# SAR TEST REPORT

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

| | |
|---|---|
| **Equipment Under Test** | LTE Tablet PC |
| **Model No.** | AQT100 |
| **Company Name** | Quanta Microsystems, Inc. |
| **Company Address** | No.188, Wenhua 2nd Rd., Guishan Dist., Taoyuan City 33377, Taiwan |
| **Standards** | IEEE /ANSI C95.1 , C95.3, IEEE 1528 2003, KDB248227D01v02r01, KDB616217D04v01r01, KDB865664D01v01r04, KDB865664D02v01r01, KDB941225D05v02r03, KDB447498D01v05r02 |
| **FCC ID** | T5UAQT100 |
| **Date of Receipt** | Sep. 14, 2015 |
| **Date of Test(s)** | Sep. 25, 2015 ~ Oct. 05, 2015 |
| **Date of Issue** | Oct. 12, 2015 |

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 Electronic & Communication Laboratory or testing done by SGS Taiwan Electronic & Communication Laboratory in connection with distribution or use of the product described in this report must be approved by SGS Taiwan Electronic & Communication Laboratory in writing.

**Signed on behalf of SGS**

| | |
|---|---|
| **Sr. Engineer** | **Sr. Engineer** |
| **Bond Tsai** Bond Tsai | **John Yeh** John Yeh |
| **Date: Oct. 12, 2015** | **Date: Oct. 12, 2015** |

# Version

| Report Number | Revision | Date | Memo |
|---|---|---|---|
| E5/2015/90007 | 00 | 2015/10/12 | Initial creation of test report. |
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**This test report contains a reference to the previous version test report that it replaces.**

# Contents

# 1. General Information

## 1.1 Testing Laboratory

| SGS Taiwan Ltd. Electronics & Communication Laboratory | |
|---|---|
| No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan | |
| Tel | +886-2-2299-3279 |
| Fax | +886-2-2298-0488 |
| Internet | http://www.tw.sgs.com/ |

## 1.2 Details of Applicant

| | |
|---|---|
| Company Name | Quanta Microsystems, Inc. |
| Company Address | No.188, Wenhua 2nd Rd., Guishan Dist., Taoyuan City 33377, Taiwan |

## 1.3 Description of EUT

| | | | | |
|---|---|---|---|---|
| Equipment Under Test | LTE Tablet PC | | | |
| Model No. | AQT100 | | | |
| FCC ID | T5UAQT100 | | | |
| Mode of Operation | ☒LTE FDD ☒LTE TDD ☒WLAN802.11 b/g/n(20M/40M) ☒Bluetooth | | | |
| Duty Cycle | LTE FDD | 1 | | |
| | LTE TDD | 0.633 | | |
| | WLAN802.11 b/g/n(20M/40M) | 1 | | |
| | Bluetooth | 1 | | |
| TX Frequency Range (MHz) | LTE FDD Band II | 1850 | – | 1910 |
| | LTE FDD Band IV | 1710 | – | 1755 |
| | LTE FDD Band V | 824 | – | 849 |
| | LTE FDD Band XII | 698.7 | – | 711 |
| | LTE FDD Band XXV | 1850 | – | 1915 |
| | LTE FDD Band XXVI | 814.7 | – | 848.3 |
| | LTE TDD Band XLI | 2498.5 | | 2687.5 |
| | WLAN802.11 b/g/n(20M) | 2412 | – | 2462 |
| | WLAN802.11 n(40M) | 2422 | – | 2452 |
| | Bluetooth | 2402 | – | 2480 |

| | | | | |
|---|---|---|---|---|
| Channel Number (ARFCN) | LTE FDD Band II | 18607 | — | 19193 |
| | LTE FDD Band IV | 19957 | — | 20393 |
| | LTE FDD Band V | 20407 | — | 20600 |
| | LTE FDD Band XII | 23007 | — | 23130 |
| | LTE FDD Band XXV | 26047 | — | 26683 |
| | LTE FDD Band XXVI | 26697 | — | 27033 |
| | LTE TDD Band XLI | 39675 | — | 41565 |
| | WLAN802.11 b/g/n(20M) | 1 | — | 11 |
| | WLAN802.11 n(40M) | 3 | — | 9 |
| | Bluetooth | 0 | — | 78 |

| **Max. SAR (1 g)** (Unit: W/Kg) | | | | |
|---|---|---|---|---|
| Band | Measured | Reported | Channel | Position |
| LTE FDD Band II | 1.110 | 1.220 | 18700 | Back side |
| LTE FDD Band IV | 0.959 | 1.052 | 20050 | Back side |
| LTE FDD Band V | 0.901 | 0.981 | 20600 | Back side |
| LTE FDD Band XII | 0.475 | 0.484 | 23130 | Back side |
| LTE FDD Band XXV | 1.160 | 1.252 | 26590 | Back side |
| LTE FDD Band XXVI | 0.795 | 0.945 | 26825 | Back side |
| LTE TDD Band XLI | 0.450 | 0.451 | 41490 | Back side |
| WLAN802.11 b | 1.120 | 1.268 | 6 | Back side |
| WLAN802.11 n(40M) | 0.701 | 0.711 | 6 | Back side |

## LTE FDD Band II / Band IV / Band V / Band XII / Band XXV / Band XXVI / and TDD Band XLI power table :

| FDD Band 2 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 20 | QPSK | 1 RB | 0 | 1860 | 18700 | 22.65 | 23 | 0 |
| | | | | 1880 | 18900 | 22.77 | 23 | 0 |
| | | | | 1900 | 19100 | 22.63 | 23 | 0 |
| | | | 50 | 1860 | 18700 | 23.00 | 23 | 0 |
| | | | | 1880 | 18900 | 22.70 | 23 | 0 |
| | | | | 1900 | 19100 | 22.72 | 23 | 0 |
| | | | 99 | 1860 | 18700 | 22.54 | 23 | 0 |
| | | | | 1880 | 18900 | 22.74 | 23 | 0 |
| | | | | 1900 | 19100 | 22.64 | 23 | 0 |
| | | 50 RB | 0 | 1860 | 18700 | 21.77 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.82 | 22 | 0-1 |
| | | | | 1900 | 19100 | 21.85 | 22 | 0-1 |
| | | | 25 | 1860 | 18700 | 21.69 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.80 | 22 | 0-1 |
| | | | | 1900 | 19100 | 21.71 | 22 | 0-1 |
| | | | 50 | 1860 | 18700 | 21.71 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.69 | 22 | 0-1 |
| | | | | 1900 | 19100 | 21.75 | 22 | 0-1 |
| | | 100RB | | 1860 | 18700 | 21.67 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.85 | 22 | 0-1 |
| | | | | 1900 | 19100 | 21.80 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1860 | 18700 | 21.22 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.88 | 22 | 0-1 |
| | | | | 1900 | 19100 | 21.40 | 22 | 0-1 |
| | | | 50 | 1860 | 18700 | 21.40 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.77 | 22 | 0-1 |
| | | | | 1900 | 19100 | 21.99 | 22 | 0-1 |
| | | | 99 | 1860 | 18700 | 21.90 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.54 | 22 | 0-1 |
| | | | | 1900 | 19100 | 21.81 | 22 | 0-1 |
| | | 50 RB | 0 | 1860 | 18700 | 20.64 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.63 | 21 | 0-2 |
| | | | | 1900 | 19100 | 20.69 | 21 | 0-2 |
| | | | 25 | 1860 | 18700 | 20.43 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.61 | 21 | 0-2 |
| | | | | 1900 | 19100 | 20.63 | 21 | 0-2 |
| | | | 50 | 1860 | 18700 | 20.35 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.66 | 21 | 0-2 |
| | | | | 1900 | 19100 | 20.65 | 21 | 0-2 |
| | | 100RB | | 1860 | 18700 | 20.53 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.59 | 21 | 0-2 |
| | | | | 1900 | 19100 | 20.56 | 21 | 0-2 |

| FDD Band 2 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 15 | QPSK | 1 RB | 0 | 1857.5 | 18675 | 22.56 | 23 | 0 |
| | | | | 1880 | 18900 | 22.59 | 23 | 0 |
| | | | | 1902.5 | 19125 | 22.54 | 23 | 0 |
| | | | 36 | 1857.5 | 18675 | 22.38 | 23 | 0 |
| | | | | 1880 | 18900 | 22.50 | 23 | 0 |
| | | | | 1902.5 | 19125 | 22.45 | 23 | 0 |
| | | | 74 | 1857.5 | 18675 | 22.38 | 23 | 0 |
| | | | | 1880 | 18900 | 22.49 | 23 | 0 |
| | | | | 1902.5 | 19125 | 22.32 | 23 | 0 |
| | | 36 RB | 0 | 1857.5 | 18675 | 21.52 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.59 | 22 | 0-1 |
| | | | | 1902.5 | 19125 | 21.57 | 22 | 0-1 |
| | | | 18 | 1857.5 | 18675 | 21.48 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.57 | 22 | 0-1 |
| | | | | 1902.5 | 19125 | 21.61 | 22 | 0-1 |
| | | | 37 | 1857.5 | 18675 | 21.47 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.51 | 22 | 0-1 |
| | | | | 1902.5 | 19125 | 21.56 | 22 | 0-1 |
| | | 75RB | | 1857.5 | 18675 | 21.45 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.56 | 22 | 0-1 |
| | | | | 1902.5 | 19125 | 21.60 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1857.5 | 18675 | 21.15 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.45 | 22 | 0-1 |
| | | | | 1902.5 | 19125 | 22.16 | 22 | 0-1 |
| | | | 36 | 1857.5 | 18675 | 21.33 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.45 | 22 | 0-1 |
| | | | | 1902.5 | 19125 | 22.04 | 22 | 0-1 |
| | | | 74 | 1857.5 | 18675 | 21.20 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.88 | 22 | 0-1 |
| | | | | 1902.5 | 19125 | 21.61 | 22 | 0-1 |
| | | 36 RB | 0 | 1857.5 | 18675 | 20.55 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.62 | 21 | 0-2 |
| | | | | 1902.5 | 19125 | 20.62 | 21 | 0-2 |
| | | | 18 | 1857.5 | 18675 | 20.40 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.71 | 21 | 0-2 |
| | | | | 1902.5 | 19125 | 20.55 | 21 | 0-2 |
| | | | 37 | 1857.5 | 18675 | 20.40 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.54 | 21 | 0-2 |
| | | | | 1902.5 | 19125 | 20.66 | 21 | 0-2 |
| | | 75RB | | 1857.5 | 18675 | 20.37 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.60 | 21 | 0-2 |
| | | | | 1902.5 | 19125 | 20.63 | 21 | 0-2 |

| FDD Band 2 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 10 | QPSK | 1 RB | 0 | 1855 | 18650 | 22.46 | 23 | 0 |
| | | | | 1880 | 18900 | 22.53 | 23 | 0 |
| | | | | 1905 | 19150 | 22.56 | 23 | 0 |
| | | | 25 | 1855 | 18650 | 22.50 | 23 | 0 |
| | | | | 1880 | 18900 | 22.58 | 23 | 0 |
| | | | | 1905 | 19150 | 22.78 | 23 | 0 |
| | | | 49 | 1855 | 18650 | 22.62 | 23 | 0 |
| | | | | 1880 | 18900 | 22.52 | 23 | 0 |
| | | | | 1905 | 19150 | 22.49 | 23 | 0 |
| | | 25 RB | 0 | 1855 | 18650 | 21.63 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.59 | 22 | 0-1 |
| | | | | 1905 | 19150 | 21.71 | 22 | 0-1 |
| | | | 12 | 1855 | 18650 | 21.45 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.62 | 22 | 0-1 |
| | | | | 1905 | 19150 | 21.72 | 22 | 0-1 |
| | | | 25 | 1855 | 18650 | 21.43 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.59 | 22 | 0-1 |
| | | | | 1905 | 19150 | 21.52 | 22 | 0-1 |
| | | 50RB | | 1855 | 18650 | 21.47 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.55 | 22 | 0-1 |
| | | | | 1905 | 19150 | 21.58 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1855 | 18650 | 21.71 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.87 | 22 | 0-1 |
| | | | | 1905 | 19150 | 21.64 | 22 | 0-1 |
| | | | 25 | 1855 | 18650 | 21.85 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.94 | 22 | 0-1 |
| | | | | 1905 | 19150 | 21.88 | 22 | 0-1 |
| | | | 49 | 1855 | 18650 | 21.70 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.96 | 22 | 0-1 |
| | | | | 1905 | 19150 | 21.73 | 22 | 0-1 |
| | | 25 RB | 0 | 1855 | 18650 | 20.66 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.65 | 21 | 0-2 |
| | | | | 1905 | 19150 | 20.83 | 21 | 0-2 |
| | | | 12 | 1855 | 18650 | 20.36 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.69 | 21 | 0-2 |
| | | | | 1905 | 19150 | 20.69 | 21 | 0-2 |
| | | | 25 | 1855 | 18650 | 20.61 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.71 | 21 | 0-2 |
| | | | | 1905 | 19150 | 20.65 | 21 | 0-2 |
| | | 50RB | | 1855 | 18650 | 20.60 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.48 | 21 | 0-2 |
| | | | | 1905 | 19150 | 20.63 | 21 | 0-2 |

| FDD Band 2 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 5 | QPSK | 1 RB | 0 | 1852.5 | 18625 | 22.39 | 23 | 0 |
| | | | | 1880 | 18900 | 22.33 | 23 | 0 |
| | | | | 1907.5 | 19175 | 22.56 | 23 | 0 |
| | | | 12 | 1852.5 | 18625 | 22.75 | 23 | 0 |
| | | | | 1880 | 18900 | 22.76 | 23 | 0 |
| | | | | 1907.5 | 19175 | 22.77 | 23 | 0 |
| | | | 24 | 1852.5 | 18625 | 22.23 | 23 | 0 |
| | | | | 1880 | 18900 | 22.34 | 23 | 0 |
| | | | | 1907.5 | 19175 | 22.27 | 23 | 0 |
| | | 12 RB | 0 | 1852.5 | 18625 | 21.48 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.58 | 22 | 0-1 |
| | | | | 1907.5 | 19175 | 21.54 | 22 | 0-1 |
| | | | 6 | 1852.5 | 18625 | 21.49 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.56 | 22 | 0-1 |
| | | | | 1907.5 | 19175 | 21.48 | 22 | 0-1 |
| | | | 13 | 1852.5 | 18625 | 21.42 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.57 | 22 | 0-1 |
| | | | | 1907.5 | 19175 | 21.57 | 22 | 0-1 |
| | | 25RB | | 1852.5 | 18625 | 21.56 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.52 | 22 | 0-1 |
| | | | | 1907.5 | 19175 | 21.55 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1852.5 | 18625 | 21.60 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.78 | 22 | 0-1 |
| | | | | 1907.5 | 19175 | 21.94 | 22 | 0-1 |
| | | | 12 | 1852.5 | 18625 | 21.52 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.73 | 22 | 0-1 |
| | | | | 1907.5 | 19175 | 21.81 | 22 | 0-1 |
| | | | 24 | 1852.5 | 18625 | 21.99 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.95 | 22 | 0-1 |
| | | | | 1907.5 | 19175 | 21.66 | 22 | 0-1 |
| | | 12 RB | 0 | 1852.5 | 18625 | 20.59 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.79 | 21 | 0-2 |
| | | | | 1907.5 | 19175 | 20.52 | 21 | 0-2 |
| | | | 6 | 1852.5 | 18625 | 20.58 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.50 | 21 | 0-2 |
| | | | | 1907.5 | 19175 | 20.61 | 21 | 0-2 |
| | | | 13 | 1852.5 | 18625 | 20.66 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.58 | 21 | 0-2 |
| | | | | 1907.5 | 19175 | 20.51 | 21 | 0-2 |
| | | 25RB | | 1852.5 | 18625 | 20.62 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.51 | 21 | 0-2 |
| | | | | 1907.5 | 19175 | 20.64 | 21 | 0-2 |

| FDD Band 2 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 3 | QPSK | 1 RB | 0 | 1851.5 | 18615 | 22.73 | 23 | 0 |
| | | | | 1880 | 18900 | 22.49 | 23 | 0 |
| | | | | 1908.5 | 19185 | 22.62 | 23 | 0 |
| | | | 7 | 1851.5 | 18615 | 22.79 | 23 | 0 |
| | | | | 1880 | 18900 | 22.65 | 23 | 0 |
| | | | | 1908.5 | 19185 | 22.71 | 23 | 0 |
| | | | 14 | 1851.5 | 18615 | 22.63 | 23 | 0 |
| | | | | 1880 | 18900 | 22.65 | 23 | 0 |
| | | | | 1908.5 | 19185 | 22.32 | 23 | 0 |
| | | 8 RB | 0 | 1851.5 | 18615 | 21.37 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.58 | 22 | 0-1 |
| | | | | 1908.5 | 19185 | 21.52 | 22 | 0-1 |
| | | | 4 | 1851.5 | 18615 | 21.51 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.65 | 22 | 0-1 |
| | | | | 1908.5 | 19185 | 21.54 | 22 | 0-1 |
| | | | 7 | 1851.5 | 18615 | 21.48 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.54 | 22 | 0-1 |
| | | | | 1908.5 | 19185 | 21.47 | 22 | 0-1 |
| | | 15RB | | 1851.5 | 18615 | 21.48 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.54 | 22 | 0-1 |
| | | | | 1908.5 | 19185 | 21.56 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1851.5 | 18615 | 21.17 | 22 | 0-1 |
| | | | | 1880 | 18900 | 22.00 | 22 | 0-1 |
| | | | | 1908.5 | 19185 | 21.83 | 22 | 0-1 |
| | | | 7 | 1851.5 | 18615 | 22.00 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.59 | 22 | 0-1 |
| | | | | 1908.5 | 19185 | 21.64 | 22 | 0-1 |
| | | | 14 | 1851.5 | 18615 | 21.70 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.89 | 22 | 0-1 |
| | | | | 1908.5 | 19185 | 21.58 | 22 | 0-1 |
| | | 8 RB | 0 | 1851.5 | 18615 | 20.38 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.46 | 21 | 0-2 |
| | | | | 1908.5 | 19185 | 20.63 | 21 | 0-2 |
| | | | 4 | 1851.5 | 18615 | 20.69 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.51 | 21 | 0-2 |
| | | | | 1908.5 | 19185 | 20.21 | 21 | 0-2 |
| | | | 7 | 1851.5 | 18615 | 20.79 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.59 | 21 | 0-2 |
| | | | | 1908.5 | 19185 | 20.75 | 21 | 0-2 |
| | | 15RB | | 1851.5 | 18615 | 20.64 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.29 | 21 | 0-2 |
| | | | | 1908.5 | 19185 | 20.47 | 21 | 0-2 |

| FDD Band 2 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 1.4 | QPSK | 1 RB | 0 | 1850.7 | 18607 | 22.30 | 23 | 0 |
| | | | | 1880 | 18900 | 22.33 | 23 | 0 |
| | | | | 1909.3 | 19193 | 22.33 | 23 | 0 |
| | | | 2 | 1850.7 | 18607 | 22.54 | 23 | 0 |
| | | | | 1880 | 18900 | 22.41 | 23 | 0 |
| | | | | 1909.3 | 19193 | 22.36 | 23 | 0 |
| | | | 5 | 1850.7 | 18607 | 22.39 | 23 | 0 |
| | | | | 1880 | 18900 | 22.28 | 23 | 0 |
| | | | | 1909.3 | 19193 | 22.26 | 23 | 0 |
| | | 3 RB | 0 | 1850.7 | 18607 | 21.31 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.40 | 22 | 0-1 |
| | | | | 1909.3 | 19193 | 21.30 | 22 | 0-1 |
| | | | 2 | 1850.7 | 18607 | 21.38 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.39 | 22 | 0-1 |
| | | | | 1909.3 | 19193 | 21.42 | 22 | 0-1 |
| | | | 3 | 1850.7 | 18607 | 21.53 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.36 | 22 | 0-1 |
| | | | | 1909.3 | 19193 | 21.54 | 22 | 0-1 |
| | | 6RB | | 1850.7 | 18607 | 21.44 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.61 | 22 | 0-1 |
| | | | | 1909.3 | 19193 | 21.61 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1850.7 | 18607 | 21.27 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.47 | 22 | 0-1 |
| | | | | 1909.3 | 19193 | 21.84 | 22 | 0-1 |
| | | | 2 | 1850.7 | 18607 | 21.44 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.80 | 22 | 0-1 |
| | | | | 1909.3 | 19193 | 21.56 | 22 | 0-1 |
| | | | 5 | 1850.7 | 18607 | 21.54 | 22 | 0-1 |
| | | | | 1880 | 18900 | 21.26 | 22 | 0-1 |
| | | | | 1909.3 | 19193 | 21.56 | 22 | 0-1 |
| | | 3 RB | 0 | 1850.7 | 18607 | 20.28 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.79 | 21 | 0-2 |
| | | | | 1909.3 | 19193 | 20.88 | 21 | 0-2 |
| | | | 2 | 1850.7 | 18607 | 20.75 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.71 | 21 | 0-2 |
| | | | | 1909.3 | 19193 | 20.85 | 21 | 0-2 |
| | | | 3 | 1850.7 | 18607 | 20.73 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.75 | 21 | 0-2 |
| | | | | 1909.3 | 19193 | 20.83 | 21 | 0-2 |
| | | 6RB | | 1850.7 | 18607 | 20.12 | 21 | 0-2 |
| | | | | 1880 | 18900 | 20.42 | 21 | 0-2 |
| | | | | 1909.3 | 19193 | 20.54 | 21 | 0-2 |

| FDD Band 2 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 20 | QPSK | 1 RB | 0 | 1860 | 18700 | 15.59 | 16 | 0 |
| | | | | 1880 | 18900 | 15.64 | 16 | 0 |
| | | | | 1900 | 19100 | 15.71 | 16 | 0 |
| | | | 50 | 1860 | 18700 | 15.51 | 16 | 0 |
| | | | | 1880 | 18900 | 15.65 | 16 | 0 |
| | | | | 1900 | 19100 | 15.72 | 16 | 0 |
| | | | 99 | 1860 | 18700 | 15.52 | 16 | 0 |
| | | | | 1880 | 18900 | 15.47 | 16 | 0 |
| | | | | 1900 | 19100 | 15.46 | 16 | 0 |
| | | 50 RB | 0 | 1860 | 18700 | 14.65 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.71 | 15 | 0-1 |
| | | | | 1900 | 19100 | 14.63 | 15 | 0-1 |
| | | | 25 | 1860 | 18700 | 14.77 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.56 | 15 | 0-1 |
| | | | | 1900 | 19100 | 14.64 | 15 | 0-1 |
| | | | 50 | 1860 | 18700 | 14.60 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.61 | 15 | 0-1 |
| | | | | 1900 | 19100 | 14.57 | 15 | 0-1 |
| | | 100RB | | 1860 | 18700 | 14.67 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.54 | 15 | 0-1 |
| | | | | 1900 | 19100 | 14.49 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1860 | 18700 | 14.54 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.92 | 15 | 0-1 |
| | | | | 1900 | 19100 | 14.44 | 15 | 0-1 |
| | | | 50 | 1860 | 18700 | 14.64 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.91 | 15 | 0-1 |
| | | | | 1900 | 19100 | 14.79 | 15 | 0-1 |
| | | | 99 | 1860 | 18700 | 14.90 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.45 | 15 | 0-1 |
| | | | | 1900 | 19100 | 14.10 | 15 | 0-1 |
| | | 50 RB | 0 | 1860 | 18700 | 13.63 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.43 | 14 | 0-2 |
| | | | | 1900 | 19100 | 13.45 | 14 | 0-2 |
| | | | 25 | 1860 | 18700 | 13.73 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.53 | 14 | 0-2 |
| | | | | 1900 | 19100 | 13.59 | 14 | 0-2 |
| | | | 50 | 1860 | 18700 | 13.64 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.64 | 14 | 0-2 |
| | | | | 1900 | 19100 | 13.43 | 14 | 0-2 |
| | | 100RB | | 1860 | 18700 | 13.69 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.43 | 14 | 0-2 |
| | | | | 1900 | 19100 | 13.44 | 14 | 0-2 |

| FDD Band 2 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 15 | QPSK | 1 RB | 0 | 1857.5 | 18675 | 15.51 | 16 | 0 |
| | | | | 1880 | 18900 | 15.49 | 16 | 0 |
| | | | | 1902.5 | 19125 | 15.63 | 16 | 0 |
| | | | 36 | 1857.5 | 18675 | 15.46 | 16 | 0 |
| | | | | 1880 | 18900 | 15.52 | 16 | 0 |
| | | | | 1902.5 | 19125 | 15.50 | 16 | 0 |
| | | | 74 | 1857.5 | 18675 | 15.39 | 16 | 0 |
| | | | | 1880 | 18900 | 15.58 | 16 | 0 |
| | | | | 1902.5 | 19125 | 15.49 | 16 | 0 |
| | | 36 RB | 0 | 1857.5 | 18675 | 14.54 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.58 | 15 | 0-1 |
| | | | | 1902.5 | 19125 | 14.51 | 15 | 0-1 |
| | | | 18 | 1857.5 | 18675 | 14.56 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.59 | 15 | 0-1 |
| | | | | 1902.5 | 19125 | 14.61 | 15 | 0-1 |
| | | | 37 | 1857.5 | 18675 | 14.56 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.61 | 15 | 0-1 |
| | | | | 1902.5 | 19125 | 14.44 | 15 | 0-1 |
| | | 75RB | | 1857.5 | 18675 | 14.50 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.50 | 15 | 0-1 |
| | | | | 1902.5 | 19125 | 14.57 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1857.5 | 18675 | 14.71 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.45 | 15 | 0-1 |
| | | | | 1902.5 | 19125 | 14.82 | 15 | 0-1 |
| | | | 36 | 1857.5 | 18675 | 14.96 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.79 | 15 | 0-1 |
| | | | | 1902.5 | 19125 | 14.72 | 15 | 0-1 |
| | | | 74 | 1857.5 | 18675 | 14.59 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.72 | 15 | 0-1 |
| | | | | 1902.5 | 19125 | 14.77 | 15 | 0-1 |
| | | 36 RB | 0 | 1857.5 | 18675 | 13.54 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.37 | 14 | 0-2 |
| | | | | 1902.5 | 19125 | 13.46 | 14 | 0-2 |
| | | | 18 | 1857.5 | 18675 | 13.64 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.50 | 14 | 0-2 |
| | | | | 1902.5 | 19125 | 13.55 | 14 | 0-2 |
| | | | 37 | 1857.5 | 18675 | 13.62 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.59 | 14 | 0-2 |
| | | | | 1902.5 | 19125 | 13.47 | 14 | 0-2 |
| | | 75RB | | 1857.5 | 18675 | 13.65 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.49 | 14 | 0-2 |
| | | | | 1902.5 | 19125 | 13.53 | 14 | 0-2 |

| FDD Band 2 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 10 | QPSK | 1 RB | 0 | 1855 | 18650 | 15.52 | 16 | 0 |
| | | | | 1880 | 18900 | 15.59 | 16 | 0 |
| | | | | 1905 | 19150 | 15.47 | 16 | 0 |
| | | | 25 | 1855 | 18650 | 15.47 | 16 | 0 |
| | | | | 1880 | 18900 | 15.68 | 16 | 0 |
| | | | | 1905 | 19150 | 15.49 | 16 | 0 |
| | | | 49 | 1855 | 18650 | 15.34 | 16 | 0 |
| | | | | 1880 | 18900 | 15.31 | 16 | 0 |
| | | | | 1905 | 19150 | 15.46 | 16 | 0 |
| | | 25 RB | 0 | 1855 | 18650 | 14.52 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.55 | 15 | 0-1 |
| | | | | 1905 | 19150 | 14.54 | 15 | 0-1 |
| | | | 12 | 1855 | 18650 | 14.46 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.59 | 15 | 0-1 |
| | | | | 1905 | 19150 | 14.49 | 15 | 0-1 |
| | | | 25 | 1855 | 18650 | 14.49 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.57 | 15 | 0-1 |
| | | | | 1905 | 19150 | 14.43 | 15 | 0-1 |
| | | 50RB | | 1855 | 18650 | 14.39 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.59 | 15 | 0-1 |
| | | | | 1905 | 19150 | 14.56 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1855 | 18650 | 14.91 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.56 | 15 | 0-1 |
| | | | | 1905 | 19150 | 14.19 | 15 | 0-1 |
| | | | 25 | 1855 | 18650 | 14.82 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.92 | 15 | 0-1 |
| | | | | 1905 | 19150 | 14.65 | 15 | 0-1 |
| | | | 49 | 1855 | 18650 | 14.56 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.69 | 15 | 0-1 |
| | | | | 1905 | 19150 | 14.29 | 15 | 0-1 |
| | | 25 RB | 0 | 1855 | 18650 | 13.44 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.22 | 14 | 0-2 |
| | | | | 1905 | 19150 | 13.34 | 14 | 0-2 |
| | | | 12 | 1855 | 18650 | 13.42 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.36 | 14 | 0-2 |
| | | | | 1905 | 19150 | 13.32 | 14 | 0-2 |
| | | | 25 | 1855 | 18650 | 13.45 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.34 | 14 | 0-2 |
| | | | | 1905 | 19150 | 13.21 | 14 | 0-2 |
| | | 50RB | | 1855 | 18650 | 13.38 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.34 | 14 | 0-2 |
| | | | | 1905 | 19150 | 13.14 | 14 | 0-2 |

| FDD Band 2 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 5 | QPSK | 1 RB | 0 | 1852.5 | 18625 | 15.14 | 16 | 0 |
| | | | | 1880 | 18900 | 15.59 | 16 | 0 |
| | | | | 1907.5 | 19175 | 15.65 | 16 | 0 |
| | | | 12 | 1852.5 | 18625 | 15.40 | 16 | 0 |
| | | | | 1880 | 18900 | 15.54 | 16 | 0 |
| | | | | 1907.5 | 19175 | 15.48 | 16 | 0 |
| | | | 24 | 1852.5 | 18625 | 15.42 | 16 | 0 |
| | | | | 1880 | 18900 | 15.46 | 16 | 0 |
| | | | | 1907.5 | 19175 | 15.52 | 16 | 0 |
| | | 12 RB | 0 | 1852.5 | 18625 | 14.39 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.52 | 15 | 0-1 |
| | | | | 1907.5 | 19175 | 14.37 | 15 | 0-1 |
| | | | 6 | 1852.5 | 18625 | 14.51 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.53 | 15 | 0-1 |
| | | | | 1907.5 | 19175 | 14.33 | 15 | 0-1 |
| | | | 13 | 1852.5 | 18625 | 14.51 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.54 | 15 | 0-1 |
| | | | | 1907.5 | 19175 | 14.30 | 15 | 0-1 |
| | | 25RB | | 1852.5 | 18625 | 14.47 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.57 | 15 | 0-1 |
| | | | | 1907.5 | 19175 | 14.39 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1852.5 | 18625 | 14.48 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.69 | 15 | 0-1 |
| | | | | 1907.5 | 19175 | 14.64 | 15 | 0-1 |
| | | | 12 | 1852.5 | 18625 | 14.35 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.56 | 15 | 0-1 |
| | | | | 1907.5 | 19175 | 14.49 | 15 | 0-1 |
| | | | 24 | 1852.5 | 18625 | 14.89 | 15 | 0-1 |
| | | | | 1880 | 18900 | 15.00 | 15 | 0-1 |
| | | | | 1907.5 | 19175 | 14.74 | 15 | 0-1 |
| | | 12 RB | 0 | 1852.5 | 18625 | 13.36 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.40 | 14 | 0-2 |
| | | | | 1907.5 | 19175 | 13.41 | 14 | 0-2 |
| | | | 6 | 1852.5 | 18625 | 13.55 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.45 | 14 | 0-2 |
| | | | | 1907.5 | 19175 | 13.32 | 14 | 0-2 |
| | | | 13 | 1852.5 | 18625 | 13.58 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.60 | 14 | 0-2 |
| | | | | 1907.5 | 19175 | 13.34 | 14 | 0-2 |
| | | 25RB | | 1852.5 | 18625 | 13.63 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.51 | 14 | 0-2 |
| | | | | 1907.5 | 19175 | 13.45 | 14 | 0-2 |

| FDD Band 2 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 3 | QPSK | 1 RB | 0 | 1851.5 | 18615 | 15.41 | 16 | 0 |
| | | | | 1880 | 18900 | 15.37 | 16 | 0 |
| | | | | 1908.5 | 19185 | 15.43 | 16 | 0 |
| | | | 7 | 1851.5 | 18615 | 15.49 | 16 | 0 |
| | | | | 1880 | 18900 | 15.61 | 16 | 0 |
| | | | | 1908.5 | 19185 | 15.68 | 16 | 0 |
| | | | 14 | 1851.5 | 18615 | 15.57 | 16 | 0 |
| | | | | 1880 | 18900 | 15.68 | 16 | 0 |
| | | | | 1908.5 | 19185 | 15.64 | 16 | 0 |
| | | 8 RB | 0 | 1851.5 | 18615 | 14.34 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.59 | 15 | 0-1 |
| | | | | 1908.5 | 19185 | 14.43 | 15 | 0-1 |
| | | | 4 | 1851.5 | 18615 | 14.39 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.63 | 15 | 0-1 |
| | | | | 1908.5 | 19185 | 14.50 | 15 | 0-1 |
| | | | 7 | 1851.5 | 18615 | 14.45 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.54 | 15 | 0-1 |
| | | | | 1908.5 | 19185 | 14.46 | 15 | 0-1 |
| | | 15RB | | 1851.5 | 18615 | 14.35 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.52 | 15 | 0-1 |
| | | | | 1908.5 | 19185 | 14.40 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1851.5 | 18615 | 14.63 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.74 | 15 | 0-1 |
| | | | | 1908.5 | 19185 | 14.48 | 15 | 0-1 |
| | | | 7 | 1851.5 | 18615 | 14.34 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.60 | 15 | 0-1 |
| | | | | 1908.5 | 19185 | 14.56 | 15 | 0-1 |
| | | | 14 | 1851.5 | 18615 | 14.91 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.90 | 15 | 0-1 |
| | | | | 1908.5 | 19185 | 14.20 | 15 | 0-1 |
| | | 8 RB | 0 | 1851.5 | 18615 | 13.20 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.45 | 14 | 0-2 |
| | | | | 1908.5 | 19185 | 13.35 | 14 | 0-2 |
| | | | 4 | 1851.5 | 18615 | 13.40 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.44 | 14 | 0-2 |
| | | | | 1908.5 | 19185 | 13.33 | 14 | 0-2 |
| | | | 7 | 1851.5 | 18615 | 13.58 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.54 | 14 | 0-2 |
| | | | | 1908.5 | 19185 | 13.26 | 14 | 0-2 |
| | | 15RB | | 1851.5 | 18615 | 13.48 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.42 | 14 | 0-2 |
| | | | | 1908.5 | 19185 | 13.20 | 14 | 0-2 |

| FDD Band 2 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 1.4 | QPSK | 1 RB | 0 | 1850.7 | 18607 | 15.32 | 16 | 0 |
| | | | | 1880 | 18900 | 15.36 | 16 | 0 |
| | | | | 1909.3 | 19193 | 15.29 | 16 | 0 |
| | | | 2 | 1850.7 | 18607 | 15.56 | 16 | 0 |
| | | | | 1880 | 18900 | 15.47 | 16 | 0 |
| | | | | 1909.3 | 19193 | 15.40 | 16 | 0 |
| | | | 5 | 1850.7 | 18607 | 15.46 | 16 | 0 |
| | | | | 1880 | 18900 | 15.43 | 16 | 0 |
| | | | | 1909.3 | 19193 | 15.22 | 16 | 0 |
| | | 3 RB | 0 | 1850.7 | 18607 | 14.18 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.48 | 15 | 0-1 |
| | | | | 1909.3 | 19193 | 14.22 | 15 | 0-1 |
| | | | 2 | 1850.7 | 18607 | 14.39 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.59 | 15 | 0-1 |
| | | | | 1909.3 | 19193 | 14.27 | 15 | 0-1 |
| | | | 3 | 1850.7 | 18607 | 14.39 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.54 | 15 | 0-1 |
| | | | | 1909.3 | 19193 | 14.38 | 15 | 0-1 |
| | | 6RB | | 1850.7 | 18607 | 14.32 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.59 | 15 | 0-1 |
| | | | | 1909.3 | 19193 | 14.37 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1850.7 | 18607 | 14.44 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.35 | 15 | 0-1 |
| | | | | 1909.3 | 19193 | 14.89 | 15 | 0-1 |
| | | | 2 | 1850.7 | 18607 | 13.90 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.91 | 15 | 0-1 |
| | | | | 1909.3 | 19193 | 14.56 | 15 | 0-1 |
| | | | 5 | 1850.7 | 18607 | 14.87 | 15 | 0-1 |
| | | | | 1880 | 18900 | 14.47 | 15 | 0-1 |
| | | | | 1909.3 | 19193 | 14.84 | 15 | 0-1 |
| | | 3 RB | 0 | 1850.7 | 18607 | 13.52 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.51 | 14 | 0-2 |
| | | | | 1909.3 | 19193 | 13.48 | 14 | 0-2 |
| | | | 2 | 1850.7 | 18607 | 13.03 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.63 | 14 | 0-2 |
| | | | | 1909.3 | 19193 | 13.66 | 14 | 0-2 |
| | | | 3 | 1850.7 | 18607 | 13.43 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.44 | 14 | 0-2 |
| | | | | 1909.3 | 19193 | 13.59 | 14 | 0-2 |
| | | 6RB | | 1850.7 | 18607 | 13.23 | 14 | 0-2 |
| | | | | 1880 | 18900 | 13.50 | 14 | 0-2 |
| | | | | 1909.3 | 19193 | 13.23 | 14 | 0-2 |

| FDD Band 4 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 20 | QPSK | 1 RB | 0 | 1720 | 20050 | 22.88 | 23 | 0 |
| | | | | 1732.5 | 20175 | 22.83 | 23 | 0 |
| | | | | 1745 | 20300 | 22.80 | 23 | 0 |
| | | | 50 | 1720 | 20050 | 22.48 | 23 | 0 |
| | | | | 1732.5 | 20175 | 22.64 | 23 | 0 |
| | | | | 1745 | 20300 | 22.54 | 23 | 0 |
| | | | 99 | 1720 | 20050 | 22.63 | 23 | 0 |
| | | | | 1732.5 | 20175 | 22.65 | 23 | 0 |
| | | | | 1745 | 20300 | 22.59 | 23 | 0 |
| | | 50 RB | 0 | 1720 | 20050 | 21.76 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.80 | 22 | 0-1 |
| | | | | 1745 | 20300 | 21.93 | 22 | 0-1 |
| | | | 25 | 1720 | 20050 | 21.59 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.70 | 22 | 0-1 |
| | | | | 1745 | 20300 | 21.84 | 22 | 0-1 |
| | | | 50 | 1720 | 20050 | 21.59 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.78 | 22 | 0-1 |
| | | | | 1745 | 20300 | 21.66 | 22 | 0-1 |
| | | 100RB | | 1720 | 20050 | 21.68 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.68 | 22 | 0-1 |
| | | | | 1745 | 20300 | 21.75 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1720 | 20050 | 21.89 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.42 | 22 | 0-1 |
| | | | | 1745 | 20300 | 21.79 | 22 | 0-1 |
| | | | 50 | 1720 | 20050 | 21.63 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.68 | 22 | 0-1 |
| | | | | 1745 | 20300 | 21.73 | 22 | 0-1 |
| | | | 99 | 1720 | 20050 | 21.40 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.66 | 22 | 0-1 |
| | | | | 1745 | 20300 | 21.15 | 22 | 0-1 |
| | | 50 RB | 0 | 1720 | 20050 | 20.58 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.48 | 21 | 0-2 |
| | | | | 1745 | 20300 | 20.55 | 21 | 0-2 |
| | | | 25 | 1720 | 20050 | 20.41 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.61 | 21 | 0-2 |
| | | | | 1745 | 20300 | 20.46 | 21 | 0-2 |
| | | | 50 | 1720 | 20050 | 20.33 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.58 | 21 | 0-2 |
| | | | | 1745 | 20300 | 20.43 | 21 | 0-2 |
| | | 100RB | | 1720 | 20050 | 20.44 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.55 | 21 | 0-2 |
| | | | | 1745 | 20300 | 20.57 | 21 | 0-2 |

| FDD Band 4 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 15 | QPSK | 1 RB | 0 | 1717.5 | 20025 | 22.58 | 23 | 0 |
| | | | | 1732.5 | 20175 | 22.44 | 23 | 0 |
| | | | | 1747.5 | 20325 | 22.66 | 23 | 0 |
| | | | 36 | 1717.5 | 20025 | 22.27 | 23 | 0 |
| | | | | 1732.5 | 20175 | 22.40 | 23 | 0 |
| | | | | 1747.5 | 20325 | 22.43 | 23 | 0 |
| | | | 74 | 1717.5 | 20025 | 22.27 | 23 | 0 |
| | | | | 1732.5 | 20175 | 22.51 | 23 | 0 |
| | | | | 1747.5 | 20325 | 22.58 | 23 | 0 |
| | | 36 RB | 0 | 1717.5 | 20025 | 21.54 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.59 | 22 | 0-1 |
| | | | | 1747.5 | 20325 | 21.67 | 22 | 0-1 |
| | | | 18 | 1717.5 | 20025 | 21.43 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.59 | 22 | 0-1 |
| | | | | 1747.5 | 20325 | 21.50 | 22 | 0-1 |
| | | | 37 | 1717.5 | 20025 | 21.39 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.39 | 22 | 0-1 |
| | | | | 1747.5 | 20325 | 21.58 | 22 | 0-1 |
| | | 75RB | | 1717.5 | 20025 | 21.47 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.50 | 22 | 0-1 |
| | | | | 1747.5 | 20325 | 21.57 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1717.5 | 20025 | 21.56 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.51 | 22 | 0-1 |
| | | | | 1747.5 | 20325 | 21.71 | 22 | 0-1 |
| | | | 36 | 1717.5 | 20025 | 21.11 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.58 | 22 | 0-1 |
| | | | | 1747.5 | 20325 | 21.79 | 22 | 0-1 |
| | | | 74 | 1717.5 | 20025 | 21.48 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.40 | 22 | 0-1 |
| | | | | 1747.5 | 20325 | 21.37 | 22 | 0-1 |
| | | 36 RB | 0 | 1717.5 | 20025 | 20.47 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.49 | 21 | 0-2 |
| | | | | 1747.5 | 20325 | 20.68 | 21 | 0-2 |
| | | | 18 | 1717.5 | 20025 | 20.42 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.50 | 21 | 0-2 |
| | | | | 1747.5 | 20325 | 20.38 | 21 | 0-2 |
| | | | 37 | 1717.5 | 20025 | 20.46 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.40 | 21 | 0-2 |
| | | | | 1747.5 | 20325 | 20.54 | 21 | 0-2 |
| | | 75RB | | 1717.5 | 20025 | 20.35 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.53 | 21 | 0-2 |
| | | | | 1747.5 | 20325 | 20.65 | 21 | 0-2 |

| FDD Band 4 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 10 | QPSK | 1 RB | 0 | 1715 | 20000 | 22.44 | 23 | 0 |
| | | | | 1732.5 | 20175 | 22.67 | 23 | 0 |
| | | | | 1750 | 20350 | 22.54 | 23 | 0 |
| | | | 25 | 1715 | 20000 | 22.66 | 23 | 0 |
| | | | | 1732.5 | 20175 | 22.68 | 23 | 0 |
| | | | | 1750 | 20350 | 22.55 | 23 | 0 |
| | | | 49 | 1715 | 20000 | 22.36 | 23 | 0 |
| | | | | 1732.5 | 20175 | 22.40 | 23 | 0 |
| | | | | 1750 | 20350 | 22.40 | 23 | 0 |
| | | 25 RB | 0 | 1715 | 20000 | 21.44 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.53 | 22 | 0-1 |
| | | | | 1750 | 20350 | 21.61 | 22 | 0-1 |
| | | | 12 | 1715 | 20000 | 21.47 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.58 | 22 | 0-1 |
| | | | | 1750 | 20350 | 21.55 | 22 | 0-1 |
| | | | 25 | 1715 | 20000 | 21.38 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.47 | 22 | 0-1 |
| | | | | 1750 | 20350 | 21.42 | 22 | 0-1 |
| | | 50RB | | 1715 | 20000 | 21.50 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.54 | 22 | 0-1 |
| | | | | 1750 | 20350 | 21.52 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1715 | 20000 | 21.00 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.88 | 22 | 0-1 |
| | | | | 1750 | 20350 | 22.00 | 22 | 0-1 |
| | | | 25 | 1715 | 20000 | 21.41 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.84 | 22 | 0-1 |
| | | | | 1750 | 20350 | 22.00 | 22 | 0-1 |
| | | | 49 | 1715 | 20000 | 20.80 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.81 | 22 | 0-1 |
| | | | | 1750 | 20350 | 21.56 | 22 | 0-1 |
| | | 25 RB | 0 | 1715 | 20000 | 20.63 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.78 | 21 | 0-2 |
| | | | | 1750 | 20350 | 20.66 | 21 | 0-2 |
| | | | 12 | 1715 | 20000 | 20.40 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.68 | 21 | 0-2 |
| | | | | 1750 | 20350 | 20.60 | 21 | 0-2 |
| | | | 25 | 1715 | 20000 | 20.31 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.58 | 21 | 0-2 |
| | | | | 1750 | 20350 | 20.41 | 21 | 0-2 |
| | | 50RB | | 1715 | 20000 | 20.40 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.57 | 21 | 0-2 |
| | | | | 1750 | 20350 | 20.49 | 21 | 0-2 |

