------------------|-------------|--------------------|
| Grid Extents [mm]   | 51.0 x 36.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm]     | 8.5 x 8.5   | 3.4 x 3.4 x 1.4    |
| Sensor Surface [mm] | 3.0         | 1.4                |
| Graded Grid         | Yes         | Yes                |
| Grading Ratio       | 1.5         | 1.4                |
| MAIA                | N/A         | N/A                |
| Surface Detection   | VMS + 6p    | VMS + 6p           |
| Scan Method         | Measured    | Measured           |

## Measurement Results

|                     | Area Scan         | Zoom Scan         |
|---------------------|-------------------|-------------------|
| Date                | 2022-03-23, 00:32 | 2022-03-23, 00:52 |
| psSAR1g [W/Kg]      | 30.2              | 30.8              |
| psSAR10g [W/Kg]     | 5.31              | 5.34              |
| Power Drift [dB]    | 0.03              | 0.03              |
| Power Scaling       | Disabled          | Disabled          |
| Scaling Factor [dB] |                   |                   |
| TSL Correction      | No correction     | No correction     |
| M2/M1 [%]           |                   | 58.3              |
| Dist 3dB Peak [mm]  |                   | 5.1               |



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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014

Measurement Report for Device, FRONT, Validation band, CW, Channel 7000 (7000.0 MHz)

## Device Under Test Properties

|                     |                    |         |          |
|---------------------|--------------------|---------|----------|
| Model, Manufacturer | Dimensions [mm]    | IMEI    | DUT Type |
| Device,             | 14.0 x 6.0 x 297.0 | SN:1007 | Dipole   |

## Exposure Conditions

|                      |                              |                 |            |                                 |                   |                        |                  |
|----------------------|------------------------------|-----------------|------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL | Position, Test Distance [mm] | Band            | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, HSL            | FRONT, 5.00                  | Validation band | CW, 0--    | 7000.0, 7000                    | 6.14              | 6.618                  | 33.69            |

## Hardware Setup

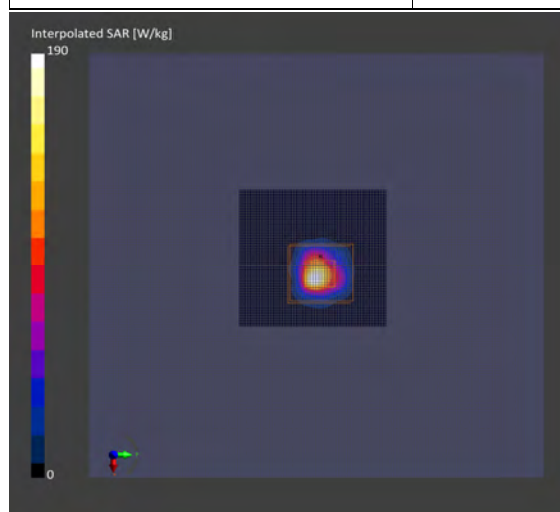
|                                    |                    |                             |                         |
|------------------------------------|--------------------|-----------------------------|-------------------------|
| Phantom                            | TSL, Measured Date | Probe, Calibration Date     | DAE, Calibration Date   |
| ELI V5.0 (20deg probe tilt) - 1141 | HBBL-600-10000     | EX3DV4 - SN7686, 2021-10-05 | DAE4 Sn1665, 2022-02-28 |

## Scans Setup

|                     |             |                    |
|---------------------|-------------|--------------------|
|                     | Area Scan   | Zoom Scan          |
| Grid Extents [mm]   | 60.0 x 45.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm]     | 7.5 x 7.5   | 3.4 x 3.4 x 1.4    |
| Sensor Surface [mm] | 3.0         | 1.4                |
| Graded Grid         | Yes         | Yes                |
| Grading Ratio       | 1.5         | 1.4                |
| MAIA                | N/A         | N/A                |
| Surface Detection   | VMS + 6p    | VMS + 6p           |
| Scan Method         | Measured    | Measured           |

## Measurement Results

|                     |                   |                   |
|---------------------|-------------------|-------------------|
|                     | Area Scan         | Zoom Scan         |
| Date                | 2022-03-23, 01:12 | 2022-03-23, 01:24 |
| psSAR1g [W/Kg]      | 26.8              | 28.3              |
| psSAR10g [W/Kg]     | 4.53              | 4.81              |
| Power Drift [dB]    | 0.03              | 0.04              |
| Power Scaling       | Disabled          | Disabled          |
| Scaling Factor [dB] |                   |                   |
| TSL Correction      | No correction     | No correction     |
| M2/M1 [%]           |                   | 49.2              |
| Dist 3dB Peak [mm]  |                   | 4.6               |