| FDD Band 4 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 5 | QPSK | 1 RB | 0 | 1712.5 | 19975 | 22.26 | 23 | 0 |
| | | | | 1732.5 | 20175 | 22.45 | 23 | 0 |
| | | | | 1752.5 | 20375 | 22.34 | 23 | 0 |
| | | | 12 | 1712.5 | 19975 | 22.10 | 23 | 0 |
| | | | | 1732.5 | 20175 | 22.58 | 23 | 0 |
| | | | | 1752.5 | 20375 | 22.43 | 23 | 0 |
| | | | 24 | 1712.5 | 19975 | 22.27 | 23 | 0 |
| | | | | 1732.5 | 20175 | 22.29 | 23 | 0 |
| | | | | 1752.5 | 20375 | 22.24 | 23 | 0 |
| | | 12 RB | 0 | 1712.5 | 19975 | 21.31 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.46 | 22 | 0-1 |
| | | | | 1752.5 | 20375 | 21.43 | 22 | 0-1 |
| | | | 6 | 1712.5 | 19975 | 21.41 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.54 | 22 | 0-1 |
| | | | | 1752.5 | 20375 | 21.39 | 22 | 0-1 |
| | | | 13 | 1712.5 | 19975 | 21.35 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.49 | 22 | 0-1 |
| | | | | 1752.5 | 20375 | 21.44 | 22 | 0-1 |
| | | 25RB | | 1712.5 | 19975 | 21.37 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.41 | 22 | 0-1 |
| | | | | 1752.5 | 20375 | 21.45 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1712.5 | 19975 | 21.98 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.94 | 22 | 0-1 |
| | | | | 1752.5 | 20375 | 21.95 | 22 | 0-1 |
| | | | 12 | 1712.5 | 19975 | 21.37 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.88 | 22 | 0-1 |
| | | | | 1752.5 | 20375 | 21.62 | 22 | 0-1 |
| | | | 24 | 1712.5 | 19975 | 21.81 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.56 | 22 | 0-1 |
| | | | | 1752.5 | 20375 | 21.67 | 22 | 0-1 |
| | | 12 RB | 0 | 1712.5 | 19975 | 20.28 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.53 | 21 | 0-2 |
| | | | | 1752.5 | 20375 | 20.40 | 21 | 0-2 |
| | | | 6 | 1712.5 | 19975 | 20.28 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.29 | 21 | 0-2 |
| | | | | 1752.5 | 20375 | 20.26 | 21 | 0-2 |
| | | | 13 | 1712.5 | 19975 | 20.26 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.41 | 21 | 0-2 |
| | | | | 1752.5 | 20375 | 20.47 | 21 | 0-2 |
| | | 25RB | | 1712.5 | 19975 | 20.32 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.26 | 21 | 0-2 |
| | | | | 1752.5 | 20375 | 20.47 | 21 | 0-2 |

| FDD Band 4 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 3 | QPSK | 1 RB | 0 | 1711.5 | 19965 | 22.35 | 23 | 0 |
| | | | | 1732.5 | 20175 | 22.43 | 23 | 0 |
| | | | | 1753.5 | 20385 | 22.33 | 23 | 0 |
| | | | 7 | 1711.5 | 19965 | 22.26 | 23 | 0 |
| | | | | 1732.5 | 20175 | 22.65 | 23 | 0 |
| | | | | 1753.5 | 20385 | 22.61 | 23 | 0 |
| | | | 14 | 1711.5 | 19965 | 22.26 | 23 | 0 |
| | | | | 1732.5 | 20175 | 22.31 | 23 | 0 |
| | | | | 1753.5 | 20385 | 22.27 | 23 | 0 |
| | | 8 RB | 0 | 1711.5 | 19965 | 21.54 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.46 | 22 | 0-1 |
| | | | | 1753.5 | 20385 | 21.49 | 22 | 0-1 |
| | | | 4 | 1711.5 | 19965 | 21.41 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.41 | 22 | 0-1 |
| | | | | 1753.5 | 20385 | 21.60 | 22 | 0-1 |
| | | | 7 | 1711.5 | 19965 | 21.34 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.51 | 22 | 0-1 |
| | | | | 1753.5 | 20385 | 21.55 | 22 | 0-1 |
| | | 15RB | | 1711.5 | 19965 | 21.39 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.44 | 22 | 0-1 |
| | | | | 1753.5 | 20385 | 21.49 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1711.5 | 19965 | 21.44 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.85 | 22 | 0-1 |
| | | | | 1753.5 | 20385 | 21.07 | 22 | 0-1 |
| | | | 7 | 1711.5 | 19965 | 21.85 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.73 | 22 | 0-1 |
| | | | | 1753.5 | 20385 | 21.71 | 22 | 0-1 |
| | | | 14 | 1711.5 | 19965 | 21.70 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.25 | 22 | 0-1 |
| | | | | 1753.5 | 20385 | 21.47 | 22 | 0-1 |
| | | 8 RB | 0 | 1711.5 | 19965 | 20.63 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.65 | 21 | 0-2 |
| | | | | 1753.5 | 20385 | 20.68 | 21 | 0-2 |
| | | | 4 | 1711.5 | 19965 | 20.32 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.43 | 21 | 0-2 |
| | | | | 1753.5 | 20385 | 20.48 | 21 | 0-2 |
| | | | 7 | 1711.5 | 19965 | 20.50 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.56 | 21 | 0-2 |
| | | | | 1753.5 | 20385 | 20.45 | 21 | 0-2 |
| | | 15RB | | 1711.5 | 19965 | 20.39 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.28 | 21 | 0-2 |
| | | | | 1753.5 | 20385 | 20.16 | 21 | 0-2 |

| FDD Band 4 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 1.4 | QPSK | 1 RB | 0 | 1710.7 | 19957 | 22.32 | 23 | 0 |
| | | | | 1732.5 | 20175 | 22.53 | 23 | 0 |
| | | | | 1754.3 | 20393 | 22.27 | 23 | 0 |
| | | | 2 | 1710.7 | 19957 | 22.28 | 23 | 0 |
| | | | | 1732.5 | 20175 | 22.50 | 23 | 0 |
| | | | | 1754.3 | 20393 | 22.51 | 23 | 0 |
| | | | 5 | 1710.7 | 19957 | 22.42 | 23 | 0 |
| | | | | 1732.5 | 20175 | 22.48 | 23 | 0 |
| | | | | 1754.3 | 20393 | 22.38 | 23 | 0 |
| | | 3 RB | 0 | 1710.7 | 19957 | 21.39 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.51 | 22 | 0-1 |
| | | | | 1754.3 | 20393 | 21.42 | 22 | 0-1 |
| | | | 2 | 1710.7 | 19957 | 21.51 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.50 | 22 | 0-1 |
| | | | | 1754.3 | 20393 | 21.42 | 22 | 0-1 |
| | | | 3 | 1710.7 | 19957 | 21.36 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.56 | 22 | 0-1 |
| | | | | 1754.3 | 20393 | 21.39 | 22 | 0-1 |
| | | 6RB | | 1710.7 | 19957 | 21.39 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.51 | 22 | 0-1 |
| | | | | 1754.3 | 20393 | 21.64 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1710.7 | 19957 | 21.38 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.95 | 22 | 0-1 |
| | | | | 1754.3 | 20393 | 21.91 | 22 | 0-1 |
| | | | 2 | 1710.7 | 19957 | 21.83 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.57 | 22 | 0-1 |
| | | | | 1754.3 | 20393 | 21.30 | 22 | 0-1 |
| | | | 5 | 1710.7 | 19957 | 21.28 | 22 | 0-1 |
| | | | | 1732.5 | 20175 | 21.86 | 22 | 0-1 |
| | | | | 1754.3 | 20393 | 21.54 | 22 | 0-1 |
| | | 3 RB | 0 | 1710.7 | 19957 | 20.15 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.62 | 21 | 0-2 |
| | | | | 1754.3 | 20393 | 20.78 | 21 | 0-2 |
| | | | 2 | 1710.7 | 19957 | 20.27 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.73 | 21 | 0-2 |
| | | | | 1754.3 | 20393 | 20.84 | 21 | 0-2 |
| | | | 3 | 1710.7 | 19957 | 20.56 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.78 | 21 | 0-2 |
| | | | | 1754.3 | 20393 | 20.83 | 21 | 0-2 |
| | | 6RB | | 1710.7 | 19957 | 20.29 | 21 | 0-2 |
| | | | | 1732.5 | 20175 | 20.21 | 21 | 0-2 |
| | | | | 1754.3 | 20393 | 20.61 | 21 | 0-2 |

| FDD Band 4 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 20 | QPSK | 1 RB | 0 | 1720 | 20050 | 15.60 | 16 | 0 |
| | | | | 1732.5 | 20175 | 15.63 | 16 | 0 |
| | | | | 1745 | 20300 | 15.65 | 16 | 0 |
| | | | 50 | 1720 | 20050 | 15.38 | 16 | 0 |
| | | | | 1732.5 | 20175 | 15.68 | 16 | 0 |
| | | | | 1745 | 20300 | 15.73 | 16 | 0 |
| | | | 99 | 1720 | 20050 | 15.43 | 16 | 0 |
| | | | | 1732.5 | 20175 | 15.29 | 16 | 0 |
| | | | | 1745 | 20300 | 15.24 | 16 | 0 |
| | | 50 RB | 0 | 1720 | 20050 | 14.42 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.50 | 15 | 0-1 |
| | | | | 1745 | 20300 | 14.54 | 15 | 0-1 |
| | | | 25 | 1720 | 20050 | 14.34 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.38 | 15 | 0-1 |
| | | | | 1745 | 20300 | 14.50 | 15 | 0-1 |
| | | | 50 | 1720 | 20050 | 14.25 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.26 | 15 | 0-1 |
| | | | | 1745 | 20300 | 14.41 | 15 | 0-1 |
| | | 100RB | | 1720 | 20050 | 14.35 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.38 | 15 | 0-1 |
| | | | | 1745 | 20300 | 14.46 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1720 | 20050 | 14.30 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.77 | 15 | 0-1 |
| | | | | 1745 | 20300 | 14.73 | 15 | 0-1 |
| | | | 50 | 1720 | 20050 | 14.12 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.54 | 15 | 0-1 |
| | | | | 1745 | 20300 | 15.15 | 15 | 0-1 |
| | | | 99 | 1720 | 20050 | 14.27 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.20 | 15 | 0-1 |
| | | | | 1745 | 20300 | 14.52 | 15 | 0-1 |
| | | 50 RB | 0 | 1720 | 20050 | 13.02 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.68 | 14 | 0-2 |
| | | | | 1745 | 20300 | 12.88 | 14 | 0-2 |
| | | | 25 | 1720 | 20050 | 12.95 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.75 | 14 | 0-2 |
| | | | | 1745 | 20300 | 12.87 | 14 | 0-2 |
| | | | 50 | 1720 | 20050 | 12.65 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.51 | 14 | 0-2 |
| | | | | 1745 | 20300 | 12.70 | 14 | 0-2 |
| | | 100RB | | 1720 | 20050 | 12.85 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.65 | 14 | 0-2 |
| | | | | 1745 | 20300 | 12.81 | 14 | 0-2 |

| FDD Band 4 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 15 | QPSK | 1 RB | 0 | 1717.5 | 20025 | 15.49 | 16 | 0 |
| | | | | 1732.5 | 20175 | 15.57 | 16 | 0 |
| | | | | 1747.5 | 20325 | 15.45 | 16 | 0 |
| | | | 36 | 1717.5 | 20025 | 15.26 | 16 | 0 |
| | | | | 1732.5 | 20175 | 15.27 | 16 | 0 |
| | | | | 1747.5 | 20325 | 15.29 | 16 | 0 |
| | | | 74 | 1717.5 | 20025 | 15.26 | 16 | 0 |
| | | | | 1732.5 | 20175 | 15.22 | 16 | 0 |
| | | | | 1747.5 | 20325 | 15.31 | 16 | 0 |
| | | 36 RB | 0 | 1717.5 | 20025 | 14.41 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.43 | 15 | 0-1 |
| | | | | 1747.5 | 20325 | 14.49 | 15 | 0-1 |
| | | | 18 | 1717.5 | 20025 | 14.28 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.39 | 15 | 0-1 |
| | | | | 1747.5 | 20325 | 14.44 | 15 | 0-1 |
| | | | 37 | 1717.5 | 20025 | 14.34 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.40 | 15 | 0-1 |
| | | | | 1747.5 | 20325 | 14.37 | 15 | 0-1 |
| | | 75RB | | 1717.5 | 20025 | 14.34 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.40 | 15 | 0-1 |
| | | | | 1747.5 | 20325 | 14.33 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1717.5 | 20025 | 14.46 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.78 | 15 | 0-1 |
| | | | | 1747.5 | 20325 | 14.40 | 15 | 0-1 |
| | | | 36 | 1717.5 | 20025 | 14.32 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.83 | 15 | 0-1 |
| | | | | 1747.5 | 20325 | 14.30 | 15 | 0-1 |
| | | | 74 | 1717.5 | 20025 | 14.31 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.53 | 15 | 0-1 |
| | | | | 1747.5 | 20325 | 13.88 | 15 | 0-1 |
| | | 36 RB | 0 | 1717.5 | 20025 | 13.09 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.73 | 14 | 0-2 |
| | | | | 1747.5 | 20325 | 13.02 | 14 | 0-2 |
| | | | 18 | 1717.5 | 20025 | 12.88 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.77 | 14 | 0-2 |
| | | | | 1747.5 | 20325 | 12.94 | 14 | 0-2 |
| | | | 37 | 1717.5 | 20025 | 12.76 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.71 | 14 | 0-2 |
| | | | | 1747.5 | 20325 | 12.87 | 14 | 0-2 |
| | | 75RB | | 1717.5 | 20025 | 12.92 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.75 | 14 | 0-2 |
| | | | | 1747.5 | 20325 | 12.94 | 14 | 0-2 |

| FDD Band 4 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 10 | QPSK | 1 RB | 0 | 1715 | 20000 | 15.59 | 16 | 0 |
| | | | | 1732.5 | 20175 | 15.48 | 16 | 0 |
| | | | | 1750 | 20350 | 15.63 | 16 | 0 |
| | | | 25 | 1715 | 20000 | 15.53 | 16 | 0 |
| | | | | 1732.5 | 20175 | 15.51 | 16 | 0 |
| | | | | 1750 | 20350 | 15.55 | 16 | 0 |
| | | | 49 | 1715 | 20000 | 15.24 | 16 | 0 |
| | | | | 1732.5 | 20175 | 15.28 | 16 | 0 |
| | | | | 1750 | 20350 | 15.23 | 16 | 0 |
| | | 25 RB | 0 | 1715 | 20000 | 14.40 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.45 | 15 | 0-1 |
| | | | | 1750 | 20350 | 14.56 | 15 | 0-1 |
| | | | 12 | 1715 | 20000 | 14.32 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.44 | 15 | 0-1 |
| | | | | 1750 | 20350 | 14.43 | 15 | 0-1 |
| | | | 25 | 1715 | 20000 | 14.25 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.35 | 15 | 0-1 |
| | | | | 1750 | 20350 | 14.31 | 15 | 0-1 |
| | | 50RB | | 1715 | 20000 | 14.32 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.35 | 15 | 0-1 |
| | | | | 1750 | 20350 | 14.35 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1715 | 20000 | 14.53 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.47 | 15 | 0-1 |
| | | | | 1750 | 20350 | 14.72 | 15 | 0-1 |
| | | | 25 | 1715 | 20000 | 14.93 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.37 | 15 | 0-1 |
| | | | | 1750 | 20350 | 14.82 | 15 | 0-1 |
| | | | 49 | 1715 | 20000 | 14.23 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.65 | 15 | 0-1 |
| | | | | 1750 | 20350 | 14.37 | 15 | 0-1 |
| | | 25 RB | 0 | 1715 | 20000 | 12.87 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 13.40 | 14 | 0-2 |
| | | | | 1750 | 20350 | 12.75 | 14 | 0-2 |
| | | | 12 | 1715 | 20000 | 12.98 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.64 | 14 | 0-2 |
| | | | | 1750 | 20350 | 12.91 | 14 | 0-2 |
| | | | 25 | 1715 | 20000 | 12.69 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.53 | 14 | 0-2 |
| | | | | 1750 | 20350 | 12.91 | 14 | 0-2 |
| | | 50RB | | 1715 | 20000 | 12.75 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.50 | 14 | 0-2 |
| | | | | 1750 | 20350 | 12.72 | 14 | 0-2 |

| FDD Band 4 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 5 | QPSK | 1 RB | 0 | 1712.5 | 19975 | 15.39 | 16 | 0 |
| | | | | 1732.5 | 20175 | 15.07 | 16 | 0 |
| | | | | 1752.5 | 20375 | 15.30 | 16 | 0 |
| | | | 12 | 1712.5 | 19975 | 15.44 | 16 | 0 |
| | | | | 1732.5 | 20175 | 15.54 | 16 | 0 |
| | | | | 1752.5 | 20375 | 15.38 | 16 | 0 |
| | | | 24 | 1712.5 | 19975 | 15.29 | 16 | 0 |
| | | | | 1732.5 | 20175 | 15.37 | 16 | 0 |
| | | | | 1752.5 | 20375 | 15.32 | 16 | 0 |
| | | 12 RB | 0 | 1712.5 | 19975 | 14.28 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.26 | 15 | 0-1 |
| | | | | 1752.5 | 20375 | 14.34 | 15 | 0-1 |
| | | | 6 | 1712.5 | 19975 | 14.20 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.29 | 15 | 0-1 |
| | | | | 1752.5 | 20375 | 14.26 | 15 | 0-1 |
| | | | 13 | 1712.5 | 19975 | 14.31 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.32 | 15 | 0-1 |
| | | | | 1752.5 | 20375 | 14.24 | 15 | 0-1 |
| | | 25RB | | 1712.5 | 19975 | 14.23 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.34 | 15 | 0-1 |
| | | | | 1752.5 | 20375 | 14.29 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1712.5 | 19975 | 14.54 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.46 | 15 | 0-1 |
| | | | | 1752.5 | 20375 | 14.73 | 15 | 0-1 |
| | | | 12 | 1712.5 | 19975 | 14.73 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.21 | 15 | 0-1 |
| | | | | 1752.5 | 20375 | 14.61 | 15 | 0-1 |
| | | | 24 | 1712.5 | 19975 | 14.43 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.46 | 15 | 0-1 |
| | | | | 1752.5 | 20375 | 14.25 | 15 | 0-1 |
| | | 12 RB | 0 | 1712.5 | 19975 | 13.06 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.86 | 14 | 0-2 |
| | | | | 1752.5 | 20375 | 13.15 | 14 | 0-2 |
| | | | 6 | 1712.5 | 19975 | 12.91 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.79 | 14 | 0-2 |
| | | | | 1752.5 | 20375 | 13.11 | 14 | 0-2 |
| | | | 13 | 1712.5 | 19975 | 13.03 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.83 | 14 | 0-2 |
| | | | | 1752.5 | 20375 | 13.04 | 14 | 0-2 |
| | | 25RB | | 1712.5 | 19975 | 12.97 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.73 | 14 | 0-2 |
| | | | | 1752.5 | 20375 | 13.09 | 14 | 0-2 |

| FDD Band 4 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 3 | QPSK | 1 RB | 0 | 1711.5 | 19965 | 15.47 | 16 | 0 |
| | | | | 1732.5 | 20175 | 15.49 | 16 | 0 |
| | | | | 1753.5 | 20385 | 15.32 | 16 | 0 |
| | | | 7 | 1711.5 | 19965 | 15.45 | 16 | 0 |
| | | | | 1732.5 | 20175 | 15.46 | 16 | 0 |
| | | | | 1753.5 | 20385 | 15.31 | 16 | 0 |
| | | | 14 | 1711.5 | 19965 | 15.35 | 16 | 0 |
| | | | | 1732.5 | 20175 | 15.39 | 16 | 0 |
| | | | | 1753.5 | 20385 | 15.44 | 16 | 0 |
| | | 8 RB | 0 | 1711.5 | 19965 | 14.31 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.37 | 15 | 0-1 |
| | | | | 1753.5 | 20385 | 14.29 | 15 | 0-1 |
| | | | 4 | 1711.5 | 19965 | 14.35 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.34 | 15 | 0-1 |
| | | | | 1753.5 | 20385 | 14.36 | 15 | 0-1 |
| | | | 7 | 1711.5 | 19965 | 14.43 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.34 | 15 | 0-1 |
| | | | | 1753.5 | 20385 | 14.43 | 15 | 0-1 |
| | | 15RB | | 1711.5 | 19965 | 14.35 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.34 | 15 | 0-1 |
| | | | | 1753.5 | 20385 | 14.31 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1711.5 | 19965 | 14.91 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.83 | 15 | 0-1 |
| | | | | 1753.5 | 20385 | 14.47 | 15 | 0-1 |
| | | | 7 | 1711.5 | 19965 | 14.50 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.49 | 15 | 0-1 |
| | | | | 1753.5 | 20385 | 14.22 | 15 | 0-1 |
| | | | 14 | 1711.5 | 19965 | 14.56 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.87 | 15 | 0-1 |
| | | | | 1753.5 | 20385 | 14.80 | 15 | 0-1 |
| | | 8 RB | 0 | 1711.5 | 19965 | 12.98 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.77 | 14 | 0-2 |
| | | | | 1753.5 | 20385 | 13.09 | 14 | 0-2 |
| | | | 4 | 1711.5 | 19965 | 13.14 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.80 | 14 | 0-2 |
| | | | | 1753.5 | 20385 | 13.16 | 14 | 0-2 |
| | | | 7 | 1711.5 | 19965 | 13.06 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.82 | 14 | 0-2 |
| | | | | 1753.5 | 20385 | 13.11 | 14 | 0-2 |
| | | 15RB | | 1711.5 | 19965 | 12.98 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.61 | 14 | 0-2 |
| | | | | 1753.5 | 20385 | 13.03 | 14 | 0-2 |

| FDD Band 4 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 1.4 | QPSK | 1 RB | 0 | 1710.7 | 19957 | 15.19 | 16 | 0 |
| | | | | 1732.5 | 20175 | 15.18 | 16 | 0 |
| | | | | 1754.3 | 20393 | 15.13 | 16 | 0 |
| | | | 2 | 1710.7 | 19957 | 15.38 | 16 | 0 |
| | | | | 1732.5 | 20175 | 15.22 | 16 | 0 |
| | | | | 1754.3 | 20393 | 15.13 | 16 | 0 |
| | | | 5 | 1710.7 | 19957 | 15.15 | 16 | 0 |
| | | | | 1732.5 | 20175 | 15.12 | 16 | 0 |
| | | | | 1754.3 | 20393 | 15.07 | 16 | 0 |
| | | 3 RB | 0 | 1710.7 | 19957 | 14.31 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.21 | 15 | 0-1 |
| | | | | 1754.3 | 20393 | 14.26 | 15 | 0-1 |
| | | | 2 | 1710.7 | 19957 | 14.32 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.21 | 15 | 0-1 |
| | | | | 1754.3 | 20393 | 14.23 | 15 | 0-1 |
| | | | 3 | 1710.7 | 19957 | 14.28 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.20 | 15 | 0-1 |
| | | | | 1754.3 | 20393 | 14.25 | 15 | 0-1 |
| | | 6RB | | 1710.7 | 19957 | 14.56 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.28 | 15 | 0-1 |
| | | | | 1754.3 | 20393 | 14.24 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1710.7 | 19957 | 14.96 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.76 | 15 | 0-1 |
| | | | | 1754.3 | 20393 | 14.48 | 15 | 0-1 |
| | | | 2 | 1710.7 | 19957 | 14.90 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.59 | 15 | 0-1 |
| | | | | 1754.3 | 20393 | 14.24 | 15 | 0-1 |
| | | | 5 | 1710.7 | 19957 | 14.40 | 15 | 0-1 |
| | | | | 1732.5 | 20175 | 14.48 | 15 | 0-1 |
| | | | | 1754.3 | 20393 | 14.08 | 15 | 0-1 |
| | | 3 RB | 0 | 1710.7 | 19957 | 13.26 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 13.58 | 14 | 0-2 |
| | | | | 1754.3 | 20393 | 13.11 | 14 | 0-2 |
| | | | 2 | 1710.7 | 19957 | 13.60 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 13.65 | 14 | 0-2 |
| | | | | 1754.3 | 20393 | 13.13 | 14 | 0-2 |
| | | | 3 | 1710.7 | 19957 | 13.50 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 13.57 | 14 | 0-2 |
| | | | | 1754.3 | 20393 | 13.42 | 14 | 0-2 |
| | | 6RB | | 1710.7 | 19957 | 13.11 | 14 | 0-2 |
| | | | | 1732.5 | 20175 | 12.66 | 14 | 0-2 |
| | | | | 1754.3 | 20393 | 13.02 | 14 | 0-2 |

| FDD Band 5 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 10 | QPSK | 1 RB | 0 | 829 | 20450 | 22.58 | 23 | 0 |
| | | | | 836.5 | 20525 | 22.62 | 23 | 0 |
| | | | | 844 | 20600 | 22.57 | 23 | 0 |
| | | | 25 | 829 | 20450 | 22.48 | 23 | 0 |
| | | | | 836.5 | 20525 | 22.61 | 23 | 0 |
| | | | | 844 | 20600 | 22.63 | 23 | 0 |
| | | | 49 | 829 | 20450 | 22.34 | 23 | 0 |
| | | | | 836.5 | 20525 | 22.68 | 23 | 0 |
| | | | | 844 | 20600 | 22.56 | 23 | 0 |
| | | 25 RB | 0 | 829 | 20450 | 21.55 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.58 | 22 | 0-1 |
| | | | | 844 | 20600 | 21.67 | 22 | 0-1 |
| | | | 12 | 829 | 20450 | 21.59 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.60 | 22 | 0-1 |
| | | | | 844 | 20600 | 21.60 | 22 | 0-1 |
| | | | 25 | 829 | 20450 | 21.54 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.52 | 22 | 0-1 |
| | | | | 844 | 20600 | 21.49 | 22 | 0-1 |
| | | 50RB | | 829 | 20450 | 21.65 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.62 | 22 | 0-1 |
| | | | | 844 | 20600 | 21.53 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 829 | 20450 | 21.22 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.60 | 22 | 0-1 |
| | | | | 844 | 20600 | 21.89 | 22 | 0-1 |
| | | | 25 | 829 | 20450 | 21.06 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.62 | 22 | 0-1 |
| | | | | 844 | 20600 | 22.00 | 22 | 0-1 |
| | | | 49 | 829 | 20450 | 21.29 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.50 | 22 | 0-1 |
| | | | | 844 | 20600 | 21.67 | 22 | 0-1 |
| | | 25 RB | 0 | 829 | 20450 | 20.22 | 21 | 0-2 |
| | | | | 836.5 | 20525 | 20.43 | 21 | 0-2 |
| | | | | 844 | 20600 | 20.45 | 21 | 0-2 |
| | | | 12 | 829 | 20450 | 20.30 | 21 | 0-2 |
| | | | | 836.5 | 20525 | 20.33 | 21 | 0-2 |
| | | | | 844 | 20600 | 20.17 | 21 | 0-2 |
| | | | 25 | 829 | 20450 | 20.39 | 21 | 0-2 |
| | | | | 836.5 | 20525 | 20.22 | 21 | 0-2 |
| | | | | 844 | 20600 | 20.27 | 21 | 0-2 |
| | | 50RB | | 829 | 20450 | 20.14 | 21 | 0-2 |
| | | | | 836.5 | 20525 | 20.21 | 21 | 0-2 |
| | | | | 844 | 20600 | 20.34 | 21 | 0-2 |

| FDD Band 5 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 5 | QPSK | 1 RB | 0 | 826.5 | 20425 | 22.41 | 23 | 0 |
| | | | | 836.5 | 20525 | 22.45 | 23 | 0 |
| | | | | 846.5 | 20625 | 22.22 | 23 | 0 |
| | | | 12 | 826.5 | 20425 | 22.36 | 23 | 0 |
| | | | | 836.5 | 20525 | 22.35 | 23 | 0 |
| | | | | 846.5 | 20625 | 22.50 | 23 | 0 |
| | | | 24 | 826.5 | 20425 | 22.31 | 23 | 0 |
| | | | | 836.5 | 20525 | 22.26 | 23 | 0 |
| | | | | 846.5 | 20625 | 22.26 | 23 | 0 |
| | | 12 RB | 0 | 826.5 | 20425 | 21.34 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.41 | 22 | 0-1 |
| | | | | 846.5 | 20625 | 21.36 | 22 | 0-1 |
| | | | 6 | 826.5 | 20425 | 21.32 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.43 | 22 | 0-1 |
| | | | | 846.5 | 20625 | 21.32 | 22 | 0-1 |
| | | | 13 | 826.5 | 20425 | 21.30 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.27 | 22 | 0-1 |
| | | | | 846.5 | 20625 | 21.33 | 22 | 0-1 |
| | | 25RB | | 826.5 | 20425 | 21.32 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.29 | 22 | 0-1 |
| | | | | 846.5 | 20625 | 21.34 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 826.5 | 20425 | 21.98 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.44 | 22 | 0-1 |
| | | | | 846.5 | 20625 | 21.58 | 22 | 0-1 |
| | | | 12 | 826.5 | 20425 | 21.63 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.44 | 22 | 0-1 |
| | | | | 846.5 | 20625 | 21.42 | 22 | 0-1 |
| | | | 24 | 826.5 | 20425 | 21.27 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.30 | 22 | 0-1 |
| | | | | 846.5 | 20625 | 21.84 | 22 | 0-1 |
| | | 12 RB | 0 | 826.5 | 20425 | 20.25 | 21 | 0-2 |
| | | | | 836.5 | 20525 | 20.30 | 21 | 0-2 |
| | | | | 846.5 | 20625 | 20.52 | 21 | 0-2 |
| | | | 6 | 826.5 | 20425 | 20.21 | 21 | 0-2 |
| | | | | 836.5 | 20525 | 20.27 | 21 | 0-2 |
| | | | | 846.5 | 20625 | 20.21 | 21 | 0-2 |
| | | | 13 | 826.5 | 20425 | 20.20 | 21 | 0-2 |
| | | | | 836.5 | 20525 | 20.00 | 21 | 0-2 |
| | | | | 846.5 | 20625 | 20.20 | 21 | 0-2 |
| | | 25RB | | 826.5 | 20425 | 20.25 | 21 | 0-2 |
| | | | | 836.5 | 20525 | 20.36 | 21 | 0-2 |
| | | | | 846.5 | 20625 | 20.22 | 21 | 0-2 |

| FDD Band 5 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 3 | QPSK | 1 RB | 0 | 825.5 | 20415 | 22.46 | 23 | 0 |
| | | | | 836.5 | 20525 | 22.39 | 23 | 0 |
| | | | | 847.5 | 20635 | 22.25 | 23 | 0 |
| | | | 7 | 825.5 | 20415 | 22.43 | 23 | 0 |
| | | | | 836.5 | 20525 | 22.59 | 23 | 0 |
| | | | | 847.5 | 20635 | 22.56 | 23 | 0 |
| | | | 14 | 825.5 | 20415 | 22.24 | 23 | 0 |
| | | | | 836.5 | 20525 | 22.32 | 23 | 0 |
| | | | | 847.5 | 20635 | 22.22 | 23 | 0 |
| | | 8 RB | 0 | 825.5 | 20415 | 21.35 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.38 | 22 | 0-1 |
| | | | | 847.5 | 20635 | 21.43 | 22 | 0-1 |
| | | | 4 | 825.5 | 20415 | 21.34 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.48 | 22 | 0-1 |
| | | | | 847.5 | 20635 | 21.41 | 22 | 0-1 |
| | | | 7 | 825.5 | 20415 | 21.29 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.44 | 22 | 0-1 |
| | | | | 847.5 | 20635 | 21.47 | 22 | 0-1 |
| | | 15RB | | 825.5 | 20415 | 21.33 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.31 | 22 | 0-1 |
| | | | | 847.5 | 20635 | 21.32 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 825.5 | 20415 | 21.45 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.98 | 22 | 0-1 |
| | | | | 847.5 | 20635 | 21.50 | 22 | 0-1 |
| | | | 7 | 825.5 | 20415 | 20.95 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.39 | 22 | 0-1 |
| | | | | 847.5 | 20635 | 21.49 | 22 | 0-1 |
| | | | 14 | 825.5 | 20415 | 21.00 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.54 | 22 | 0-1 |
| | | | | 847.5 | 20635 | 21.63 | 22 | 0-1 |
| | | 8 RB | 0 | 825.5 | 20415 | 20.24 | 21 | 0-2 |
| | | | | 836.5 | 20525 | 20.37 | 21 | 0-2 |
| | | | | 847.5 | 20635 | 20.47 | 21 | 0-2 |
| | | | 4 | 825.5 | 20415 | 20.30 | 21 | 0-2 |
| | | | | 836.5 | 20525 | 20.36 | 21 | 0-2 |
| | | | | 847.5 | 20635 | 20.33 | 21 | 0-2 |
| | | | 7 | 825.5 | 20415 | 20.39 | 21 | 0-2 |
| | | | | 836.5 | 20525 | 20.12 | 21 | 0-2 |
| | | | | 847.5 | 20635 | 20.44 | 21 | 0-2 |
| | | 15RB | | 825.5 | 20415 | 20.28 | 21 | 0-2 |
| | | | | 836.5 | 20525 | 20.31 | 21 | 0-2 |
| | | | | 847.5 | 20635 | 20.54 | 21 | 0-2 |

| FDD Band 5 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 1.4 | QPSK | 1 RB | 0 | 824.7 | 20407 | 22.16 | 23 | 0 |
| | | | | 836.5 | 20525 | 22.24 | 23 | 0 |
| | | | | 848.3 | 20643 | 22.36 | 23 | 0 |
| | | | 2 | 824.7 | 20407 | 22.21 | 23 | 0 |
| | | | | 836.5 | 20525 | 22.30 | 23 | 0 |
| | | | | 848.3 | 20643 | 22.27 | 23 | 0 |
| | | | 5 | 824.7 | 20407 | 22.04 | 23 | 0 |
| | | | | 836.5 | 20525 | 22.21 | 23 | 0 |
| | | | | 848.3 | 20643 | 22.12 | 23 | 0 |
| | | 3 RB | 0 | 824.7 | 20407 | 21.22 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.33 | 22 | 0-1 |
| | | | | 848.3 | 20643 | 21.47 | 22 | 0-1 |
| | | | 2 | 824.7 | 20407 | 21.35 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.16 | 22 | 0-1 |
| | | | | 848.3 | 20643 | 21.26 | 22 | 0-1 |
| | | | 3 | 824.7 | 20407 | 21.17 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.24 | 22 | 0-1 |
| | | | | 848.3 | 20643 | 21.27 | 22 | 0-1 |
| | | 6RB | | 824.7 | 20407 | 21.24 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.35 | 22 | 0-1 |
| | | | | 848.3 | 20643 | 21.31 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 824.7 | 20407 | 21.56 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.27 | 22 | 0-1 |
| | | | | 848.3 | 20643 | 21.84 | 22 | 0-1 |
| | | | 2 | 824.7 | 20407 | 21.42 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.73 | 22 | 0-1 |
| | | | | 848.3 | 20643 | 21.49 | 22 | 0-1 |
| | | | 5 | 824.7 | 20407 | 20.60 | 22 | 0-1 |
| | | | | 836.5 | 20525 | 21.48 | 22 | 0-1 |
| | | | | 848.3 | 20643 | 21.78 | 22 | 0-1 |
| | | 3 RB | 0 | 824.7 | 20407 | 20.49 | 21 | 0-2 |
| | | | | 836.5 | 20525 | 20.57 | 21 | 0-2 |
| | | | | 848.3 | 20643 | 20.62 | 21 | 0-2 |
| | | | 2 | 824.7 | 20407 | 20.37 | 21 | 0-2 |
| | | | | 836.5 | 20525 | 20.18 | 21 | 0-2 |
| | | | | 848.3 | 20643 | 20.35 | 21 | 0-2 |
| | | | 3 | 824.7 | 20407 | 19.93 | 21 | 0-2 |
| | | | | 836.5 | 20525 | 20.29 | 21 | 0-2 |
| | | | | 848.3 | 20643 | 20.60 | 21 | 0-2 |
| | | 6RB | | 824.7 | 20407 | 19.86 | 21 | 0-2 |
| | | | | 836.5 | 20525 | 19.86 | 21 | 0-2 |
| | | | | 848.3 | 20643 | 20.38 | 21 | 0-2 |

| FDD Band 5 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 10 | QPSK | 1 RB | 0 | 829 | 20450 | 14.67 | 15 | 0 |
| | | | | 836.5 | 20525 | 14.64 | 15 | 0 |
| | | | | 844 | 20600 | 14.80 | 15 | 0 |
| | | | 25 | 829 | 20450 | 14.63 | 15 | 0 |
| | | | | 836.5 | 20525 | 14.56 | 15 | 0 |
| | | | | 844 | 20600 | 14.70 | 15 | 0 |
| | | | 49 | 829 | 20450 | 14.85 | 15 | 0 |
| | | | | 836.5 | 20525 | 14.64 | 15 | 0 |
| | | | | 844 | 20600 | 14.79 | 15 | 0 |
| | | 25 RB | 0 | 829 | 20450 | 14.55 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.83 | 15 | 0-1 |
| | | | | 844 | 20600 | 14.72 | 15 | 0-1 |
| | | | 12 | 829 | 20450 | 14.43 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.73 | 15 | 0-1 |
| | | | | 844 | 20600 | 14.72 | 15 | 0-1 |
| | | | 25 | 829 | 20450 | 14.66 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.75 | 15 | 0-1 |
| | | | | 844 | 20600 | 14.65 | 15 | 0-1 |
| | | 50RB | | 829 | 20450 | 14.66 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.70 | 15 | 0-1 |
| | | | | 844 | 20600 | 14.79 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 829 | 20450 | 14.57 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.74 | 15 | 0-1 |
| | | | | 844 | 20600 | 14.74 | 15 | 0-1 |
| | | | 25 | 829 | 20450 | 14.50 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.53 | 15 | 0-1 |
| | | | | 844 | 20600 | 14.77 | 15 | 0-1 |
| | | | 49 | 829 | 20450 | 14.73 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.65 | 15 | 0-1 |
| | | | | 844 | 20600 | 14.72 | 15 | 0-1 |
| | | 25 RB | 0 | 829 | 20450 | 13.71 | 15 | 0-2 |
| | | | | 836.5 | 20525 | 13.91 | 15 | 0-2 |
| | | | | 844 | 20600 | 13.88 | 15 | 0-2 |
| | | | 12 | 829 | 20450 | 13.69 | 15 | 0-2 |
| | | | | 836.5 | 20525 | 13.73 | 15 | 0-2 |
| | | | | 844 | 20600 | 13.73 | 15 | 0-2 |
| | | | 25 | 829 | 20450 | 13.72 | 15 | 0-2 |
| | | | | 836.5 | 20525 | 13.90 | 15 | 0-2 |
| | | | | 844 | 20600 | 13.66 | 15 | 0-2 |
| | | 50RB | | 829 | 20450 | 13.61 | 15 | 0-2 |
| | | | | 836.5 | 20525 | 13.66 | 15 | 0-2 |
| | | | | 844 | 20600 | 13.86 | 15 | 0-2 |

| FDD Band 5 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 5 | QPSK | 1 RB | 0 | 826.5 | 20425 | 14.72 | 15 | 0 |
| | | | | 836.5 | 20525 | 14.71 | 15 | 0 |
| | | | | 846.5 | 20625 | 14.62 | 15 | 0 |
| | | | 12 | 826.5 | 20425 | 14.68 | 15 | 0 |
| | | | | 836.5 | 20525 | 14.56 | 15 | 0 |
| | | | | 846.5 | 20625 | 14.65 | 15 | 0 |
| | | | 24 | 826.5 | 20425 | 14.45 | 15 | 0 |
| | | | | 836.5 | 20525 | 14.55 | 15 | 0 |
| | | | | 846.5 | 20625 | 14.59 | 15 | 0 |
| | | 12 RB | 0 | 826.5 | 20425 | 14.53 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.70 | 15 | 0-1 |
| | | | | 846.5 | 20625 | 14.62 | 15 | 0-1 |
| | | | 6 | 826.5 | 20425 | 14.58 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.60 | 15 | 0-1 |
| | | | | 846.5 | 20625 | 14.56 | 15 | 0-1 |
| | | | 13 | 826.5 | 20425 | 14.45 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.59 | 15 | 0-1 |
| | | | | 846.5 | 20625 | 14.73 | 15 | 0-1 |
| | | 25RB | | 826.5 | 20425 | 14.49 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.64 | 15 | 0-1 |
| | | | | 846.5 | 20625 | 14.66 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 826.5 | 20425 | 14.25 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.47 | 15 | 0-1 |
| | | | | 846.5 | 20625 | 14.04 | 15 | 0-1 |
| | | | 12 | 826.5 | 20425 | 14.16 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.61 | 15 | 0-1 |
| | | | | 846.5 | 20625 | 14.06 | 15 | 0-1 |
| | | | 24 | 826.5 | 20425 | 14.14 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.61 | 15 | 0-1 |
| | | | | 846.5 | 20625 | 14.12 | 15 | 0-1 |
| | | 12 RB | 0 | 826.5 | 20425 | 13.52 | 15 | 0-2 |
| | | | | 836.5 | 20525 | 13.58 | 15 | 0-2 |
| | | | | 846.5 | 20625 | 13.67 | 15 | 0-2 |
| | | | 6 | 826.5 | 20425 | 13.32 | 15 | 0-2 |
| | | | | 836.5 | 20525 | 13.50 | 15 | 0-2 |
| | | | | 846.5 | 20625 | 13.56 | 15 | 0-2 |
| | | | 13 | 826.5 | 20425 | 13.16 | 15 | 0-2 |
| | | | | 836.5 | 20525 | 13.49 | 15 | 0-2 |
| | | | | 846.5 | 20625 | 13.64 | 15 | 0-2 |
| | | 25RB | | 826.5 | 20425 | 13.46 | 15 | 0-2 |
| | | | | 836.5 | 20525 | 13.72 | 15 | 0-2 |
| | | | | 846.5 | 20625 | 13.57 | 15 | 0-2 |

| FDD Band 5 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 3 | QPSK | 1 RB | 0 | 825.5 | 20415 | 14.67 | 15 | 0 |
| | | | | 836.5 | 20525 | 14.58 | 15 | 0 |
| | | | | 847.5 | 20635 | 14.71 | 15 | 0 |
| | | | 7 | 825.5 | 20415 | 14.63 | 15 | 0 |
| | | | | 836.5 | 20525 | 14.59 | 15 | 0 |
| | | | | 847.5 | 20635 | 14.76 | 15 | 0 |
| | | | 14 | 825.5 | 20415 | 14.60 | 15 | 0 |
| | | | | 836.5 | 20525 | 14.49 | 15 | 0 |
| | | | | 847.5 | 20635 | 14.63 | 15 | 0 |
| | | 8 RB | 0 | 825.5 | 20415 | 14.64 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.76 | 15 | 0-1 |
| | | | | 847.5 | 20635 | 14.73 | 15 | 0-1 |
| | | | 4 | 825.5 | 20415 | 14.57 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.64 | 15 | 0-1 |
| | | | | 847.5 | 20635 | 14.64 | 15 | 0-1 |
| | | | 7 | 825.5 | 20415 | 14.59 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.59 | 15 | 0-1 |
| | | | | 847.5 | 20635 | 14.72 | 15 | 0-1 |
| | | 15RB | | 825.5 | 20415 | 14.55 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.68 | 15 | 0-1 |
| | | | | 847.5 | 20635 | 14.60 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 825.5 | 20415 | 14.59 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.49 | 15 | 0-1 |
| | | | | 847.5 | 20635 | 14.57 | 15 | 0-1 |
| | | | 7 | 825.5 | 20415 | 14.53 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.46 | 15 | 0-1 |
| | | | | 847.5 | 20635 | 14.51 | 15 | 0-1 |
| | | | 14 | 825.5 | 20415 | 14.62 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.49 | 15 | 0-1 |
| | | | | 847.5 | 20635 | 14.52 | 15 | 0-1 |
| | | 8 RB | 0 | 825.5 | 20415 | 13.42 | 15 | 0-2 |
| | | | | 836.5 | 20525 | 13.58 | 15 | 0-2 |
| | | | | 847.5 | 20635 | 13.60 | 15 | 0-2 |
| | | | 4 | 825.5 | 20415 | 13.35 | 15 | 0-2 |
| | | | | 836.5 | 20525 | 13.71 | 15 | 0-2 |
| | | | | 847.5 | 20635 | 13.79 | 15 | 0-2 |
| | | | 7 | 825.5 | 20415 | 13.41 | 15 | 0-2 |
| | | | | 836.5 | 20525 | 13.58 | 15 | 0-2 |
| | | | | 847.5 | 20635 | 13.58 | 15 | 0-2 |
| | | 15RB | | 825.5 | 20415 | 13.35 | 15 | 0-2 |
| | | | | 836.5 | 20525 | 13.40 | 15 | 0-2 |
| | | | | 847.5 | 20635 | 13.40 | 15 | 0-2 |

| FDD Band 5 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 1.4 | QPSK | 1 RB | 0 | 824.7 | 20407 | 14.49 | 15 | 0 |
| | | | | 836.5 | 20525 | 14.54 | 15 | 0 |
| | | | | 848.3 | 20643 | 14.80 | 15 | 0 |
| | | | 2 | 824.7 | 20407 | 14.49 | 15 | 0 |
| | | | | 836.5 | 20525 | 14.50 | 15 | 0 |
| | | | | 848.3 | 20643 | 14.73 | 15 | 0 |
| | | | 5 | 824.7 | 20407 | 14.35 | 15 | 0 |
| | | | | 836.5 | 20525 | 14.35 | 15 | 0 |
| | | | | 848.3 | 20643 | 14.49 | 15 | 0 |
| | | 3 RB | 0 | 824.7 | 20407 | 14.47 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.61 | 15 | 0-1 |
| | | | | 848.3 | 20643 | 14.67 | 15 | 0-1 |
| | | | 2 | 824.7 | 20407 | 14.57 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.61 | 15 | 0-1 |
| | | | | 848.3 | 20643 | 14.58 | 15 | 0-1 |
| | | | 3 | 824.7 | 20407 | 14.48 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.63 | 15 | 0-1 |
| | | | | 848.3 | 20643 | 14.59 | 15 | 0-1 |
| | | 6RB | | 824.7 | 20407 | 14.52 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.67 | 15 | 0-1 |
| | | | | 848.3 | 20643 | 14.76 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 824.7 | 20407 | 14.53 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.64 | 15 | 0-1 |
| | | | | 848.3 | 20643 | 14.62 | 15 | 0-1 |
| | | | 2 | 824.7 | 20407 | 14.32 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.17 | 15 | 0-1 |
| | | | | 848.3 | 20643 | 14.45 | 15 | 0-1 |
| | | | 5 | 824.7 | 20407 | 14.41 | 15 | 0-1 |
| | | | | 836.5 | 20525 | 14.05 | 15 | 0-1 |
| | | | | 848.3 | 20643 | 14.51 | 15 | 0-1 |
| | | 3 RB | 0 | 824.7 | 20407 | 13.49 | 15 | 0-2 |
| | | | | 836.5 | 20525 | 13.30 | 15 | 0-2 |
| | | | | 848.3 | 20643 | 13.68 | 15 | 0-2 |
| | | | 2 | 824.7 | 20407 | 13.46 | 15 | 0-2 |
| | | | | 836.5 | 20525 | 13.64 | 15 | 0-2 |
| | | | | 848.3 | 20643 | 13.61 | 15 | 0-2 |
| | | | 3 | 824.7 | 20407 | 13.31 | 15 | 0-2 |
| | | | | 836.5 | 20525 | 13.71 | 15 | 0-2 |
| | | | | 848.3 | 20643 | 13.58 | 15 | 0-2 |
| | | 6RB | | 824.7 | 20407 | 13.68 | 15 | 0-2 |
| | | | | 836.5 | 20525 | 13.33 | 15 | 0-2 |
| | | | | 848.3 | 20643 | 13.73 | 15 | 0-2 |

| FDD Band 12 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 10 | QPSK | 1 RB | 0 | 704 | 23060 | 22.28 | 23 | 0 |
| | | | | 707.5 | 23095 | 22.41 | 23 | 0 |
| | | | | 711 | 23130 | 22.55 | 23 | 0 |
| | | | 25 | 704 | 23060 | 22.60 | 23 | 0 |
| | | | | 707.5 | 23095 | 22.49 | 23 | 0 |
| | | | | 711 | 23130 | 22.52 | 23 | 0 |
| | | | 49 | 704 | 23060 | 22.57 | 23 | 0 |
| | | | | 707.5 | 23095 | 22.47 | 23 | 0 |
| | | | | 711 | 23130 | 22.64 | 23 | 0 |
| | | 25 RB | 0 | 704 | 23060 | 21.53 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.59 | 22 | 0-1 |
| | | | | 711 | 23130 | 21.78 | 22 | 0-1 |
| | | | 12 | 704 | 23060 | 21.55 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.55 | 22 | 0-1 |
| | | | | 711 | 23130 | 21.73 | 22 | 0-1 |
| | | | 25 | 704 | 23060 | 21.57 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.51 | 22 | 0-1 |
| | | | | 711 | 23130 | 21.76 | 22 | 0-1 |
| | | 50RB | | 704 | 23060 | 21.57 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.59 | 22 | 0-1 |
| | | | | 711 | 23130 | 21.67 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 704 | 23060 | 21.82 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.81 | 22 | 0-1 |
| | | | | 711 | 23130 | 21.95 | 22 | 0-1 |
| | | | 25 | 704 | 23060 | 21.66 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 22.00 | 22 | 0-1 |
| | | | | 711 | 23130 | 21.94 | 22 | 0-1 |
| | | | 49 | 704 | 23060 | 21.78 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.89 | 22 | 0-1 |
| | | | | 711 | 23130 | 21.83 | 22 | 0-1 |
| | | 25 RB | 0 | 704 | 23060 | 20.36 | 21 | 0-2 |
| | | | | 707.5 | 23095 | 20.45 | 21 | 0-2 |
| | | | | 711 | 23130 | 20.36 | 21 | 0-2 |
| | | | 12 | 704 | 23060 | 20.34 | 21 | 0-2 |
| | | | | 707.5 | 23095 | 20.44 | 21 | 0-2 |
| | | | | 711 | 23130 | 20.51 | 21 | 0-2 |
| | | | 25 | 704 | 23060 | 20.37 | 21 | 0-2 |
| | | | | 707.5 | 23095 | 20.38 | 21 | 0-2 |
| | | | | 711 | 23130 | 20.63 | 21 | 0-2 |
| | | 50RB | | 704 | 23060 | 20.29 | 21 | 0-2 |
| | | | | 707.5 | 23095 | 20.36 | 21 | 0-2 |
| | | | | 711 | 23130 | 20.39 | 21 | 0-2 |

| FDD Band 12 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 5 | QPSK | 1 RB | 0 | 701.5 | 23035 | 22.31 | 23 | 0 |
| | | | | 707.5 | 23095 | 22.49 | 23 | 0 |
| | | | | 713.5 | 23155 | 22.36 | 23 | 0 |
| | | | 12 | 701.5 | 23035 | 22.37 | 23 | 0 |
| | | | | 707.5 | 23095 | 22.54 | 23 | 0 |
| | | | | 713.5 | 23155 | 22.52 | 23 | 0 |
| | | | 24 | 701.5 | 23035 | 22.25 | 23 | 0 |
| | | | | 707.5 | 23095 | 22.39 | 23 | 0 |
| | | | | 713.5 | 23155 | 22.36 | 23 | 0 |
| | | 12 RB | 0 | 701.5 | 23035 | 21.14 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.29 | 22 | 0-1 |
| | | | | 713.5 | 23155 | 21.31 | 22 | 0-1 |
| | | | 6 | 701.5 | 23035 | 21.32 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.38 | 22 | 0-1 |
| | | | | 713.5 | 23155 | 21.40 | 22 | 0-1 |
| | | | 13 | 701.5 | 23035 | 21.42 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.43 | 22 | 0-1 |
| | | | | 713.5 | 23155 | 21.46 | 22 | 0-1 |
| | | 25RB | | 701.5 | 23035 | 21.30 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.35 | 22 | 0-1 |
| | | | | 713.5 | 23155 | 21.41 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 701.5 | 23035 | 21.59 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.39 | 22 | 0-1 |
| | | | | 713.5 | 23155 | 21.50 | 22 | 0-1 |
| | | | 12 | 701.5 | 23035 | 21.44 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.73 | 22 | 0-1 |
| | | | | 713.5 | 23155 | 21.62 | 22 | 0-1 |
| | | | 24 | 701.5 | 23035 | 21.28 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.44 | 22 | 0-1 |
| | | | | 713.5 | 23155 | 21.76 | 22 | 0-1 |
| | | 12 RB | 0 | 701.5 | 23035 | 20.27 | 21 | 0-2 |
| | | | | 707.5 | 23095 | 20.37 | 21 | 0-2 |
| | | | | 713.5 | 23155 | 20.39 | 21 | 0-2 |
| | | | 6 | 701.5 | 23035 | 20.22 | 21 | 0-2 |
| | | | | 707.5 | 23095 | 20.37 | 21 | 0-2 |
| | | | | 713.5 | 23155 | 20.29 | 21 | 0-2 |
| | | | 13 | 701.5 | 23035 | 20.38 | 21 | 0-2 |
| | | | | 707.5 | 23095 | 20.40 | 21 | 0-2 |
| | | | | 713.5 | 23155 | 20.27 | 21 | 0-2 |
| | | 25RB | | 701.5 | 23035 | 20.45 | 21 | 0-2 |
| | | | | 707.5 | 23095 | 20.33 | 21 | 0-2 |
| | | | | 713.5 | 23155 | 20.37 | 21 | 0-2 |

| FDD Band 12 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 3 | QPSK | 1 RB | 0 | 700.5 | 23025 | 22.44 | 23 | 0 |
| | | | | 707.5 | 23095 | 22.32 | 23 | 0 |
| | | | | 714.5 | 23165 | 22.29 | 23 | 0 |
| | | | 7 | 700.5 | 23025 | 22.09 | 23 | 0 |
| | | | | 707.5 | 23095 | 22.56 | 23 | 0 |
| | | | | 714.5 | 23165 | 22.55 | 23 | 0 |
| | | | 14 | 700.5 | 23025 | 22.34 | 23 | 0 |
| | | | | 707.5 | 23095 | 22.29 | 23 | 0 |
| | | | | 714.5 | 23165 | 22.52 | 23 | 0 |
| | | 8 RB | 0 | 700.5 | 23025 | 21.32 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.40 | 22 | 0-1 |
| | | | | 714.5 | 23165 | 21.36 | 22 | 0-1 |
| | | | 4 | 700.5 | 23025 | 21.36 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.39 | 22 | 0-1 |
| | | | | 714.5 | 23165 | 21.35 | 22 | 0-1 |
| | | | 7 | 700.5 | 23025 | 21.32 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.43 | 22 | 0-1 |
| | | | | 714.5 | 23165 | 21.47 | 22 | 0-1 |
| | | 15RB | | 700.5 | 23025 | 21.36 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.35 | 22 | 0-1 |
| | | | | 714.5 | 23165 | 21.43 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 700.5 | 23025 | 21.51 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.94 | 22 | 0-1 |
| | | | | 714.5 | 23165 | 21.59 | 22 | 0-1 |
| | | | 7 | 700.5 | 23025 | 21.83 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.91 | 22 | 0-1 |
| | | | | 714.5 | 23165 | 21.74 | 22 | 0-1 |
| | | | 14 | 700.5 | 23025 | 21.34 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.64 | 22 | 0-1 |
| | | | | 714.5 | 23165 | 21.74 | 22 | 0-1 |
| | | 8 RB | 0 | 700.5 | 23025 | 20.36 | 21 | 0-2 |
| | | | | 707.5 | 23095 | 20.42 | 21 | 0-2 |
| | | | | 714.5 | 23165 | 20.58 | 21 | 0-2 |
| | | | 4 | 700.5 | 23025 | 20.22 | 21 | 0-2 |
| | | | | 707.5 | 23095 | 20.52 | 21 | 0-2 |
| | | | | 714.5 | 23165 | 20.46 | 21 | 0-2 |
| | | | 7 | 700.5 | 23025 | 20.37 | 21 | 0-2 |
| | | | | 707.5 | 23095 | 20.41 | 21 | 0-2 |
| | | | | 714.5 | 23165 | 20.40 | 21 | 0-2 |
| | | 15RB | | 700.5 | 23025 | 20.28 | 21 | 0-2 |
| | | | | 707.5 | 23095 | 20.27 | 21 | 0-2 |
| | | | | 714.5 | 23165 | 20.27 | 21 | 0-2 |

| FDD Band 12 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 1.4 | QPSK | 1 RB | 0 | 699.7 | 23017 | 22.19 | 23 | 0 |
| | | | | 707.5 | 23095 | 22.11 | 23 | 0 |
| | | | | 715.3 | 23173 | 22.21 | 23 | 0 |
| | | | 2 | 699.7 | 23017 | 22.37 | 23 | 0 |
| | | | | 707.5 | 23095 | 22.34 | 23 | 0 |
| | | | | 715.3 | 23173 | 22.34 | 23 | 0 |
| | | | 5 | 699.7 | 23017 | 22.16 | 23 | 0 |
| | | | | 707.5 | 23095 | 22.26 | 23 | 0 |
| | | | | 715.3 | 23173 | 22.28 | 23 | 0 |
| | | 3 RB | 0 | 699.7 | 23017 | 21.25 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.23 | 22 | 0-1 |
| | | | | 715.3 | 23173 | 21.33 | 22 | 0-1 |
| | | | 2 | 699.7 | 23017 | 21.30 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.31 | 22 | 0-1 |
| | | | | 715.3 | 23173 | 21.45 | 22 | 0-1 |
| | | | 3 | 699.7 | 23017 | 21.13 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.32 | 22 | 0-1 |
| | | | | 715.3 | 23173 | 21.45 | 22 | 0-1 |
| | | 6RB | | 699.7 | 23017 | 21.32 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.22 | 22 | 0-1 |
| | | | | 715.3 | 23173 | 21.42 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 699.7 | 23017 | 21.10 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.51 | 22 | 0-1 |
| | | | | 715.3 | 23173 | 21.52 | 22 | 0-1 |
| | | | 2 | 699.7 | 23017 | 21.31 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.80 | 22 | 0-1 |
| | | | | 715.3 | 23173 | 21.88 | 22 | 0-1 |
| | | | 5 | 699.7 | 23017 | 21.81 | 22 | 0-1 |
| | | | | 707.5 | 23095 | 21.31 | 22 | 0-1 |
| | | | | 715.3 | 23173 | 21.68 | 22 | 0-1 |
| | | 3 RB | 0 | 699.7 | 23017 | 20.27 | 21 | 0-2 |
| | | | | 707.5 | 23095 | 20.64 | 21 | 0-2 |
| | | | | 715.3 | 23173 | 20.78 | 21 | 0-2 |
| | | | 2 | 699.7 | 23017 | 20.45 | 21 | 0-2 |
| | | | | 707.5 | 23095 | 20.73 | 21 | 0-2 |
| | | | | 715.3 | 23173 | 20.65 | 21 | 0-2 |
| | | | 3 | 699.7 | 23017 | 20.62 | 21 | 0-2 |
| | | | | 707.5 | 23095 | 20.68 | 21 | 0-2 |
| | | | | 715.3 | 23173 | 20.56 | 21 | 0-2 |
| | | 6RB | | 699.7 | 23017 | 20.17 | 21 | 0-2 |
| | | | | 707.5 | 23095 | 20.35 | 21 | 0-2 |
| | | | | 715.3 | 23173 | 20.26 | 21 | 0-2 |

| FDD Band 12 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 10 | QPSK | 1 RB | 0 | 704 | 23060 | 14.74 | 15 | 0 |
| | | | | 707.5 | 23095 | 14.34 | 15 | 0 |
| | | | | 711 | 23130 | 14.79 | 15 | 0 |
| | | | 25 | 704 | 23060 | 14.90 | 15 | 0 |
| | | | | 707.5 | 23095 | 14.74 | 15 | 0 |
| | | | | 711 | 23130 | 14.92 | 15 | 0 |
| | | | 49 | 704 | 23060 | 14.85 | 15 | 0 |
| | | | | 707.5 | 23095 | 14.68 | 15 | 0 |
| | | | | 711 | 23130 | 14.75 | 15 | 0 |
| | | 25 RB | 0 | 704 | 23060 | 13.76 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.71 | 14 | 0-1 |
| | | | | 711 | 23130 | 13.76 | 14 | 0-1 |
| | | | 12 | 704 | 23060 | 13.73 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.70 | 14 | 0-1 |
| | | | | 711 | 23130 | 13.83 | 14 | 0-1 |
| | | | 25 | 704 | 23060 | 13.75 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.63 | 14 | 0-1 |
| | | | | 711 | 23130 | 13.82 | 14 | 0-1 |
| | | 50RB | | 704 | 23060 | 13.72 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.63 | 14 | 0-1 |
| | | | | 711 | 23130 | 13.75 | 14 | 0-1 |
| | 16-QAM | 1 RB | 0 | 704 | 23060 | 13.81 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.81 | 14 | 0-1 |
| | | | | 711 | 23130 | 13.72 | 14 | 0-1 |
| | | | 25 | 704 | 23060 | 13.88 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.80 | 14 | 0-1 |
| | | | | 711 | 23130 | 13.68 | 14 | 0-1 |
| | | | 49 | 704 | 23060 | 13.85 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.27 | 14 | 0-1 |
| | | | | 711 | 23130 | 13.63 | 14 | 0-1 |
| | | 25 RB | 0 | 704 | 23060 | 12.20 | 13 | 0-2 |
| | | | | 707.5 | 23095 | 12.18 | 13 | 0-2 |
| | | | | 711 | 23130 | 12.25 | 13 | 0-2 |
| | | | 12 | 704 | 23060 | 12.28 | 13 | 0-2 |
| | | | | 707.5 | 23095 | 12.33 | 13 | 0-2 |
| | | | | 711 | 23130 | 12.32 | 13 | 0-2 |
| | | | 25 | 704 | 23060 | 12.24 | 13 | 0-2 |
| | | | | 707.5 | 23095 | 12.38 | 13 | 0-2 |
| | | | | 711 | 23130 | 12.29 | 13 | 0-2 |
| | | 50RB | | 704 | 23060 | 12.23 | 13 | 0-2 |
| | | | | 707.5 | 23095 | 12.26 | 13 | 0-2 |
| | | | | 711 | 23130 | 12.29 | 13 | 0-2 |

| FDD Band 12 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 5 | QPSK | 1 RB | 0 | 701.5 | 23035 | 14.77 | 15 | 0 |
| | | | | 707.5 | 23095 | 14.69 | 15 | 0 |
| | | | | 713.5 | 23155 | 14.69 | 15 | 0 |
| | | | 12 | 701.5 | 23035 | 14.76 | 15 | 0 |
| | | | | 707.5 | 23095 | 14.59 | 15 | 0 |
| | | | | 713.5 | 23155 | 14.64 | 15 | 0 |
| | | | 24 | 701.5 | 23035 | 14.42 | 15 | 0 |
| | | | | 707.5 | 23095 | 14.59 | 15 | 0 |
| | | | | 713.5 | 23155 | 14.71 | 15 | 0 |
| | | 12 RB | 0 | 701.5 | 23035 | 13.72 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.59 | 14 | 0-1 |
| | | | | 713.5 | 23155 | 13.62 | 14 | 0-1 |
| | | | 6 | 701.5 | 23035 | 13.75 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.54 | 14 | 0-1 |
| | | | | 713.5 | 23155 | 13.64 | 14 | 0-1 |
| | | | 13 | 701.5 | 23035 | 13.63 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.64 | 14 | 0-1 |
| | | | | 713.5 | 23155 | 13.64 | 14 | 0-1 |
| | | 25RB | | 701.5 | 23035 | 13.73 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.66 | 14 | 0-1 |
| | | | | 713.5 | 23155 | 13.68 | 14 | 0-1 |
| | 16-QAM | 1 RB | 0 | 701.5 | 23035 | 13.63 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.54 | 14 | 0-1 |
| | | | | 713.5 | 23155 | 13.66 | 14 | 0-1 |
| | | | 12 | 701.5 | 23035 | 13.73 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.71 | 14 | 0-1 |
| | | | | 713.5 | 23155 | 13.71 | 14 | 0-1 |
| | | | 24 | 701.5 | 23035 | 13.24 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.72 | 14 | 0-1 |
| | | | | 713.5 | 23155 | 13.66 | 14 | 0-1 |
| | | 12 RB | 0 | 701.5 | 23035 | 12.32 | 13 | 0-2 |
| | | | | 707.5 | 23095 | 12.52 | 13 | 0-2 |
| | | | | 713.5 | 23155 | 12.45 | 13 | 0-2 |
| | | | 6 | 701.5 | 23035 | 12.33 | 13 | 0-2 |
| | | | | 707.5 | 23095 | 12.39 | 13 | 0-2 |
| | | | | 713.5 | 23155 | 12.39 | 13 | 0-2 |
| | | | 13 | 701.5 | 23035 | 12.48 | 13 | 0-2 |
| | | | | 707.5 | 23095 | 12.61 | 13 | 0-2 |
| | | | | 713.5 | 23155 | 12.52 | 13 | 0-2 |
| | | 25RB | | 701.5 | 23035 | 12.44 | 13 | 0-2 |
| | | | | 707.5 | 23095 | 12.61 | 13 | 0-2 |
| | | | | 713.5 | 23155 | 12.44 | 13 | 0-2 |

| FDD Band 12 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 3 | QPSK | 1 RB | 0 | 700.5 | 23025 | 14.81 | 15 | 0 |
| | | | | 707.5 | 23095 | 14.78 | 15 | 0 |
| | | | | 714.5 | 23165 | 14.52 | 15 | 0 |
| | | | 7 | 700.5 | 23025 | 14.85 | 15 | 0 |
| | | | | 707.5 | 23095 | 14.46 | 15 | 0 |
| | | | | 714.5 | 23165 | 14.60 | 15 | 0 |
| | | | 14 | 700.5 | 23025 | 14.59 | 15 | 0 |
| | | | | 707.5 | 23095 | 14.43 | 15 | 0 |
| | | | | 714.5 | 23165 | 14.71 | 15 | 0 |
| | | 8 RB | 0 | 700.5 | 23025 | 13.80 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.60 | 14 | 0-1 |
| | | | | 714.5 | 23165 | 13.61 | 14 | 0-1 |
| | | | 4 | 700.5 | 23025 | 13.84 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.57 | 14 | 0-1 |
| | | | | 714.5 | 23165 | 13.61 | 14 | 0-1 |
| | | | 7 | 700.5 | 23025 | 13.81 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.61 | 14 | 0-1 |
| | | | | 714.5 | 23165 | 13.64 | 14 | 0-1 |
| | | 15RB | | 700.5 | 23025 | 13.73 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.61 | 14 | 0-1 |
| | | | | 714.5 | 23165 | 13.58 | 14 | 0-1 |
| | 16-QAM | 1 RB | 0 | 700.5 | 23025 | 13.81 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.91 | 14 | 0-1 |
| | | | | 714.5 | 23165 | 13.75 | 14 | 0-1 |
| | | | 7 | 700.5 | 23025 | 13.71 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.54 | 14 | 0-1 |
| | | | | 714.5 | 23165 | 13.75 | 14 | 0-1 |
| | | | 14 | 700.5 | 23025 | 13.64 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.58 | 14 | 0-1 |
| | | | | 714.5 | 23165 | 13.52 | 14 | 0-1 |
| | | 8 RB | 0 | 700.5 | 23025 | 12.24 | 13 | 0-2 |
| | | | | 707.5 | 23095 | 12.38 | 13 | 0-2 |
| | | | | 714.5 | 23165 | 12.55 | 13 | 0-2 |
| | | | 4 | 700.5 | 23025 | 12.35 | 13 | 0-2 |
| | | | | 707.5 | 23095 | 12.45 | 13 | 0-2 |
| | | | | 714.5 | 23165 | 12.35 | 13 | 0-2 |
| | | | 7 | 700.5 | 23025 | 12.33 | 13 | 0-2 |
| | | | | 707.5 | 23095 | 12.40 | 13 | 0-2 |
| | | | | 714.5 | 23165 | 12.37 | 13 | 0-2 |
| | | 15RB | | 700.5 | 23025 | 12.31 | 13 | 0-2 |
| | | | | 707.5 | 23095 | 12.50 | 13 | 0-2 |
| | | | | 714.5 | 23165 | 12.36 | 13 | 0-2 |

| FDD Band 12 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 1.4 | QPSK | 1 RB | 0 | 699.7 | 23017 | 14.72 | 15 | 0 |
| | | | | 707.5 | 23095 | 14.42 | 15 | 0 |
| | | | | 715.3 | 23173 | 14.49 | 15 | 0 |
| | | | 2 | 699.7 | 23017 | 14.71 | 15 | 0 |
| | | | | 707.5 | 23095 | 14.49 | 15 | 0 |
| | | | | 715.3 | 23173 | 14.49 | 15 | 0 |
| | | | 5 | 699.7 | 23017 | 14.75 | 15 | 0 |
| | | | | 707.5 | 23095 | 14.61 | 15 | 0 |
| | | | | 715.3 | 23173 | 14.58 | 15 | 0 |
| | | 3 RB | 0 | 699.7 | 23017 | 13.88 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.57 | 14 | 0-1 |
| | | | | 715.3 | 23173 | 13.60 | 14 | 0-1 |
| | | | 2 | 699.7 | 23017 | 13.82 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.58 | 14 | 0-1 |
| | | | | 715.3 | 23173 | 13.69 | 14 | 0-1 |
| | | | 3 | 699.7 | 23017 | 13.78 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.58 | 14 | 0-1 |
| | | | | 715.3 | 23173 | 13.62 | 14 | 0-1 |
| | | 6RB | | 699.7 | 23017 | 13.80 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.62 | 14 | 0-1 |
| | | | | 715.3 | 23173 | 13.73 | 14 | 0-1 |
| | 16-QAM | 1 RB | 0 | 699.7 | 23017 | 13.85 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.04 | 14 | 0-1 |
| | | | | 715.3 | 23173 | 13.27 | 14 | 0-1 |
| | | | 2 | 699.7 | 23017 | 13.57 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.32 | 14 | 0-1 |
| | | | | 715.3 | 23173 | 13.67 | 14 | 0-1 |
| | | | 5 | 699.7 | 23017 | 13.31 | 14 | 0-1 |
| | | | | 707.5 | 23095 | 13.46 | 14 | 0-1 |
| | | | | 715.3 | 23173 | 13.67 | 14 | 0-1 |
| | | 3 RB | 0 | 699.7 | 23017 | 12.15 | 13 | 0-2 |
| | | | | 707.5 | 23095 | 12.59 | 13 | 0-2 |
| | | | | 715.3 | 23173 | 12.60 | 13 | 0-2 |
| | | | 2 | 699.7 | 23017 | 12.66 | 13 | 0-2 |
| | | | | 707.5 | 23095 | 12.54 | 13 | 0-2 |
| | | | | 715.3 | 23173 | 12.63 | 13 | 0-2 |
| | | | 3 | 699.7 | 23017 | 12.76 | 13 | 0-2 |
| | | | | 707.5 | 23095 | 12.89 | 13 | 0-2 |
| | | | | 715.3 | 23173 | 12.71 | 13 | 0-2 |
| | | 6RB | | 699.7 | 23017 | 12.31 | 13 | 0-2 |
| | | | | 707.5 | 23095 | 12.41 | 13 | 0-2 |
| | | | | 715.3 | 23173 | 12.26 | 13 | 0-2 |

| FDD Band 25 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 20 | QPSK | 1 RB | 0 | 1860 | 26140 | 22.43 | 23 | 0 |
| | | | | 1882.5 | 26365 | 22.69 | 23 | 0 |
| | | | | 1905 | 26590 | 22.57 | 23 | 0 |
| | | | 50 | 1860 | 26140 | 22.26 | 23 | 0 |
| | | | | 1882.5 | 26365 | 22.66 | 23 | 0 |
| | | | | 1905 | 26590 | 22.52 | 23 | 0 |
| | | | 99 | 1860 | 26140 | 22.44 | 23 | 0 |
| | | | | 1882.5 | 26365 | 22.37 | 23 | 0 |
| | | | | 1905 | 26590 | 22.58 | 23 | 0 |
| | | 50 RB | 0 | 1860 | 26140 | 21.57 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.68 | 22 | 0-1 |
| | | | | 1905 | 26590 | 21.69 | 22 | 0-1 |
| | | | 25 | 1860 | 26140 | 21.39 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.53 | 22 | 0-1 |
| | | | | 1905 | 26590 | 21.65 | 22 | 0-1 |
| | | | 50 | 1860 | 26140 | 21.39 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.55 | 22 | 0-1 |
| | | | | 1905 | 26590 | 21.65 | 22 | 0-1 |
| | | 100RB | | 1860 | 26140 | 21.36 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.66 | 22 | 0-1 |
| | | | | 1905 | 26590 | 21.60 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1860 | 26140 | 21.65 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.92 | 22 | 0-1 |
| | | | | 1905 | 26590 | 21.64 | 22 | 0-1 |
| | | | 50 | 1860 | 26140 | 21.16 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.53 | 22 | 0-1 |
| | | | | 1905 | 26590 | 21.61 | 22 | 0-1 |
| | | | 99 | 1860 | 26140 | 21.08 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.41 | 22 | 0-1 |
| | | | | 1905 | 26590 | 21.35 | 22 | 0-1 |
| | | 50 RB | 0 | 1860 | 26140 | 20.17 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.51 | 21 | 0-2 |
| | | | | 1905 | 26590 | 20.33 | 21 | 0-2 |
| | | | 25 | 1860 | 26140 | 20.06 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.37 | 21 | 0-2 |
| | | | | 1905 | 26590 | 20.46 | 21 | 0-2 |
| | | | 50 | 1860 | 26140 | 20.05 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.28 | 21 | 0-2 |
| | | | | 1905 | 26590 | 20.49 | 21 | 0-2 |
| | | 100RB | | 1860 | 26140 | 20.18 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.50 | 21 | 0-2 |
| | | | | 1905 | 26590 | 20.33 | 21 | 0-2 |

| FDD Band 25 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 15 | QPSK | 1 RB | 0 | 1857.5 | 26115 | 22.40 | 23 | 0 |
| | | | | 1882.5 | 26365 | 22.51 | 23 | 0 |
| | | | | 1907.5 | 26615 | 22.45 | 23 | 0 |
| | | | 36 | 1857.5 | 26115 | 22.15 | 23 | 0 |
| | | | | 1882.5 | 26365 | 22.26 | 23 | 0 |
| | | | | 1907.5 | 26615 | 22.24 | 23 | 0 |
| | | | 74 | 1857.5 | 26115 | 22.08 | 23 | 0 |
| | | | | 1882.5 | 26365 | 22.11 | 23 | 0 |
| | | | | 1907.5 | 26615 | 22.34 | 23 | 0 |
| | | 36 RB | 0 | 1857.5 | 26115 | 21.30 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.41 | 22 | 0-1 |
| | | | | 1907.5 | 26615 | 21.57 | 22 | 0-1 |
| | | | 18 | 1857.5 | 26115 | 21.17 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.36 | 22 | 0-1 |
| | | | | 1907.5 | 26615 | 21.35 | 22 | 0-1 |
| | | | 37 | 1857.5 | 26115 | 21.16 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.37 | 22 | 0-1 |
| | | | | 1907.5 | 26615 | 21.45 | 22 | 0-1 |
| | | 75RB | | 1857.5 | 26115 | 21.21 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.45 | 22 | 0-1 |
| | | | | 1907.5 | 26615 | 21.52 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1857.5 | 26115 | 21.93 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.82 | 22 | 0-1 |
| | | | | 1907.5 | 26615 | 21.92 | 22 | 0-1 |
| | | | 36 | 1857.5 | 26115 | 21.38 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.68 | 22 | 0-1 |
| | | | | 1907.5 | 26615 | 21.72 | 22 | 0-1 |
| | | | 74 | 1857.5 | 26115 | 20.70 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.74 | 22 | 0-1 |
| | | | | 1907.5 | 26615 | 21.89 | 22 | 0-1 |
| | | 36 RB | 0 | 1857.5 | 26115 | 20.34 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.51 | 21 | 0-2 |
| | | | | 1907.5 | 26615 | 20.64 | 21 | 0-2 |
| | | | 18 | 1857.5 | 26115 | 20.22 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.52 | 21 | 0-2 |
| | | | | 1907.5 | 26615 | 20.45 | 21 | 0-2 |
| | | | 37 | 1857.5 | 26115 | 20.09 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.33 | 21 | 0-2 |
| | | | | 1907.5 | 26615 | 20.57 | 21 | 0-2 |
| | | 75RB | | 1857.5 | 26115 | 20.16 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.30 | 21 | 0-2 |
| | | | | 1907.5 | 26615 | 20.41 | 21 | 0-2 |

| FDD Band 25 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 10 | QPSK | 1 RB | 0 | 1855 | 26090 | 22.32 | 23 | 0 |
| | | | | 1882.5 | 26365 | 22.27 | 23 | 0 |
| | | | | 1910 | 26640 | 22.39 | 23 | 0 |
| | | | 25 | 1855 | 26090 | 22.12 | 23 | 0 |
| | | | | 1882.5 | 26365 | 22.61 | 23 | 0 |
| | | | | 1910 | 26640 | 22.58 | 23 | 0 |
| | | | 49 | 1855 | 26090 | 22.16 | 23 | 0 |
| | | | | 1882.5 | 26365 | 22.27 | 23 | 0 |
| | | | | 1910 | 26640 | 22.44 | 23 | 0 |
| | | 25 RB | 0 | 1855 | 26090 | 21.25 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.39 | 22 | 0-1 |
| | | | | 1910 | 26640 | 21.46 | 22 | 0-1 |
| | | | 12 | 1855 | 26090 | 21.28 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.41 | 22 | 0-1 |
| | | | | 1910 | 26640 | 21.48 | 22 | 0-1 |
| | | | 25 | 1855 | 26090 | 21.13 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.36 | 22 | 0-1 |
| | | | | 1910 | 26640 | 21.44 | 22 | 0-1 |
| | | 50RB | | 1855 | 26090 | 21.31 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.38 | 22 | 0-1 |
| | | | | 1910 | 26640 | 21.44 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1855 | 26090 | 21.58 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.49 | 22 | 0-1 |
| | | | | 1910 | 26640 | 21.70 | 22 | 0-1 |
| | | | 25 | 1855 | 26090 | 21.44 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.42 | 22 | 0-1 |
| | | | | 1910 | 26640 | 22.00 | 22 | 0-1 |
| | | | 49 | 1855 | 26090 | 21.40 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.02 | 22 | 0-1 |
| | | | | 1910 | 26640 | 21.77 | 22 | 0-1 |
| | | 25 RB | 0 | 1855 | 26090 | 20.27 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.28 | 21 | 0-2 |
| | | | | 1910 | 26640 | 20.54 | 21 | 0-2 |
| | | | 12 | 1855 | 26090 | 20.32 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.54 | 21 | 0-2 |
| | | | | 1910 | 26640 | 20.43 | 21 | 0-2 |
| | | | 25 | 1855 | 26090 | 20.14 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.38 | 21 | 0-2 |
| | | | | 1910 | 26640 | 20.49 | 21 | 0-2 |
| | | 50RB | | 1855 | 26090 | 20.16 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.21 | 21 | 0-2 |
| | | | | 1910 | 26640 | 20.35 | 21 | 0-2 |

| FDD Band 25 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 5 | QPSK | 1 RB | 0 | 1852.5 | 26065 | 22.32 | 23 | 0 |
| | | | | 1882.5 | 26365 | 22.43 | 23 | 0 |
| | | | | 1912.5 | 26665 | 22.52 | 23 | 0 |
| | | | 12 | 1852.5 | 26065 | 22.24 | 23 | 0 |
| | | | | 1882.5 | 26365 | 22.58 | 23 | 0 |
| | | | | 1912.5 | 26665 | 22.54 | 23 | 0 |
| | | | 24 | 1852.5 | 26065 | 22.22 | 23 | 0 |
| | | | | 1882.5 | 26365 | 22.52 | 23 | 0 |
| | | | | 1912.5 | 26665 | 22.26 | 23 | 0 |
| | | 12 RB | 0 | 1852.5 | 26065 | 21.29 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.35 | 22 | 0-1 |
| | | | | 1912.5 | 26665 | 21.48 | 22 | 0-1 |
| | | | 6 | 1852.5 | 26065 | 21.26 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.41 | 22 | 0-1 |
| | | | | 1912.5 | 26665 | 21.51 | 22 | 0-1 |
| | | | 13 | 1852.5 | 26065 | 21.18 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.45 | 22 | 0-1 |
| | | | | 1912.5 | 26665 | 21.51 | 22 | 0-1 |
| | | 25RB | | 1852.5 | 26065 | 21.31 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.38 | 22 | 0-1 |
| | | | | 1912.5 | 26665 | 21.50 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1852.5 | 26065 | 21.40 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.89 | 22 | 0-1 |
| | | | | 1912.5 | 26665 | 21.94 | 22 | 0-1 |
| | | | 12 | 1852.5 | 26065 | 21.39 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.58 | 22 | 0-1 |
| | | | | 1912.5 | 26665 | 21.68 | 22 | 0-1 |
| | | | 24 | 1852.5 | 26065 | 21.34 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.93 | 22 | 0-1 |
| | | | | 1912.5 | 26665 | 21.93 | 22 | 0-1 |
| | | 12 RB | 0 | 1852.5 | 26065 | 20.47 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.34 | 21 | 0-2 |
| | | | | 1912.5 | 26665 | 20.42 | 21 | 0-2 |
| | | | 6 | 1852.5 | 26065 | 20.32 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.21 | 21 | 0-2 |
| | | | | 1912.5 | 26665 | 20.40 | 21 | 0-2 |
| | | | 13 | 1852.5 | 26065 | 20.08 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.38 | 21 | 0-2 |
| | | | | 1912.5 | 26665 | 20.45 | 21 | 0-2 |
| | | 25RB | | 1852.5 | 26065 | 20.36 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.67 | 21 | 0-2 |
| | | | | 1912.5 | 26665 | 20.48 | 21 | 0-2 |

| FDD Band 25 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 3 | QPSK | 1 RB | 0 | 1851.5 | 26055 | 22.44 | 23 | 0 |
| | | | | 1882.5 | 26365 | 22.39 | 23 | 0 |
| | | | | 1913.5 | 26675 | 22.59 | 23 | 0 |
| | | | 7 | 1851.5 | 26055 | 22.25 | 23 | 0 |
| | | | | 1882.5 | 26365 | 22.71 | 23 | 0 |
| | | | | 1913.5 | 26675 | 22.49 | 23 | 0 |
| | | | 14 | 1851.5 | 26055 | 22.42 | 23 | 0 |
| | | | | 1882.5 | 26365 | 22.36 | 23 | 0 |
| | | | | 1913.5 | 26675 | 22.39 | 23 | 0 |
| | | 8 RB | 0 | 1851.5 | 26055 | 21.33 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.48 | 22 | 0-1 |
| | | | | 1913.5 | 26675 | 21.53 | 22 | 0-1 |
| | | | 4 | 1851.5 | 26055 | 21.43 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.43 | 22 | 0-1 |
| | | | | 1913.5 | 26675 | 21.60 | 22 | 0-1 |
| | | | 7 | 1851.5 | 26055 | 21.36 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.48 | 22 | 0-1 |
| | | | | 1913.5 | 26675 | 21.41 | 22 | 0-1 |
| | | 15RB | | 1851.5 | 26055 | 21.37 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.40 | 22 | 0-1 |
| | | | | 1913.5 | 26675 | 21.46 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1851.5 | 26055 | 21.84 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.78 | 22 | 0-1 |
| | | | | 1913.5 | 26675 | 21.84 | 22 | 0-1 |
| | | | 7 | 1851.5 | 26055 | 21.85 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.68 | 22 | 0-1 |
| | | | | 1913.5 | 26675 | 21.89 | 22 | 0-1 |
| | | | 14 | 1851.5 | 26055 | 21.94 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.92 | 22 | 0-1 |
| | | | | 1913.5 | 26675 | 21.70 | 22 | 0-1 |
| | | 8 RB | 0 | 1851.5 | 26055 | 20.27 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.54 | 21 | 0-2 |
| | | | | 1913.5 | 26675 | 20.66 | 21 | 0-2 |
| | | | 4 | 1851.5 | 26055 | 20.25 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.56 | 21 | 0-2 |
| | | | | 1913.5 | 26675 | 20.39 | 21 | 0-2 |
| | | | 7 | 1851.5 | 26055 | 20.16 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.56 | 21 | 0-2 |
| | | | | 1913.5 | 26675 | 20.56 | 21 | 0-2 |
| | | 15RB | | 1851.5 | 26055 | 20.24 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.24 | 21 | 0-2 |
| | | | | 1913.5 | 26675 | 20.54 | 21 | 0-2 |

| FDD Band 25 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 1.4 | QPSK | 1 RB | 0 | 1850.7 | 26047 | 22.26 | 23 | 0 |
| | | | | 1882.5 | 26365 | 22.30 | 23 | 0 |
| | | | | 1914.3 | 26683 | 22.32 | 23 | 0 |
| | | | 2 | 1850.7 | 26047 | 22.23 | 23 | 0 |
| | | | | 1882.5 | 26365 | 22.43 | 23 | 0 |
| | | | | 1914.3 | 26683 | 22.51 | 23 | 0 |
| | | | 5 | 1850.7 | 26047 | 22.28 | 23 | 0 |
| | | | | 1882.5 | 26365 | 22.20 | 23 | 0 |
| | | | | 1914.3 | 26683 | 22.43 | 23 | 0 |
| | | 3 RB | 0 | 1850.7 | 26047 | 21.40 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.32 | 22 | 0-1 |
| | | | | 1914.3 | 26683 | 21.41 | 22 | 0-1 |
| | | | 2 | 1850.7 | 26047 | 21.31 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.38 | 22 | 0-1 |
| | | | | 1914.3 | 26683 | 21.48 | 22 | 0-1 |
| | | | 3 | 1850.7 | 26047 | 21.30 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.33 | 22 | 0-1 |
| | | | | 1914.3 | 26683 | 21.41 | 22 | 0-1 |
| | | 6RB | | 1850.7 | 26047 | 21.24 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.63 | 22 | 0-1 |
| | | | | 1914.3 | 26683 | 21.38 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1850.7 | 26047 | 21.61 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.74 | 22 | 0-1 |
| | | | | 1914.3 | 26683 | 21.90 | 22 | 0-1 |
| | | | 2 | 1850.7 | 26047 | 21.39 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.90 | 22 | 0-1 |
| | | | | 1914.3 | 26683 | 21.48 | 22 | 0-1 |
| | | | 5 | 1850.7 | 26047 | 21.57 | 22 | 0-1 |
| | | | | 1882.5 | 26365 | 21.61 | 22 | 0-1 |
| | | | | 1914.3 | 26683 | 21.82 | 22 | 0-1 |
| | | 3 RB | 0 | 1850.7 | 26047 | 20.64 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.77 | 21 | 0-2 |
| | | | | 1914.3 | 26683 | 20.64 | 21 | 0-2 |
| | | | 2 | 1850.7 | 26047 | 20.60 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.56 | 21 | 0-2 |
| | | | | 1914.3 | 26683 | 20.70 | 21 | 0-2 |
| | | | 3 | 1850.7 | 26047 | 20.65 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.56 | 21 | 0-2 |
| | | | | 1914.3 | 26683 | 20.65 | 21 | 0-2 |
| | | 6RB | | 1850.7 | 26047 | 20.32 | 21 | 0-2 |
| | | | | 1882.5 | 26365 | 20.26 | 21 | 0-2 |
| | | | | 1914.3 | 26683 | 20.47 | 21 | 0-2 |

| FDD Band 25 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 20 | QPSK | 1 RB | 0 | 1860 | 26140 | 15.60 | 16 | 0 |
| | | | | 1882.5 | 26365 | 15.88 | 16 | 0 |
| | | | | 1905 | 26590 | 15.43 | 16 | 0 |
| | | | 50 | 1860 | 26140 | 15.77 | 16 | 0 |
| | | | | 1882.5 | 26365 | 15.73 | 16 | 0 |
| | | | | 1905 | 26590 | 15.67 | 16 | 0 |
| | | | 99 | 1860 | 26140 | 15.38 | 16 | 0 |
| | | | | 1882.5 | 26365 | 15.53 | 16 | 0 |
| | | | | 1905 | 26590 | 15.52 | 16 | 0 |
| | | 50 RB | 0 | 1860 | 26140 | 14.56 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.58 | 15 | 0-1 |
| | | | | 1905 | 26590 | 14.69 | 15 | 0-1 |
| | | | 25 | 1860 | 26140 | 14.48 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.51 | 15 | 0-1 |
| | | | | 1905 | 26590 | 14.58 | 15 | 0-1 |
| | | | 50 | 1860 | 26140 | 14.43 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.50 | 15 | 0-1 |
| | | | | 1905 | 26590 | 14.63 | 15 | 0-1 |
| | | 100RB | | 1860 | 26140 | 14.48 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.54 | 15 | 0-1 |
| | | | | 1905 | 26590 | 14.61 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1860 | 26140 | 14.72 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.75 | 15 | 0-1 |
| | | | | 1905 | 26590 | 14.72 | 15 | 0-1 |
| | | | 50 | 1860 | 26140 | 14.31 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.65 | 15 | 0-1 |
| | | | | 1905 | 26590 | 14.71 | 15 | 0-1 |
| | | | 99 | 1860 | 26140 | 14.82 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.31 | 15 | 0-1 |
| | | | | 1905 | 26590 | 14.60 | 15 | 0-1 |
| | | 50 RB | 0 | 1860 | 26140 | 13.32 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 12.92 | 14 | 0-2 |
| | | | | 1905 | 26590 | 13.14 | 14 | 0-2 |
| | | | 25 | 1860 | 26140 | 13.41 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.19 | 14 | 0-2 |
| | | | | 1905 | 26590 | 13.29 | 14 | 0-2 |
| | | | 50 | 1860 | 26140 | 13.26 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.24 | 14 | 0-2 |
| | | | | 1905 | 26590 | 13.26 | 14 | 0-2 |
| | | 100RB | | 1860 | 26140 | 13.15 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.14 | 14 | 0-2 |
| | | | | 1905 | 26590 | 13.17 | 14 | 0-2 |

| FDD Band 25 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 15 | QPSK | 1 RB | 0 | 1857.5 | 26115 | 15.50 | 16 | 0 |
| | | | | 1882.5 | 26365 | 15.73 | 16 | 0 |
| | | | | 1907.5 | 26615 | 15.50 | 16 | 0 |
| | | | 36 | 1857.5 | 26115 | 15.39 | 16 | 0 |
| | | | | 1882.5 | 26365 | 15.45 | 16 | 0 |
| | | | | 1907.5 | 26615 | 15.47 | 16 | 0 |
| | | | 74 | 1857.5 | 26115 | 15.42 | 16 | 0 |
| | | | | 1882.5 | 26365 | 15.52 | 16 | 0 |
| | | | | 1907.5 | 26615 | 15.50 | 16 | 0 |
| | | 36 RB | 0 | 1857.5 | 26115 | 14.48 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.55 | 15 | 0-1 |
| | | | | 1907.5 | 26615 | 14.58 | 15 | 0-1 |
| | | | 18 | 1857.5 | 26115 | 14.49 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.55 | 15 | 0-1 |
| | | | | 1907.5 | 26615 | 14.56 | 15 | 0-1 |
| | | | 37 | 1857.5 | 26115 | 14.57 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.50 | 15 | 0-1 |
| | | | | 1907.5 | 26615 | 14.62 | 15 | 0-1 |
| | | 75RB | | 1857.5 | 26115 | 14.47 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.56 | 15 | 0-1 |
| | | | | 1907.5 | 26615 | 14.57 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1857.5 | 26115 | 14.15 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.24 | 15 | 0-1 |
| | | | | 1907.5 | 26615 | 14.53 | 15 | 0-1 |
| | | | 36 | 1857.5 | 26115 | 14.29 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.29 | 15 | 0-1 |
| | | | | 1907.5 | 26615 | 14.64 | 15 | 0-1 |
| | | | 74 | 1857.5 | 26115 | 14.48 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.81 | 15 | 0-1 |
| | | | | 1907.5 | 26615 | 14.82 | 15 | 0-1 |
| | | 36 RB | 0 | 1857.5 | 26115 | 13.37 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.13 | 14 | 0-2 |
| | | | | 1907.5 | 26615 | 13.29 | 14 | 0-2 |
| | | | 18 | 1857.5 | 26115 | 13.41 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.21 | 14 | 0-2 |
| | | | | 1907.5 | 26615 | 13.37 | 14 | 0-2 |
| | | | 37 | 1857.5 | 26115 | 13.36 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.31 | 14 | 0-2 |
| | | | | 1907.5 | 26615 | 13.44 | 14 | 0-2 |
| | | 75RB | | 1857.5 | 26115 | 13.36 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.26 | 14 | 0-2 |
| | | | | 1907.5 | 26615 | 13.37 | 14 | 0-2 |