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

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

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Report No. : ES/2022/20014  
Measurement Report for 10G Source, Front, Validation band, CW, Channel 10000 (10000.0 MHz)  
Device Under Test Properties

|                                |                       |          |          |
|--------------------------------|-----------------------|----------|----------|
| Model, Manufacturer            | Dimensions [mm]       | IMEI     | DUT Type |
| 5G Verification Source 10 GHz, | 100.0 x 100.0 x 172.0 | SN: 1021 | -        |

**Exposure Conditions**

|                 |                              |                 |            |                                 |                   |
|-----------------|------------------------------|-----------------|------------|---------------------------------|-------------------|
| Phantom Section | Position, Test Distance [mm] | Band            | Group, UID | Frequency [MHz], Channel Number | Conversion Factor |
| 5G Air          | Front, 10.00                 | Validation band | CW, 0--    | 10000.0, 10000                  | 1.0               |

**Hardware Setup**

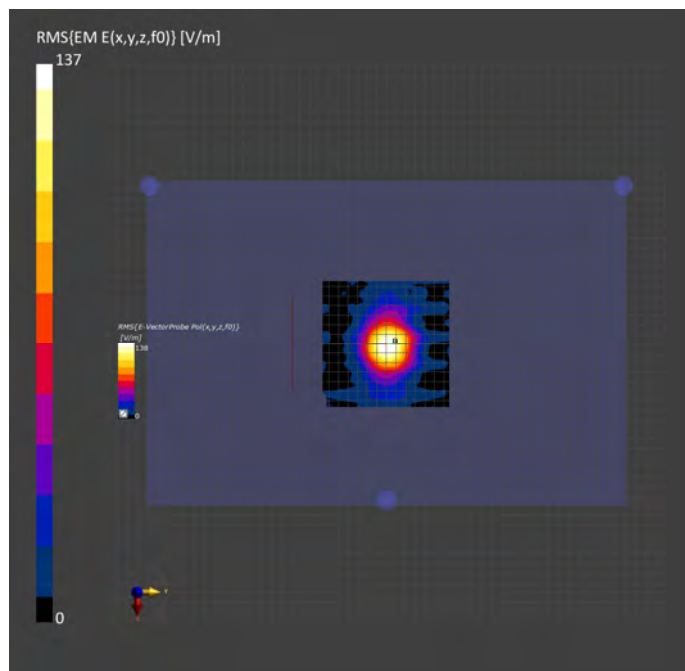
|               |        |                                       |                         |
|---------------|--------|---------------------------------------|-------------------------|
| Phantom       | Medium | Probe, Calibration Date               | DAE, Calibration Date   |
| mmWave - 1076 | Air -  | EUmmWV3 - SN9399_F1-78GHz, 2022-01-26 | DAE4 Sn1665, 2022-02-28 |

**Scans Setup**

|                     |               |
|---------------------|---------------|
| Scan Type           | 5G Scan       |
| Grid Extents [mm]   | 120.0 x 120.0 |
| Grid Steps [lambda] | 0.25 x 0.25   |
| Sensor Surface [mm] | 10.0          |
| MAIA                | N/A           |

**Measurement Results**

|                              |                   |
|------------------------------|-------------------|
| Scan Type                    | 5G Scan           |
| Date                         | 2022-03-24, 00:20 |
| Avg. Area [cm <sup>2</sup> ] | 4.00              |
| psPDn+ [W/m <sup>2</sup> ]   | 51.5              |
| psPDtot+ [W/m <sup>2</sup> ] | 51.9              |
| psPDmod+ [W/m <sup>2</sup> ] | 52.6              |
| E <sub>max</sub> [V/m]       | 136               |
| Power Drift [dB]             | 0.04              |



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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## 7.Uncertainty Budget