| FDD Band 25 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 10 | QPSK | 1 RB | 0 | 1855 | 26090 | 15.78 | 16 | 0 |
| | | | | 1882.5 | 26365 | 15.69 | 16 | 0 |
| | | | | 1910 | 26640 | 15.57 | 16 | 0 |
| | | | 25 | 1855 | 26090 | 15.54 | 16 | 0 |
| | | | | 1882.5 | 26365 | 15.65 | 16 | 0 |
| | | | | 1910 | 26640 | 15.63 | 16 | 0 |
| | | | 49 | 1855 | 26090 | 15.57 | 16 | 0 |
| | | | | 1882.5 | 26365 | 15.54 | 16 | 0 |
| | | | | 1910 | 26640 | 15.64 | 16 | 0 |
| | | 25 RB | 0 | 1855 | 26090 | 14.47 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.60 | 15 | 0-1 |
| | | | | 1910 | 26640 | 14.61 | 15 | 0-1 |
| | | | 12 | 1855 | 26090 | 14.45 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.50 | 15 | 0-1 |
| | | | | 1910 | 26640 | 14.64 | 15 | 0-1 |
| | | | 25 | 1855 | 26090 | 14.47 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.50 | 15 | 0-1 |
| | | | | 1910 | 26640 | 14.64 | 15 | 0-1 |
| | | 50RB | | 1855 | 26090 | 14.53 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.50 | 15 | 0-1 |
| | | | | 1910 | 26640 | 14.67 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1855 | 26090 | 14.28 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.56 | 15 | 0-1 |
| | | | | 1910 | 26640 | 14.75 | 15 | 0-1 |
| | | | 25 | 1855 | 26090 | 14.47 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.87 | 15 | 0-1 |
| | | | | 1910 | 26640 | 14.67 | 15 | 0-1 |
| | | | 49 | 1855 | 26090 | 14.65 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.78 | 15 | 0-1 |
| | | | | 1910 | 26640 | 14.82 | 15 | 0-1 |
| | | 25 RB | 0 | 1855 | 26090 | 13.20 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 12.93 | 14 | 0-2 |
| | | | | 1910 | 26640 | 13.28 | 14 | 0-2 |
| | | | 12 | 1855 | 26090 | 13.28 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.23 | 14 | 0-2 |
| | | | | 1910 | 26640 | 13.36 | 14 | 0-2 |
| | | | 25 | 1855 | 26090 | 13.47 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.16 | 14 | 0-2 |
| | | | | 1910 | 26640 | 13.19 | 14 | 0-2 |
| | | 50RB | | 1855 | 26090 | 13.23 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.13 | 14 | 0-2 |
| | | | | 1910 | 26640 | 13.18 | 14 | 0-2 |

| FDD Band 25 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 5 | QPSK | 1 RB | 0 | 1852.5 | 26065 | 15.42 | 16 | 0 |
| | | | | 1882.5 | 26365 | 15.49 | 16 | 0 |
| | | | | 1912.5 | 26665 | 15.56 | 16 | 0 |
| | | | 12 | 1852.5 | 26065 | 15.40 | 16 | 0 |
| | | | | 1882.5 | 26365 | 15.57 | 16 | 0 |
| | | | | 1912.5 | 26665 | 15.51 | 16 | 0 |
| | | | 24 | 1852.5 | 26065 | 15.43 | 16 | 0 |
| | | | | 1882.5 | 26365 | 15.56 | 16 | 0 |
| | | | | 1912.5 | 26665 | 15.41 | 16 | 0 |
| | | 12 RB | 0 | 1852.5 | 26065 | 14.51 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.48 | 15 | 0-1 |
| | | | | 1912.5 | 26665 | 14.56 | 15 | 0-1 |
| | | | 6 | 1852.5 | 26065 | 14.43 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.44 | 15 | 0-1 |
| | | | | 1912.5 | 26665 | 14.55 | 15 | 0-1 |
| | | | 13 | 1852.5 | 26065 | 14.38 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.47 | 15 | 0-1 |
| | | | | 1912.5 | 26665 | 14.54 | 15 | 0-1 |
| | | 25RB | | 1852.5 | 26065 | 14.39 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.42 | 15 | 0-1 |
| | | | | 1912.5 | 26665 | 14.60 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1852.5 | 26065 | 14.85 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.52 | 15 | 0-1 |
| | | | | 1912.5 | 26665 | 14.55 | 15 | 0-1 |
| | | | 12 | 1852.5 | 26065 | 14.31 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.52 | 15 | 0-1 |
| | | | | 1912.5 | 26665 | 14.82 | 15 | 0-1 |
| | | | 24 | 1852.5 | 26065 | 14.74 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.72 | 15 | 0-1 |
| | | | | 1912.5 | 26665 | 14.71 | 15 | 0-1 |
| | | 12 RB | 0 | 1852.5 | 26065 | 13.54 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.24 | 14 | 0-2 |
| | | | | 1912.5 | 26665 | 13.38 | 14 | 0-2 |
| | | | 6 | 1852.5 | 26065 | 13.48 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.22 | 14 | 0-2 |
| | | | | 1912.5 | 26665 | 13.38 | 14 | 0-2 |
| | | | 13 | 1852.5 | 26065 | 13.52 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.36 | 14 | 0-2 |
| | | | | 1912.5 | 26665 | 13.44 | 14 | 0-2 |
| | | 25RB | | 1852.5 | 26065 | 13.55 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.33 | 14 | 0-2 |
| | | | | 1912.5 | 26665 | 13.46 | 14 | 0-2 |

| FDD Band 25 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 3 | QPSK | 1 RB | 0 | 1851.5 | 26055 | 15.58 | 16 | 0 |
| | | | | 1882.5 | 26365 | 15.66 | 16 | 0 |
| | | | | 1913.5 | 26675 | 15.45 | 16 | 0 |
| | | | 7 | 1851.5 | 26055 | 15.72 | 16 | 0 |
| | | | | 1882.5 | 26365 | 15.58 | 16 | 0 |
| | | | | 1913.5 | 26675 | 15.66 | 16 | 0 |
| | | | 14 | 1851.5 | 26055 | 15.63 | 16 | 0 |
| | | | | 1882.5 | 26365 | 15.59 | 16 | 0 |
| | | | | 1913.5 | 26675 | 15.48 | 16 | 0 |
| | | 8 RB | 0 | 1851.5 | 26055 | 14.50 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.49 | 15 | 0-1 |
| | | | | 1913.5 | 26675 | 14.55 | 15 | 0-1 |
| | | | 4 | 1851.5 | 26055 | 14.42 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.52 | 15 | 0-1 |
| | | | | 1913.5 | 26675 | 14.54 | 15 | 0-1 |
| | | | 7 | 1851.5 | 26055 | 14.50 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.57 | 15 | 0-1 |
| | | | | 1913.5 | 26675 | 14.62 | 15 | 0-1 |
| | | 15RB | | 1851.5 | 26055 | 14.40 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.43 | 15 | 0-1 |
| | | | | 1913.5 | 26675 | 14.54 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1851.5 | 26055 | 14.66 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.57 | 15 | 0-1 |
| | | | | 1913.5 | 26675 | 14.55 | 15 | 0-1 |
| | | | 7 | 1851.5 | 26055 | 14.55 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.44 | 15 | 0-1 |
| | | | | 1913.5 | 26675 | 14.66 | 15 | 0-1 |
| | | | 14 | 1851.5 | 26055 | 14.71 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.49 | 15 | 0-1 |
| | | | | 1913.5 | 26675 | 14.65 | 15 | 0-1 |
| | | 8 RB | 0 | 1851.5 | 26055 | 13.46 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.36 | 14 | 0-2 |
| | | | | 1913.5 | 26675 | 13.47 | 14 | 0-2 |
| | | | 4 | 1851.5 | 26055 | 13.58 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.34 | 14 | 0-2 |
| | | | | 1913.5 | 26675 | 13.42 | 14 | 0-2 |
| | | | 7 | 1851.5 | 26055 | 13.55 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.49 | 14 | 0-2 |
| | | | | 1913.5 | 26675 | 13.45 | 14 | 0-2 |
| | | 15RB | | 1851.5 | 26055 | 13.51 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.35 | 14 | 0-2 |
| | | | | 1913.5 | 26675 | 13.43 | 14 | 0-2 |

| FDD Band 25 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 1.4 | QPSK | 1 RB | 0 | 1850.7 | 26047 | 15.36 | 16 | 0 |
| | | | | 1882.5 | 26365 | 15.44 | 16 | 0 |
| | | | | 1914.3 | 26683 | 15.60 | 16 | 0 |
| | | | 2 | 1850.7 | 26047 | 15.55 | 16 | 0 |
| | | | | 1882.5 | 26365 | 15.58 | 16 | 0 |
| | | | | 1914.3 | 26683 | 15.61 | 16 | 0 |
| | | | 5 | 1850.7 | 26047 | 15.54 | 16 | 0 |
| | | | | 1882.5 | 26365 | 15.31 | 16 | 0 |
| | | | | 1914.3 | 26683 | 15.46 | 16 | 0 |
| | | 3 RB | 0 | 1850.7 | 26047 | 14.44 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.44 | 15 | 0-1 |
| | | | | 1914.3 | 26683 | 14.38 | 15 | 0-1 |
| | | | 2 | 1850.7 | 26047 | 14.55 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.40 | 15 | 0-1 |
| | | | | 1914.3 | 26683 | 14.48 | 15 | 0-1 |
| | | | 3 | 1850.7 | 26047 | 14.48 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.46 | 15 | 0-1 |
| | | | | 1914.3 | 26683 | 14.40 | 15 | 0-1 |
| | | 6RB | | 1850.7 | 26047 | 14.43 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.45 | 15 | 0-1 |
| | | | | 1914.3 | 26683 | 14.60 | 15 | 0-1 |
| | 16-QAM | 1 RB | 0 | 1850.7 | 26047 | 14.51 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.78 | 15 | 0-1 |
| | | | | 1914.3 | 26683 | 14.51 | 15 | 0-1 |
| | | | 2 | 1850.7 | 26047 | 14.77 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.44 | 15 | 0-1 |
| | | | | 1914.3 | 26683 | 14.15 | 15 | 0-1 |
| | | | 5 | 1850.7 | 26047 | 14.65 | 15 | 0-1 |
| | | | | 1882.5 | 26365 | 14.57 | 15 | 0-1 |
| | | | | 1914.3 | 26683 | 14.27 | 15 | 0-1 |
| | | 3 RB | 0 | 1850.7 | 26047 | 13.55 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.81 | 14 | 0-2 |
| | | | | 1914.3 | 26683 | 13.31 | 14 | 0-2 |
| | | | 2 | 1850.7 | 26047 | 13.45 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.48 | 14 | 0-2 |
| | | | | 1914.3 | 26683 | 13.14 | 14 | 0-2 |
| | | | 3 | 1850.7 | 26047 | 13.19 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.12 | 14 | 0-2 |
| | | | | 1914.3 | 26683 | 13.11 | 14 | 0-2 |
| | | 6RB | | 1850.7 | 26047 | 13.43 | 14 | 0-2 |
| | | | | 1882.5 | 26365 | 13.26 | 14 | 0-2 |
| | | | | 1914.3 | 26683 | 13.46 | 14 | 0-2 |

| FDD Band 26 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 15 | QPSK | 1 RB | 0 | 822.5 | 26825 | 22.25 | 23 | 0 |
| | | | | 831.5 | 26865 | 22.48 | 23 | 0 |
| | | | | 841.5 | 26965 | 22.57 | 23 | 0 |
| | | | 36 | 822.5 | 26825 | 22.24 | 23 | 0 |
| | | | | 831.5 | 26865 | 22.22 | 23 | 0 |
| | | | | 841.5 | 26965 | 22.35 | 23 | 0 |
| | | | 74 | 822.5 | 26825 | 22.23 | 23 | 0 |
| | | | | 831.5 | 26865 | 22.28 | 23 | 0 |
| | | | | 841.5 | 26965 | 22.19 | 23 | 0 |
| | | 36 RB | 0 | 822.5 | 26825 | 21.46 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.50 | 22 | 0-1 |
| | | | | 841.5 | 26965 | 21.49 | 22 | 0-1 |
| | | | 18 | 822.5 | 26825 | 21.34 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.41 | 22 | 0-1 |
| | | | | 841.5 | 26965 | 21.39 | 22 | 0-1 |
| | | | 37 | 822.5 | 26825 | 21.34 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.33 | 22 | 0-1 |
| | | | | 841.5 | 26965 | 21.33 | 22 | 0-1 |
| | | 75RB | | 822.5 | 26825 | 21.37 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.36 | 22 | 0-1 |
| | | | | 841.5 | 26965 | 21.33 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 822.5 | 26825 | 21.58 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.84 | 22 | 0-1 |
| | | | | 841.5 | 26965 | 21.84 | 22 | 0-1 |
| | | | 36 | 822.5 | 26825 | 21.19 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 20.91 | 22 | 0-1 |
| | | | | 841.5 | 26965 | 21.62 | 22 | 0-1 |
| | | | 74 | 822.5 | 26825 | 20.98 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.19 | 22 | 0-1 |
| | | | | 841.5 | 26965 | 21.15 | 22 | 0-1 |
| | | 36 RB | 0 | 822.5 | 26825 | 20.30 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 20.34 | 21 | 0-2 |
| | | | | 841.5 | 26965 | 20.33 | 21 | 0-2 |
| | | | 18 | 822.5 | 26825 | 20.17 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 20.29 | 21 | 0-2 |
| | | | | 841.5 | 26965 | 20.20 | 21 | 0-2 |
| | | | 37 | 822.5 | 26825 | 20.26 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 20.16 | 21 | 0-2 |
| | | | | 841.5 | 26965 | 20.02 | 21 | 0-2 |
| | | 75RB | | 822.5 | 26825 | 20.24 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 20.03 | 21 | 0-2 |
| | | | | 841.5 | 26965 | 20.08 | 21 | 0-2 |

| FDD Band 26 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 10 | QPSK | 1 RB | 0 | 820 | 26800 | 22.14 | 23 | 0 |
| | | | | 831.5 | 26865 | 22.02 | 23 | 0 |
| | | | | 844 | 26990 | 22.09 | 23 | 0 |
| | | | 25 | 820 | 26800 | 22.19 | 23 | 0 |
| | | | | 831.5 | 26865 | 21.97 | 23 | 0 |
| | | | | 844 | 26990 | 22.11 | 23 | 0 |
| | | | 49 | 820 | 26800 | 21.95 | 23 | 0 |
| | | | | 831.5 | 26865 | 22.11 | 23 | 0 |
| | | | | 844 | 26990 | 22.05 | 23 | 0 |
| | | 25 RB | 0 | 820 | 26800 | 21.29 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.24 | 22 | 0-1 |
| | | | | 844 | 26990 | 21.22 | 22 | 0-1 |
| | | | 12 | 820 | 26800 | 21.21 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.23 | 22 | 0-1 |
| | | | | 844 | 26990 | 21.24 | 22 | 0-1 |
| | | | 25 | 820 | 26800 | 21.08 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.16 | 22 | 0-1 |
| | | | | 844 | 26990 | 21.11 | 22 | 0-1 |
| | | 50RB | | 820 | 26800 | 21.16 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.18 | 22 | 0-1 |
| | | | | 844 | 26990 | 21.02 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 820 | 26800 | 21.67 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.58 | 22 | 0-1 |
| | | | | 844 | 26990 | 21.19 | 22 | 0-1 |
| | | | 25 | 820 | 26800 | 21.43 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.38 | 22 | 0-1 |
| | | | | 844 | 26990 | 21.48 | 22 | 0-1 |
| | | | 49 | 820 | 26800 | 21.18 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 20.97 | 22 | 0-1 |
| | | | | 844 | 26990 | 21.46 | 22 | 0-1 |
| | | 25 RB | 0 | 820 | 26800 | 20.21 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 20.19 | 21 | 0-2 |
| | | | | 844 | 26990 | 20.20 | 21 | 0-2 |
| | | | 12 | 820 | 26800 | 20.27 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 20.13 | 21 | 0-2 |
| | | | | 844 | 26990 | 20.13 | 21 | 0-2 |
| | | | 25 | 820 | 26800 | 20.03 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 19.98 | 21 | 0-2 |
| | | | | 844 | 26990 | 20.27 | 21 | 0-2 |
| | | 50RB | | 820 | 26800 | 20.00 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 20.03 | 21 | 0-2 |
| | | | | 844 | 26990 | 20.12 | 21 | 0-2 |

| FDD Band 26 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 5 | QPSK | 1 RB | 0 | 816.5 | 26715 | 22.18 | 23 | 0 |
| | | | | 831.5 | 26865 | 22.41 | 23 | 0 |
| | | | | 846.5 | 27015 | 22.39 | 23 | 0 |
| | | | 12 | 816.5 | 26715 | 22.15 | 23 | 0 |
| | | | | 831.5 | 26865 | 22.23 | 23 | 0 |
| | | | | 846.5 | 27015 | 22.38 | 23 | 0 |
| | | | 24 | 816.5 | 26715 | 22.18 | 23 | 0 |
| | | | | 831.5 | 26865 | 22.33 | 23 | 0 |
| | | | | 846.5 | 27015 | 22.16 | 23 | 0 |
| | | 12 RB | 0 | 816.5 | 26715 | 21.02 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.20 | 22 | 0-1 |
| | | | | 846.5 | 27015 | 21.28 | 22 | 0-1 |
| | | | 6 | 816.5 | 26715 | 21.17 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.14 | 22 | 0-1 |
| | | | | 846.5 | 27015 | 21.15 | 22 | 0-1 |
| | | | 13 | 816.5 | 26715 | 21.15 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.12 | 22 | 0-1 |
| | | | | 846.5 | 27015 | 21.04 | 22 | 0-1 |
| | | 25RB | | 816.5 | 26715 | 21.31 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.23 | 22 | 0-1 |
| | | | | 846.5 | 27015 | 21.14 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 816.5 | 26715 | 21.00 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.78 | 22 | 0-1 |
| | | | | 846.5 | 27015 | 21.50 | 22 | 0-1 |
| | | | 12 | 816.5 | 26715 | 21.35 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.11 | 22 | 0-1 |
| | | | | 846.5 | 27015 | 21.04 | 22 | 0-1 |
| | | | 24 | 816.5 | 26715 | 21.23 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.25 | 22 | 0-1 |
| | | | | 846.5 | 27015 | 21.57 | 22 | 0-1 |
| | | 12 RB | 0 | 816.5 | 26715 | 20.01 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 20.22 | 21 | 0-2 |
| | | | | 846.5 | 27015 | 20.29 | 21 | 0-2 |
| | | | 6 | 816.5 | 26715 | 19.93 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 20.09 | 21 | 0-2 |
| | | | | 846.5 | 27015 | 19.97 | 21 | 0-2 |
| | | | 13 | 816.5 | 26715 | 20.39 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 20.11 | 21 | 0-2 |
| | | | | 846.5 | 27015 | 19.90 | 21 | 0-2 |
| | | 25RB | | 816.5 | 26715 | 20.40 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 20.17 | 21 | 0-2 |
| | | | | 846.5 | 27015 | 20.31 | 21 | 0-2 |

| FDD Band 26 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 3 | QPSK | 1 RB | 0 | 815.5 | 26705 | 22.05 | 23 | 0 |
| | | | | 831.5 | 26865 | 21.95 | 23 | 0 |
| | | | | 847.5 | 27025 | 22.34 | 23 | 0 |
| | | | 7 | 815.5 | 26705 | 22.36 | 23 | 0 |
| | | | | 831.5 | 26865 | 22.07 | 23 | 0 |
| | | | | 847.5 | 27025 | 22.32 | 23 | 0 |
| | | | 14 | 815.5 | 26705 | 22.26 | 23 | 0 |
| | | | | 831.5 | 26865 | 21.98 | 23 | 0 |
| | | | | 847.5 | 27025 | 22.03 | 23 | 0 |
| | | 8 RB | 0 | 815.5 | 26705 | 21.02 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.17 | 22 | 0-1 |
| | | | | 847.5 | 27025 | 21.20 | 22 | 0-1 |
| | | | 4 | 815.5 | 26705 | 21.17 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.05 | 22 | 0-1 |
| | | | | 847.5 | 27025 | 21.05 | 22 | 0-1 |
| | | | 7 | 815.5 | 26705 | 21.18 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.12 | 22 | 0-1 |
| | | | | 847.5 | 27025 | 21.13 | 22 | 0-1 |
| | | 15RB | | 815.5 | 26705 | 20.98 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.12 | 22 | 0-1 |
| | | | | 847.5 | 27025 | 21.08 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 815.5 | 26705 | 21.30 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.61 | 22 | 0-1 |
| | | | | 847.5 | 27025 | 21.82 | 22 | 0-1 |
| | | | 7 | 815.5 | 26705 | 21.44 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.30 | 22 | 0-1 |
| | | | | 847.5 | 27025 | 21.46 | 22 | 0-1 |
| | | | 14 | 815.5 | 26705 | 21.42 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.30 | 22 | 0-1 |
| | | | | 847.5 | 27025 | 21.21 | 22 | 0-1 |
| | | 8 RB | 0 | 815.5 | 26705 | 20.00 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 20.26 | 21 | 0-2 |
| | | | | 847.5 | 27025 | 20.25 | 21 | 0-2 |
| | | | 4 | 815.5 | 26705 | 19.99 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 20.25 | 21 | 0-2 |
| | | | | 847.5 | 27025 | 20.04 | 21 | 0-2 |
| | | | 7 | 815.5 | 26705 | 20.24 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 20.21 | 21 | 0-2 |
| | | | | 847.5 | 27025 | 20.16 | 21 | 0-2 |
| | | 15RB | | 815.5 | 26705 | 19.85 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 20.26 | 21 | 0-2 |
| | | | | 847.5 | 27025 | 19.98 | 21 | 0-2 |

| FDD Band 26 (Full Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 1.4 | QPSK | 1 RB | 0 | 814.7 | 26697 | 21.87 | 23 | 0 |
| | | | | 831.5 | 26865 | 22.09 | 23 | 0 |
| | | | | 848.3 | 27033 | 22.22 | 23 | 0 |
| | | | 2 | 814.7 | 26697 | 21.83 | 23 | 0 |
| | | | | 831.5 | 26865 | 22.07 | 23 | 0 |
| | | | | 848.3 | 27033 | 22.11 | 23 | 0 |
| | | | 5 | 814.7 | 26697 | 21.80 | 23 | 0 |
| | | | | 831.5 | 26865 | 22.03 | 23 | 0 |
| | | | | 848.3 | 27033 | 21.87 | 23 | 0 |
| | | 3 RB | 0 | 814.7 | 26697 | 21.00 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.12 | 22 | 0-1 |
| | | | | 848.3 | 27033 | 21.22 | 22 | 0-1 |
| | | | 2 | 814.7 | 26697 | 21.01 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.23 | 22 | 0-1 |
| | | | | 848.3 | 27033 | 21.05 | 22 | 0-1 |
| | | | 3 | 814.7 | 26697 | 20.96 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.22 | 22 | 0-1 |
| | | | | 848.3 | 27033 | 20.95 | 22 | 0-1 |
| | | 6RB | | 814.7 | 26697 | 21.01 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.17 | 22 | 0-1 |
| | | | | 848.3 | 27033 | 20.99 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 814.7 | 26697 | 21.23 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.32 | 22 | 0-1 |
| | | | | 848.3 | 27033 | 21.64 | 22 | 0-1 |
| | | | 2 | 814.7 | 26697 | 21.31 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.65 | 22 | 0-1 |
| | | | | 848.3 | 27033 | 20.96 | 22 | 0-1 |
| | | | 5 | 814.7 | 26697 | 21.05 | 22 | 0-1 |
| | | | | 831.5 | 26865 | 21.35 | 22 | 0-1 |
| | | | | 848.3 | 27033 | 21.44 | 22 | 0-1 |
| | | 3 RB | 0 | 814.7 | 26697 | 20.28 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 20.28 | 21 | 0-2 |
| | | | | 848.3 | 27033 | 20.41 | 21 | 0-2 |
| | | | 2 | 814.7 | 26697 | 20.39 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 20.38 | 21 | 0-2 |
| | | | | 848.3 | 27033 | 20.42 | 21 | 0-2 |
| | | | 3 | 814.7 | 26697 | 19.95 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 20.23 | 21 | 0-2 |
| | | | | 848.3 | 27033 | 20.28 | 21 | 0-2 |
| | | 6RB | | 814.7 | 26697 | 20.10 | 21 | 0-2 |
| | | | | 831.5 | 26865 | 20.09 | 21 | 0-2 |
| | | | | 848.3 | 27033 | 20.02 | 21 | 0-2 |

| FDD Band 26 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 15 | QPSK | 1 RB | 0 | 822.5 | 26825 | 14.88 | 15 | 0 |
| | | | | 831.5 | 26865 | 14.98 | 15 | 0 |
| | | | | 841.5 | 26965 | 14.87 | 15 | 0 |
| | | | 36 | 822.5 | 26825 | 14.52 | 15 | 0 |
| | | | | 831.5 | 26865 | 14.78 | 15 | 0 |
| | | | | 841.5 | 26965 | 14.69 | 15 | 0 |
| | | | 74 | 822.5 | 26825 | 14.63 | 15 | 0 |
| | | | | 831.5 | 26865 | 14.83 | 15 | 0 |
| | | | | 841.5 | 26965 | 14.69 | 15 | 0 |
| | | 36 RB | 0 | 822.5 | 26825 | 13.96 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.94 | 14 | 0-1 |
| | | | | 841.5 | 26965 | 13.87 | 14 | 0-1 |
| | | | 18 | 822.5 | 26825 | 13.80 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.89 | 14 | 0-1 |
| | | | | 841.5 | 26965 | 13.89 | 14 | 0-1 |
| | | | 37 | 822.5 | 26825 | 13.82 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.77 | 14 | 0-1 |
| | | | | 841.5 | 26965 | 13.95 | 14 | 0-1 |
| | | 75RB | | 822.5 | 26825 | 13.89 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.83 | 14 | 0-1 |
| | | | | 841.5 | 26965 | 13.78 | 14 | 0-1 |
| | 16-QAM | 1 RB | 0 | 822.5 | 26825 | 13.85 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.65 | 14 | 0-1 |
| | | | | 841.5 | 26965 | 13.65 | 14 | 0-1 |
| | | | 36 | 822.5 | 26825 | 13.73 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.83 | 14 | 0-1 |
| | | | | 841.5 | 26965 | 13.61 | 14 | 0-1 |
| | | | 74 | 822.5 | 26825 | 13.72 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.72 | 14 | 0-1 |
| | | | | 841.5 | 26965 | 13.59 | 14 | 0-1 |
| | | 36 RB | 0 | 822.5 | 26825 | 12.84 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.67 | 13 | 0-2 |
| | | | | 841.5 | 26965 | 12.72 | 13 | 0-2 |
| | | | 18 | 822.5 | 26825 | 12.56 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.56 | 13 | 0-2 |
| | | | | 841.5 | 26965 | 12.64 | 13 | 0-2 |
| | | | 37 | 822.5 | 26825 | 12.29 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.34 | 13 | 0-2 |
| | | | | 841.5 | 26965 | 12.27 | 13 | 0-2 |
| | | 75RB | | 822.5 | 26825 | 12.50 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.56 | 13 | 0-2 |
| | | | | 841.5 | 26965 | 12.45 | 13 | 0-2 |

| FDD Band 26 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 10 | QPSK | 1 RB | 0 | 820 | 26800 | 14.65 | 15 | 0 |
| | | | | 831.5 | 26865 | 14.97 | 15 | 0 |
| | | | | 844 | 26990 | 14.84 | 15 | 0 |
| | | | 25 | 820 | 26800 | 14.82 | 15 | 0 |
| | | | | 831.5 | 26865 | 14.64 | 15 | 0 |
| | | | | 844 | 26990 | 14.80 | 15 | 0 |
| | | | 49 | 820 | 26800 | 14.73 | 15 | 0 |
| | | | | 831.5 | 26865 | 14.74 | 15 | 0 |
| | | | | 844 | 26990 | 14.88 | 15 | 0 |
| | | 25 RB | 0 | 820 | 26800 | 13.93 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.92 | 14 | 0-1 |
| | | | | 844 | 26990 | 13.78 | 14 | 0-1 |
| | | | 12 | 820 | 26800 | 13.94 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.86 | 14 | 0-1 |
| | | | | 844 | 26990 | 13.94 | 14 | 0-1 |
| | | | 25 | 820 | 26800 | 13.83 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.87 | 14 | 0-1 |
| | | | | 844 | 26990 | 13.81 | 14 | 0-1 |
| | | 50RB | | 820 | 26800 | 13.84 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.85 | 14 | 0-1 |
| | | | | 844 | 26990 | 13.89 | 14 | 0-1 |
| | 16-QAM | 1 RB | 0 | 820 | 26800 | 13.61 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.62 | 14 | 0-1 |
| | | | | 844 | 26990 | 13.60 | 14 | 0-1 |
| | | | 25 | 820 | 26800 | 13.82 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.91 | 14 | 0-1 |
| | | | | 844 | 26990 | 13.33 | 14 | 0-1 |
| | | | 49 | 820 | 26800 | 13.27 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.24 | 14 | 0-1 |
| | | | | 844 | 26990 | 13.26 | 14 | 0-1 |
| | | 25 RB | 0 | 820 | 26800 | 12.71 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.56 | 13 | 0-2 |
| | | | | 844 | 26990 | 12.80 | 13 | 0-2 |
| | | | 12 | 820 | 26800 | 12.52 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.47 | 13 | 0-2 |
| | | | | 844 | 26990 | 12.70 | 13 | 0-2 |
| | | | 25 | 820 | 26800 | 12.16 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.24 | 13 | 0-2 |
| | | | | 844 | 26990 | 11.93 | 13 | 0-2 |
| | | 50RB | | 820 | 26800 | 12.40 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.47 | 13 | 0-2 |
| | | | | 844 | 26990 | 12.31 | 13 | 0-2 |

| FDD Band 26 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 5 | QPSK | 1 RB | 0 | 816.5 | 26715 | 14.69 | 15 | 0 |
| | | | | 831.5 | 26865 | 14.76 | 15 | 0 |
| | | | | 846.5 | 27015 | 14.90 | 15 | 0 |
| | | | 12 | 816.5 | 26715 | 14.95 | 15 | 0 |
| | | | | 831.5 | 26865 | 14.91 | 15 | 0 |
| | | | | 846.5 | 27015 | 14.82 | 15 | 0 |
| | | | 24 | 816.5 | 26715 | 14.65 | 15 | 0 |
| | | | | 831.5 | 26865 | 14.66 | 15 | 0 |
| | | | | 846.5 | 27015 | 14.66 | 15 | 0 |
| | | 12 RB | 0 | 816.5 | 26715 | 13.79 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.81 | 14 | 0-1 |
| | | | | 846.5 | 27015 | 13.83 | 14 | 0-1 |
| | | | 6 | 816.5 | 26715 | 13.74 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.76 | 14 | 0-1 |
| | | | | 846.5 | 27015 | 13.81 | 14 | 0-1 |
| | | | 13 | 816.5 | 26715 | 13.78 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.78 | 14 | 0-1 |
| | | | | 846.5 | 27015 | 13.75 | 14 | 0-1 |
| | | 25RB | | 816.5 | 26715 | 13.86 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.82 | 14 | 0-1 |
| | | | | 846.5 | 27015 | 13.79 | 14 | 0-1 |
| | 16-QAM | 1 RB | 0 | 816.5 | 26715 | 13.89 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.77 | 14 | 0-1 |
| | | | | 846.5 | 27015 | 13.72 | 14 | 0-1 |
| | | | 12 | 816.5 | 26715 | 13.89 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.77 | 14 | 0-1 |
| | | | | 846.5 | 27015 | 13.84 | 14 | 0-1 |
| | | | 24 | 816.5 | 26715 | 13.76 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.82 | 14 | 0-1 |
| | | | | 846.5 | 27015 | 13.49 | 14 | 0-1 |
| | | 12 RB | 0 | 816.5 | 26715 | 12.68 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.67 | 13 | 0-2 |
| | | | | 846.5 | 27015 | 12.79 | 13 | 0-2 |
| | | | 6 | 816.5 | 26715 | 12.43 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.55 | 13 | 0-2 |
| | | | | 846.5 | 27015 | 12.14 | 13 | 0-2 |
| | | | 13 | 816.5 | 26715 | 12.36 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.40 | 13 | 0-2 |
| | | | | 846.5 | 27015 | 11.31 | 13 | 0-2 |
| | | 25RB | | 816.5 | 26715 | 12.56 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.57 | 13 | 0-2 |
| | | | | 846.5 | 27015 | 12.05 | 13 | 0-2 |

| FDD Band 26 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 3 | QPSK | 1 RB | 0 | 815.5 | 26705 | 14.83 | 15 | 0 |
| | | | | 831.5 | 26865 | 14.83 | 15 | 0 |
| | | | | 847.5 | 27025 | 14.89 | 15 | 0 |
| | | | 7 | 815.5 | 26705 | 14.84 | 15 | 0 |
| | | | | 831.5 | 26865 | 14.72 | 15 | 0 |
| | | | | 847.5 | 27025 | 14.72 | 15 | 0 |
| | | | 14 | 815.5 | 26705 | 14.72 | 15 | 0 |
| | | | | 831.5 | 26865 | 14.87 | 15 | 0 |
| | | | | 847.5 | 27025 | 14.61 | 15 | 0 |
| | | 8 RB | 0 | 815.5 | 26705 | 13.84 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.81 | 14 | 0-1 |
| | | | | 847.5 | 27025 | 13.72 | 14 | 0-1 |
| | | | 4 | 815.5 | 26705 | 13.78 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.76 | 14 | 0-1 |
| | | | | 847.5 | 27025 | 13.92 | 14 | 0-1 |
| | | | 7 | 815.5 | 26705 | 13.85 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.86 | 14 | 0-1 |
| | | | | 847.5 | 27025 | 13.78 | 14 | 0-1 |
| | | 15RB | | 815.5 | 26705 | 13.84 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.83 | 14 | 0-1 |
| | | | | 847.5 | 27025 | 13.88 | 14 | 0-1 |
| | 16-QAM | 1 RB | 0 | 815.5 | 26705 | 13.52 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.56 | 14 | 0-1 |
| | | | | 847.5 | 27025 | 13.90 | 14 | 0-1 |
| | | | 7 | 815.5 | 26705 | 13.62 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.72 | 14 | 0-1 |
| | | | | 847.5 | 27025 | 13.49 | 14 | 0-1 |
| | | | 14 | 815.5 | 26705 | 12.90 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.48 | 14 | 0-1 |
| | | | | 847.5 | 27025 | 13.49 | 14 | 0-1 |
| | | 8 RB | 0 | 815.5 | 26705 | 12.24 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.57 | 13 | 0-2 |
| | | | | 847.5 | 27025 | 11.95 | 13 | 0-2 |
| | | | 4 | 815.5 | 26705 | 12.30 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.45 | 13 | 0-2 |
| | | | | 847.5 | 27025 | 11.40 | 13 | 0-2 |
| | | | 7 | 815.5 | 26705 | 12.34 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.52 | 13 | 0-2 |
| | | | | 847.5 | 27025 | 11.01 | 13 | 0-2 |
| | | 15RB | | 815.5 | 26705 | 12.47 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.46 | 13 | 0-2 |
| | | | | 847.5 | 27025 | 11.49 | 13 | 0-2 |

| FDD Band 26 (Reduced Power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| 1.4 | QPSK | 1 RB | 0 | 814.7 | 26697 | 14.72 | 15 | 0 |
| | | | | 831.5 | 26865 | 14.60 | 15 | 0 |
| | | | | 848.3 | 27033 | 14.86 | 15 | 0 |
| | | | 2 | 814.7 | 26697 | 14.75 | 15 | 0 |
| | | | | 831.5 | 26865 | 14.85 | 15 | 0 |
| | | | | 848.3 | 27033 | 14.72 | 15 | 0 |
| | | | 5 | 814.7 | 26697 | 14.61 | 15 | 0 |
| | | | | 831.5 | 26865 | 14.58 | 15 | 0 |
| | | | | 848.3 | 27033 | 14.60 | 15 | 0 |
| | | 3 RB | 0 | 814.7 | 26697 | 13.71 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.65 | 14 | 0-1 |
| | | | | 848.3 | 27033 | 13.87 | 14 | 0-1 |
| | | | 2 | 814.7 | 26697 | 13.71 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.75 | 14 | 0-1 |
| | | | | 848.3 | 27033 | 13.59 | 14 | 0-1 |
| | | | 3 | 814.7 | 26697 | 13.70 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.67 | 14 | 0-1 |
| | | | | 848.3 | 27033 | 13.88 | 14 | 0-1 |
| | | 6RB | | 814.7 | 26697 | 13.84 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.84 | 14 | 0-1 |
| | | | | 848.3 | 27033 | 13.87 | 14 | 0-1 |
| | 16-QAM | 1 RB | 0 | 814.7 | 26697 | 13.72 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.46 | 14 | 0-1 |
| | | | | 848.3 | 27033 | 13.72 | 14 | 0-1 |
| | | | 2 | 814.7 | 26697 | 13.68 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.53 | 14 | 0-1 |
| | | | | 848.3 | 27033 | 13.87 | 14 | 0-1 |
| | | | 5 | 814.7 | 26697 | 13.81 | 14 | 0-1 |
| | | | | 831.5 | 26865 | 13.63 | 14 | 0-1 |
| | | | | 848.3 | 27033 | 13.74 | 14 | 0-1 |
| | | 3 RB | 0 | 814.7 | 26697 | 12.54 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.39 | 13 | 0-2 |
| | | | | 848.3 | 27033 | 12.96 | 13 | 0-2 |
| | | | 2 | 814.7 | 26697 | 12.83 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.46 | 13 | 0-2 |
| | | | | 848.3 | 27033 | 12.87 | 13 | 0-2 |
| | | | 3 | 814.7 | 26697 | 12.51 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.58 | 13 | 0-2 |
| | | | | 848.3 | 27033 | 12.59 | 13 | 0-2 |
| | | 6RB | | 814.7 | 26697 | 12.04 | 13 | 0-2 |
| | | | | 831.5 | 26865 | 12.54 | 13 | 0-2 |
| | | | | 848.3 | 27033 | 12.61 | 13 | 0-2 |

| TDD Band 41 (Full power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB | RB start | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm)) | MPR Target(dB) |
| 20 | QPSK | 1 RB | 0 | 2506 | 39750 | 22.62 | 23 | 0 |
| | | | | 2549.5 | 40185 | 22.54 | 23 | 0 |
| | | | | 2593 | 40620 | 22.67 | 23 | 0 |
| | | | | 2636.5 | 41055 | 22.51 | 23 | 0 |
| | | | | 2680 | 41490 | 22.56 | 23 | 0 |
| | | | 50 | 2506 | 39750 | 22.41 | 23 | 0 |
| | | | | 2549.5 | 40185 | 22.32 | 23 | 0 |
| | | | | 2593 | 40620 | 22.35 | 23 | 0 |
| | | | | 2636.5 | 41055 | 22.34 | 23 | 0 |
| | | | | 2680 | 41490 | 22.34 | 23 | 0 |
| | | | 99 | 2506 | 39750 | 22.39 | 23 | 0 |
| | | | | 2549.5 | 40185 | 22.24 | 23 | 0 |
| | | | | 2593 | 40620 | 22.37 | 23 | 0 |
| | | | | 2636.5 | 41055 | 22.21 | 23 | 0 |
| | | | | 2680 | 41490 | 22.31 | 23 | 0 |
| | | 50 RB | 0 | 2506 | 39750 | 21.56 | 22 | 0-1 |
| | | | | 2549.5 | 40185 | 21.44 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.55 | 22 | 0-1 |
| | | | | 2636.5 | 41055 | 21.33 | 22 | 0-1 |
| | | | | 2680 | 41490 | 21.53 | 22 | 0-1 |
| | | | 25 | 2506 | 39750 | 21.38 | 22 | 0-1 |
| | | | | 2549.5 | 40185 | 21.47 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.37 | 22 | 0-1 |
| | | | | 2636.5 | 41055 | 21.47 | 22 | 0-1 |
| | | | | 2680 | 41490 | 21.28 | 22 | 0-1 |
| | | | 50 | 2506 | 39750 | 21.24 | 22 | 0-1 |
| | | | | 2549.5 | 40185 | 21.43 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.47 | 22 | 0-1 |
| | | | | 2636.5 | 41055 | 21.39 | 22 | 0-1 |
| | | | | 2680 | 41490 | 21.39 | 22 | 0-1 |
| | | 100RB | | 2506 | 39750 | 21.32 | 22 | 0-1 |
| | | | | 2549.5 | 40185 | 21.33 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.47 | 22 | 0-1 |
| | | | | 2636.5 | 41055 | 21.35 | 22 | 0-1 |
| | | | | 2680 | 41490 | 21.41 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 2506 | 39750 | 21.29 | 22 | 0-1 |
| | | | | 2549.5 | 40185 | 21.21 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.52 | 22 | 0-1 |
| | | | | 2636.5 | 41055 | 21.32 | 22 | 0-1 |
| | | | | 2680 | 41490 | 21.43 | 22 | 0-1 |
| | | | 50 | 2506 | 39750 | 21.42 | 22 | 0-1 |
| | | | | 2549.5 | 40185 | 21.15 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.64 | 22 | 0-1 |
| | | | | 2636.5 | 41055 | 21.42 | 22 | 0-1 |
| | | | | 2680 | 41490 | 21.68 | 22 | 0-1 |
| | | | 99 | 2506 | 39750 | 21.44 | 22 | 0-1 |
| | | | | 2549.5 | 40185 | 21.35 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.27 | 22 | 0-1 |
| | | | | 2636.5 | 41055 | 21.37 | 22 | 0-1 |
| | | | | 2680 | 41490 | 21.27 | 22 | 0-1 |
| | | 50 RB | 0 | 2506 | 39750 | 20.08 | 21 | 0-2 |
| | | | | 2549.5 | 40185 | 20.12 | 21 | 0-2 |
| | | | | 2593 | 40620 | 20.24 | 21 | 0-2 |
| | | | | 2636.5 | 41055 | 20.23 | 21 | 0-2 |
| | | | | 2680 | 41490 | 20.27 | 21 | 0-2 |
| | | | 25 | 2506 | 39750 | 20.33 | 21 | 0-2 |
| | | | | 2549.5 | 40185 | 20.27 | 21 | 0-2 |
| | | | | 2593 | 40620 | 20.11 | 21 | 0-2 |
| | | | | 2636.5 | 41055 | 20.26 | 21 | 0-2 |
| | | | | 2680 | 41490 | 20.12 | 21 | 0-2 |
| | | | 50 | 2506 | 39750 | 20.17 | 21 | 0-2 |
| | | | | 2549.5 | 40185 | 20.11 | 21 | 0-2 |
| | | | | 2593 | 40620 | 20.12 | 21 | 0-2 |
| | | | | 2636.5 | 41055 | 20.14 | 21 | 0-2 |
| | | | | 2680 | 41490 | 20.11 | 21 | 0-2 |
| | | 100RB | | 2506 | 39750 | 20.16 | 21 | 0-2 |
| | | | | 2549.5 | 40185 | 20.15 | 21 | 0-2 |
| | | | | 2593 | 40620 | 20.27 | 21 | 0-2 |
| | | | | 2636.5 | 41055 | 20.16 | 21 | 0-2 |
| | | | | 2680 | 41490 | 20.24 | 21 | 0-2 |

| TDD Band 41 (Full power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB | RB start | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm)) | MPR Target(dB) |
| 15 | QPSK | 1 RB | 0 | 2503.5 | 39725 | 22.56 | 23 | 0 |
| | | | | 2548.3 | 40173 | 22.49 | 23 | 0 |
| | | | | 2593 | 40620 | 22.55 | 23 | 0 |
| | | | | 2637.8 | 41068 | 22.39 | 23 | 0 |
| | | | | 2682.5 | 41515 | 22.34 | 23 | 0 |
| | | | 36 | 2503.5 | 39725 | 22.27 | 23 | 0 |
| | | | | 2548.3 | 40173 | 22.41 | 23 | 0 |
| | | | | 2593 | 40620 | 22.41 | 23 | 0 |
| | | | | 2637.8 | 41068 | 22.37 | 23 | 0 |
| | | | | 2682.5 | 41515 | 22.18 | 23 | 0 |
| | | | 74 | 2503.5 | 39725 | 22.42 | 23 | 0 |
| | | | | 2548.3 | 40173 | 22.35 | 23 | 0 |
| | | | | 2593 | 40620 | 22.42 | 23 | 0 |
| | | | | 2637.8 | 41068 | 22.31 | 23 | 0 |
| | | | | 2682.5 | 41515 | 22.35 | 23 | 0 |
| | | 36 RB | 0 | 2503.5 | 39725 | 21.17 | 22 | 0-1 |
| | | | | 2548.3 | 40173 | 21.18 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.23 | 22 | 0-1 |
| | | | | 2637.8 | 41068 | 21.16 | 22 | 0-1 |
| | | | | 2682.5 | 41515 | 21.22 | 22 | 0-1 |
| | | | 18 | 2503.5 | 39725 | 21.17 | 22 | 0-1 |
| | | | | 2548.3 | 40173 | 21.14 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.18 | 22 | 0-1 |
| | | | | 2637.8 | 41068 | 21.16 | 22 | 0-1 |
| | | | | 2682.5 | 41515 | 21.21 | 22 | 0-1 |
| | | | 37 | 2503.5 | 39725 | 21.13 | 22 | 0-1 |
| | | | | 2548.3 | 40173 | 21.19 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.25 | 22 | 0-1 |
| | | | | 2637.8 | 41068 | 21.17 | 22 | 0-1 |
| | | | | 2682.5 | 41515 | 21.11 | 22 | 0-1 |
| | | 75RB | | 2503.5 | 39725 | 21.11 | 22 | 0-1 |
| | | | | 2548.3 | 40173 | 21.09 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.19 | 22 | 0-1 |
| | | | | 2637.8 | 41068 | 21.16 | 22 | 0-1 |
| | | | | 2682.5 | 41515 | 21.22 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 2503.5 | 39725 | 20.88 | 22 | 0-1 |
| | | | | 2548.3 | 40173 | 20.97 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.05 | 22 | 0-1 |
| | | | | 2637.8 | 41068 | 21.24 | 22 | 0-1 |
| | | | | 2682.5 | 41515 | 21.37 | 22 | 0-1 |
| | | | 36 | 2503.5 | 39725 | 20.74 | 22 | 0-1 |
| | | | | 2548.3 | 40173 | 20.97 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.11 | 22 | 0-1 |
| | | | | 2637.8 | 41068 | 21.17 | 22 | 0-1 |
| | | | | 2682.5 | 41515 | 21.22 | 22 | 0-1 |
| | | | 74 | 2503.5 | 39725 | 20.73 | 22 | 0-1 |
| | | | | 2548.3 | 40173 | 20.77 | 22 | 0-1 |
| | | | | 2593 | 40620 | 20.87 | 22 | 0-1 |
| | | | | 2637.8 | 41068 | 20.99 | 22 | 0-1 |
| | | | | 2682.5 | 41515 | 21.08 | 22 | 0-1 |
| | | 36 RB | 0 | 2503.5 | 39725 | 20.23 | 21 | 0-2 |
| | | | | 2548.3 | 40173 | 20.31 | 21 | 0-2 |
| | | | | 2593 | 40620 | 20.25 | 21 | 0-2 |
| | | | | 2637.8 | 41068 | 20.21 | 21 | 0-2 |
| | | | | 2682.5 | 41515 | 19.96 | 21 | 0-2 |
| | | | 18 | 2503.5 | 39725 | 19.97 | 21 | 0-2 |
| | | | | 2548.3 | 40173 | 20.05 | 21 | 0-2 |
| | | | | 2593 | 40620 | 20.23 | 21 | 0-2 |
| | | | | 2637.8 | 41068 | 19.99 | 21 | 0-2 |
| | | | | 2682.5 | 41515 | 19.96 | 21 | 0-2 |
| | | | 37 | 2503.5 | 39725 | 19.89 | 21 | 0-2 |
| | | | | 2548.3 | 40173 | 20.17 | 21 | 0-2 |
| | | | | 2593 | 40620 | 20.19 | 21 | 0-2 |
| | | | | 2637.8 | 41068 | 20.14 | 21 | 0-2 |
| | | | | 2682.5 | 41515 | 19.88 | 21 | 0-2 |
| | | 75RB | | 2503.5 | 39725 | 20.08 | 21 | 0-2 |
| | | | | 2548.3 | 40173 | 20.04 | 21 | 0-2 |
| | | | | 2593 | 40620 | 20.22 | 21 | 0-2 |
| | | | | 2637.8 | 41068 | 20.21 | 21 | 0-2 |
| | | | | 2682.5 | 41515 | 20.33 | 21 | 0-2 |

| TDD Band 41 (Full power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB | RB start | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm)) | MPR Target(dB) |
| 10 | QPSK | 1 RB | 0 | 2501 | 39700 | 22.40 | 23 | 0 |
| | | | | 2547 | 40160 | 22.37 | 23 | 0 |
| | | | | 2593 | 40620 | 22.47 | 23 | 0 |
| | | | | 2639 | 41080 | 22.41 | 23 | 0 |
| | | | | 2685 | 41540 | 22.55 | 23 | 0 |
| | | | 25 | 2501 | 39700 | 22.37 | 23 | 0 |
| | | | | 2547 | 40160 | 22.32 | 23 | 0 |
| | | | | 2593 | 40620 | 22.42 | 23 | 0 |
| | | | | 2639 | 41080 | 22.31 | 23 | 0 |
| | | | | 2685 | 41540 | 22.25 | 23 | 0 |
| | | | 49 | 2501 | 39700 | 22.48 | 23 | 0 |
| | | | | 2547 | 40160 | 22.37 | 23 | 0 |
| | | | | 2593 | 40620 | 22.39 | 23 | 0 |
| | | | | 2639 | 41080 | 22.25 | 23 | 0 |
| | | | | 2685 | 41540 | 22.41 | 23 | 0 |
| | | 25 RB | 0 | 2501 | 39700 | 21.23 | 22 | 0-1 |
| | | | | 2547 | 40160 | 21.14 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.20 | 22 | 0-1 |
| | | | | 2639 | 41080 | 21.15 | 22 | 0-1 |
| | | | | 2685 | 41540 | 21.30 | 22 | 0-1 |
| | | | 12 | 2501 | 39700 | 21.11 | 22 | 0-1 |
| | | | | 2547 | 40160 | 21.19 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.19 | 22 | 0-1 |
| | | | | 2639 | 41080 | 21.23 | 22 | 0-1 |
| | | | | 2685 | 41540 | 21.20 | 22 | 0-1 |
| | | | 25 | 2501 | 39700 | 20.98 | 22 | 0-1 |
| | | | | 2547 | 40160 | 21.04 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.14 | 22 | 0-1 |
| | | | | 2639 | 41080 | 21.09 | 22 | 0-1 |
| | | | | 2685 | 41540 | 21.17 | 22 | 0-1 |
| | | 50RB | | 2501 | 39700 | 21.13 | 22 | 0-1 |
| | | | | 2547 | 40160 | 21.04 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.08 | 22 | 0-1 |
| | | | | 2639 | 41080 | 21.01 | 22 | 0-1 |
| | | | | 2685 | 41540 | 21.05 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 2501 | 39700 | 20.95 | 22 | 0-1 |
| | | | | 2547 | 40160 | 21.21 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.52 | 22 | 0-1 |
| | | | | 2639 | 41080 | 21.16 | 22 | 0-1 |
| | | | | 2685 | 41540 | 21.39 | 22 | 0-1 |
| | | | 25 | 2501 | 39700 | 21.31 | 22 | 0-1 |
| | | | | 2547 | 40160 | 21.31 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.73 | 22 | 0-1 |
| | | | | 2639 | 41080 | 21.16 | 22 | 0-1 |
| | | | | 2685 | 41540 | 21.47 | 22 | 0-1 |
| | | | 49 | 2501 | 39700 | 21.30 | 22 | 0-1 |
| | | | | 2547 | 40160 | 21.15 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.34 | 22 | 0-1 |
| | | | | 2639 | 41080 | 21.19 | 22 | 0-1 |
| | | | | 2685 | 41540 | 21.45 | 22 | 0-1 |
| | | 25 RB | 0 | 2501 | 39700 | 20.15 | 21 | 0-2 |
| | | | | 2547 | 40160 | 20.05 | 21 | 0-2 |
| | | | | 2593 | 40620 | 20.46 | 21 | 0-2 |
| | | | | 2639 | 41080 | 20.44 | 21 | 0-2 |
| | | | | 2685 | 41540 | 20.26 | 21 | 0-2 |
| | | | 12 | 2501 | 39700 | 20.40 | 21 | 0-2 |
| | | | | 2547 | 40160 | 20.19 | 21 | 0-2 |
| | | | | 2593 | 40620 | 20.46 | 21 | 0-2 |
| | | | | 2639 | 41080 | 20.25 | 21 | 0-2 |
| | | | | 2685 | 41540 | 20.15 | 21 | 0-2 |
| | | | 25 | 2501 | 39700 | 20.00 | 21 | 0-2 |
| | | | | 2547 | 40160 | 20.18 | 21 | 0-2 |
| | | | | 2593 | 40620 | 20.31 | 21 | 0-2 |
| | | | | 2639 | 41080 | 20.16 | 21 | 0-2 |
| | | | | 2685 | 41540 | 20.21 | 21 | 0-2 |
| | | 50RB | | 2501 | 39700 | 20.25 | 21 | 0-2 |
| | | | | 2547 | 40160 | 20.14 | 21 | 0-2 |
| | | | | 2593 | 40620 | 20.25 | 21 | 0-2 |
| | | | | 2639 | 41080 | 20.17 | 21 | 0-2 |
| | | | | 2685 | 41540 | 20.22 | 21 | 0-2 |

| TDD Band 41 (Full power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB | RB start | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm)) | MPR Target(dB) |
| 5 | QPSK | 1 RB | 0 | 2498.5 | 39675 | 22.06 | 23 | 0 |
| | | | | 2547.8 | 40148 | 22.06 | 23 | 0 |
| | | | | 2593 | 40620 | 22.39 | 23 | 0 |
| | | | | 2640.3 | 41093 | 22.17 | 23 | 0 |
| | | | | 2687.5 | 41565 | 22.37 | 23 | 0 |
| | | | 12 | 2498.5 | 39675 | 22.42 | 23 | 0 |
| | | | | 2547.8 | 40148 | 22.34 | 23 | 0 |
| | | | | 2593 | 40620 | 22.27 | 23 | 0 |
| | | | | 2640.3 | 41093 | 22.25 | 23 | 0 |
| | | | | 2687.5 | 41565 | 22.55 | 23 | 0 |
| | | | 24 | 2498.5 | 39675 | 22.27 | 23 | 0 |
| | | | | 2547.8 | 40148 | 22.31 | 23 | 0 |
| | | | | 2593 | 40620 | 22.32 | 23 | 0 |
| | | | | 2640.3 | 41093 | 22.39 | 23 | 0 |
| | | | | 2687.5 | 41565 | 22.29 | 23 | 0 |
| | | 12 RB | 0 | 2498.5 | 39675 | 21.00 | 22 | 0-1 |
| | | | | 2547.8 | 40148 | 21.04 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.13 | 22 | 0-1 |
| | | | | 2640.3 | 41093 | 21.03 | 22 | 0-1 |
| | | | | 2687.5 | 41565 | 21.11 | 22 | 0-1 |
| | | | 6 | 2498.5 | 39675 | 20.97 | 22 | 0-1 |
| | | | | 2547.8 | 40148 | 20.87 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.18 | 22 | 0-1 |
| | | | | 2640.3 | 41093 | 21.08 | 22 | 0-1 |
| | | | | 2687.5 | 41565 | 21.15 | 22 | 0-1 |
| | | | 13 | 2498.5 | 39675 | 21.03 | 22 | 0-1 |
| | | | | 2547.8 | 40148 | 21.05 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.11 | 22 | 0-1 |
| | | | | 2640.3 | 41093 | 21.11 | 22 | 0-1 |
| | | | | 2687.5 | 41565 | 21.07 | 22 | 0-1 |
| | | 25RB | | 2498.5 | 39675 | 21.20 | 22 | 0-1 |
| | | | | 2547.8 | 40148 | 21.14 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.16 | 22 | 0-1 |
| | | | | 2640.3 | 41093 | 21.09 | 22 | 0-1 |
| | | | | 2687.5 | 41565 | 21.11 | 22 | 0-1 |
| | 16-QAM | 1 RB | 0 | 2498.5 | 39675 | 21.05 | 22 | 0-1 |
| | | | | 2547.8 | 40148 | 21.07 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.22 | 22 | 0-1 |
| | | | | 2640.3 | 41093 | 21.14 | 22 | 0-1 |
| | | | | 2687.5 | 41565 | 21.16 | 22 | 0-1 |
| | | | 12 | 2498.5 | 39675 | 20.93 | 22 | 0-1 |
| | | | | 2547.8 | 40148 | 20.99 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.06 | 22 | 0-1 |
| | | | | 2640.3 | 41093 | 21.01 | 22 | 0-1 |
| | | | | 2687.5 | 41565 | 21.03 | 22 | 0-1 |
| | | | 24 | 2498.5 | 39675 | 21.17 | 22 | 0-1 |
| | | | | 2547.8 | 40148 | 20.98 | 22 | 0-1 |
| | | | | 2593 | 40620 | 21.18 | 22 | 0-1 |
| | | | | 2640.3 | 41093 | 20.99 | 22 | 0-1 |
| | | | | 2687.5 | 41565 | 20.96 | 22 | 0-1 |
| | | 12 RB | 0 | 2498.5 | 39675 | 19.87 | 21 | 0-2 |
| | | | | 2547.8 | 40148 | 19.65 | 21 | 0-2 |
| | | | | 2593 | 40620 | 19.91 | 21 | 0-2 |
| | | | | 2640.3 | 41093 | 19.87 | 21 | 0-2 |
| | | | | 2687.5 | 41565 | 20.24 | 21 | 0-2 |
| | | | 6 | 2498.5 | 39675 | 20.11 | 21 | 0-2 |
| | | | | 2547.8 | 40148 | 20.01 | 21 | 0-2 |
| | | | | 2593 | 40620 | 19.95 | 21 | 0-2 |
| | | | | 2640.3 | 41093 | 19.98 | 21 | 0-2 |
| | | | | 2687.5 | 41565 | 20.26 | 21 | 0-2 |
| | | | 13 | 2498.5 | 39675 | 20.23 | 21 | 0-2 |
| | | | | 2547.8 | 40148 | 20.21 | 21 | 0-2 |
| | | | | 2593 | 40620 | 19.90 | 21 | 0-2 |
| | | | | 2640.3 | 41093 | 21.00 | 21 | 0-2 |
| | | | | 2687.5 | 41565 | 20.29 | 21 | 0-2 |
| | | 25RB | | 2498.5 | 39675 | 20.30 | 21 | 0-2 |
| | | | | 2547.8 | 40148 | 20.00 | 21 | 0-2 |
| | | | | 2593 | 40620 | 20.38 | 21 | 0-2 |
| | | | | 2640.3 | 41093 | 20.22 | 21 | 0-2 |
| | | | | 2687.5 | 41565 | 20.23 | 21 | 0-2 |

| TDD Band 41 (Reduce power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB | RB start | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm)) | MPR Target(dB) |
| 20 | QPSK | 1 RB | 0 | 2506 | 39750 | 12.59 | 14 | 0 |
| | | | | 2549.5 | 40185 | 13.02 | 14 | 0 |
| | | | | 2593 | 40620 | 13.13 | 14 | 0 |
| | | | | 2636.5 | 41055 | 13.44 | 14 | 0 |
| | | | | 2680 | 41490 | 13.98 | 14 | 0 |
| | | | 50 | 2506 | 39750 | 12.91 | 14 | 0 |
| | | | | 2549.5 | 40185 | 13.11 | 14 | 0 |
| | | | | 2593 | 40620 | 13.55 | 14 | 0 |
| | | | | 2636.5 | 41055 | 13.66 | 14 | 0 |
| | | | | 2680 | 41490 | 13.99 | 14 | 0 |
| | | | 99 | 2506 | 39750 | 12.42 | 14 | 0 |
| | | | | 2549.5 | 40185 | 12.87 | 14 | 0 |
| | | | | 2593 | 40620 | 13.28 | 14 | 0 |
| | | | | 2636.5 | 41055 | 13.44 | 14 | 0 |
| | | | | 2680 | 41490 | 13.65 | 14 | 0 |
| | | 50 RB | 0 | 2506 | 39750 | 11.72 | 13 | 0-1 |
| | | | | 2549.5 | 40185 | 22.89 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.51 | 13 | 0-1 |
| | | | | 2636.5 | 41055 | 12.66 | 13 | 0-1 |
| | | | | 2680 | 41490 | 12.97 | 13 | 0-1 |
| | | | 25 | 2506 | 39750 | 11.74 | 13 | 0-1 |
| | | | | 2549.5 | 40185 | 11.95 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.56 | 13 | 0-1 |
| | | | | 2636.5 | 41055 | 12.77 | 13 | 0-1 |
| | | | | 2680 | 41490 | 12.89 | 13 | 0-1 |
| | | | 50 | 2506 | 39750 | 11.48 | 13 | 0-1 |
| | | | | 2549.5 | 40185 | 11.92 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.52 | 13 | 0-1 |
| | | | | 2636.5 | 41055 | 12.66 | 13 | 0-1 |
| | | | | 2680 | 41490 | 12.86 | 13 | 0-1 |
| | | 100RB | | 2506 | 39750 | 11.58 | 13 | 0-1 |
| | | | | 2549.5 | 40185 | 11.89 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.45 | 13 | 0-1 |
| | | | | 2636.5 | 41055 | 12.65 | 13 | 0-1 |
| | | | | 2680 | 41490 | 12.85 | 13 | 0-1 |
| | 16-QAM | 1 RB | 0 | 2506 | 39750 | 11.71 | 13 | 0-1 |
| | | | | 2549.5 | 40185 | 12.01 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.32 | 13 | 0-1 |
| | | | | 2636.5 | 41055 | 12.65 | 13 | 0-1 |
| | | | | 2680 | 41490 | 12.98 | 13 | 0-1 |
| | | | 50 | 2506 | 39750 | 12.04 | 13 | 0-1 |
| | | | | 2549.5 | 40185 | 12.45 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.75 | 13 | 0-1 |
| | | | | 2636.5 | 41055 | 12.86 | 13 | 0-1 |
| | | | | 2680 | 41490 | 12.97 | 13 | 0-1 |
| | | | 99 | 2506 | 39750 | 11.60 | 13 | 0-1 |
| | | | | 2549.5 | 40185 | 11.82 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.45 | 13 | 0-1 |
| | | | | 2636.5 | 41055 | 12.65 | 13 | 0-1 |
| | | | | 2680 | 41490 | 12.86 | 13 | 0-1 |
| | | 50 RB | 0 | 2506 | 39750 | 10.74 | 12 | 0-2 |
| | | | | 2549.5 | 40185 | 11.21 | 12 | 0-2 |
| | | | | 2593 | 40620 | 11.57 | 12 | 0-2 |
| | | | | 2636.5 | 41055 | 11.73 | 12 | 0-2 |
| | | | | 2680 | 41490 | 11.89 | 12 | 0-2 |
| | | | 25 | 2506 | 39750 | 10.71 | 12 | 0-2 |
| | | | | 2549.5 | 40185 | 10.99 | 12 | 0-2 |
| | | | | 2593 | 40620 | 11.58 | 12 | 0-2 |
| | | | | 2636.5 | 41055 | 11.65 | 12 | 0-2 |
| | | | | 2680 | 41490 | 11.71 | 12 | 0-2 |
| | | | 50 | 2506 | 39750 | 10.46 | 12 | 0-2 |
| | | | | 2549.5 | 40185 | 11.17 | 12 | 0-2 |
| | | | | 2593 | 40620 | 11.53 | 12 | 0-2 |
| | | | | 2636.5 | 41055 | 11.65 | 12 | 0-2 |
| | | | | 2680 | 41490 | 11.72 | 12 | 0-2 |
| | | 100RB | | 2506 | 39750 | 10.59 | 12 | 0-2 |
| | | | | 2549.5 | 40185 | 10.94 | 12 | 0-2 |
| | | | | 2593 | 40620 | 11.46 | 12 | 0-2 |
| | | | | 2636.5 | 41055 | 11.68 | 12 | 0-2 |
| | | | | 2680 | 41490 | 11.86 | 12 | 0-2 |

| TDD Band 41 (Reduce power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB | RB start | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm)) | MPR Target(dB) |
| 15 | QPSK | 1 RB | 0 | 2503.5 | 39725 | 13.05 | 14 | 0 |
| | | | | 2548.3 | 40173 | 13.31 | 14 | 0 |
| | | | | 2593 | 40620 | 13.64 | 14 | 0 |
| | | | | 2637.8 | 41068 | 13.71 | 14 | 0 |
| | | | | 2682.5 | 41515 | 13.98 | 14 | 0 |
| | | | 36 | 2503.5 | 39725 | 13.01 | 14 | 0 |
| | | | | 2548.3 | 40173 | 13.24 | 14 | 0 |
| | | | | 2593 | 40620 | 13.54 | 14 | 0 |
| | | | | 2637.8 | 41068 | 13.67 | 14 | 0 |
| | | | | 2682.5 | 41515 | 13.86 | 14 | 0 |
| | | | 74 | 2503.5 | 39725 | 12.88 | 14 | 0 |
| | | | | 2548.3 | 40173 | 13.21 | 14 | 0 |
| | | | | 2593 | 40620 | 13.65 | 14 | 0 |
| | | | | 2637.8 | 41068 | 13.77 | 14 | 0 |
| | | | | 2682.5 | 41515 | 13.92 | 14 | 0 |
| | | 36 RB | 0 | 2503.5 | 39725 | 11.89 | 13 | 0-1 |
| | | | | 2548.3 | 40173 | 12.05 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.58 | 13 | 0-1 |
| | | | | 2637.8 | 41068 | 12.72 | 13 | 0-1 |
| | | | | 2682.5 | 41515 | 12.99 | 13 | 0-1 |
| | | | 18 | 2503.5 | 39725 | 11.95 | 13 | 0-1 |
| | | | | 2548.3 | 40173 | 12.09 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.61 | 13 | 0-1 |
| | | | | 2637.8 | 41068 | 12.44 | 13 | 0-1 |
| | | | | 2682.5 | 41515 | 12.96 | 13 | 0-1 |
| | | | 37 | 2503.5 | 39725 | 11.81 | 13 | 0-1 |
| | | | | 2548.3 | 40173 | 12.37 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.66 | 13 | 0-1 |
| | | | | 2637.8 | 41068 | 12.78 | 13 | 0-1 |
| | | | | 2682.5 | 41515 | 12.96 | 13 | 0-1 |
| | | 75RB | | 2503.5 | 39725 | 11.69 | 13 | 0-1 |
| | | | | 2548.3 | 40173 | 11.74 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.59 | 13 | 0-1 |
| | | | | 2637.8 | 41068 | 12.75 | 13 | 0-1 |
| | | | | 2682.5 | 41515 | 12.97 | 13 | 0-1 |
| | 16-QAM | 1 RB | 0 | 2503.5 | 39725 | 12.35 | 13 | 0-1 |
| | | | | 2548.3 | 40173 | 12.45 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.79 | 13 | 0-1 |
| | | | | 2637.8 | 41068 | 12.82 | 13 | 0-1 |
| | | | | 2682.5 | 41515 | 12.97 | 13 | 0-1 |
| | | | 36 | 2503.5 | 39725 | 12.08 | 13 | 0-1 |
| | | | | 2548.3 | 40173 | 12.34 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.71 | 13 | 0-1 |
| | | | | 2637.8 | 41068 | 12.83 | 13 | 0-1 |
| | | | | 2682.5 | 41515 | 12.95 | 13 | 0-1 |
| | | | 74 | 2503.5 | 39725 | 11.99 | 13 | 0-1 |
| | | | | 2548.3 | 40173 | 12.36 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.83 | 13 | 0-1 |
| | | | | 2637.8 | 41068 | 12.88 | 13 | 0-1 |
| | | | | 2682.5 | 41515 | 12.94 | 13 | 0-1 |
| | | 36 RB | 0 | 2503.5 | 39725 | 10.92 | 12 | 0-2 |
| | | | | 2548.3 | 40173 | 11.19 | 12 | 0-2 |
| | | | | 2593 | 40620 | 11.55 | 12 | 0-2 |
| | | | | 2637.8 | 41068 | 11.67 | 12 | 0-2 |
| | | | | 2682.5 | 41515 | 11.97 | 12 | 0-2 |
| | | | 18 | 2503.5 | 39725 | 10.87 | 12 | 0-2 |
| | | | | 2548.3 | 40173 | 11.34 | 12 | 0-2 |
| | | | | 2593 | 40620 | 11.57 | 12 | 0-2 |
| | | | | 2637.8 | 41068 | 11.67 | 12 | 0-2 |
| | | | | 2682.5 | 41515 | 11.96 | 12 | 0-2 |
| | | | 37 | 2503.5 | 39725 | 10.74 | 12 | 0-2 |
| | | | | 2548.3 | 40173 | 10.97 | 12 | 0-2 |
| | | | | 2593 | 40620 | 11.66 | 12 | 0-2 |
| | | | | 2637.8 | 41068 | 11.78 | 12 | 0-2 |
| | | | | 2682.5 | 41515 | 11.94 | 12 | 0-2 |
| | | 75RB | | 2503.5 | 39725 | 10.69 | 12 | 0-2 |
| | | | | 2548.3 | 40173 | 11.21 | 12 | 0-2 |
| | | | | 2593 | 40620 | 11.61 | 12 | 0-2 |
| | | | | 2637.8 | 41068 | 11.82 | 12 | 0-2 |
| | | | | 2682.5 | 41515 | 11.96 | 12 | 0-2 |

| TDD Band 41 (Reduce power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB | RB start | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm)) | MPR Target(dB) |
| 10 | QPSK | 1 RB | 0 | 2501 | 39700 | 12.41 | 14 | 0 |
| | | | | 2547 | 40160 | 12.67 | 14 | 0 |
| | | | | 2593 | 40620 | 12.94 | 14 | 0 |
| | | | | 2639 | 41080 | 13.54 | 14 | 0 |
| | | | | 2685 | 41540 | 13.92 | 14 | 0 |
| | | | 25 | 2501 | 39700 | 12.91 | 14 | 0 |
| | | | | 2547 | 40160 | 13.14 | 14 | 0 |
| | | | | 2593 | 40620 | 13.47 | 14 | 0 |
| | | | | 2639 | 41080 | 13.76 | 14 | 0 |
| | | | | 2685 | 41540 | 13.92 | 14 | 0 |
| | | | 49 | 2501 | 39700 | 12.53 | 14 | 0 |
| | | | | 2547 | 40160 | 12.89 | 14 | 0 |
| | | | | 2593 | 40620 | 13.12 | 14 | 0 |
| | | | | 2639 | 41080 | 13.45 | 14 | 0 |
| | | | | 2685 | 41540 | 13.57 | 14 | 0 |
| | | 25 RB | 0 | 2501 | 39700 | 11.67 | 13 | 0-1 |
| | | | | 2547 | 40160 | 11.97 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.40 | 13 | 0-1 |
| | | | | 2639 | 41080 | 12.66 | 13 | 0-1 |
| | | | | 2685 | 41540 | 12.95 | 13 | 0-1 |
| | | | 12 | 2501 | 39700 | 11.81 | 13 | 0-1 |
| | | | | 2547 | 40160 | 12.23 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.53 | 13 | 0-1 |
| | | | | 2639 | 41080 | 12.72 | 13 | 0-1 |
| | | | | 2685 | 41540 | 12.88 | 13 | 0-1 |
| | | | 25 | 2501 | 39700 | 11.62 | 13 | 0-1 |
| | | | | 2547 | 40160 | 11.92 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.46 | 13 | 0-1 |
| | | | | 2639 | 41080 | 12.67 | 13 | 0-1 |
| | | | | 2685 | 41540 | 12.86 | 13 | 0-1 |
| | | 50RB | | 2501 | 39700 | 11.61 | 13 | 0-1 |
| | | | | 2547 | 40160 | 11.76 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.41 | 13 | 0-1 |
| | | | | 2639 | 41080 | 12.81 | 13 | 0-1 |
| | | | | 2685 | 41540 | 12.97 | 13 | 0-1 |
| | 16-QAM | 1 RB | 0 | 2501 | 39700 | 11.85 | 13 | 0-1 |
| | | | | 2547 | 40160 | 12.01 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.24 | 13 | 0-1 |
| | | | | 2639 | 41080 | 12.66 | 13 | 0-1 |
| | | | | 2685 | 41540 | 12.84 | 13 | 0-1 |
| | | | 25 | 2501 | 39700 | 12.05 | 13 | 0-1 |
| | | | | 2547 | 40160 | 12.56 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.77 | 13 | 0-1 |
| | | | | 2639 | 41080 | 12.81 | 13 | 0-1 |
| | | | | 2685 | 41540 | 12.97 | 13 | 0-1 |
| | | | 49 | 2501 | 39700 | 11.69 | 13 | 0-1 |
| | | | | 2547 | 40160 | 12.01 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.37 | 13 | 0-1 |
| | | | | 2639 | 41080 | 12.65 | 13 | 0-1 |
| | | | | 2685 | 41540 | 12.99 | 13 | 0-1 |
| | | 25 RB | 0 | 2501 | 39700 | 10.77 | 12 | 0-2 |
| | | | | 2547 | 40160 | 11.11 | 12 | 0-2 |
| | | | | 2593 | 40620 | 11.46 | 12 | 0-2 |
| | | | | 2639 | 41080 | 11.78 | 12 | 0-2 |
| | | | | 2685 | 41540 | 11.99 | 12 | 0-2 |
| | | | 12 | 2501 | 39700 | 11.04 | 12 | 0-2 |
| | | | | 2547 | 40160 | 11.37 | 12 | 0-2 |
| | | | | 2593 | 40620 | 11.55 | 12 | 0-2 |
| | | | | 2639 | 41080 | 11.72 | 12 | 0-2 |
| | | | | 2685 | 41540 | 11.89 | 12 | 0-2 |
| | | | 25 | 2501 | 39700 | 10.84 | 12 | 0-2 |
| | | | | 2547 | 40160 | 11.11 | 12 | 0-2 |
| | | | | 2593 | 40620 | 11.49 | 12 | 0-2 |
| | | | | 2639 | 41080 | 11.67 | 12 | 0-2 |
| | | | | 2685 | 41540 | 11.98 | 12 | 0-2 |
| | | 50RB | | 2501 | 39700 | 10.82 | 12 | 0-2 |
| | | | | 2547 | 40160 | 11.04 | 12 | 0-2 |
| | | | | 2593 | 40620 | 11.43 | 12 | 0-2 |
| | | | | 2639 | 41080 | 11.71 | 12 | 0-2 |
| | | | | 2685 | 41540 | 11.94 | 12 | 0-2 |

| TDD Band 41 (Reduce power) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB | RB start | Frequency (MHz) | Channel | Conducted power (dBm) | Target Power + Max. Tolerance (dBm)) | MPR Target(dB) |
| 5 | QPSK | 1 RB | 0 | 2498.5 | 39675 | 13.37 | 14 | 0 |
| | | | | 2547.8 | 40148 | 13.67 | 14 | 0 |
| | | | | 2593 | 40620 | 13.79 | 14 | 0 |
| | | | | 2640.3 | 41093 | 13.82 | 14 | 0 |
| | | | | 2687.5 | 41565 | 13.91 | 14 | 0 |
| | | | 12 | 2498.5 | 39675 | 12.81 | 14 | 0 |
| | | | | 2547.8 | 40148 | 13.05 | 14 | 0 |
| | | | | 2593 | 40620 | 13.47 | 14 | 0 |
| | | | | 2640.3 | 41093 | 13.64 | 14 | 0 |
| | | | | 2687.5 | 41565 | 13.94 | 14 | 0 |
| | | | 24 | 2498.5 | 39675 | 13.13 | 14 | 0 |
| | | | | 2547.8 | 40148 | 13.43 | 14 | 0 |
| | | | | 2593 | 40620 | 13.79 | 14 | 0 |
| | | | | 2640.3 | 41093 | 13.87 | 14 | 0 |
| | | | | 2687.5 | 41565 | 13.95 | 14 | 0 |
| | | 12 RB | 0 | 2498.5 | 39675 | 12.01 | 13 | 0-1 |
| | | | | 2547.8 | 40148 | 12.21 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.55 | 13 | 0-1 |
| | | | | 2640.3 | 41093 | 12.76 | 13 | 0-1 |
| | | | | 2687.5 | 41565 | 12.95 | 13 | 0-1 |
| | | | 6 | 2498.5 | 39675 | 11.82 | 13 | 0-1 |
| | | | | 2547.8 | 40148 | 12.21 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.51 | 13 | 0-1 |
| | | | | 2640.3 | 41093 | 12.76 | 13 | 0-1 |
| | | | | 2687.5 | 41565 | 12.92 | 13 | 0-1 |
| | | | 13 | 2498.5 | 39675 | 11.91 | 13 | 0-1 |
| | | | | 2547.8 | 40148 | 12.56 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.95 | 13 | 0-1 |
| | | | | 2640.3 | 41093 | 12.88 | 13 | 0-1 |
| | | | | 2687.5 | 41565 | 12.92 | 13 | 0-1 |
| | | 25RB | | 2498.5 | 39675 | 11.89 | 13 | 0-1 |
| | | | | 2547.8 | 40148 | 12.09 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.58 | 13 | 0-1 |
| | | | | 2640.3 | 41093 | 12.65 | 13 | 0-1 |
| | | | | 2687.5 | 41565 | 12.99 | 13 | 0-1 |
| | 16-QAM | 1 RB | 0 | 2498.5 | 39675 | 12.51 | 13 | 0-1 |
| | | | | 2547.8 | 40148 | 12.78 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.85 | 13 | 0-1 |
| | | | | 2640.3 | 41093 | 12.91 | 13 | 0-1 |
| | | | | 2687.5 | 41565 | 12.98 | 13 | 0-1 |
| | | | 12 | 2498.5 | 39675 | 11.99 | 13 | 0-1 |
| | | | | 2547.8 | 40148 | 12.05 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.69 | 13 | 0-1 |
| | | | | 2640.3 | 41093 | 12.13 | 13 | 0-1 |
| | | | | 2687.5 | 41565 | 12.98 | 13 | 0-1 |
| | | | 24 | 2498.5 | 39675 | 12.33 | 13 | 0-1 |
| | | | | 2547.8 | 40148 | 12.21 | 13 | 0-1 |
| | | | | 2593 | 40620 | 12.75 | 13 | 0-1 |
| | | | | 2640.3 | 41093 | 12.72 | 13 | 0-1 |
| | | | | 2687.5 | 41565 | 12.99 | 13 | 0-1 |
| | | 12 RB | 0 | 2498.5 | 39675 | 11.05 | 12 | 0-2 |
| | | | | 2547.8 | 40148 | 11.03 | 12 | 0-2 |
| | | | | 2593 | 40620 | 11.53 | 12 | 0-2 |
| | | | | 2640.3 | 41093 | 11.31 | 12 | 0-2 |
| | | | | 2687.5 | 41565 | 11.92 | 12 | 0-2 |
| | | | 6 | 2498.5 | 39675 | 10.87 | 12 | 0-2 |
| | | | | 2547.8 | 40148 | 10.78 | 12 | 0-2 |
| | | | | 2593 | 40620 | 11.62 | 12 | 0-2 |
| | | | | 2640.3 | 41093 | 11.01 | 12 | 0-2 |
| | | | | 2687.5 | 41565 | 11.87 | 12 | 0-2 |
| | | | 13 | 2498.5 | 39675 | 10.97 | 12 | 0-2 |
| | | | | 2547.8 | 40148 | 11.21 | 12 | 0-2 |
| | | | | 2593 | 40620 | 11.71 | 12 | 0-2 |
| | | | | 2640.3 | 41093 | 11.23 | 12 | 0-2 |
| | | | | 2687.5 | 41565 | 11.95 | 12 | 0-2 |
| | | 25RB | | 2498.5 | 39675 | 10.96 | 12 | 0-2 |
| | | | | 2547.8 | 40148 | 11.31 | 12 | 0-2 |
| | | | | 2593 | 40620 | 11.69 | 12 | 0-2 |
| | | | | 2640.3 | 41093 | 11.78 | 12 | 0-2 |
| | | | | 2687.5 | 41565 | 11.95 | 12 | 0-2 |

## #. WLAN802.11 b/g/n(20M/40M) conducted power table:

| 802.11 b | | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average Power Output (dBm) |
|---|---|---|---|
| CH | Frequency (MHz) | | Data Rate (Mbps) |
| | | | 1 |
| 1 | 2412 | 15.5 | 15.47 |
| 6 | 2437 | 15.5 | 14.96 |
| 11 | 2462 | 15.5 | 14.82 |

| 802.11 g | | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average Power Output (dBm) |
|---|---|---|---|
| CH | Frequency (MHz) | | Data Rate (Mbps) |
| | | | 6 |
| 1 | 2412 | 15.5 | 15.39 |
| 6 | 2437 | 15.5 | 14.96 |
| 11 | 2462 | 13 | 12.84 |

| 802.11 n(20M) | | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average Power Output (dBm) |
|---|---|---|---|
| CH | Frequency (MHz) | | Data Rate (Mbps) |
| | | | 6.5 |
| 1 | 2412 | 15.5 | 15.48 |
| 6 | 2437 | 15.5 | 14.93 |
| 11 | 2462 | 13 | 12.36 |

| 802.11 n(40M) | | Max. Rated Avg. Power + Max. Tolerance (dBm) | Average Power Output (dBm) |
|---|---|---|---|
| CH | Frequency (MHz) | | Data Rate (Mbps) |
| | | | 13.5 |
| 3 | 2422 | 15.5 | 15.28 |
| 6 | 2437 | 15.5 | 15.44 |
| 9 | 2452 | 13 | 12.81 |

## #. Bluetooth maximum power table:

| Frequency (MHz) | Avg. (dBm) |
|---|---|
| 2402 | 7.5 |
| 2442 | |
| 2480 | |

## 1.4 Test Environment

Ambient Temperature: 22±2° C
Tissue Simulating Liquid: 22±2° C

## 1.5 Operation Description

### 1. WWAN (LTE):

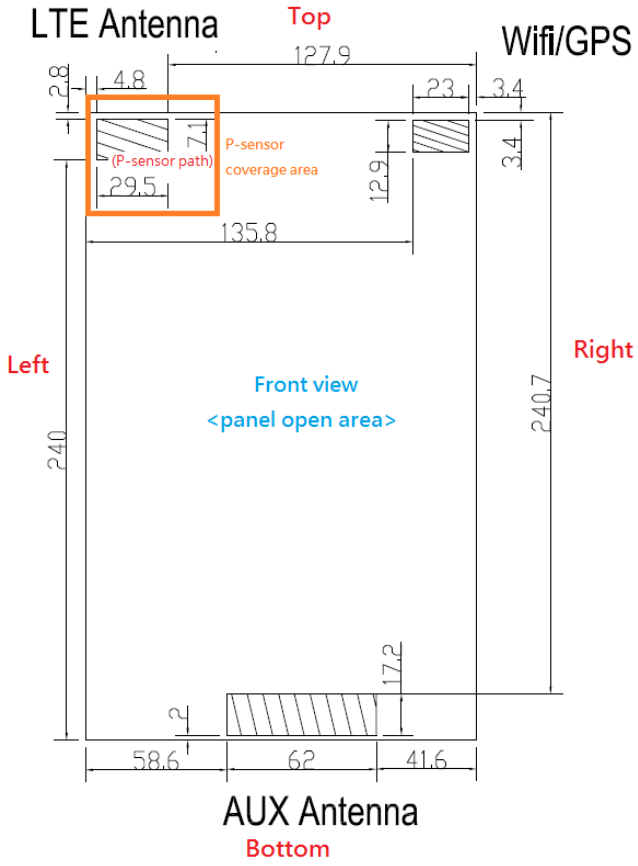
The EUT is controlled by using Radio Communication Tester(Anritsu MT8820C), and the communication between the EUT and the tester is established by air link. The EUT was tested in the following configuration.

**Configuration: Back/top/left side_0mm.** (SAR measurement for the other sides can be excluded based on KDB447498 D01)

### 2. WLAN (802.11b/g/n):

Use chipset specific software to control the EUT, and makes it transmit in maximum power. The EUT was tested in the following configuration.

**Configurations: Back/top/right side_0mm.** (SAR measurement for the other sides can be excluded based on KDB447498 D01)




**Antenna position plot(Front view)**

Note:

**1.** LTE modes test according to **FCC KDB 941225 D05v02r03.**

a. Per Section 5.2.1, the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation.

- Using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
- When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel.
- When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.

b. Per Section 5.2.2, the largest channel bandwidth and measure SAR for QPSK with 50% RB allocation

- The procedures required for 1 RB allocation in 5.2.1 are applied to measure the SAR for QPSK with 50% RB allocation.

c. Per Section 5.2.3, the largest channel bandwidth and measure SAR for QPSK with 100% RB allocation

- For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation in 5.2.1 and 5.2.2 are ≤ 0.8 W/kg.
- Otherwise, SAR is measured for the highest output power channel and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.

d. Per Section 5.2.4, Higher order modulations

- For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in sections 5.2.1, 5.2.2 and 5.2.3 to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is > ½ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

e. Per Section 5.3, other channel bandwidth standalone SAR test requirements

- For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in section 5.2 to determine the channels and RB configurations that need SAR testing and only measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is > ½ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.
- The equivalent channel configuration for the RB allocation, RB offset and

modulation etc. is determined for the smaller channel bandwidth according to the same number of RB allocated in the largest channel bandwidth.

2. TDD LTE was tested at highest duty factor using UL-DL configuration 0 with 6 UL subframes and 2 S subframes using extended cyclic prefix only and special subframe configuration 6. SAR tests were performed at maximum output power and worst-case transmission duty factor in extended cyclic prefix. Per 3GPP 36.211 Section 4, the duty factor for special subframe configuration 6 using extended cyclic prefix is 0.633. FCC's guidance on how device is configured in TD environment is sought, and detailed with agreeable condition of setting on UE's configuration of transmission mode, and SAR test system in KDB inquiry (tracking number: 806089).

802.11b DSSS SAR Test Requirements:

3. SAR is measured for 2.4 GHz 802.11b DSSS mode using the highest measured maximum output power channel, when the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.
4. When the reported SAR is > 0.8 W/kg, SAR is required for that exposure configuration using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.

802.11g/n OFDM SAR Test Exclusion Requirements:

5. SAR is not required for 802.11g/n when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.

Initial Test Configuration:

6. 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.
7. SAR is measured using the highest measured maximum output power channel. When the reported SAR of the initial test configuration is > 0.8 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 ≤ 1.2 W/kg or all required channels are tested.
8. For WLAN 802.11g/n, the largest channel bandwidth configuration(WLAN 802.11n(40)) is selected to be the initial test configuration among the multiple configurations in a frequency band with the same specified maximum output power.
9. BT and WLAN use the same antenna path and Bluetooth can't transmit simultaneously with WLAN.

**10.** Based on KDB447498D01,

(1) SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances≤ 50 mm are determined by:

$$\frac{\text{Max. tune up power(mW)}}{\text{Min. test separation distance(mm)}} \times \sqrt{\text{f(GHz)}} \leq 3$$

When the minimum test separation distance is < 5mm, 5mm is applied to determine SAR test exclusion.

(2) For test separation distances > 50 mm, and the frequency at 100 MHz to 1500MHz, the SAR test exclusion threshold is determined according to the following, and as illustrated in Appendix B of KDB447498 D01.
[(Threshold at 50mm in step1) + (test separation distance-50mm)x($\frac{\text{f(MHz)}}{160}$)](mW),

(3) For test separation distances > 50 mm, and the frequency at >1500MHz to 6GHz, the SAR test exclusion threshold is determined according to the following, and as illustrated in Appendix B of KDB447498 D01.

| Mode | Max. tune-up power(dBm) | Max. tune-up power(mW) | Top side | | | Right side | | | Left side | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ant. to surface (mm) | Exclusion threshold (mW) | Require SAR testing? | Ant. to surface (mm) | Exclusion threshold (mW) | Require SAR testing? | Ant. to surface (mm) | Exclusion threshold (mW) | Require SAR testing? |
| LTE Band 2 | 23 | 199.526 | less than 5 | 55.140 | YES | 127.9 | 784.514 | NO | less than 5 | 55.140 | YES |
| LTE Band 4 | 23 | 199.526 | less than 5 | 52.854 | YES | 127.9 | 784.285 | NO | less than 5 | 52.854 | YES |
| LTE Band 5 | 23 | 199.526 | less than 5 | 36.754 | YES | 127.9 | 444.226 | NO | less than 5 | 36.754 | YES |
| LTE Band 12 | 23 | 199.526 | less than 5 | 33.750 | YES | 127.9 | 374.854 | NO | less than 5 | 33.750 | YES |
| LTE Band 25 | 23 | 199.526 | less than 5 | 55.212 | YES | 127.9 | 784.521 | NO | less than 5 | 55.212 | YES |
| LTE Band 26 | 23 | 199.526 | less than 5 | 36.754 | YES | 127.9 | 444.226 | NO | less than 5 | 36.754 | YES |
| LTE Band 41 | 23 | 199.526 | less than 5 | 65.419 | YES | 127.9 | 785.542 | NO | less than 5 | 65.419 | YES |
| WLAN 2.45GHz | 15.5 | 35.481 | less than 5 | 11.135 | YES | less than 5 | 11.135 | YES | 135.8 | 859.113 | NO |
| BT | 7.5 | 5.623 | less than 5 | 1.771 | NO | less than 5 | 1.771 | NO | 135.8 | 858.177 | NO |

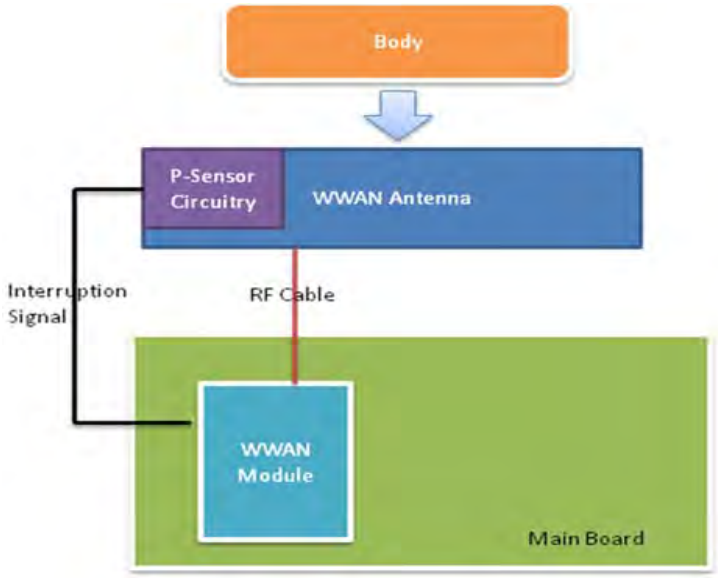
| Mode | Max. tune-up power(dBm) | Max. tune-up power(mW) | Bottom side | | | Back side | | |
|---|---|---|---|---|---|---|---|---|
| | | | Ant. to surface (mm) | Exclusion threshold (mW) | Require SAR testing? | Ant. to surface (mm) | Exclusion threshold (mW) | Require SAR testing? |
| LTE Band 2 | 23 | 199.526 | 240 | Over 200mm | NO | less than 5 | 55.140 | YES |
| LTE Band 4 | 23 | 199.526 | 240 | Over 200mm | NO | less than 5 | 52.854 | YES |
| LTE Band 5 | 23 | 199.526 | 240 | Over 200mm | NO | less than 5 | 36.754 | YES |
| LTE Band 12 | 23 | 199.526 | 240 | Over 200mm | NO | less than 5 | 33.750 | YES |
| LTE Band 25 | 23 | 199.526 | 240 | Over 200mm | NO | less than 5 | 55.212 | YES |
| LTE Band 26 | 23 | 199.526 | 240 | Over 200mm | NO | less than 5 | 36.754 | YES |
| LTE Band 41 | 23 | 199.526 | 240 | Over 200mm | NO | less than 5 | 65.419 | YES |
| WLAN 2.45GHz | 15.5 | 35.481 | 240 | Over 200mm | NO | less than 5 | 11.135 | YES |
| BT | 7.5 | 5.623 | 240 | Over 200mm | NO | less than 5 | 1.771 | NO |

**11.** According to KDB447498 D01, testing of other required channels is not required when the reported 1-g SAR for the highest output channel is ≤ 0.8 W/kg, when the transmission band is ≤ 100 MHz.