Measurement Uncertainty evaluation template for DUT SAR test (3-6G)

| A   | c                         | D               | e   |           | f       | g        | h=c * f / e             | i=c * g / e             | k              |
|---|---------------------------|-----------------|-----|-----------|---------|----------|-------------------------|-------------------------|----------------|
| Source of Uncertainty                         | Tolerance/<br>Uncertainty | Probabili<br>ty | Div | Div Value | ci (1g) | ci (10g) | Standard<br>uncertainty | Standard<br>uncertainty | vi, or<br>Veff |
| <b>Measurement system</b>                     |                           |                 |     |           |         |          |                         |                         |                |
| Probe calibration                             | 6.55%                     | N               | 1   | 1         | 1       | 1        | 6.55%                   | 6.55%                   | ∞              |
| <i>Isotropy , Axial</i>                       | 3.50%                     | R               | √3  | 1.732     | 1       | 1        | 2.02%                   | 2.02%                   | ∞              |
| <i>Isotropy, Hemispherical</i>                | 9.60%                     | R               | √3  | 1.732     | 1       | 1        | 5.54%                   | 5.54%                   | ∞              |
| Modulation Response                           | 2.40%                     | R               | √3  | 1.732     | 1       | 1        | 1.40%                   | 1.40%                   | ∞              |
| Boundary Effect                               | 1.00%                     | R               | √3  | 1.732     | 1       | 1        | 0.58%                   | 0.58%                   | ∞              |
| Linearity                                     | 4.70%                     | R               | √3  | 1.732     | 1       | 1        | 2.71%                   | 2.71%                   | ∞              |
| Detection Limits                              | 1.00%                     | R               | √3  | 1.732     | 1       | 1        | 0.58%                   | 0.58%                   | ∞              |
| Readout Electronics                           | 0.30%                     | N               | 1   | 1         | 1       | 1        | 0.30%                   | 0.30%                   | ∞              |
| Response time                                 | 0.80%                     | R               | √3  | 1.732     | 1       | 1        | 0.46%                   | 0.46%                   | ∞              |
| Integration Time                              | 2.60%                     | R               | √3  | 1.732     | 1       | 1        | 1.50%                   | 1.50%                   | ∞              |
| <b>Measurement drift (class A evaluation)</b> | 1.75%                     | R               | √3  | 1.732     | 1       | 1        | 1.01%                   | 1.01%                   | ∞              |
| RF ambient condition - noise                  | 3.00%                     | R               | √3  | 1.732     | 1       | 1        | 1.73%                   | 1.73%                   | ∞              |
| RF ambient conditions - reflections           | 3.00%                     | R               | √3  | 1.732     | 1       | 1        | 1.73%                   | 1.73%                   | ∞              |
| Probe positioner Mechanical restrictions      | 0.40%                     | R               | √3  | 1.732     | 1       | 1        | 0.23%                   | 0.23%                   | ∞              |
| Probe Positioning with respect to phantom     | 2.90%                     | R               | √3  | 1.732     | 1       | 1        | 1.67%                   | 1.67%                   | ∞              |
| Post-processing                               | 1.00%                     | R               | √3  | 1.732     | 1       | 1        | 0.58%                   | 0.58%                   | ∞              |
| Max SAR Eval                                  | 1.00%                     | R               | √3  | 1.732     | 1       | 1        | 0.58%                   | 0.58%                   | ∞              |
| <b>Test Sample related</b>                    |                           |                 |     |           |         |          |                         |                         |                |
| Test sample positioning                       | 2.90%                     | N               | 1   | 1         | 1       | 1        | 2.90%                   | 2.90%                   | M-1            |
| Device Holder Uncertainty                     | 3.60%                     | N               | 1   | 1         | 1       | 1        | 3.60%                   | 3.60%                   | M-1            |
| Drift of output power                         | 5.00%                     | R               | √3  | 1.732     | 1       | 1        | 2.89%                   | 2.89%                   | ∞              |
| <b>Phantom and Setup</b>                      |                           |                 |     |           |         |          |                         |                         |                |
| Phantom Uncertainty                           | 4.00%                     | R               | √3  | 1.732     | 1       | 1        | 2.31%                   | 2.31%                   | ∞              |
| Liquid permittivity (mea.)                    | 1.45%                     | N               | 1   | 1         | 0.64    | 0.43     | 0.93%                   | 0.62%                   | M              |
| Liquid Conductivity (mea.)                    | 0.96%                     | N               | 1   | 1         | 0.6     | 0.49     | 0.58%                   | 0.47%                   | M              |
| Combined standard uncertainty                 |                           | RSS             |     |           |         |          | 11.77%                  | 11.73%                  |                |
| Expant uncertainty (95% confidence)           |                           |                 |     |           |         |          | 23.53%                  | 23.47%                  |                |

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

Measurement Uncertainty evaluation template for DUT SAR test (0.3-3G)

| A   | c                         | D               | e          |           | f       | g        | h=c * f / e             | i=c * g / e             | k              |
|---|---------------------------|-----------------|------------|-----------|---------|----------|-------------------------|-------------------------|----------------|
| Source of Uncertainty                         | Tolerance/<br>Uncertainty | Probabili<br>ty | Div        | Div Value | ci (1g) | ci (10g) | Standard<br>uncertainty | Standard<br>uncertainty | vi, or<br>Veff |
| <b>Measurement system</b>                     |                           |                 |            |           |         |          |                         |                         |                |
| Probe calibration                             | 6.00%                     | N               | 1          | 1         | 1       | 1        | 6.00%                   | 6.00%                   | ∞              |
| <b>Isotropy , Axial</b>                       | 3.50%                     | R               | $\sqrt{3}$ | 1.732     | 1       | 1        | 2.02%                   | 2.02%                   | ∞              |
| <b>Isotropy, Hemispherical</b>                | 9.60%                     | R               | $\sqrt{3}$ | 1.732     | 1       | 1        | 5.54%                   | 5.54%                   | ∞              |
| Modulation Response                           | 2.40%                     | R               | $\sqrt{3}$ | 1.732     | 1       | 1        | 1.40%                   | 1.40%                   | ∞              |
| Boundary Effect                               | 1.00%                     | R               | $\sqrt{3}$ | 1.732     | 1       | 1        | 0.58%                   | 0.58%                   | ∞              |
| Linearity                                     | 4.70%                     | R               | $\sqrt{3}$ | 1.732     | 1       | 1        | 2.71%                   | 2.71%                   | ∞              |
| Detection Limits                              | 1.00%                     | R               | $\sqrt{3}$ | 1.732     | 1       | 1        | 0.58%                   | 0.58%                   | ∞              |
| Readout Electronics                           | 0.30%                     | N               | 1          | 1         | 1       | 1        | 0.30%                   | 0.30%                   | ∞              |
| Response time                                 | 0.80%                     | R               | $\sqrt{3}$ | 1.732     | 1       | 1        | 0.46%                   | 0.46%                   | ∞              |
| Integration Time                              | 2.60%                     | R               | $\sqrt{3}$ | 1.732     | 1       | 1        | 1.50%                   | 1.50%                   | ∞              |
| <b>Measurement drift (class A evaluation)</b> | 1.75%                     | R               | $\sqrt{3}$ | 1.732     | 1       | 1        | 1.01%                   | 1.01%                   | ∞              |
| RF ambient condition - noise                  | 3.00%                     | R               | $\sqrt{3}$ | 1.732     | 1       | 1        | 1.73%                   | 1.73%                   | ∞              |
| RF ambient conditions - reflections           | 3.00%                     | R               | $\sqrt{3}$ | 1.732     | 1       | 1        | 1.73%                   | 1.73%                   | ∞              |
| Probe positioner Mechanical restrictions      | 0.40%                     | R               | $\sqrt{3}$ | 1.732     | 1       | 1        | 0.23%                   | 0.23%                   | ∞              |
| Probe Positioning with respect to phantom     | 2.90%                     | R               | $\sqrt{3}$ | 1.732     | 1       | 1        | 1.67%                   | 1.67%                   | ∞              |
| Post-processing                               | 1.00%                     | R               | $\sqrt{3}$ | 1.732     | 1       | 1        | 0.58%                   | 0.58%                   | ∞              |
| Max SAR Eval                                  | 1.00%                     | R               | $\sqrt{3}$ | 1.732     | 1       | 1        | 0.58%                   | 0.58%                   | ∞              |
| <b>Test Sample related</b>                    |                           |                 |            |           |         |          |                         |                         |                |
| Test sample positioning                       | 2.90%                     | N               | 1          | 1         | 1       | 1        | 2.90%                   | 2.90%                   | M-1            |
| Device Holder Uncertainty                     | 3.60%                     | N               | 1          | 1         | 1       | 1        | 3.60%                   | 3.60%                   | M-1            |
| Drift of output power                         | 5.00%                     | R               | $\sqrt{3}$ | 1.732     | 1       | 1        | 2.89%                   | 2.89%                   | ∞              |
| <b>Phantom and Setup</b>                      |                           |                 |            |           |         |          |                         |                         |                |
| Phantom Uncertainty                           | 4.00%                     | R               | $\sqrt{3}$ | 1.732     | 1       | 1        | 2.31%                   | 2.31%                   | ∞              |
| Liquid permittivity (mea.)                    | 1.02%                     | N               | 1          | 1         | 0.64    | 0.43     | 0.65%                   | 0.44%                   | M              |
| Liquid Conductivity (mea.)                    | 0.86%                     | N               | 1          | 1         | 0.6     | 0.49     | 0.52%                   | 0.42%                   | M              |
| Combined standard uncertainty                 |                           | RSS             |            |           |         |          | 11.45%                  | 11.42%                  |                |
| Expant uncertainty (95% confidence)           |                           |                 |            |           |         |          | 22.90%                  | 22.85%                  |                |