**12.** According to KDB865664 D01, SAR measurement variability must be assessed for each frequency band. When the original highest measured SAR is ≥ 0.8 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 ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

## 1.6 Proximity sensor operation description

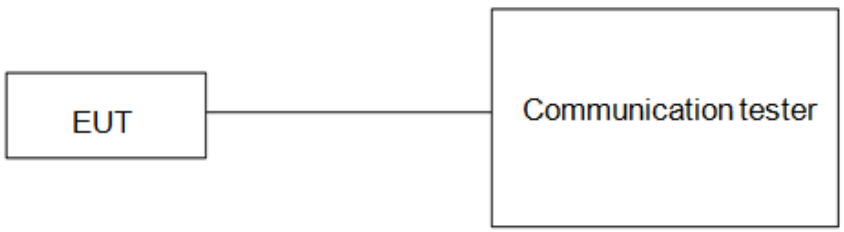
The P-sensor being used to reduce output power is capacitive in which when the object such as human body, metal or plastic is being approached, the sensing capacitance would be increased with the antenna pad. Once the capacitance is accumulated, and reached over the threshold as set in MCU of the microchip, the interruption signal is pulled low (High state without trigger ) and further inform modem module of the transmitter to make power reduction.




1.6.1 Proximity sensor measurement procedure

(1) The proximity sensor is collocated with WWAN antenna.

(2) Output power is measured, and monitored by using the communication tester. A RF cables with sufficient length was being attached from the antenna port of the module, and used for the measurement. The appropriate loss attenuated from cable is compensated in the communication tester.



1.6.2 Trigger distances for back/top side

Test procedure:

1) The entire back surface or edge of the tablet is positioned below a flat phantom filled with the required tissue equivalent medium and positioned at least 20 mm further than the distance that triggers power reduction.

2) The back surface or edge is moved toward the phantom in 3 mm steps until the sensor triggers.

3) The back surface or edge is then moved back (further away) from the phantom until maximum output power is returned to the normal maximum level.

4) The back surface or edge is again moved toward the phantom, but in 1 mm steps, until it is at least 5 mm past the triggering point or touching the phantom

5) If the tablet is not touching the phantom, it is moved in 3 mm steps until it touches the phantom to confirm that the sensor remains triggered and the maximum power stays reduced.

6) The process is then reversed by moving the tablet away from the phantom to determine triggering release, until it is at least 10 mm beyond the point that triggers the return of normal maximum power.

7) The measured output power within ± 5 mm of the triggering points, or until the tablet is touching the phantom, for movements to and from the phantom should be tabulated.

8) To ensure all production units are compliant, it is generally necessary to reduce the triggering distance determined from the triggering tests by 1 mm, or more if it is necessary, and use the smallest distance for movements to and from the phantom, minus 1 mm, as the sensor triggering distance for determining the SAR measurement distance.

9) For back side, the trigger distance of proximity sensor is 11mm.

10) For top side, the trigger distance of proximity sensor is 7mm, and we perform the 1.6.3 tilt angle testing in next step.

1.6.3 Tilt angle testing

Test procedure:

1) The influence of table tilt angles to proximity sensor triggering is determined by positioning each tablet edge that contains a transmitting antenna, perpendicular to the flat phantom, at the smallest sensor triggering test distance determined in sections 1.6.2 by rotating the tablet around the edge next to the phantom in ≤ 10 deg increments until the tablet is +/- 45deg or more from the vertical position at 0 deg.

2) If sensor triggering is released and normal maximum output power is restored within the +/- 45deg range, the procedures in step 1) should be repeated by reducing the tablet to phantom separation distance by 1 mm until the proximity sensor no longer releases triggering, and maximum output power remains in the reduced mode.

3) The smallest separation distance determined in steps 1) and 2), minus 1 mm, is the sensor triggering distance for tablet tilt coverage. The smallest separation distance determined in sections 1.6.2, 1.6.3 minus 1 mm should be used in the SAR measurements.

4) The influence of tablet tilt angles to proximity sensor triggering is determined by positioning top and right sides, please refer to table 1.6.5 and 1.6.6.

5) After the tilt angle testing for top side, the sensor is not released during +/- 45deg, so 7-1=6mm, is the sensor triggering distance for tablet tilt coverage. The smallest separation distance minus 1 mm(6-1=5mm) should be used in the SAR measurements.

1.6.4 Proximity sensor coverage

The following procedures do not apply and are not required for configurations where the antenna and sensor are collocated and the peak SAR location is overlapping with the sensor.

Test procedure:

1) The back surface or edges of the tablet is positioned at a test separation distance less than or equal to the distance required for back surface or edge triggering, with both the antenna and sensor pad located at least 20 mm laterally outside the edge (boundary) of the phantom, along the direction of maximum antenna and sensor offset.

2) The similar sequence of steps applied to determine sensor triggering distance in section 1.6.2 are used to verify back surface and edge sensor coverage by moving the tablet (sensor and antenna) horizontally toward the phantom while maintaining the same vertical separation between the back surface or edge and the phantom.

3) After the exact location where triggering of power reduction is determined, with respect to the sensor and antenna, the tablet movement should be continued, in 3 mm increments, until both the sensor and antenna(s) are fully under the phantom and at least 20 mm inside the phantom edge.

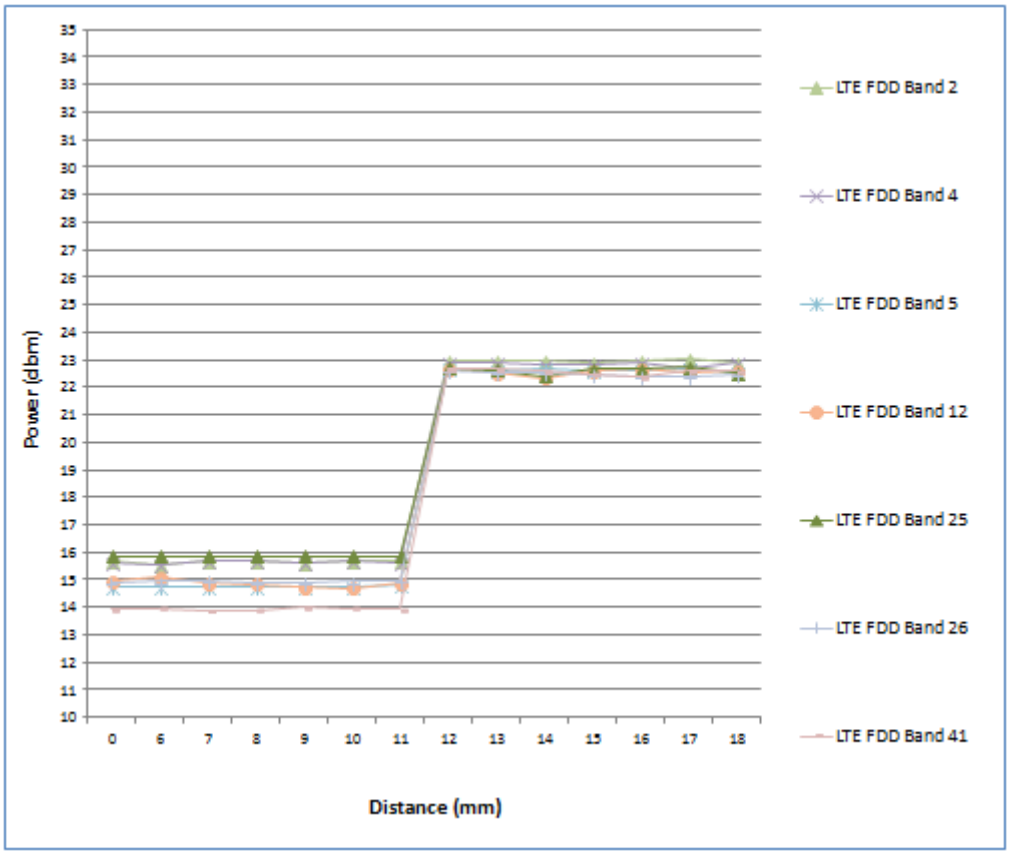
4) The process is then repeated from the other direction, at the opposite end of maximum antenna and sensor offset, by rotating the tablet 180 degrees.

1.6.5 Results

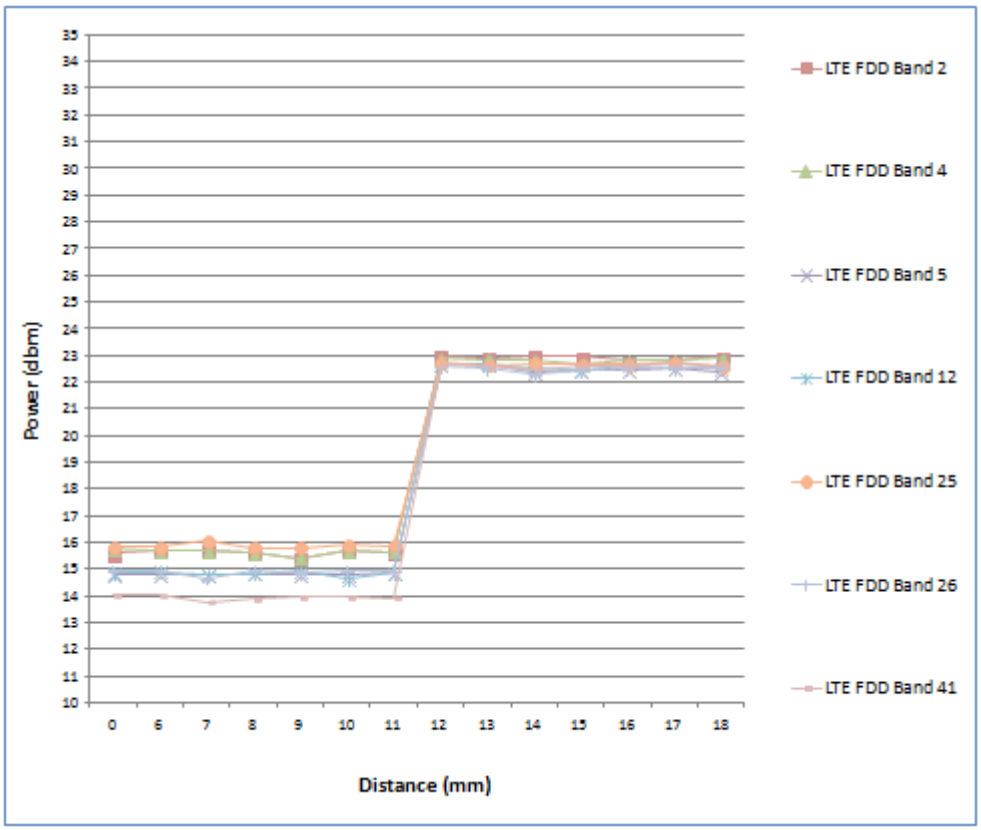
The measured output power within ± 5 mm of the triggering points, or until the tablet is touching the phantom, for movements to and from the phantom is tabulated in the following.

**Back side**

Moving device toward the phantom



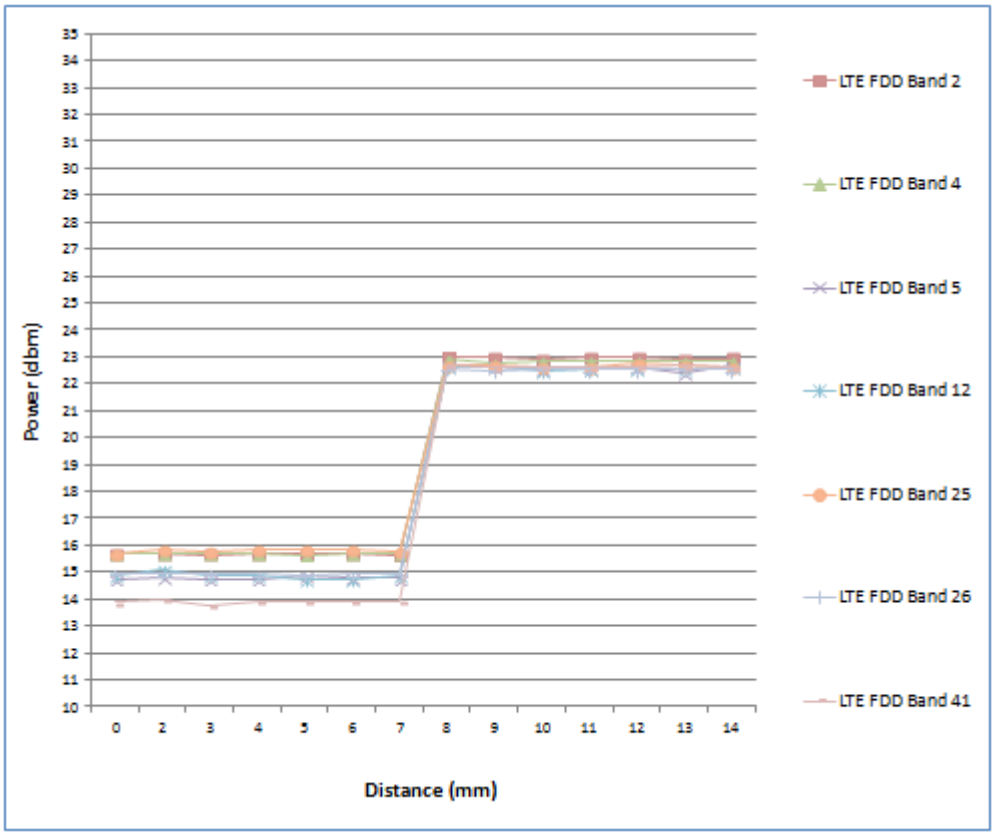
Moving device away from the phantom




For back side, the worst trigger distance of proximity sensor is 11mm, thus we test back side SAR in 10mm without power reduction and 0mm with power reduction.

## Top side

Moving device toward the phantom



Moving device away from the phantom

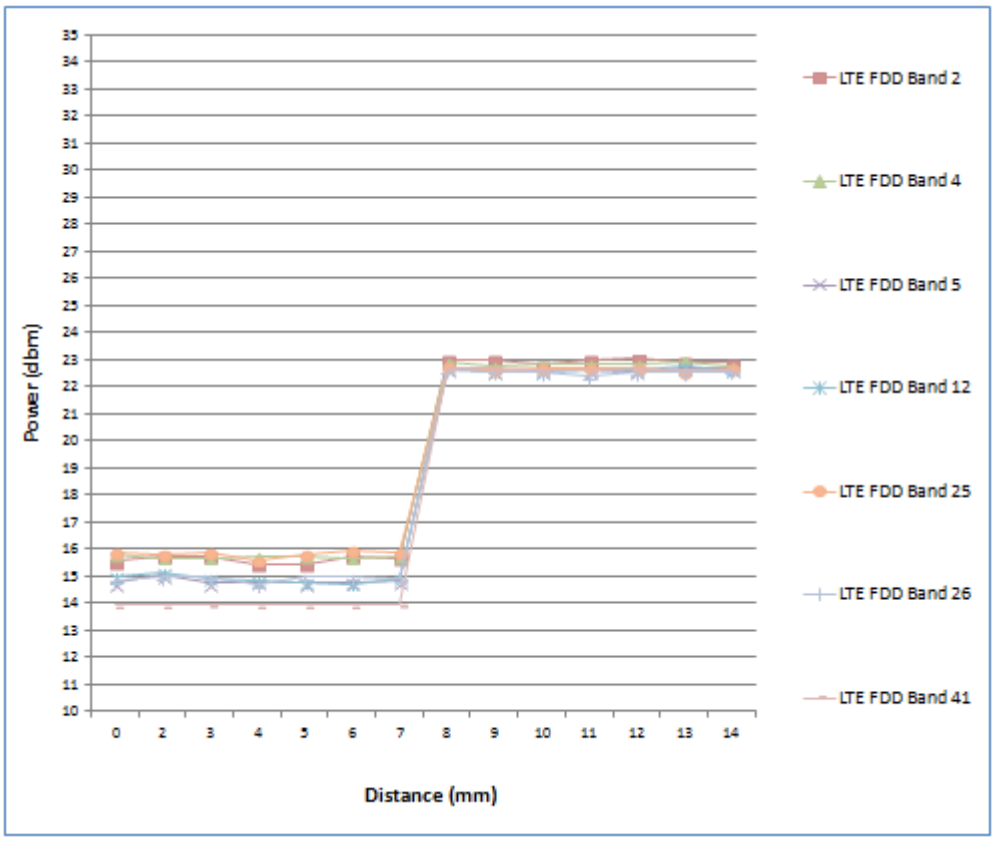



Table 1.6.5 Tilt angle test results for top side

| P-sensor ON/OFF | -50 deg | -45 deg | -40 deg | -30 deg | -20 deg | -10 deg | 0 deg | 10 deg | 20 deg | 30 deg | 40 deg | 45 deg | 50 deg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7mm | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON |

During the tilt angle testing for top side, the sensor is not released in 7mm, so 7-1=6mm, is the sensor triggering distance for tablet tilt coverage. The smallest separation distance minus 1 mm(6-1=5mm) should be used in the SAR measurements for top side.

Note:

1. The triggering variations and hysteresis effect has been evaluated separately according to the tissue-equivalent medium required for each frequency band, and sensor triggering does not change with different tissue-equivalent media.

2. The default power level for sensor failure and malfunctioning, including all compliance concerns, has been addressed in the client's operation description (1.6.6) for the proximity sensor implementation to be acceptable.

3. Conducted power is monitored qualitatively to identify the general triggering characteristics and recorded quantitatively, versus spacing.

1.6.6 Operation description for P-sensor

**Power Reduction Design Specification (for P-sensor)**

The mechanism of power reduction is used only for WWAN, not for Wi-Fi and Bluetooth. The reduced power for each technology/band is defined in Table1-1. With P-sensor mechanism, the LTE default power when P-sensor failure or malfunction are show in Table1-2 as below.

**Table1-1：The power reduction scenario table**

| Band | Power Reduction |
|---|---|
| LTE B2/4/5/12/25/26/41 | YES |
| WLAN | NO |
| BT | NO |

**Table1-2：The default maximum power when p-sensor failure or malfunction**

| Technology / Band | Mode | Default Maximum Power (dBm) |
|---|---|---|
| LTE B2 | All | 16 |
| LTE B4 | All | 16 |
| LTE B5 | All | 15 |
| LTE B12 | All | 15 |
| LTE B25 | All | 16 |
| LTE B26 | All | 15 |
| LTE B41 | All | 14 |

## 1.7 The SAR Measurement System

A block diagram of the SAR measurement System is given in Fig. a. This SAR Measurement System uses a Computer-controlled 3-D stepper motor system (SPEAG DASY 5 professional system). The model EX3DV4 field probe is used to determine the internal electric fields. The SAR can be obtained from the equation SAR= σ ($|Ei|^2$)/ ρ where σ and ρ are the conductivity and mass density of the tissue-simulant.

The DASY 5 system for performing compliance tests consists of the following items:

- A standard high precision 6-axis robot (Staubli RX family) with controller, teach pendant and software. An arm extension is for accommodating the data acquisition electronics (DAE).
- A dosimetric probe, i.e., an isotropic E-field probe optimized and calibrated for usage intissue simulating liquid. The probe is equipped with an optical surface detector system.
- 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.

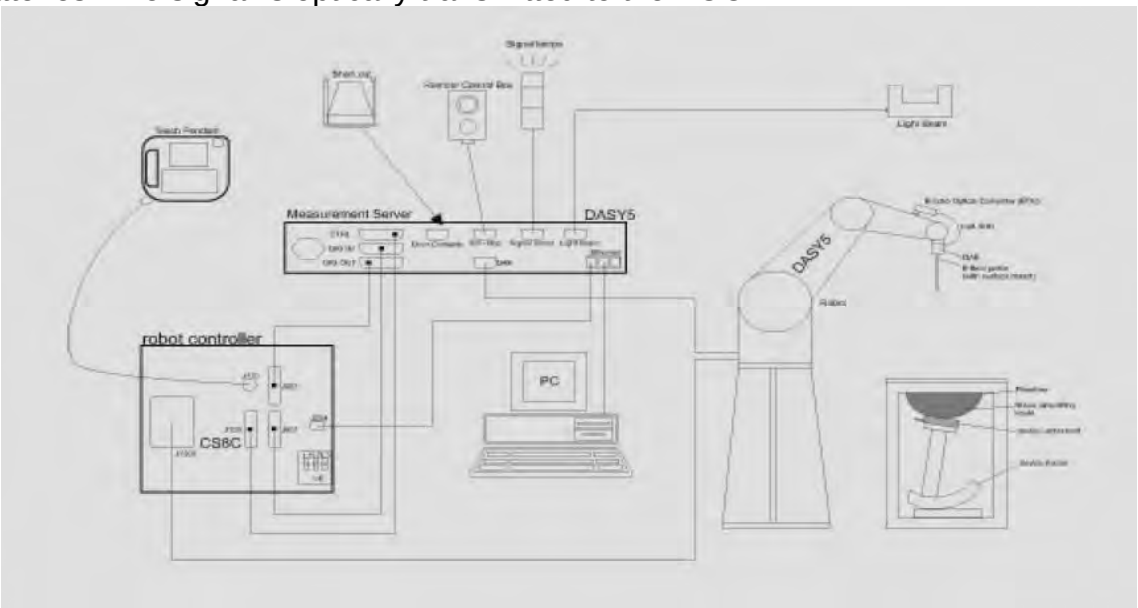



Fig. a The block diagram of SAR system

- The Electro-optical converter (EOC) performs the conversion between optical and electrical of the signals for the digital communication to the DAE and for the analog signal from the optical surface detection. The EOC is connected to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- A probe alignment unit which improves the (absolute) accuracy of the probe positioning.
- A computer operating Windows 7.
- DASY 5 software.
- Remote control with teach pendant and additional circuitry for robot safety such as warning lamps, etc.
- The SAM twin phantom enabling testing left-hand and right-hand usage.
- The device holder for handheld mobile phones.
- Tissue simulating liquid mixed according to the given recipes.
  Validation dipole kits allowing to validate the proper functioning of the system.

## 1.8 System Components

### EX3DV4 E-Field Probe

| | | |
|---|---|---|
| Construction | Symmetrical design with triangular core<br>Built-in shielding against static charges<br>PEEK enclosure material (resistant to organic solvents, e.g., DGBE) |  |
| Calibration | Basic Broad Band Calibration in air<br>Conversion Factors (CF) for HSL 750/835/ 1750/1900/2450/2600 MHz Additional CF for other liquids and frequencies upon request | |
| Frequency | 10 MHz to > 6 GHz | |
| Directivity | ± 0.3 dB in HSL (rotation around probe axis)<br>± 0.5 dB in tissue material (rotation normal to probe axis) | |
| Dynamic Range | 10 µW/g to > 100 mW/g<br>Linearity: ± 0.2 dB (noise: typically < 1 µW/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%. | |

## SAM PHANTOM V4.0C

| | | |
|---|---|---|
| Construction | The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528 and IEC 62209.<br>It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points with the robot. | |
| Shell Thickness | 2 ± 0.2 mm |  |
| Filling Volume | Approx. 25 liters | |
| Dimensions | Height: 850 mm;<br>Length: 1000 mm;<br>Width: 500 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. |  <br>Device Holder |

## 1.9 SAR System Verification

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 +/- 10% from the target SAR values. These tests were done at 750/835/1750/1900/2450/2600 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 (SAR values are normalized to 1W forward power delivered to the dipole). During the tests, the ambient temperature of the laboratory was 21.7°C, the relative humidity was 62% and the liquid depth above the ear reference points was ≥ 15 cm ± 5 mm (frequency ≤ 3 GHz) or ≥ 10 cm ± 5 mm (frequency > 3 G Hz) 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.

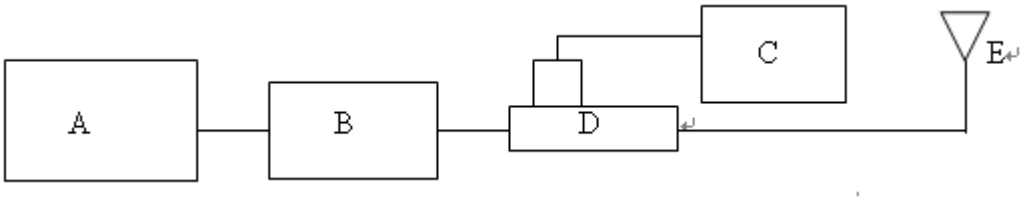



Fig. b The block diagram of system verification

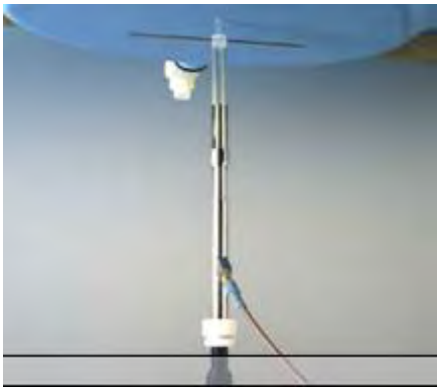
A. Signal generator

B. Amplifier

C. Power meter

D. Dual directional coupling

E. Reference dipole antenna



Photograph of the dipole Antenna

| Validation Kit | S/N | Frequency (MHz) | | 1W Target SAR-1g (mW/g) | Measured SAR-1g (mW/g) | Measured SAR-1g normalized to 1W | Deviation (%) | Measured Date |
|---|---|---|---|---|---|---|---|---|
| D750V2 | 1015 | 750 | Body | 8.52 | 2.16 | 8.64 | 1.41% | Oct. 01, 2015 |
| D835V2 | 4d063 | 835 | Body | 9.28 | 2.41 | 9.64 | 3.88% | Oct. 02, 2015 |
| D1750V2 | 1008 | 1750 | Body | 37.4 | 9.42 | 37.68 | 0.75% | Sep. 29, 2015 |
| D1900V2 | 5d027 | 1900 | Body | 39.3 | 9.85 | 39.4 | 0.25% | Oct. 05, 2015 |
| D2450V2 | 727 | 2450 | Body | 51 | 13.1 | 52.4 | 2.75% | Sep. 26, 2015 |
| D2600V2 | 1005 | 2600 | Body | 55.1 | 14.1 | 56.4 | 2.36% | Sep. 25, 2015 |

Table 1. Results of system validation

## 1.10 Tissue Simulant Fluid for the Frequency Band

The dielectric properties for this body-simulant fluid were measured by using the Agilent Model 85070E Dielectric Probe (rates frequency band 200 MHz to 20 GHz) in conjunction with Network Analyzer (30 KHz-6000 MHz).

All dielectric parameters of tissue simulates were measured within 24 hours of SAR measurements. The depth of the tissue simulant in the flat section of the phantom was ≥ 15 cm ± 5 mm (Frequency ≤3G) or ≥ 10 cm ± 5 mm (Frequency >3G) during all tests. (Fig. 2)

| Tissue Type | Measurement Date | Measured Frequency (MHz) | Target Dielectric Constant, εr | Target Conductivity, σ (S/m) | Measured Dielectric Constant, εr | Measured Conductivity, σ (S/m) | % dev εr | % dev σ |
|---|---|---|---|---|---|---|---|---|
| Body | Oct. 01, 2015 | 711 | 55.683 | 0.960 | 54.274 | 0.979 | 2.53% | -2.02% |
| | | 750 | 55.531 | 0.963 | 54.104 | 0.984 | 2.57% | -2.15% |
| | Oct. 02, 2015 | 822.5 | 55.249 | 0.969 | 53.757 | 0.990 | 2.70% | -2.19% |
| | | 829 | 55.223 | 0.970 | 53.688 | 0.992 | 2.78% | -2.29% |
| | | 831.5 | 55.214 | 0.970 | 53.629 | 0.993 | 2.87% | -2.41% |
| | | 835 | 55.200 | 0.970 | 53.561 | 0.994 | 2.97% | -2.49% |
| | | 836.5 | 55.195 | 0.972 | 53.462 | 0.997 | 3.14% | -2.62% |
| | | 841.5 | 55.180 | 0.978 | 53.398 | 1.004 | 3.23% | -2.65% |
| | | 844 | 55.172 | 0.981 | 53.357 | 1.009 | 3.29% | -2.83% |
| | Sep. 29, 2015 | 1720 | 53.511 | 1.469 | 51.906 | 1.506 | 3.00% | -2.49% |
| | | 1732.5 | 53.478 | 1.477 | 51.884 | 1.514 | 2.98% | -2.52% |
| | | 1745 | 53.445 | 1.485 | 51.852 | 1.523 | 2.98% | -2.54% |
| | | 1750 | 53.432 | 1.488 | 51.845 | 1.526 | 2.97% | -2.55% |
| | Oct. 05, 2015 | 1860 | 53.300 | 1.520 | 51.717 | 1.551 | 2.97% | -2.04% |
| | | 1880 | 53.300 | 1.520 | 51.701 | 1.554 | 3.00% | -2.24% |
| | | 1882.5 | 53.300 | 1.520 | 51.690 | 1.556 | 3.02% | -2.37% |
| | | 1900 | 53.300 | 1.520 | 51.688 | 1.558 | 3.02% | -2.50% |
| | | 1905 | 53.300 | 1.520 | 51.680 | 1.559 | 3.04% | -2.57% |
| | Sep. 26, 2015 | 2412 | 52.751 | 1.914 | 51.368 | 1.953 | 2.62% | -2.04% |
| | | 2437 | 52.717 | 1.932 | 51.277 | 1.966 | 2.73% | -1.75% |
| | | 2450 | 52.700 | 1.950 | 51.262 | 1.984 | 2.73% | -1.75% |
| | | 2462 | 52.685 | 1.967 | 51.147 | 1.996 | 2.92% | -1.48% |
| | Sep. 25, 2015 | 2506 | 52.629 | 2.029 | 50.841 | 2.066 | 3.40% | -1.82% |
| | | 2593 | 52.518 | 2.153 | 50.685 | 2.174 | 3.49% | -0.98% |
| | | 2600 | 52.509 | 2.163 | 50.682 | 2.184 | 3.48% | -0.96% |
| | | 2680 | 52.407 | 2.276 | 50.594 | 2.299 | 3.46% | -1.02% |

Table 2. Dielectric Parameters of Tissue Simulant Fluid

The composition of the body tissue simulating liquid:

| Frequency (MHz) | Mode | Ingredient | | | | | | Total amount |
|---|---|---|---|---|---|---|---|---|
| | | DGMBE | Water | Salt | Preventol D-7 | Cellulose | Sugar | |
| 750 | Body | — | 631.68 g | 11.72 g | 1.2 g | — | 600 g | 1.0L(Kg) |
| 850 | Body | — | 631.68 g | 11.72 g | 1.2 g | — | 600 g | 1.0L(Kg) |
| 1750 | Body | 300.67 g | 716.56 g | 4.0 g | — | — | — | 1.0L(Kg) |
| 1900 | Body | 300.67 g | 716.56 g | 4.0 g | — | — | — | 1.0L(Kg) |
| 2450 | Body | 301.7ml | 698.3ml | — | — | — | — | 1.0L(Kg) |
| 2600 | Body | 301.7ml | 698.3ml | — | — | — | — | 1.0L(Kg) |

Table 3. Recipes for Tissue Simulating Liquid

## 1.11 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 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.

## 1.12 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:

### 1.12.1 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.

$$SAR = \frac{\sigma}{\rho}|E|^2 = c\frac{\delta T}{\delta t}$$

whereby σ is the conductivity, ρ 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:

- 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.

- The measured volume around the temperature probe is not well defined. It is 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.
- 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 (~ 2% for c; much better for ρ) , there is no standard for the measurement of the conductivity. Depending on the method and liquid, the error can well exceed ±5%.
- 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 ±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 ±5% (RSS) when the same liquid is used for the calibration and for actual measurements and ±7-9% (RSS) when not, which is in good agreement with the estimates given in [2].

### 1.12.2 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:

- The setup must enable accurate determination of the incident power.
- The accuracy of the calculated field strength will depend on the assessment of the dielectric parameters of the liquid.
- 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.

## 1.13 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 an 10 grams of tissue (defined as a tissue volume in the shape of a cube).

(2) 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.

(3) 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). 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 4.)

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

Table 4. RF exposure limits

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.

# 2. Summary of Results

## LTE FDD Band II (Full power)

| Mode | Bandwidth (MHz) | Modulation | RB Size | RB start | Position | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Scaling | Averaged SAR over 1g (W/kg) | | Plot page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Measured | Reported | |
| LTE Band 2 | 20MHz | QPSK | 1 RB | 0 | Top side | 5mm | 18900 | 1880 | 23 | 22.77 | 5.44% | 0.988 | 1.042 | 132 |
| | | | | | Left side | 0mm | 18900 | 1880 | 23 | 22.77 | 5.44% | 0.872 | 0.919 | - |
| | | | | 50 | Back side | 10mm | 18700 | 1860 | 23 | 23.00 | 0.00% | 0.737 | 0.737 | - |
| | | | | | Top side | 5mm | 18700 | 1860 | 23 | 23.00 | 0.00% | 0.930 | 0.930 | - |
| | | | | | Top side | 5mm | 19100 | 1900 | 23 | 22.72 | 6.66% | 0.840 | 0.896 | - |
| | | | | | Left side | 0mm | 18700 | 1860 | 23 | 23.00 | 0.00% | 0.880 | 0.880 | - |
| | | | | | Left side | 0mm | 19100 | 1900 | 23 | 22.72 | 6.66% | 0.742 | 0.791 | - |
| | | | 50 RB | 0 | Back side | 10mm | 19100 | 1900 | 22 | 21.85 | 3.51% | 0.551 | 0.570 | - |
| | | | | | Top side | 5mm | 19100 | 1900 | 22 | 21.85 | 3.51% | 0.744 | 0.770 | - |
| | | | | | Left side | 0mm | 19100 | 1900 | 22 | 21.85 | 3.51% | 0.671 | 0.695 | - |
| | | | 100 RB | | Back side | 10mm | 18900 | 1880 | 22 | 21.85 | 3.51% | 0.548 | 0.567 | - |
| | | | | | Top side | 5mm | 18900 | 1880 | 22 | 21.85 | 3.51% | 0.741 | 0.767 | - |
| | | | | | Left side | 0mm | 18900 | 1880 | 22 | 21.85 | 3.51% | 0.669 | 0.693 | - |

## LTE FDD Band II (Reduced power)

| Mode | Bandwidth (MHz) | Modulation | RB Size | RB start | Position | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Scaling | Averaged SAR over 1g (W/kg) | | Plot page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Measured | Reported | |
| LTE Band 2 | 20MHz | QPSK | 1 RB | 0 | Back side | 0mm | 18700 | 1860 | 16 | 15.59 | 9.90% | 1.110 | 1.220 | 133 |
| | | | | | Back side* | 0mm | 18700 | 1860 | 16 | 15.59 | 9.90% | 1.070 | 1.176 | - |
| | | | | 50 | Back side | 0mm | 18900 | 1880 | 16 | 15.65 | 8.39% | 1.100 | 1.192 | - |
| | | | | | Back side | 0mm | 19100 | 1900 | 16 | 15.72 | 6.66% | 1.090 | 1.163 | - |
| | | | | | Top side | 0mm | 19100 | 1900 | 16 | 15.72 | 6.66% | 0.539 | 0.575 | - |
| | | | 50 RB | 0 | Back side | 0mm | 18900 | 1880 | 15 | 14.71 | 6.91% | 0.905 | 0.967 | - |
| | | | | 25 | Back side | 0mm | 18700 | 1860 | 15 | 14.77 | 5.44% | 0.912 | 0.962 | - |
| | | | | | Back side | 0mm | 19100 | 1900 | 15 | 14.64 | 8.64% | 0.889 | 0.966 | - |
| | | | | | Top side | 0mm | 18700 | 1860 | 15 | 14.77 | 5.44% | 0.435 | 0.459 | - |
| | | | 100 RB | | Back side | 0mm | 18700 | 1860 | 15 | 14.67 | 7.89% | 0.896 | 0.967 | - |
| | | | | | Back side | 0mm | 18900 | 1880 | 15 | 14.54 | 11.17% | 0.863 | 0.959 | - |
| | | | | | Back side | 0mm | 19100 | 1900 | 15 | 14.49 | 12.46% | 0.849 | 0.955 | - |
| | | | | | Top side | 0mm | 18700 | 1860 | 15 | 14.67 | 7.89% | 0.425 | 0.459 | - |

*- repeated at the highest SAR measurement according to the FCC KDB865664D01v01r04

## LTE FDD Band IV (Full power)

| Mode | Bandwidth (MHz) | Modulation | RB Size | RB start | Position | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Scaling | Averaged SAR over 1g (W/kg) | | Plot page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Measured | Reported | |
| LTE Band 4 | 20MHz | QPSK | 1 RB | 0 | Back side | 10mm | 20050 | 1720 | 23 | 22.88 | 2.80% | 0.578 | 0.594 | - |
| | | | | | Top side | 5mm | 20050 | 1720 | 23 | 22.88 | 2.80% | 0.740 | 0.761 | 134 |
| | | | | | Left side | 0mm | 20050 | 1720 | 23 | 22.88 | 2.80% | 0.614 | 0.631 | - |
| | | | 50 RB | 0 | Back side | 10mm | 20300 | 1745 | 22 | 21.93 | 1.62% | 0.451 | 0.458 | - |
| | | | | | Top side | 5mm | 20300 | 1745 | 22 | 21.93 | 1.62% | 0.581 | 0.590 | - |
| | | | | | Left side | 0mm | 20300 | 1745 | 22 | 21.93 | 1.62% | 0.486 | 0.494 | - |
| | | | 100 RB | | Back side | 10mm | 20300 | 1745 | 22 | 21.75 | 5.93% | 0.423 | 0.448 | - |
| | | | | | Top side | 5mm | 20300 | 1745 | 22 | 21.75 | 5.93% | 0.572 | 0.606 | - |
| | | | | | Left side | 0mm | 20300 | 1745 | 22 | 21.75 | 5.93% | 0.475 | 0.503 | - |

## LTE FDD Band IV (Reduced power)

| Mode | Bandwidth (MHz) | Modulation | RB Size | RB start | Position | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Scaling | Averaged SAR over 1g (W/kg) | | Plot page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Measured | Reported | |
| LTE Band 4 | 20MHz | QPSK | 1 RB | 0 | Back side | 0mm | 20050 | 1720 | 16 | 15.60 | 9.65% | 0.959 | 1.052 | - |
| | | | | 50 | Back side | 0mm | 20175 | 1732.5 | 16 | 15.68 | 7.65% | 0.952 | 1.025 | - |
| | | | | | Back side | 0mm | 20300 | 1745 | 16 | 15.73 | 6.41% | 0.961 | 1.023 | 135 |
| | | | | | Back side* | 0mm | 20300 | 1745 | 16 | 15.73 | 6.41% | 0.916 | 0.975 | - |
| | | | | | Top side | 0mm | 20300 | 1745 | 16 | 15.73 | 6.41% | 0.507 | 0.540 | - |
| | | | 50 RB | 0 | Back side | 0mm | 20300 | 1745 | 15 | 14.54 | 11.17% | 0.711 | 0.790 | - |
| | | | | | Top side | 0mm | 20300 | 1745 | 15 | 14.54 | 11.17% | 0.371 | 0.412 | - |
| | | | 100 RB | | Back side | 0mm | 20300 | 1745 | 15 | 14.46 | 13.24% | 0.699 | 0.792 | - |
| | | | | | Top side | 0mm | 20300 | 1745 | 15 | 14.46 | 13.24% | 0.359 | 0.407 | - |

*- repeated at the highest SAR measurement according to the FCC KDB865664D01v01r04

## LTE FDD Band V (Full power)

| Mode | Bandwidth (MHz) | Modulation | RB Size | RB start | Position | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Scaling | Averaged SAR over 1g (W/kg) | | Plot page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Measured | Reported | |
| LTE Band 5 | 10MHz | QPSK | 1 RB | 0 | Back side | 10mm | 20450 | 829 | 23 | 22.58 | 10.15% | 0.809 | 0.891 | - |
| | | | | 25 | Back side | 10mm | 20600 | 844 | 23 | 22.63 | 8.89% | 0.901 | 0.981 | 136 |
| | | | | | Back side* | 10mm | 20600 | 844 | 23 | 22.63 | 8.89% | 0.884 | 0.963 | - |
| | | | | 49 | Back side | 10mm | 20525 | 836.5 | 23 | 22.68 | 7.65% | 0.822 | 0.885 | - |
| | | | | | Top side | 5mm | 20525 | 836.5 | 23 | 22.68 | 7.65% | 0.264 | 0.284 | - |
| | | | | | Left side | 0mm | 20525 | 836.5 | 23 | 22.68 | 7.65% | 0.514 | 0.553 | - |
| | | | 25 RB | 0 | Back side | 10mm | 20600 | 844 | 22 | 21.67 | 7.89% | 0.714 | 0.770 | - |
| | | | | | Top side | 5mm | 20600 | 844 | 22 | 21.67 | 7.89% | 0.215 | 0.232 | - |
| | | | | | Left side | 0mm | 20600 | 844 | 22 | 21.67 | 7.89% | 0.407 | 0.439 | - |
| | | | 50 RB | | Back side | 10mm | 20450 | 829 | 22 | 21.65 | 8.39% | 0.711 | 0.771 | - |
| | | | | | Top side | 5mm | 20450 | 829 | 22 | 21.65 | 8.39% | 0.211 | 0.229 | - |
| | | | | | Left side | 0mm | 20450 | 829 | 22 | 21.65 | 8.39% | 0.404 | 0.438 | - |

*- repeated at the highest SAR measurement according to the FCC KDB865664D01v01r04

## LTE FDD Band V (Reduced power)

| Mode | Bandwidth (MHz) | Modulation | RB Size | RB start | Position | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Scaling | Averaged SAR over 1g (W/kg) | | Plot page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Measured | Reported | |
| LTE Band 5 | 10MHz | QPSK | 1 RB | 49 | Back side | 0mm | 20450 | 829 | 15 | 14.85 | 3.51% | 0.649 | 0.672 | 137 |
| | | | | | Top side | 0mm | 20450 | 829 | 15 | 14.85 | 3.51% | 0.069 | 0.071 | - |
| | | | 25 RB | 0 | Back side | 0mm | 20525 | 836.5 | 15 | 14.83 | 3.99% | 0.635 | 0.660 | - |
| | | | | | Top side | 0mm | 20525 | 836.5 | 15 | 14.83 | 3.99% | 0.063 | 0.066 | - |
| | | | 50 RB | | Back side | 0mm | 20600 | 844 | 15 | 14.79 | 4.95% | 0.628 | 0.659 | - |
| | | | | | Top side | 0mm | 20600 | 844 | 15 | 14.79 | 4.95% | 0.062 | 0.065 | - |

## LTE FDD Band XII (Full power)

| Mode | Bandwidth (MHz) | Modulation | RB Size | RB start | Position | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Scaling | Averaged SAR over 1g (W/kg) | | Plot page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Measured | Reported | |
| LTE Band 12 | 10MHz | QPSK | 1 RB | 49 | Back side | 10mm | 23130 | 711 | 23 | 22.64 | 8.64% | 0.393 | 0.427 | 138 |
| | | | | | Top side | 5mm | 23130 | 711 | 23 | 22.64 | 8.64% | 0.179 | 0.194 | - |
| | | | | | Left side | 0mm | 23130 | 711 | 23 | 22.64 | 8.64% | 0.200 | 0.217 | - |
| | | | 25 RB | 0 | Back side | 10mm | 23130 | 711 | 22 | 21.78 | 5.20% | 0.302 | 0.318 | - |
| | | | | | Top side | 5mm | 23130 | 711 | 22 | 21.78 | 5.20% | 0.141 | 0.148 | - |
| | | | | | Left side | 0mm | 23130 | 711 | 22 | 21.78 | 5.20% | 0.158 | 0.166 | - |
| | | | 50 RB | | Back side | 10mm | 23130 | 711 | 22 | 21.67 | 7.89% | 0.293 | 0.316 | - |
| | | | | | Top side | 5mm | 23130 | 711 | 22 | 21.67 | 7.89% | 0.139 | 0.150 | - |
| | | | | | Left side | 0mm | 23130 | 711 | 22 | 21.67 | 7.89% | 0.157 | 0.169 | - |

## LTE FDD Band XII (Reduced power)

| Mode | Bandwidth (MHz) | Modulation | RB Size | RB start | Position | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Scaling | Averaged SAR over 1g (W/kg) | | Plot page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Measured | Reported | |
| LTE Band 12 | 10MHz | QPSK | 1 RB | 25 | Back side | 0mm | 23130 | 711 | 15 | 14.92 | 1.86% | 0.475 | 0.484 | 139 |
| | | | | | Top side | 0mm | 23130 | 711 | 15 | 14.92 | 1.86% | 0.077 | 0.078 | - |
| | | | 25 RB | 12 | Back side | 0mm | 23130 | 711 | 14 | 13.83 | 3.99% | 0.362 | 0.376 | - |
| | | | | | Top side | 0mm | 23130 | 711 | 14 | 13.83 | 3.99% | 0.055 | 0.057 | - |
| | | | 50 RB | | Back side | 0mm | 23130 | 711 | 14 | 13.75 | 5.93% | 0.351 | 0.372 | - |
| | | | | | Top side | 0mm | 23130 | 711 | 14 | 13.75 | 5.93% | 0.052 | 0.055 | - |

## LTE FDD Band XXV (Full power)

| Mode | Bandwidth (MHz) | Modulation | RB Size | RB start | Position | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Scaling | Averaged SAR over 1g (W/kg) | | Plot page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Measured | Reported | |
| LTE Band 25 | 20MHz | QPSK | 1 RB | 0 | Back side | 10mm | 26365 | 1882.5 | 23 | 22.69 | 7.40% | 0.793 | 0.852 | - |
| | | | | | Top side | 5mm | 26365 | 1882.5 | 23 | 22.69 | 7.40% | 0.740 | 0.795 | - |
| | | | | | Left side | 0mm | 26365 | 1882.5 | 23 | 22.69 | 7.40% | 0.742 | 0.797 | - |
| | | | | 99 | Back side | 10mm | 26140 | 1860 | 23 | 22.44 | 13.76% | 0.731 | 0.832 | - |
| | | | | | Back side | 10mm | 26590 | 1905 | 23 | 22.58 | 10.15% | 0.842 | 0.927 | 140 |
| | | | 50 RB | 0 | Back side | 10mm | 26590 | 1905 | 22 | 21.69 | 7.40% | 0.677 | 0.727 | - |
| | | | | | Top side | 5mm | 26590 | 1905 | 22 | 21.69 | 7.40% | 0.592 | 0.636 | - |
| | | | | | Left side | 0mm | 26590 | 1905 | 22 | 21.69 | 7.40% | 0.589 | 0.633 | - |
| | | | 100 RB | | Back side | 10mm | 26365 | 1882.5 | 22 | 21.66 | 8.14% | 0.671 | 0.726 | - |
| | | | | | Top side | 5mm | 26365 | 1882.5 | 22 | 21.66 | 8.14% | 0.585 | 0.633 | - |
| | | | | | Left side | 0mm | 26365 | 1882.5 | 22 | 21.66 | 8.14% | 0.584 | 0.632 | - |

## LTE FDD Band XXV (Reduced power)

| Mode | Bandwidth (MHz) | Modulation | RB Size | RB start | Position | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Scaling | Averaged SAR over 1g (W/kg) | | Plot page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Measured | Reported | |
| LTE Band 25 | 20MHz | QPSK | 1 RB | 0 | Back side | 0mm | 26365 | 1882.5 | 16 | 15.88 | 2.80% | 1.180 | 1.213 | - |
| | | | | | Back side* | 0mm | 26365 | 1882.5 | 16 | 15.88 | 2.80% | 1.190 | 1.223 | 141 |
| | | | | | Top side | 0mm | 26365 | 1882.5 | 16 | 15.88 | 2.80% | 0.515 | 0.529 | - |
| | | | | 50 | Back side | 0mm | 26140 | 1860 | 16 | 15.77 | 5.44% | 1.090 | 1.149 | - |
| | | | | | Back side | 0mm | 26590 | 1905 | 16 | 15.67 | 7.89% | 1.160 | 1.252 | - |
| | | | 50 RB | 0 | Back side | 0mm | 26140 | 1860 | 15 | 14.56 | 10.66% | 0.844 | 0.934 | - |
| | | | | | Back side | 0mm | 26365 | 1882.5 | 15 | 14.58 | 10.15% | 0.841 | 0.926 | - |
| | | | | | Back side | 0mm | 26590 | 1905 | 15 | 14.69 | 7.40% | 0.861 | 0.925 | - |
| | | | | | Top side | 0mm | 26590 | 1905 | 15 | 14.69 | 7.40% | 0.385 | 0.413 | - |
| | | | 100 RB | | Back side | 0mm | 26140 | 1860 | 15 | 14.48 | 12.72% | 0.819 | 0.923 | - |
| | | | | | Back side | 0mm | 16365 | 1882.5 | 15 | 14.54 | 11.17% | 0.824 | 0.916 | - |
| | | | | | Back side | 0mm | 26590 | 1905 | 15 | 14.61 | 9.40% | 0.842 | 0.921 | - |
| | | | | | Top side | 0mm | 26590 | 1905 | 15 | 14.61 | 9.40% | 0.371 | 0.406 | - |

*- repeated at the highest SAR measurement according to the FCC KDB865664D01v01r04

## LTE FDD Band XXVI (Full power)

| Mode | Bandwidth (MHz) | Modulation | RB Size | RB start | Position | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Scaling | Averaged SAR over 1g (W/kg) | | Plot page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Measured | Reported | |
| LTE Band 26 | 15MHz | QPSK | 1 RB | 0 | Back side | 10mm | 26825 | 822.5 | 23 | 22.25 | 18.85% | 0.795 | 0.945 | - |
| | | | | | Back side | 10mm | 26865 | 831.5 | 23 | 22.48 | 12.72% | 0.834 | 0.940 | 142 |
| | | | | | Back side* | 10mm | 26865 | 831.5 | 23 | 22.48 | 12.72% | 0.831 | 0.937 | - |
| | | | | | Back side | 10mm | 26965 | 841.5 | 23 | 22.57 | 10.41% | 0.831 | 0.917 | - |
| | | | | | Top side | 5mm | 26965 | 841.5 | 23 | 22.57 | 10.41% | 0.260 | 0.287 | - |
| | | | | | Left side | 0mm | 26965 | 841.5 | 23 | 22.57 | 10.41% | 0.502 | 0.554 | - |
| | | | 36 RB | 0 | Back side | 10mm | 26865 | 831.5 | 22 | 21.50 | 12.20% | 0.652 | 0.732 | - |
| | | | | | Top side | 5mm | 26865 | 831.5 | 22 | 21.50 | 12.20% | 0.196 | 0.220 | - |
| | | | | | Left side | 0mm | 26865 | 831.5 | 22 | 21.50 | 12.20% | 0.381 | 0.427 | - |
| | | | 75 RB | | Back side | 10mm | 26825 | 822.5 | 22 | 21.37 | 15.61% | 0.641 | 0.741 | - |
| | | | | | Top side | 5mm | 26825 | 822.5 | 22 | 21.37 | 15.61% | 0.189 | 0.219 | - |
| | | | | | Left side | 0mm | 26825 | 822.5 | 22 | 21.37 | 15.61% | 0.372 | 0.430 | - |

*- repeated at the highest SAR measurement according to the FCC KDB865664D01v01r04

## LTE FDD Band XXVI (Reduced power)

| Mode | Bandwidth (MHz) | Modulation | RB Size | RB start | Position | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Scaling | Averaged SAR over 1g (W/kg) | | Plot page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Measured | Reported | |
| LTE Band 26 | 15MHz | QPSK | 1 RB | 0 | Back side | 0mm | 26865 | 831.5 | 15 | 14.98 | 0.46% | 0.533 | 0.535 | 143 |
| | | | | | Top side | 0mm | 26865 | 831.5 | 15 | 14.98 | 0.46% | 0.065 | 0.065 | - |
| | | | 36 RB | 0 | Back side | 0mm | 26825 | 822.5 | 14 | 13.96 | 0.93% | 0.415 | 0.419 | - |
| | | | | | Top side | 0mm | 26825 | 822.5 | 14 | 13.96 | 0.93% | 0.048 | 0.048 | - |
| | | | 75 RB | | Back side | 0mm | 26825 | 822.5 | 14 | 13.89 | 2.57% | 0.403 | 0.413 | - |
| | | | | | Top side | 0mm | 26825 | 822.5 | 14 | 13.89 | 2.57% | 0.044 | 0.045 | - |

## LTE FDD Band XLI (Full power)

| Mode | Bandwidth (MHz) | Modulation | RB Size | RB start | Position | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Scaling | Averaged SAR over 1g (W/kg) | | Plot page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Measured | Reported | |
| LTE Band 41 | 20MHz | QPSK | 1 RB | 0 | Back side | 10mm | 40620 | 2593 | 23 | 22.67 | 7.89% | 0.300 | 0.324 | 144 |
| | | | | | Top side | 5mm | 40620 | 2593 | 23 | 22.67 | 7.89% | 0.180 | 0.194 | - |
| | | | | | Left side | 0mm | 40620 | 2593 | 23 | 22.67 | 7.89% | 0.237 | 0.256 | - |
| | | | 50 RB | 0 | Back side | 10mm | 39750 | 2506 | 22 | 21.56 | 10.66% | 0.221 | 0.245 | - |
| | | | | | Top side | 5mm | 39750 | 2506 | 22 | 21.56 | 10.66% | 0.127 | 0.141 | - |
| | | | | | Left side | 0mm | 39750 | 2506 | 22 | 21.56 | 10.66% | 0.179 | 0.198 | - |
| | | | 100 RB | | Back side | 10mm | 40620 | 2593 | 22 | 21.47 | 12.98% | 0.209 | 0.236 | - |
| | | | | | Top side | 5mm | 40620 | 2593 | 22 | 21.47 | 12.98% | 0.119 | 0.134 | - |
| | | | | | Left side | 0mm | 40620 | 2593 | 22 | 21.47 | 12.98% | 0.171 | 0.193 | - |

## LTE FDD Band XLI (Reduced power)

| Mode | Bandwidth (MHz) | Modulation | RB Size | RB start | Position | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Scaling | Averaged SAR over 1g (W/kg) | | Plot page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Measured | Reported | |
| LTE Band 41 | 20MHz | QPSK | 1 RB | 50 | Back side | 0mm | 41490 | 2680 | 14 | 13.99 | 0.23% | 0.450 | 0.451 | 145 |
| | | | | | Top side | 0mm | 41490 | 2680 | 14 | 13.99 | 0.23% | 0.065 | 0.065 | - |
| | | | 50 RB | 0 | Back side | 0mm | 41490 | 2680 | 13 | 12.97 | 0.69% | 0.344 | 0.346 | - |
| | | | | | Top side | 0mm | 41490 | 2680 | 13 | 12.97 | 0.69% | 0.048 | 0.048 | - |
| | | | 100 RB | | Back side | 0mm | 41490 | 2680 | 13 | 12.85 | 3.51% | 0.325 | 0.336 | - |
| | | | | | Top side | 0mm | 41490 | 2680 | 13 | 12.85 | 3.51% | 0.041 | 0.042 | - |

## WLAN802.11

| Mode | Position | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Scaling | Averaged SAR over 1g (W/kg) | | Plot page |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Measured | Reported | |
| WLAN802.11 b | Back side | 0 | 1 | 2412 | 15.5 | 15.47 | 0.69% | 0.903 | 0.909 | - |
| | Back side | 0 | 6 | 2437 | 15.5 | 14.96 | 13.24% | 1.120 | 1.268 | 146 |
| | Back side | 0 | 11 | 2462 | 15.5 | 14.82 | 16.95% | 0.861 | 1.007 | - |
| | Back side* | 0 | 6 | 2437 | 15.5 | 14.96 | 13.24% | 1.100 | 1.246 | - |
| | Top side | 0 | 1 | 2412 | 15.5 | 15.47 | 0.69% | 0.475 | 0.478 | - |
| | Right side | 0 | 1 | 2412 | 15.5 | 15.47 | 0.69% | 0.257 | 0.259 | - |
| WLAN802.11 n(40M) | Back side | 0 | 6 | 2437 | 15.5 | 15.44 | 1.39% | 0.701 | 0.711 | 147 |
| | Top side | 0 | 6 | 2437 | 15.5 | 15.44 | 1.39% | 0.402 | 0.408 | - |
| | Right side | 0 | 6 | 2437 | 15.5 | 15.44 | 1.39% | 0.198 | 0.201 | - |

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

# 3. Simultaneous Transmission Analysis

## Simultaneous Transmission Scenarios:

| Simultaneous Transmit Configurations | Body |
|---|---|
| LTE B2/4/5/12/25/26/41 + 2.4GHz WLAN | Yes |
| LTE B2/4/5/12/25/26/41 + BT | Yes |

Note:
1. WWAN and WLAN may transmit simultaneously.
2. Bluetooth and WLAN share the same antenna path, and BT can't transmit with WLAN simultaneously.

### 3.1 Estimated SAR calculation

According to KDB447498 D01v05 – 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.

| Mode / Band | frequency (GHz) | Maximum power(dBm) | Test position | test separation distance(mm) | Estimated SAR(W/kg) |
|---|---|---|---|---|---|
| BT / 2.4G | 2.48 | 7.5 | back/top/right | 5 | 0.236 |
| BT / 2.4G | 2.48 | 7.5 | left | > 50 | 0.4 |

| Mode / Band | frequency (GHz) | Maximum power(dBm) | Test position | test separation distance(mm) | Estimated SAR(W/kg) |
|---|---|---|---|---|---|
| WLAN | 2.462 | 15.5 | left | > 50 | 0.4 |

| Mode / Band | Maximum power(dBm) | Test position | test separation distance(mm) | Estimated SAR(W/kg) |
|---|---|---|---|---|
| WWAN | 23 | right | > 50 | 0.4 |

### 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 **(SAR1 + SAR2)^1.5/Ri**, rounded to two decimal digits, and must be **≤ 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 Ri is the separation distance between the peak SAR locations for the antenna pair in mm.

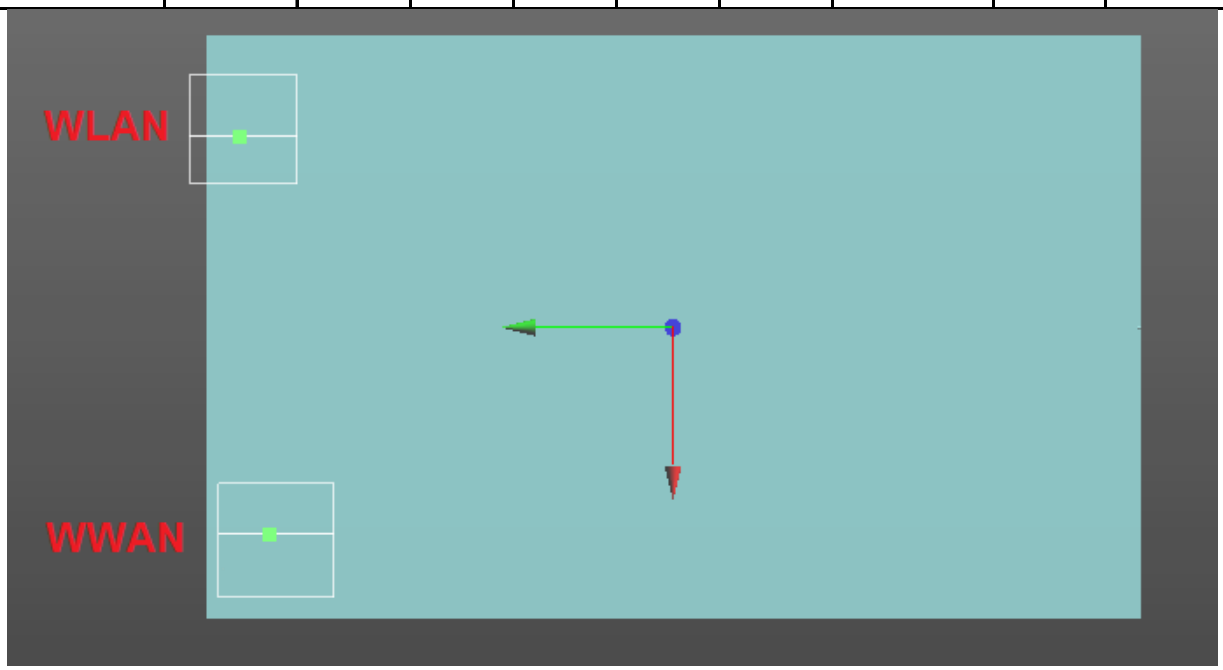
When standalone test exclusion applies, SAR is estimated; the peak location is assumed to be at the feed-point or geometric center of the antenna.

## LTE FDD Band II + 2.4GHz WLAN

| No. | Conditions | Position | Distance (mm) | Max. WWAN | Max. WLAN | SAR Sum | SPLSR |
|---|---|---|---|---|---|---|---|
| 1 | LTE B2 | Back side | 0 | 1.22 | 1.268 | **2.488** | Analyzed as below |
| | | Left side | 0 | 0.919 | 0.4 | 1.319 | ΣSAR<1.6, Not required |
| | | Top side | 0 | 0.575 | 0.478 | 1.053 | ΣSAR<1.6, Not required |
| | | Right side | 0 | 0.4 | 0.259 | 0.659 | ΣSAR<1.6, Not required |

WWAN & WLAN

| Conditions | Position | SAR Value (W/kg) | Coordinates (cm) | | | ΣSAR (W/kg) | Peak Location Separation Distance (mm) | SPLSR | Simultaneous Transmission SAR Test |
|---|---|---|---|---|---|---|---|---|---|
| | | | x | y | z | | | | |
| LTE Band 2 | Back side | 1.22 | 5.74 | 11.21 | -0.20 | 2.488 | 111 | 0.035 | SPLSR<0.04, Not required |
| WLAN | | 1.268 | -5.32 | 12.06 | -0.29 | | | | |

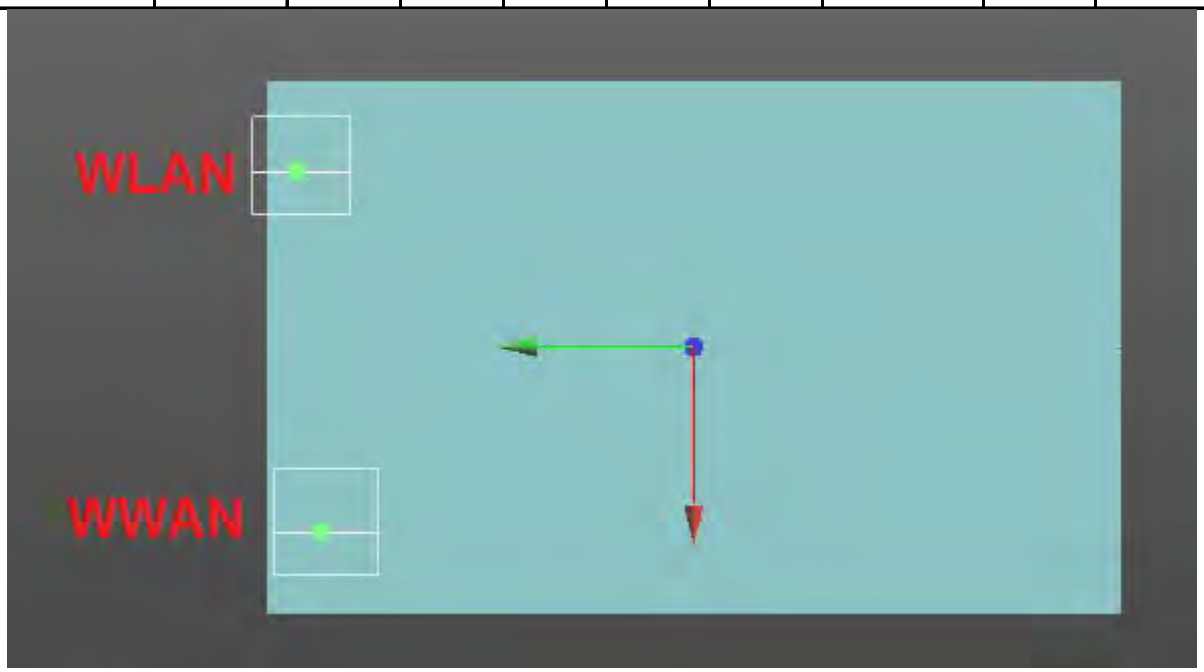


## LTE FDD Band IV + 2.4GHz WLAN

| No. | Conditions | Position | Distance (mm) | Max. WWAN | Max. WLAN | SAR Sum | SPLSR |
|---|---|---|---|---|---|---|---|
| 2 | LTE B4 | Back side | 0 | 1.052 | 1.268 | **2.32** | Analyzed as below |
| | | Left side | 0 | 0.631 | 0.4 | 1.031 | ΣSAR<1.6, Not required |
| | | Top side | 0 | 0.54 | 0.478 | 1.018 | ΣSAR<1.6, Not required |
| | | Right side | 0 | 0.4 | 0.259 | 0.659 | ΣSAR<1.6, Not required |

WWAN & WLAN

| Conditions | Position | SAR Value (W/kg) | Coordinates (cm) | | | ΣSAR (W/kg) | Peak Location Separation Distance (mm) | SPLSR | Simultaneous Transmission SAR Test |
|---|---|---|---|---|---|---|---|---|---|
| | | | x | y | z | | | | |
| LTE Band 4 | Back side | 1.052 | 5.62 | 11.36 | -0.20 | 2.32 | 109.6 | 0.032 | SPLSR<0.04, Not required |
| WLAN | | 1.268 | -5.32 | 12.06 | -0.29 | | | | |

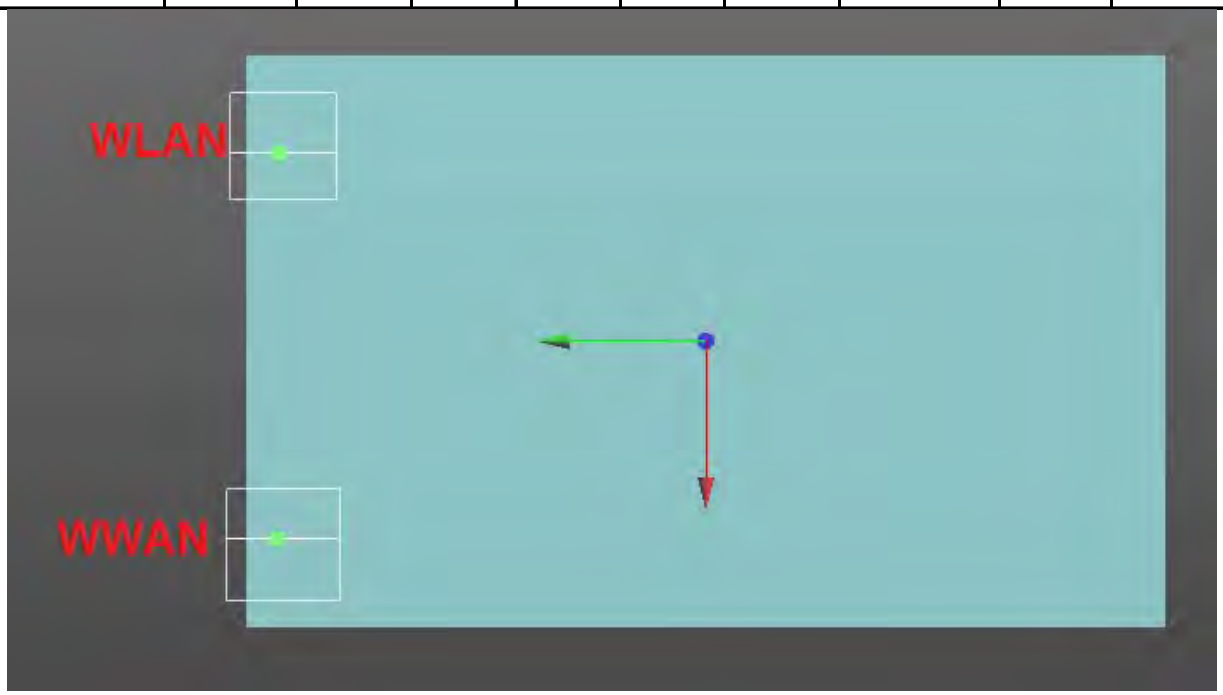


## LTE FDD Band V + 2.4GHz WLAN

| No. | Conditions | Position | Distance (mm) | Max. WWAN | Max. WLAN | SAR Sum | SPLSR |
|---|---|---|---|---|---|---|---|
| 3 | LTE B5 | Back side | 0 | 0.672 | 1.268 | **1.94** | Analyzed as below |
| | | Left side | 0 | 0.553 | 0.4 | 0.953 | ΣSAR<1.6, Not required |
| | | Top side | 0 | 0.071 | 0.478 | 0.549 | ΣSAR<1.6, Not required |
| | | Right side | 0 | 0.4 | 0.259 | 0.659 | ΣSAR<1.6, Not required |

WWAN & WLAN

| Conditions | Position | SAR Value (W/kg) | Coordinates (cm) | | | ΣSAR (W/kg) | Peak Location Separation Distance (mm) | SPLSR | Simultaneous Transmission SAR Test |
|---|---|---|---|---|---|---|---|---|---|
| | | | x | y | z | | | | |
| LTE Band 5 | Back side | 0.672 | 5.59 | 12.11 | -0.26 | 1.94 | 109.1 | 0.025 | SPLSR<0.04, Not required |
| WLAN | | 1.268 | -5.32 | 12.06 | -0.29 | | | | |

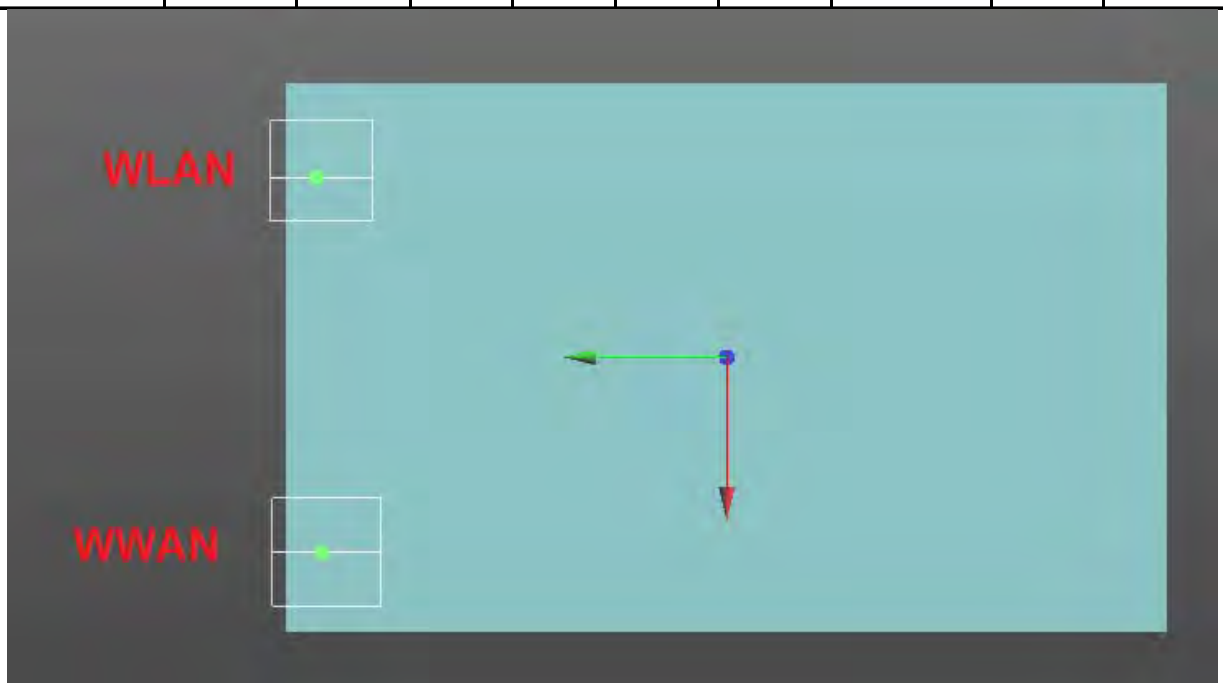


## LTE FDD Band XII + 2.4GHz WLAN

| No. | Conditions | Position | Distance (mm) | Max. WWAN | Max. WLAN | SAR Sum | SPLSR |
|---|---|---|---|---|---|---|---|
| 4 | LTE B12 | Back side | 0 | 0.484 | 1.268 | **1.752** | Analyzed as below |
| | | Left side | 0 | 0.217 | 0.4 | 0.617 | ΣSAR<1.6, Not required |
| | | Top side | 0 | 0.078 | 0.478 | 0.556 | ΣSAR<1.6, Not required |
| | | Right side | 0 | 0.4 | 0.259 | 0.659 | ΣSAR<1.6, Not required |

WWAN & WLAN

| Conditions | Position | SAR Value (W/kg) | Coordinates (cm) | | | ΣSAR (W/kg) | Peak Location Separation Distance (mm) | SPLSR | Simultaneous Transmission SAR Test |
|---|---|---|---|---|---|---|---|---|---|
| | | | x | y | z | | | | |
| LTE Band 12 | Back side | 0.484 | 5.75 | 11.96 | -0.29 | 1.752 | 110.7 | 0.021 | SPLSR<0.04, Not required |
| WLAN | | 1.268 | -5.32 | 12.06 | -0.29 | | | | |

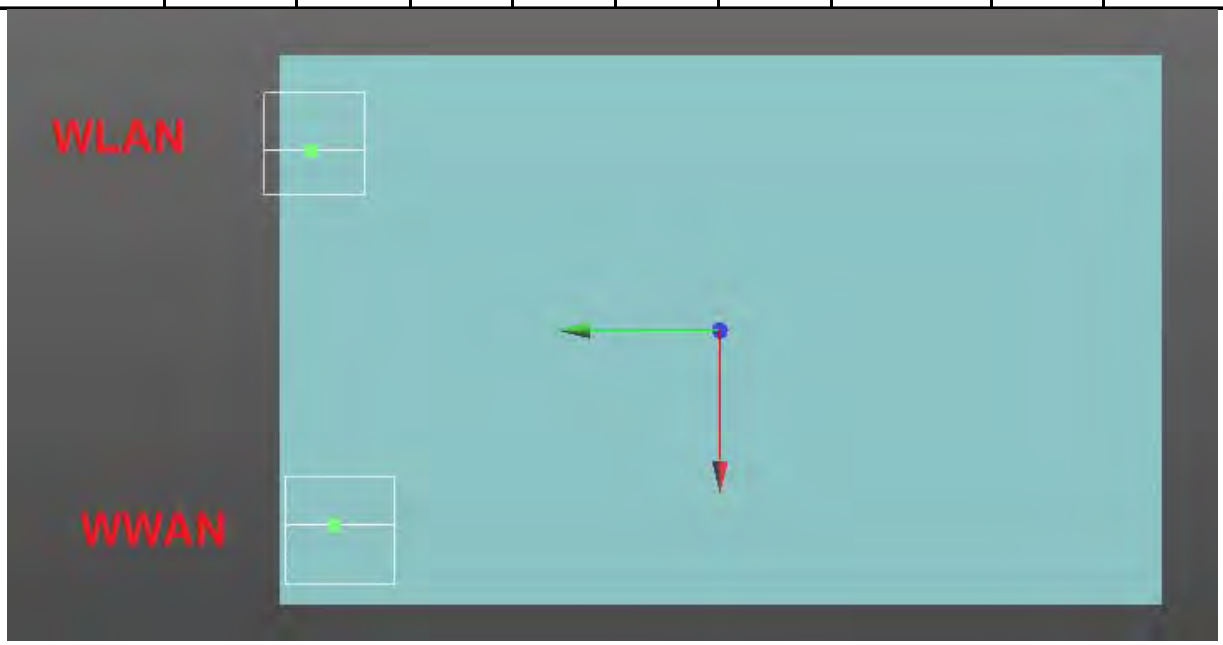


## LTE FDD Band XXV + 2.4GHz WLAN

| No. | Conditions | Position | Distance (mm) | Max. WWAN | Max. WLAN | SAR Sum | SPLSR |
|---|---|---|---|---|---|---|---|
| 5 | LTE B25 | Back side | 0 | 1.252 | 1.268 | **2.52** | Analyzed as below |
| | | Left side | 0 | 0.797 | 0.4 | 1.197 | ΣSAR<1.6, Not required |
| | | Top side | 0 | 0.529 | 0.478 | 1.007 | ΣSAR<1.6, Not required |
| | | Right side | 0 | 0.4 | 0.259 | 0.659 | ΣSAR<1.6, Not required |

WWAN & WLAN

| Conditions | Position | SAR Value (W/kg) | Coordinates (cm) | | | ΣSAR (W/kg) | Peak Location Separation Distance (mm) | SPLSR | Simultaneous Transmission SAR Test |
|---|---|---|---|---|---|---|---|---|---|
| | | | x | y | z | | | | |
| LTE Band 25 | Back side | 1.252 | 5.74 | 11.36 | -0.20 | 2.52 | 110.8 | 0.036 | SPLSR<0.04, Not required |
| WLAN | | 1.268 | -5.32 | 12.06 | -0.29 | | | | |

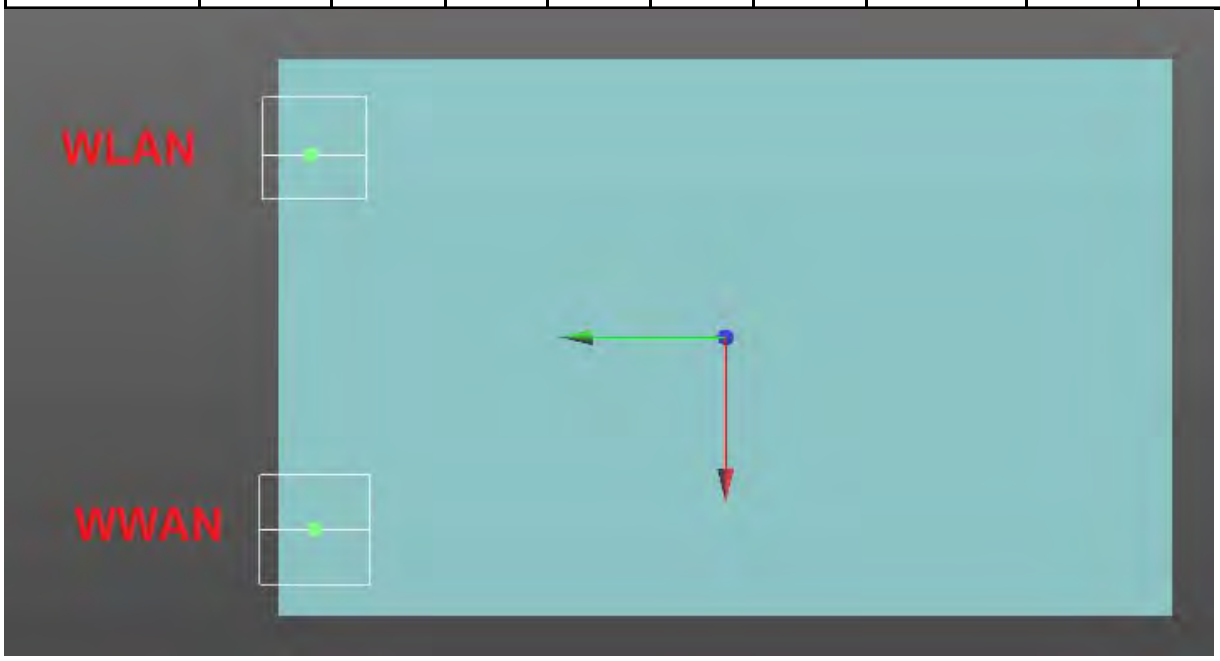


## LTE FDD Band XXVI + 2.4GHz WLAN

| No. | Conditions | Position | Distance (mm) | Max. WWAN | Max. WLAN | SAR Sum | SPLSR |
|---|---|---|---|---|---|---|---|
| 6 | LTE B26 | Back side | 0 | 0.535 | 1.268 | **1.803** | Analyzed as below |
| | | Left side | 0 | 0.554 | 0.4 | 0.954 | ΣSAR<1.6, Not required |
| | | Top side | 0 | 0.065 | 0.478 | 0.543 | ΣSAR<1.6, Not required |
| | | Right side | 0 | 0.4 | 0.259 | 0.659 | ΣSAR<1.6, Not required |

WWAN & WLAN

| Conditions | Position | SAR Value (W/kg) | Coordinates (cm) | | | ΣSAR (W/kg) | Peak Location Separation Distance (mm) | SPLSR | Simultaneous Transmission SAR Test |
|---|---|---|---|---|---|---|---|---|---|
| | | | x | y | z | | | | |
| LTE Band 26 | Back side | 0.535 | 5.60 | 11.95 | -0.31 | 1.803 | 109.2 | 0.022 | SPLSR<0.04, Not required |
| WLAN | | 1.268 | -5.32 | 12.06 | -0.29 | | | | |

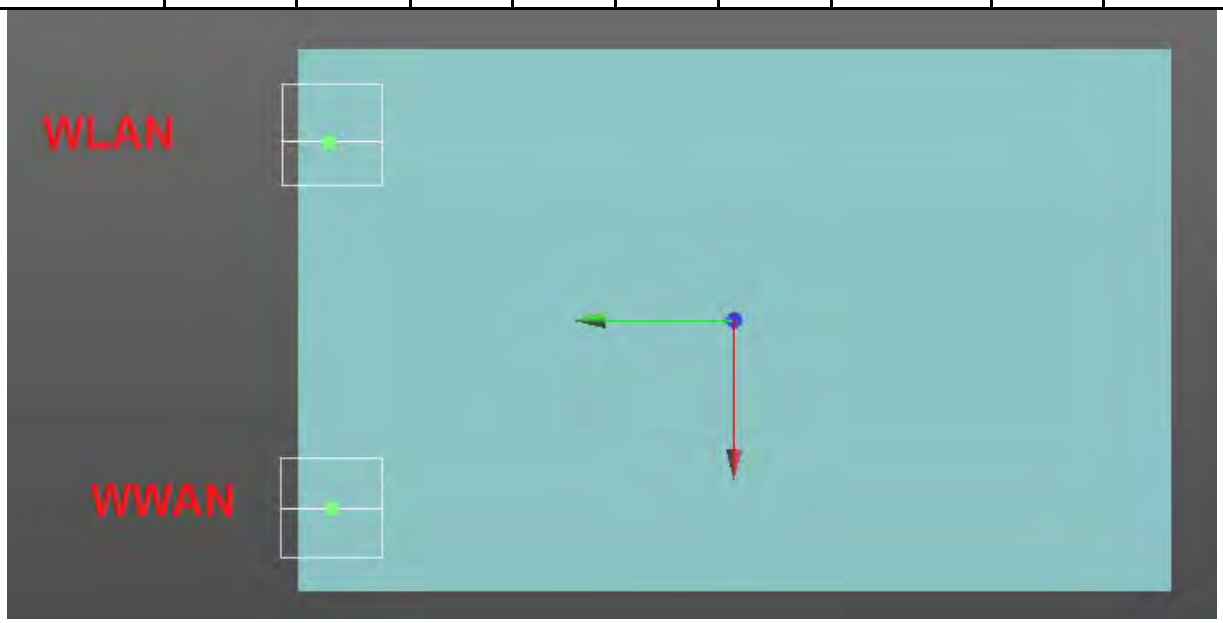


## LTE TDD Band XLI + 2.4GHz WLAN

| No. | Conditions | Position | Distance (mm) | Max. WWAN | Max. WLAN | SAR Sum | SPLSR |
|---|---|---|---|---|---|---|---|
| 7 | LTE B41 | Back side | 0 | 0.451 | 1.268 | **1.719** | Analyzed as below |
| | | Left side | 0 | 0.256 | 0.4 | 0.656 | ΣSAR<1.6, Not required |
| | | Top side | 0 | 0.065 | 0.478 | 0.543 | ΣSAR<1.6, Not required |
| | | Right side | 0 | 0.4 | 0.259 | 0.659 | ΣSAR<1.6, Not required |

WWAN & WLAN

| Conditions | Position | SAR Value (W/kg) | Coordinates (cm) | | | ΣSAR (W/kg) | Peak Location Separation Distance (mm) | SPLSR | Simultaneous Transmission SAR Test |
|---|---|---|---|---|---|---|---|---|---|
| | | | x | y | z | | | | |
| LTE Band 41 | Back side | 0.451 | 5.60 | 11.98 | -0.13 | 1.719 | 109.2 | 0.021 | SPLSR<0.04, Not required |
| WLAN | | 1.268 | -5.32 | 12.06 | -0.29 | | | | |



## LTE FDD Band II + BT

| No. | Conditions | Position | Distance (mm) | Max. WWAN | BT | SAR Sum | SPLSR |
|---|---|---|---|---|---|---|---|
| 8 | LTE B2 | Back side | 0 | 1.22 | 0.236 | 1.456 | ΣSAR<1.6, Not required |
| | | Left side | 0 | 0.919 | 0.4 | 1.319 | ΣSAR<1.6, Not required |
| | | Top side | 0 | 0.575 | 0.236 | 0.811 | ΣSAR<1.6, Not required |
| | | Right side | 0 | 0.4 | 0.236 | 0.636 | ΣSAR<1.6, Not required |

## LTE FDD Band IV + BT

| No. | Conditions | Position | Distance (mm) | Max. WWAN | BT | SAR Sum | SPLSR |
|---|---|---|---|---|---|---|---|
| 9 | LTE B4 | Back side | 0 | 1.052 | 0.236 | 1.288 | ΣSAR<1.6, Not required |
| | | Left side | 0 | 0.631 | 0.4 | 1.031 | ΣSAR<1.6, Not required |
| | | Top side | 0 | 0.54 | 0.236 | 0.776 | ΣSAR<1.6, Not required |
| | | Right side | 0 | 0.4 | 0.236 | 0.636 | ΣSAR<1.6, Not required |

## LTE FDD Band V + BT

| No. | Conditions | Position | Distance (mm) | Max. WWAN | BT | SAR Sum | SPLSR |
|---|---|---|---|---|---|---|---|
| 10 | LTE B5 | Back side | 0 | 0.672 | 0.236 | 0.908 | ΣSAR<1.6, Not required |
| | | Left side | 0 | 0.553 | 0.4 | 0.953 | ΣSAR<1.6, Not required |
| | | Top side | 0 | 0.071 | 0.236 | 0.307 | ΣSAR<1.6, Not required |
| | | Right side | 0 | 0.4 | 0.236 | 0.636 | ΣSAR<1.6, Not required |

## LTE FDD Band XII + BT

| No. | Conditions | Position | Distance (mm) | Max. WWAN | BT | SAR Sum | SPLSR |
|---|---|---|---|---|---|---|---|
| 11 | LTE B12 | Back side | 0 | 0.484 | 0.236 | 0.72 | ΣSAR<1.6, Not required |
| | | Left side | 0 | 0.217 | 0.4 | 0.617 | ΣSAR<1.6, Not required |
| | | Top side | 0 | 0.078 | 0.236 | 0.314 | ΣSAR<1.6, Not required |
| | | Right side | 0 | 0.4 | 0.236 | 0.636 | ΣSAR<1.6, Not required |

## LTE FDD Band XXV + BT

| No. | Conditions | Position | Distance (mm) | Max. WWAN | BT | SAR Sum | SPLSR |
|---|---|---|---|---|---|---|---|
| 12 | LTE B25 | Back side | 0 | 1.252 | 0.236 | 1.488 | ΣSAR<1.6, Not required |
| | | Left side | 0 | 0.797 | 0.4 | 1.197 | ΣSAR<1.6, Not required |
| | | Top side | 0 | 0.529 | 0.236 | 0.765 | ΣSAR<1.6, Not required |
| | | Right side | 0 | 0.4 | 0.236 | 0.636 | ΣSAR<1.6, Not required |

## LTE FDD Band XXVI + BT

| No. | Conditions | Position | Distance (mm) | Max. WWAN | BT | SAR Sum | SPLSR |
|---|---|---|---|---|---|---|---|
| 13 | LTE B26 | Back side | 0 | 0.535 | 0.236 | 0.771 | ΣSAR<1.6, Not required |
| | | Left side | 0 | 0.554 | 0.4 | 0.954 | ΣSAR<1.6, Not required |
| | | Top side | 0 | 0.065 | 0.236 | 0.301 | ΣSAR<1.6, Not required |
| | | Right side | 0 | 0.4 | 0.236 | 0.636 | ΣSAR<1.6, Not required |

## LTE FDD Band XLI + BT

| No. | Conditions | Position | Distance (mm) | Max. WWAN | BT | SAR Sum | SPLSR |
|---|---|---|---|---|---|---|---|
| 14 | LTE B41 | Back side | 0 | 0.451 | 0.236 | 0.687 | ΣSAR<1.6, Not required |
| | | Left side | 0 | 0.256 | 0.4 | 0.656 | ΣSAR<1.6, Not required |
| | | Top side | 0 | 0.065 | 0.236 | 0.301 | ΣSAR<1.6, Not required |
| | | Right side | 0 | 0.4 | 0.236 | 0.636 | ΣSAR<1.6, Not required |

# 4. Instruments List

| Manufacturer | Device | Type | Serial number | Date of last calibration | Date of next calibration |
|---|---|---|---|---|---|
| Schmid & Partner Engineering AG | Dosimetric E-Field Probe | EX3DV4 | 3923 | Aug.27,2015 | Aug.26,2016 |
| Schmid & Partner Engineering AG | System Validation Dipole | D750V2 | 1015 | Aug.24,2015 | Aug.23,2016 |
| | | D835V2 | 4d063 | Aug.24,2015 | Aug.23,2016 |
| | | D1750V2 | 1008 | Aug.20,2015 | Aug.19,2016 |
| | | D1900V2 | 5d027 | Apr.29,2015 | Apr.28,2016 |
| | | D2450V2 | 727 | Apr.22,2015 | Apr.21,2016 |
| | | D2600V2 | 1005 | Jan.27,2015 | Jan.26,2016 |
| Schmid & Partner Engineering AG | Data acquisition Electronics | DAE4 | 917 | Dec.14,2014 | Dec.13,2015 |
| Schmid & Partner Engineering AG | Software | DASY 52 V52.8.8 | N/A | Calibration not required | Calibration not required |
| Schmid & Partner Engineering AG | Phantom | SAM | N/A | Calibration not required | Calibration not required |
| HP | Network Analyzer | 8753D | 3410A05547 | May.21,2015 | May.20,2016 |

| Manufacturer | Device | Type | Serial number | Date of last calibration | Date of next calibration |
|---|---|---|---|---|---|
| Agilent | Dielectric Probe Kit | 85070E | MY44300677 | Calibration not required | Calibration not required |
| Agilent | Dual-directional coupler | 772D | MY52180142 | Feb.11,2015 | Feb.10,2016 |
| | | 778D | MY52180302 | Feb.05,2015 | Feb.04,2016 |
| Agilent | RF Signal Generator | N5181A | MY50145142 | Feb.06.2015 | Feb.05.2016 |
| Agilent | Power Meter | E4417A | MY51410006 | Oct.25,2013 | Oct.24,2015 |
| Agilent | Power Sensor | E9301H | MY51470001 | Dec.11,2014 | Dec.10,2015 |
| TECPEL | Digital thermometer | DTM-303A | TP130078 | Mar.30,2015 | Mar.29,2016 |
| Anritsu | Radio Communication Test | MT8820C | 6201061049 | Feb.02,2015 | Feb.01,2016 |

# 5. Measurements

Date: 2015/10/5

## LTE Band 2 (20MHz)_Body-worn_Top side_CH 18900_QPSK_1-0_5mm

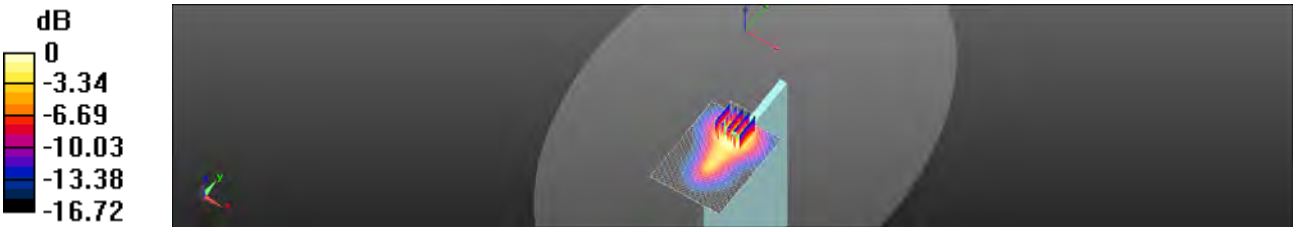
Communication System: LTE; Frequency: 1880 MHz
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.554 S/m; $\varepsilon_r$ = 51.701; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.11, 8.11, 8.11); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/BODY/Area Scan (61x81x1):** Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 1.32 W/kg