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

www.sgs.com.tw

Member of SGS Group

### DASY6 Uncertainty Budget According to IEC/IEEE 62209-1528 (Frequency band: 6GHz - 10GHz range)

| a  | b                      | c                        | d    |            | e       | e        | f=b * e / d                | f=b * e / d                 |
|--|------------------------|--------------------------|------|------------|---------|----------|----------------------------|-----------------------------|
| Source of Uncertainty                                    | Uncertainty Value (±%) | Probability Distribution | Div. | Div. Value | (ci) 1g | (ci) 10g | Std. uncertainty (1g) (±%) | Std. uncertainty (10g) (±%) |
| <b>Measurement system errors</b>                         |                        |                          |      |            |         |          |                            |                             |
| Probe calibration  | 18.6                   | N                        | 2    | 2          | 1       | 1        | 9.3                        | 9.3                         |
| Probe Calibration Drift                                  | 1.7                    | R                        | √3   | 1.732      | 1       | 1        | 1.0                        | 1.0                         |
| Probe Linearity  | 4.7                    | R                        | √3   | 1.732      | 1       | 1        | 2.7                        | 2.7                         |
| Broadband Signal   | 2.8                    | R                        | √3   | 1.732      | 1       | 1        | 1.6                        | 1.6                         |
| Probe Isotropy   | 7.6                    | R                        | √3   | 1.732      | 1       | 1        | 4.4                        | 4.4                         |
| Data Acquisition   | 0.3                    | N                        | 1    | 1          | 1       | 1        | 0.3                        | 0.3                         |
| RF Ambient   | 1.8                    | N                        | 1    | 1          | 1       | 1        | 1.8                        | 1.8                         |
| Probe positioning  | 0.2                    | N                        | 1    | 1          | 0.67    | 0.67     | 0.1                        | 0.1                         |
| Data Processing  | 3.5                    | N                        | 1    | 1          | 1       | 1        | 3.5                        | 3.5                         |
| <b>Phantom and device errors</b>                         |                        |                          |      |            |         |          |                            |                             |
| Conductivity (meas.)DAK                                  | 2.5                    | N                        | 1    | 1          | 0.78    | 0.71     | 2.0                        | 1.8                         |
| Conductivity (temp.)BB                                   | 2.4                    | R                        | √3   | 1.732      | 0.78    | 0.71     | 1.1                        | 1.0                         |
| Phantom Permittivity                                     | 14.0                   | R                        | √3   | 1.732      | 0.5     | 0.5      | 4.0                        | 4.0                         |
| Distance DUT - TSL                                       | 2.0                    | N                        | 1    | 1          | 2       | 2        | 4.0                        | 4.0                         |
| Device Positioning (±0.5mm)                              | 1.0                    | N                        | 1    | 1          | 1       | 1        | 1.0                        | 1.0                         |
| Device Holder  | 3.6                    | N                        | 1    | 1          | 1       | 1        | 3.6                        | 3.6                         |
| DUT Modulationm  | 2.4                    | R                        | √3   | 1.732      | 1       | 1        | 1.4                        | 1.4                         |
| Time-average SAR   | 0.0                    | R                        | √3   | 1.732      | 1       | 1        | 0.0                        | 0.0                         |
| DUT drift  | 2.5                    | N                        | 1    | 1          | 1       | 1        | 2.5                        | 2.5                         |
| Val Antenna Unc.   | 0.0                    | N                        | 1    | 1          | 1       | 1        | 0.0                        | 0.0                         |
| Unc. Input Power   | 0.0                    | N                        | 1    | 1          | 1       | 1        | 0.0                        | 0.0                         |
| <b>Correction to the SAR results</b>                     |                        |                          |      |            |         |          |                            |                             |
| Deviation to Target                                      | 1.90                   | N                        | 1    | 1          | 1       | 0.84     | 1.9                        | 1.6                         |
| SAR scaling  |                        | R                        | √3   | 1.732      | 1       | 1        | 0.0                        | 0.0                         |
| Combined Std. uncertainty                                |                        |                          |      |            |         |          | 14.0                       | 13.9                        |
| Expanded Std. uncertainty (95% confidence interval), K=2 |                        |                          |      |            |         |          | 28.0                       | 27.8                        |

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

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

## cDASY6 Module mmWave Uncertainty Budget for PD

### Evaluation Distances to the Antennas $\geq \lambda / 5$

### In Compliance with IEC/IEEE 63195

| a   | b                         | c                        | d          |            | e  | f=b * e / d              | g         |
|---|---------------------------|--------------------------|------------|------------|----|--------------------------|-----------|
| Source of Uncertainty   | Uncertainty Value (+/-dB) | Probability Distribution | Div.       | Div. Value | ci | Std. uncertainty (+/-dB) | (vi) Veff |
| <b>Uncertainty terms dependent on the measurement system</b>            |                           |                          |            |            |    |                          |           |
| Probe calibration   | 0.49                      | N                        | 1          | 1          | 1  | 0.49                     | $\infty$  |
| Probe correction  | 0.00                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.00                     | $\infty$  |
| Frequency response ( $BW \leq 1\text{GHz}$ )                            | 0.20                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.12                     | $\infty$  |
| Sensor cross coupling   | 0.00                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.00                     | $\infty$  |
| Isotropy  | 0.50                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.29                     | $\infty$  |
| Linearity   | 0.20                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.12                     | $\infty$  |
| Probe scattering  | 0.00                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.00                     | $\infty$  |
| Probe positioning offset  | 0.30                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.17                     | $\infty$  |
| Probe positioning repeatability   | 0.04                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.02                     | $\infty$  |
| Sensor mechanical offset  | 0.00                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.00                     | $\infty$  |
| Probe spatial resolution  | 0.00                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.00                     | $\infty$  |
| Field impedance dependence  | 0.00                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.00                     | $\infty$  |
| Amplitude and phase drift   | 0.00                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.00                     | $\infty$  |
| Amplitude and phase noise   | 0.04                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.02                     | $\infty$  |
| Measurement area truncation   | 0.00                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.00                     | $\infty$  |
| Data acquisition  | 0.03                      | N                        | 1          | 1          | 1  | 0.03                     | $\infty$  |
| Sampling  | 0.00                      | R                        | $\sqrt{3}$ | 1          | 1  | 0.00                     | $\infty$  |
| Field reconstruction  | 2.00                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 1.15                     | $\infty$  |
| Forward transformation  | 0.00                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.00                     | $\infty$  |
| Power density scaling   | -                         | R                        | $\sqrt{3}$ | 1.732      | 1  | -                        | $\infty$  |
| Spatial averaging   | 0.10                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.06                     | $\infty$  |
| System detection limit  | 0.04                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.02                     | $\infty$  |
| <b>Uncertainty terms dependent on the DUT and environmental factors</b> |                           |                          |            |            |    |                          |           |
| Probe coupling with DUT   | 0.00                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.00                     | $\infty$  |
| Modulation response   | 0.40                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.23                     | $\infty$  |
| Integration time  | 0.00                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.00                     | $\infty$  |
| Response time   | 0.00                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.00                     | $\infty$  |
| Device holder influence   | 0.10                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.06                     | $\infty$  |
| DUT alignment   | 0.00                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.00                     | $\infty$  |
| RF ambient conditions   | 0.04                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.02                     | $\infty$  |
| Ambient reflections   | 0.04                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.02                     | $\infty$  |
| Immunity / secondary reception  | 0.00                      | R                        | $\sqrt{3}$ | 1.732      | 1  | 0.00                     | $\infty$  |
| Drift of the DUT  | -                         | R                        | $\sqrt{3}$ | 1.732      | 1  | -                        | $\infty$  |
| Combined Std. uncertainty   |                           |                          |            |            |    | 1.33                     |           |
| Expanded Std. uncertainty (95% confidence interval), K=2                |                           |                          |            |            |    | 2.67                     |           |

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group

## Appendixes

**Refer to separated files for the following appendixes.**

**ES202220014 SAR\_Appendix A Photographs**

**ES202220014 SAR\_Appendix B DAE & Probe Cal. Certificate**

**ES202220014 SAR\_Appendix C Phantom Description & Dipole Cal. Certificate**

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

SGS Taiwan Ltd.

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

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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

Member of SGS Group