**Configuration/BODY/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.38 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 1.54 W/kg
**SAR(1 g) = 0.988 W/kg; SAR(10 g) = 0.580 W/kg**
Maximum value of SAR (measured) = 1.28 W/kg




0 dB = 1.28 W/kg = 1.07 dBW/kg

Date: 2015/10/5

## LTE Band 2 (20MHz)_Body-worn_Back side_CH 18700_QPSK_1-0_0mm

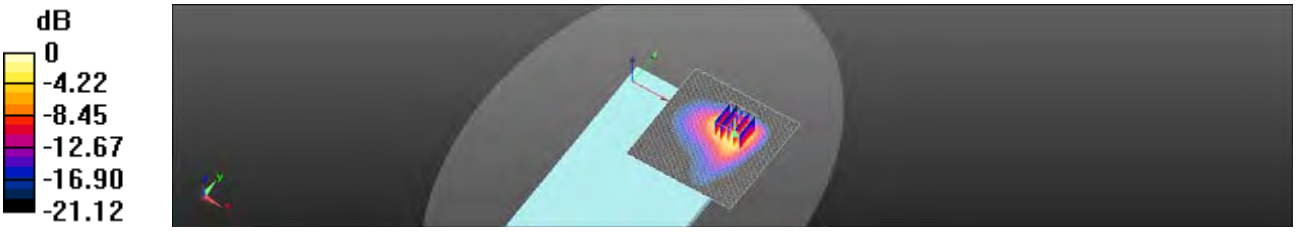
Communication System: LTE; Frequency: 1860 MHz
Medium parameters used: f = 1860 MHz; $\sigma$ = 1.551 S/m; $\varepsilon_r$ = 51.717; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.11, 8.11, 8.11); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/BODY/Area Scan (91x91x1):** Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 1.24 W/kg

**Configuration/BODY/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.9240 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 2.59 W/kg
**SAR(1 g) = 1.11 W/kg; SAR(10 g) = 0.508 W/kg**
Maximum value of SAR (measured) = 1.88 W/kg




0 dB = 1.88 W/kg = 2.75 dBW/kg

Date: 2015/9/29

## LTE Band 4 (20MHz)_Body-worn_Top side_CH 20050_QPSK_1-0_5mm

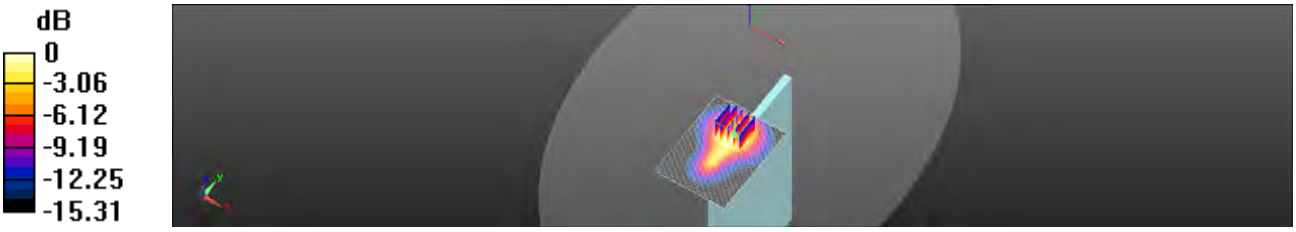
Communication System: LTE; Frequency: 1720 MHz
Medium parameters used: f = 1720.05 MHz; $\sigma$ = 1.506 S/m; $\varepsilon_r$ = 51.906; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.4, 8.4, 8.4); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/BODY/Area Scan (61x81x1):** Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 0.941 W/kg

**Configuration/BODY/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.36 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 1.13 W/kg
**SAR(1 g) = 0.740 W/kg; SAR(10 g) = 0.439 W/kg**
Maximum value of SAR (measured) = 0.965 W/kg




0 dB = 0.965 W/kg = -0.16 dBW/kg

Date: 2015/9/29

**LTE Band 4 (20MHz)_Body-worn_Back side_CH 20300_QPSK_1-50_0mm**

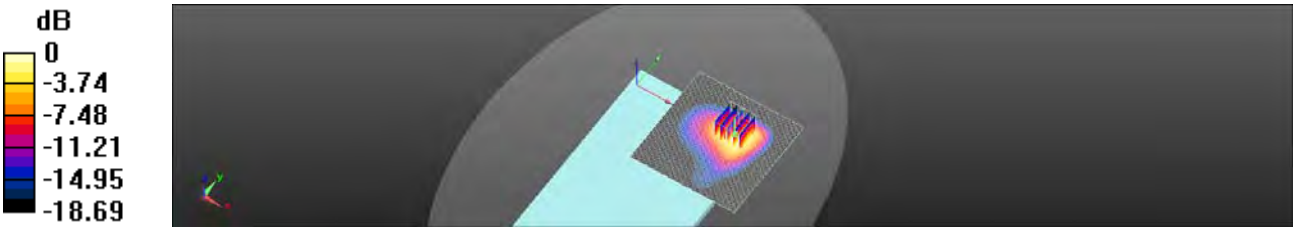
Communication System: LTE; Frequency: 1745 MHz
Medium parameters used: f = 1745.18 MHz; $\sigma$ = 1.523 S/m; $\varepsilon_r$ = 51.852; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.4, 8.4, 8.4); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/BODY/Area Scan (91x91x1):** Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 1.20 W/kg

**Configuration/BODY/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.553 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 2.05 W/kg
**SAR(1 g) = 0.961 W/kg; SAR(10 g) = 0.482 W/kg**
Maximum value of SAR (measured) = 1.38 W/kg




0 dB = 1.38 W/kg = 1.40 dBW/kg

Date: 2015/10/2

## LTE Band 5 (10MHz)_Body-worn_Back side_CH 20600_QPSK_1-25_10mm

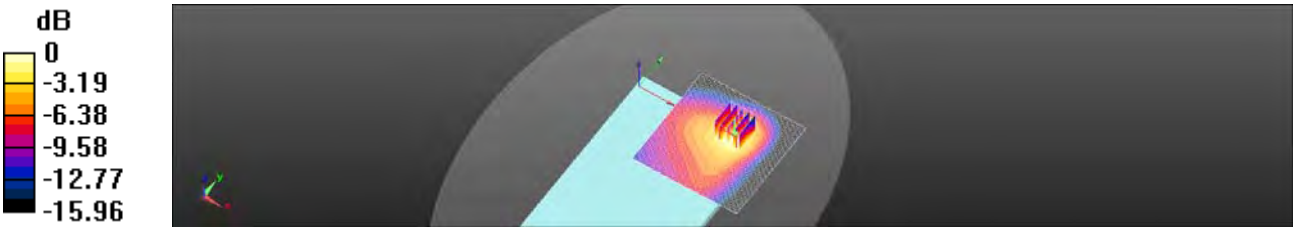
Communication System: LTE; Frequency: 844 MHz
Medium parameters used: f = 844 MHz; $\sigma$ = 1.009 S/m; $\varepsilon_r$ = 53.357; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(10.48, 10.48, 10.48); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/BODY/Area Scan (91x91x1):** Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 1.19 W/kg

**Configuration/BODY/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.510 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 1.44 W/kg
**SAR(1 g) = 0.901 W/kg; SAR(10 g) = 0.552 W/kg**
Maximum value of SAR (measured) = 1.20 W/kg




0 dB = 1.20 W/kg = 0.78 dBW/kg

Date: 2015/10/2

## LTE Band 5 (10MHz)_Body-worn_Back side_CH 20450_QPSK_1-49_0mm

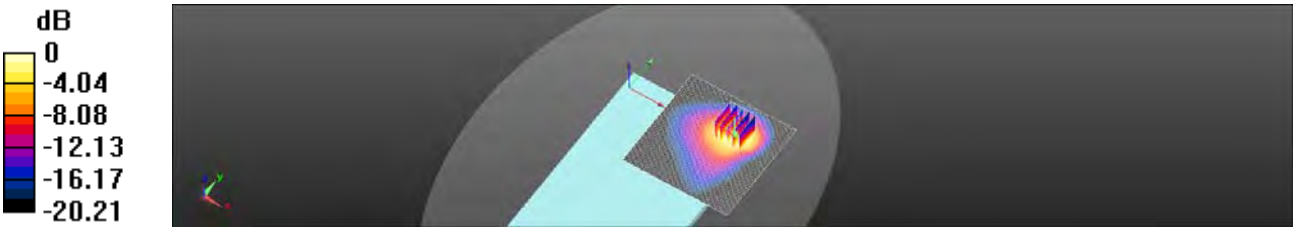
Communication System: LTE; Frequency: 829 MHz
Medium parameters used: f = 829 MHz; $\sigma$ = 0.992 S/m; $\varepsilon_r$ = 53.688; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(10.48, 10.48, 10.48); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/BODY/Area Scan (91x91x1):** Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 0.925 W/kg

**Configuration/BODY/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.2010 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 1.39 W/kg
**SAR(1 g) = 0.649 W/kg; SAR(10 g) = 0.333 W/kg**
Maximum value of SAR (measured) = 0.951 W/kg




0 dB = 0.951 W/kg = -0.22 dBW/kg

Date: 2015/10/1

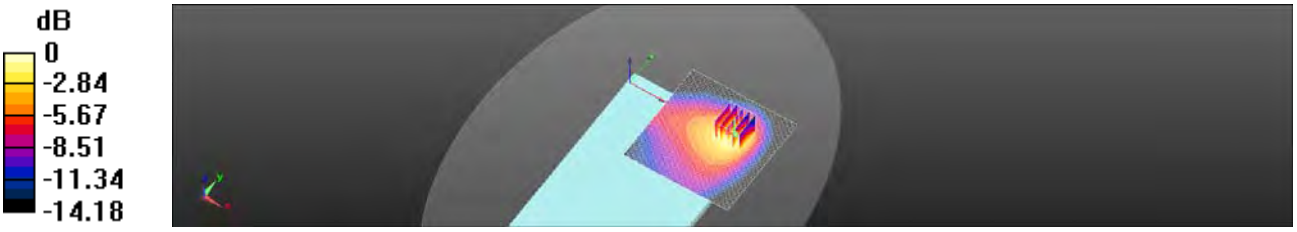
**LTE Band 12 (10MHz)_Body-worn_Back side_CH 23130_QPSK_1-49_10mm**
Communication System: LTE; Frequency: 711 MHz
Medium parameters used: f = 711 MHz; $\sigma$ = 0.979 S/m; $\varepsilon_r$ = 54.274; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(10.5, 10.5, 10.5); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/BODY/Area Scan (91x91x1):** Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 0.498 W/kg

**Configuration/BODY/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.077 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.584 W/kg
**SAR(1 g) = 0.393 W/kg; SAR(10 g) = 0.255 W/kg**
Maximum value of SAR (measured) = 0.496 W/kg




0 dB = 0.496 W/kg = -3.05 dBW/kg

Date: 2015/10/1

## LTE Band 12 (10MHz)_Body-worn_Back side_CH 23130_QPSK_1-25_0mm

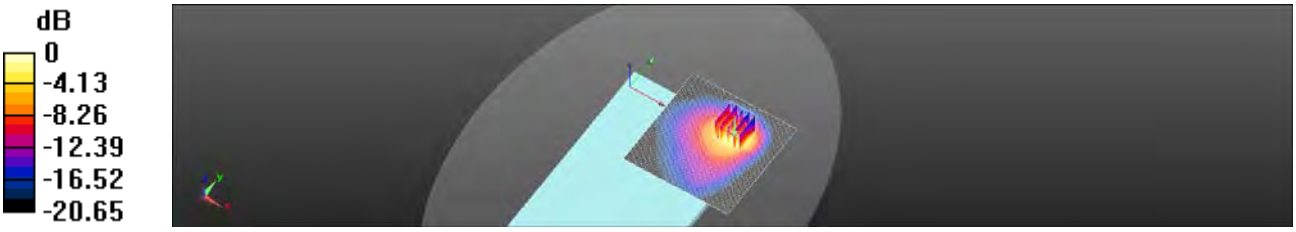
Communication System: LTE; Frequency: 711 MHz
Medium parameters used: f = 711 MHz; $\sigma$ = 0.979 S/m; $\varepsilon_r$ = 54.274; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(10.5, 10.5, 10.5); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/BODY/Area Scan (91x91x1):** Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 0.632 W/kg

**Configuration/BODY/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.639 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 0.996 W/kg
**SAR(1 g) = 0.475 W/kg; SAR(10 g) = 0.250 W/kg**
Maximum value of SAR (measured) = 0.723 W/kg




0 dB = 0.723 W/kg = -1.41 dBW/kg

Date: 2015/10/5

**LTE Band 25 (20MHz)_Body-worn_Back side_CH 26590_QPSK_1-99_10mm**
Communication System: LTE; Frequency: 1905 MHz
Medium parameters used: f = 1905 MHz; $\sigma$ = 1.559 S/m; $\varepsilon_r$ = 51.68; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

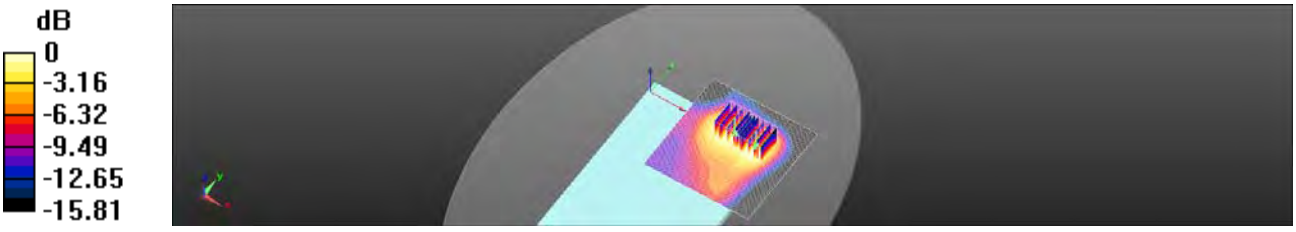
DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.11, 8.11, 8.11); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/BODY/Area Scan (91x91x1):** Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 1.17 W/kg

**Configuration/BODY/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.619 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 1.48 W/kg
**SAR(1 g) = 0.842 W/kg; SAR(10 g) = 0.465 W/kg**
Maximum value of SAR (measured) = 1.17 W/kg

**Configuration/BODY/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.619 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 1.15 W/kg
**SAR(1 g) = 0.724 W/kg; SAR(10 g) = 0.430 W/kg**
Maximum value of SAR (measured) = 0.967 W/kg




0 dB = 0.967 W/kg = -0.15 dBW/kg

Date: 2015/10/5

**LTE Band 25 (20MHz)_Body-worn_Back side_CH 26365_QPSK_1-0_0mm_Repeat SAR test at the highest SAR measurement**

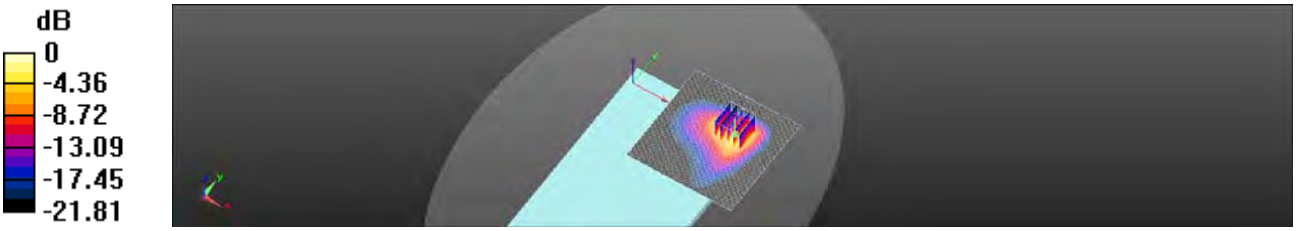
Communication System: LTE; Frequency: 1882.5 MHz
Medium parameters used: f = 1882.86 MHz; $\sigma$ = 1.556 S/m; $\varepsilon_r$ = 51.69; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.11, 8.11, 8.11); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/BODY/Area Scan (91x91x1):** Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 1.30 W/kg

**Configuration/BODY/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.8770 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 2.95 W/kg
**SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.527 W/kg**
Maximum value of SAR (measured) = 2.17 W/kg




0 dB = 2.17 W/kg = 3.36 dBW/kg

Date: 2015/10/2

## LTE Band 26 (15MHz)_Body-worn_Back side_CH 26865_QPSK_1-0_10mm

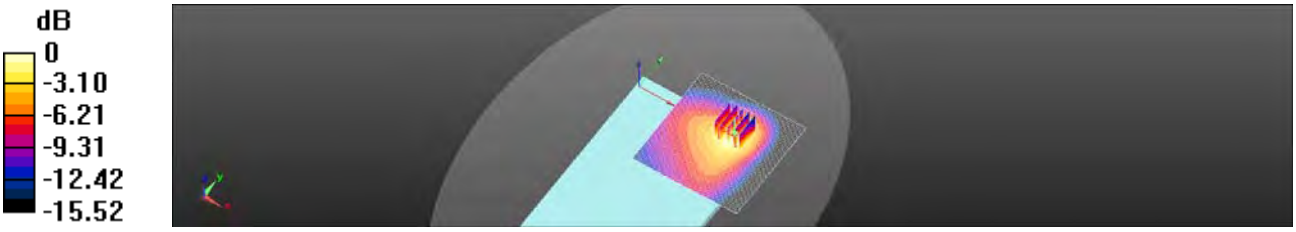
Communication System: LTE; Frequency: 831.5 MHz
Medium parameters used: f = 831.5 MHz; $\sigma$ = 0.993 S/m; $\varepsilon_r$ = 53.629; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(10.48, 10.48, 10.48); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/BODY/Area Scan (91x91x1):** Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 1.13 W/kg

**Configuration/BODY/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.421 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 1.30 W/kg
**SAR(1 g) = 0.834 W/kg; SAR(10 g) = 0.527 W/kg**
Maximum value of SAR (measured) = 1.09 W/kg




0 dB = 1.09 W/kg = 0.38 dBW/kg

Date: 2015/10/2

## LTE Band 26 (15MHz)_Body-worn_Back side_CH 26865_QPSK_1-0_0mm

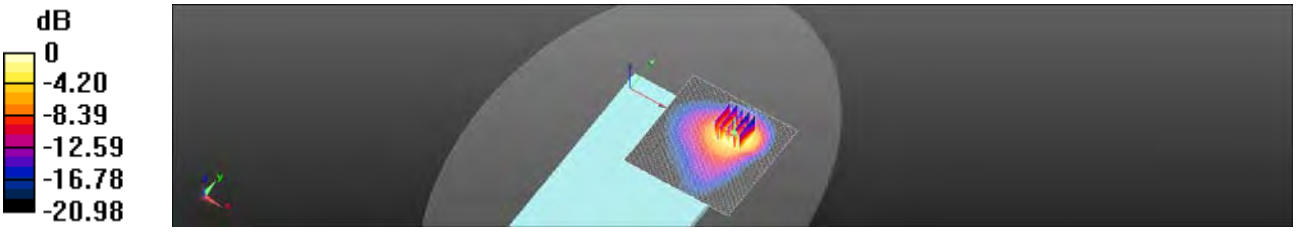
Communication System: LTE; Frequency: 831.5 MHz
Medium parameters used: f = 831.5 MHz; $\sigma$ = 0.993 S/m; $\varepsilon_r$ = 53.629; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(10.48, 10.48, 10.48); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/BODY/Area Scan (91x91x1):** Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 0.747 W/kg

**Configuration/BODY/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.1790 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 1.14 W/kg
**SAR(1 g) = 0.533 W/kg; SAR(10 g) = 0.276 W/kg**
Maximum value of SAR (measured) = 0.818 W/kg




0 dB = 0.818 W/kg = -0.87 dBW/kg

Date: 2015/9/25

## LTE Band 41 (20MHz)_Body-worn_Back side_CH 40620_QPSK_1-0_10mm

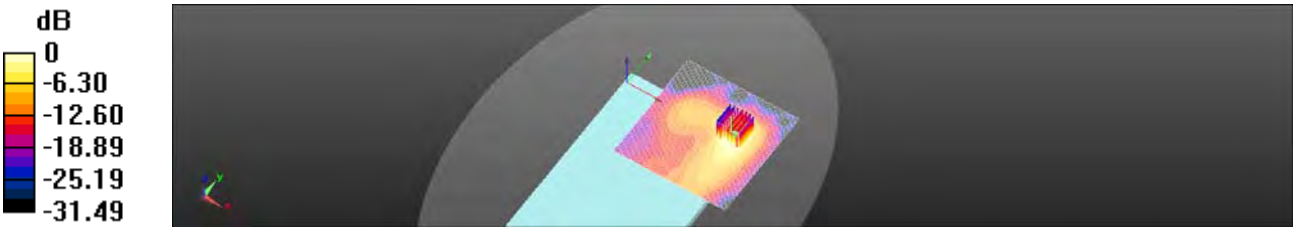
Communication System: LTE; Frequency: 2593 MHz
Medium parameters used: f = 2593 MHz; $\sigma$ = 2.174 S/m; $\varepsilon_r$ = 50.685; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.49, 7.49, 7.49); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/BODY/Area Scan (121x121x1):** Interpolated grid: dx=12 mm, dy=12 mm
Maximum value of SAR (interpolated) = 0.454 W/kg

**Configuration/BODY/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.269 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 0.632 W/kg
**SAR(1 g) = 0.300 W/kg; SAR(10 g) = 0.147 W/kg**
Maximum value of SAR (measured) = 0.448 W/kg




0 dB = 0.448 W/kg = -3.49 dBW/kg

Date: 2015/9/25

## LTE Band 41 (20MHz)_Body-worn_Back side_CH 41490_QPSK_1-50_0mm

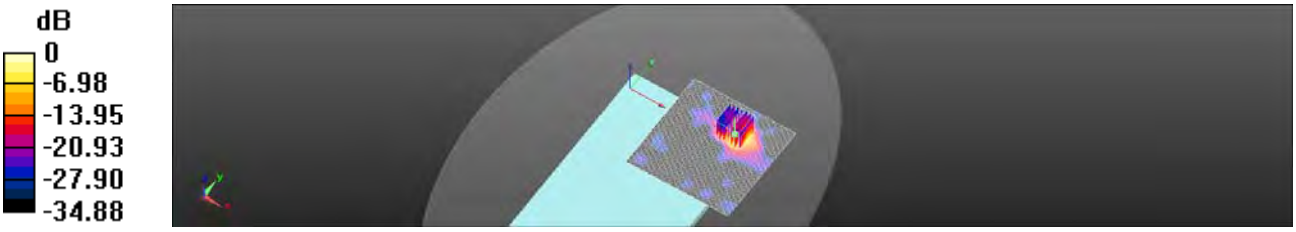
Communication System: LTE; Frequency: 2593 MHz
Medium parameters used: f = 2593 MHz; $\sigma$ = 2.174 S/m; $\varepsilon_r$ = 50.685; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.49, 7.49, 7.49); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/BODY/Area Scan (111x111x1):** Interpolated grid: dx=12 mm, dy=12 mm
Maximum value of SAR (interpolated) = 0.608 W/kg

**Configuration/BODY/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.7790 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 1.53 W/kg
**SAR(1 g) = 0.450 W/kg; SAR(10 g) = 0.146 W/kg**
Maximum value of SAR (measured) = 0.951 W/kg




0 dB = 0.951 W/kg = -0.22 dBW/kg

Date: 2015/9/26

## WLAN 802.11b_Body-worn_Back side_CH 6

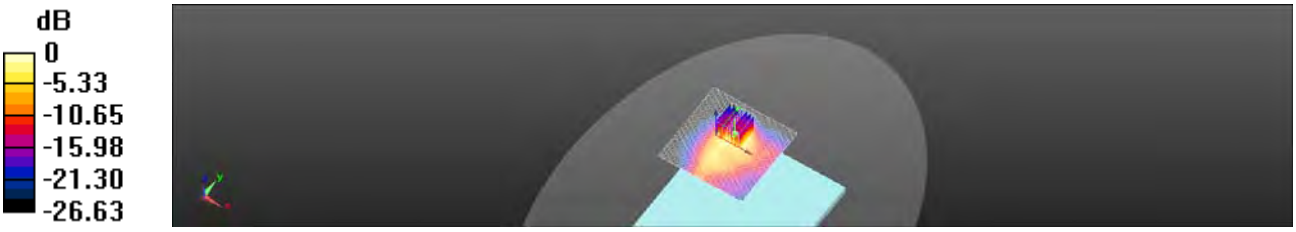
Communication System: WLAN(2.45G); Frequency: 2437 MHz
Medium parameters used: f = 2437 MHz; $\sigma$ = 1.966 S/m; $\varepsilon_r$ = 51.277; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.63, 7.63, 7.63); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/BODY/Area Scan (91x91x1):** Interpolated grid: dx=12 mm, dy=12 mm
Maximum value of SAR (interpolated) = 1.82 W/kg

**Configuration/BODY/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.338 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 2.67 W/kg
**SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.508 W/kg**
Maximum value of SAR (measured) = 1.80 W/kg




0 dB = 1.80 W/kg = 2.56 dBW/kg

Date: 2015/9/26

## WLAN 802.11n(40M)_Body-worn_Back side_CH 6

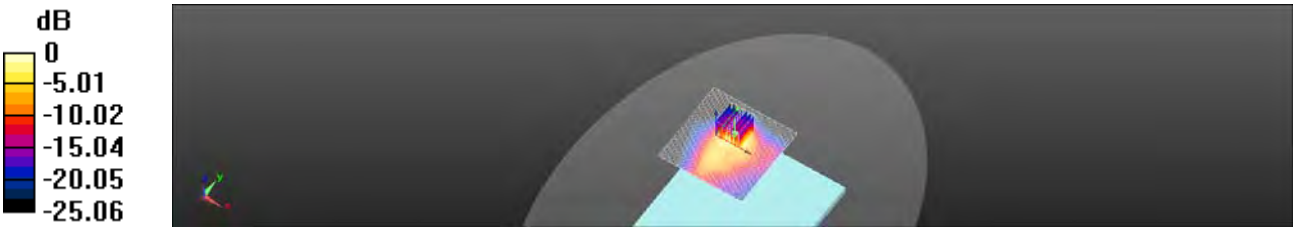
Communication System: WLAN(2.45G); Frequency: 2437 MHz
Medium parameters used: f = 2437 MHz; $\sigma$ = 1.966 S/m; $\varepsilon_r$ = 51.277; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.63, 7.63, 7.63); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/BODY/Area Scan (91x91x1):** Interpolated grid: dx= 12 mm, dy= 12 mm
Maximum value of SAR (interpolated) = 1.14 W/kg

**Configuration/BODY/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.465 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 1.69 W/kg
**SAR(1 g) = 0.701 W/kg; SAR(10 g) = 0.319 W/kg**
Maximum value of SAR (measured) = 1.13 W/kg




0 dB = 1.13 W/kg = 0.52 dBW/kg

# 6. SAR System Performance Verification

Date: 2015/10/1

## Dipole 750 MHz_SN:1015

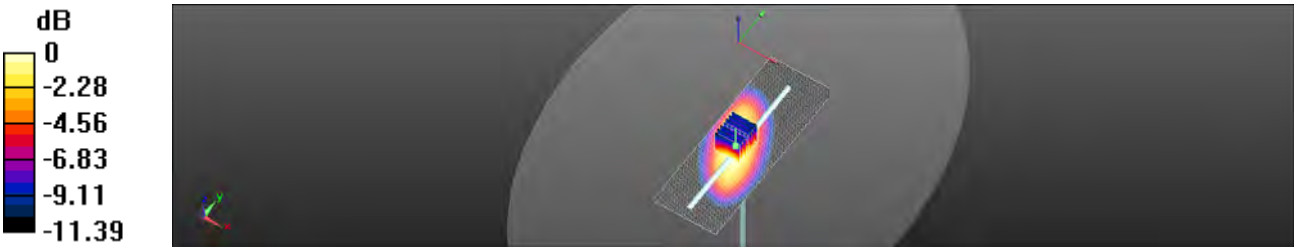
Communication System: CW; Frequency: 750 MHz
Medium parameters used: f = 750 MHz; $\sigma$ = 0.984 S/m; $\varepsilon_r$ = 54.104; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(10.5, 10.5, 10.5); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Pin=250mW/Area Scan (51x141x1):** Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 2.87 W/kg

**Configuration/Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.21 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 3.45 W/kg
**SAR(1 g) = 2.16 W/kg; SAR(10 g) = 1.36 W/kg**
Maximum value of SAR (measured) = 2.90 W/kg




0 dB = 2.90 W/kg = 4.62 dBW/kg

Date: 2015/10/2

## Dipole 835 MHz_SN:4d063

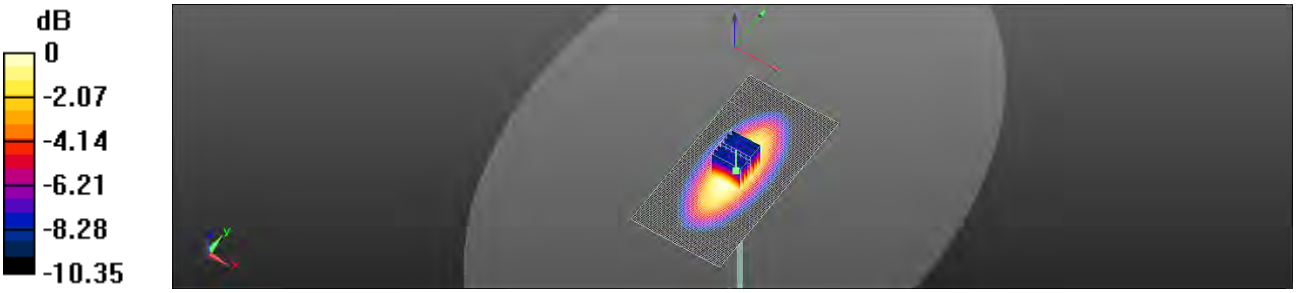
Communication System: CW; Frequency: 835 MHz
Medium parameters used: f = 835 MHz; $\sigma$ = 0.994 S/m; $\varepsilon_r$ = 53.561; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(10.48,10.48, 10.48); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Pin=250mW/Area Scan (61x121x1):** Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 3.05 W/kg

**Configuration/Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.17 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 3.59 W/kg
**SAR(1 g) = 2.41 W/kg; SAR(10 g) = 1.59 W/kg**
Maximum value of SAR (measured) = 3.05 W/kg




0 dB = 3.05 W/kg = 4.84 dBW/kg

Date: 2015/9/29

## Dipole 1750 MHz_SN:1008

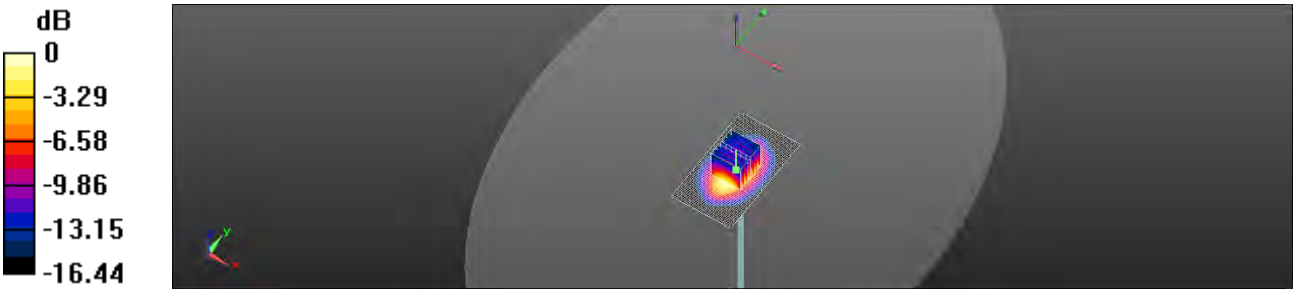
Communication System: CW; Frequency: 1750 MHz
Medium parameters used: f = 1750 MHz; $\sigma$ = 1.526 S/m; $\varepsilon_r$ = 51.845; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.4, 8.4, 8.4); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Pin=250mW/Area Scan (41x71x1):** Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 14.2 W/kg

**Configuration/Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 95.40 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 16.9 W/kg
**SAR(1 g) = 9.42 W/kg; SAR(10 g) = 5.01 W/kg**
Maximum value of SAR (measured) = 13.5 W/kg




0 dB = 13.5 W/kg = 11.30 dBW/kg

Date: 2015/10/5

## Dipole 1900 MHz_SN:5d027

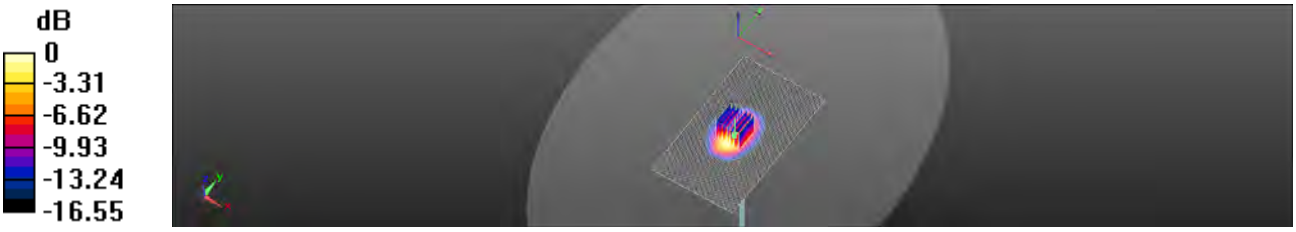
Communication System: CW; Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; $\sigma$ = 1.558 S/m; $\varepsilon_r$ = 51.688; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.11, 8.11, 8.11); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Pin=250mW/Area Scan (71x121x1):** Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 13.6 W/kg

**Configuration/Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 92.66 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 17.2 W/kg
**SAR(1 g) = 9.85 W/kg; SAR(10 g) = 5.24 W/kg**
Maximum value of SAR (measured) = 13.9 W/kg




0 dB = 13.9 W/kg = 11.44 dBW/kg

Date: 2015/9/26

## Dipole 2450 MHz_SN:727

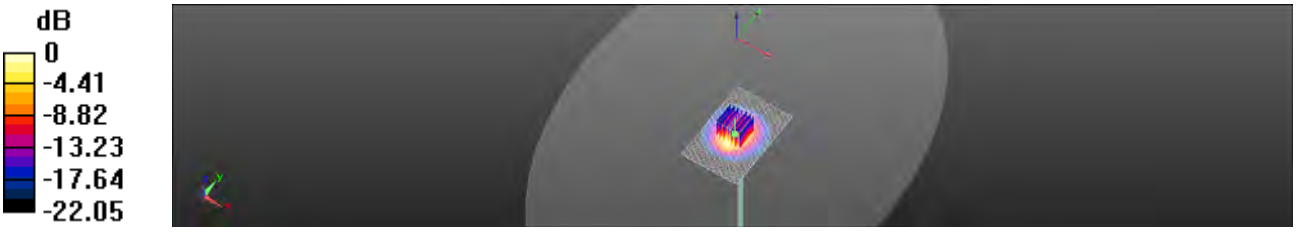
Communication System: CW; Frequency: 2450 MHz
Medium parameters used: f = 2450 MHz; $\sigma$ = 1.984 S/m; $\varepsilon_r$ = 51.262; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.63, 7.63, 7.63); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Pin=250mW/Area Scan (61x91x1):** Interpolated grid: dx=12 mm, dy=12 mm
Maximum value of SAR (interpolated) = 20.7 W/kg

**Configuration/Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 99.92 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 26.7 W/kg
**SAR(1 g) = 13.1 W/kg; SAR(10 g) = 6.07 W/kg**
Maximum value of SAR (measured) = 19.9 W/kg




0 dB = 19.9 W/kg = 12.99 dBW/kg

Date: 2015/9/25

## Dipole 2600 MHz_SN:1005

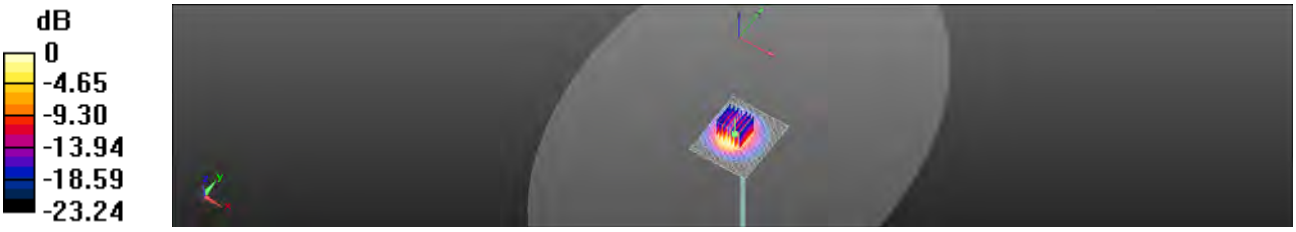
Communication System: CW; Frequency: 2600 MHz
Medium parameters used: f = 2600 MHz; $\sigma$ = 2.184 S/m; $\varepsilon_r$ = 50.682; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.49, 7.49, 7.49); Calibrated: 2015/8/27;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn917; Calibrated: 2014/12/29
- Phantom: Body
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Pin=250mW/Area Scan (61x71x1):** Interpolated grid: dx=12 mm, dy=12 mm
Maximum value of SAR (interpolated) = 23.7 W/kg

**Configuration/Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 96.45 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 29.4 W/kg
**SAR(1 g) = 14.1 W/kg; SAR(10 g) = 6.3 W/kg**
Maximum value of SAR (measured) = 21.7 W/kg




0 dB = 21.7 W/kg = 13.37 dBW/kg

# 7. DAE & Probe Calibration Certificate

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Accreditation No.: SCS 108

Client Auden

Certificate No: DAE4-917_Dec14

## CALIBRATION CERTIFICATE

Object: DAE4 - SD 000 D04 BK - SN: 917

Calibration procedure(s): QA CAL-06.v28
Calibration procedure for the data acquisition electronics (DAE)

Calibration date: December 29, 2014

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards | ID # | Cal Date (Certificate No.) | Scheduled Calibration |
|---|---|---|---|
| Keithley Multimeter Type 2001 | SN: 0810278 | 03-Oct-14 (No:15573) | Oct-15 |
| **Secondary Standards** | **ID #** | **Check Date (in house)** | **Scheduled Check** |
| Auto DAE Calibration Unit | SE UWS 053 AA 1001 | 07-Jan-14 (in house check) | In house check: Jan-15 |
| Calibrator Box V2.1 | SE UMS 006 AA 1002 | 07-Jan-14 (in house check) | In house check: Jan-15 |

| | Name | Function | Signature |
|---|---|---|---|
| Calibrated by: | Eric Hainfeld | Technician | |
| Approved by: | Fin Bomholt | Deputy Technical Manager | |

Issued: December 29, 2014

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Certificate No: DAE4-917_Dec14 Page 1 of 8

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Accreditation No.: SCS 108

## Glossary

| | |
|---|---|
| DAE | data acquisition electronics |
| Connector angle | information used in DASY system to align probe sensor X to the robot coordinate system. |

## Methods Applied and Interpretation of Parameters

- *DC Voltage Measurement:* Calibration Factor assessed for use in DASY system by comparison with a calibrated instrument traceable to national standards. The figure given corresponds to the full scale range of the voltmeter in the respective range.
- *Connector angle*: The angle of the connector is assessed measuring the angle mechanically by a tool inserted. Uncertainty is not required.
- The following parameters as documented in the Appendix contain technical information as a result from the performance test and require no uncertainty.
  - *DC Voltage Measurement Linearity:* Verification of the Linearity at +10% and -10% of the nominal calibration voltage. Influence of offset voltage is included in this measurement.
  - *Common mode sensitivity:* Influence of a positive or negative common mode voltage on the differential measurement.
  - *Channel separation:* Influence of a voltage on the neighbor channels not subject to an input voltage.
  - *AD Converter Values with inputs shorted:* Values on the internal AD converter corresponding to zero input voltage
  - *Input Offset Measurement*: Output voltage and statistical results over a large number of zero voltage measurements.
  - *Input Offset Current:* Typical value for information; Maximum channel input offset current, not considering the input resistance.
  - *Input resistance:* Typical value for information: DAE input resistance at the connector, during internal auto-zeroing and during measurement.
  - *Low Battery Alarm Voltage:* Typical value for information. Below this voltage, a battery alarm signal is generated.
  - *Power consumption:* Typical value for information. Supply currents in various operating modes.

## DC Voltage Measurement

A/D - Converter Resolution nominal

| | | | | |
|---|---|---|---|---|
| High Range: | 1LSB = | 6.1μV , | full range = | -100...+300 mV |
| Low Range: | 1LSB = | 61nV , | full range = | -1.....+3mV |

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

| Calibration Factors | X | Y | Z |
|---|---|---|---|
| High Range | 404.193 ± 0.02% (k=2) | 404.193 ± 0.02% (k=2) | 404.207 ± 0.02% (k=2) |
| Low Range | 3.98475 ± 1.50% (k=2) | 4.01007 ± 1.50% (k=2) | 4.00901 ± 1.50% (k=2) |

## Connector Angle

| | |
|---|---|
| **Connector Angle** to be used in DASY system | 33.0 ° ± 1 ° |





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## Appendix (Additional assessments outside the scope of SCS108)

### 1. DC Voltage Linearity

| High Range | | Reading (μV) | Difference (μV) | Error (%) |
|---|---|---|---|---|
| Channel X | + Input | 199992.91 | -0.25 | -0.00 |
| Channel X | + Input | 20000.85 | 0.32 | 0.00 |
| Channel X | - Input | -20000.18 | 0.78 | -0.00 |
| Channel Y | + Input | 199990.98 | -1.99 | -0.00 |
| Channel Y | + Input | 19997.97 | -2.51 | -0.01 |
| Channel Y | - Input | -20003.10 | -2.09 | 0.01 |
| Channel Z | + Input | 199993.02 | -0.06 | -0.00 |
| Channel Z | + Input | 19997.19 | -3.23 | -0.02 |
| Channel Z | - Input | -20002.85 | -1.79 | 0.01 |

| Low Range | | Reading (μV) | Difference (μV) | Error (%) |
|---|---|---|---|---|
| Channel X | + Input | 2000.29 | -0.24 | -0.01 |
| Channel X | + Input | 201.12 | 0.13 | 0.06 |
| Channel X | - Input | -198.72 | 0.10 | -0.05 |
| Channel Y | + Input | 2000.89 | 0.15 | 0.01 |
| Channel Y | + Input | 199.73 | -1.32 | -0.66 |
| Channel Y | - Input | -199.30 | -0.53 | 0.27 |
| Channel Z | + Input | 2000.77 | 0.29 | 0.01 |
| Channel Z | + Input | 199.95 | -1.00 | -0.50 |
| Channel Z | - Input | -200.12 | -1.20 | 0.61 |

### 2. Common mode sensitivity

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

| | Common mode Input Voltage (mV) | High Range Average Reading (μV) | Low Range Average Reading (μV) |
|---|---|---|---|
| Channel X | 200 | -4.90 | -6.97 |
| | - 200 | 7.84 | 6.06 |
| Channel Y | 200 | 5.08 | 4.48 |
| | - 200 | -5.97 | -6.52 |
| Channel Z | 200 | -13.88 | -14.29 |
| | - 200 | 11.78 | 12.21 |

### 3. Channel separation

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

| | Input Voltage (mV) | Channel X (μV) | Channel Y (μV) | Channel Z (μV) |
|---|---|---|---|---|
| Channel X | 200 | - | -1.66 | -3.24 |
| Channel Y | 200 | 5.38 | - | -1.05 |
| Channel Z | 200 | 10.50 | 3.17 | - |





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## 4. AD-Converter Values with inputs shorted

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

| | High Range (LSB) | Low Range (LSB) |
|---|---|---|
| Channel X | 16051 | 16402 |
| Channel Y | 16151 | 16546 |
| Channel Z | 15929 | 17057 |

## 5. Input Offset Measurement

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec
Input 10MΩ

| | Average (μV) | min. Offset (μV) | max. Offset (μV) | Std. Deviation (μV) |
|---|---|---|---|---|
| Channel X | 0.30 | -0.62 | 3.64 | 0.49 |
| Channel Y | -0.60 | -2.28 | 1.76 | 0.67 |
| Channel Z | -0.60 | -1.64 | 1.17 | 0.45 |

## 6. Input Offset Current

Nominal Input circuitry offset current on all channels: <25fA

## 7. Input Resistance (Typical values for information)

| | Zeroing (kOhm) | Measuring (MOhm) |
|---|---|---|
| Channel X | 200 | 200 |
| Channel Y | 200 | 200 |
| Channel Z | 200 | 200 |

## 8. Low Battery Alarm Voltage (Typical values for information)

| Typical values | Alarm Level (VDC) |
|---|---|
| Supply (+ Vcc) | +7.9 |
| Supply (- Vcc) | -7.6 |

## 9. Power Consumption (Typical values for information)

| Typical values | Switched off (mA) | Stand by (mA) | Transmitting (mA) |
|---|---|---|---|
| Supply (+ Vcc) | +0.01 | +6 | +14 |
| Supply (- Vcc) | -0.01 | -8 | -9 |





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Accreditation No.: SCS 0108

Client SGS-TW (Auden)

Certificate No: EX3-3923_Aug15

# CALIBRATION CERTIFICATE

Object EX3DV4 - SN:3923

Calibration procedure(s) QA CAL-01.v9, QA CAL-14.v4, QA CAL-23.v5, QA CAL-25.v6
Calibration procedure for dosimetric E-field probes

Calibration date August 27, 2015

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards | ID | Cal Date (Certificate No.) | Scheduled Calibration |
|---|---|---|---|
| Power meter E4419B | GB41293874 | 01-Apr-15 (No. 217-02125) | Mar-16 |
| Power sensor E4412A | MY41498087 | 01-Apr-15 (No. 217-02128) | Mar-16 |
| Reference 3 dB Attenuator | SN: S5054 (3c) | 01-Apr-15 (No. 217-02129) | Mar-16 |
| Reference 20 dB Attenuator | SN: S5277 (20x) | 01-Apr-15 (No. 217-02132) | Mar-16 |
| Reference 30 dB Attenuator | SN: S5129 (30b) | 01-Apr-15 (No. 217-02133) | Mar-16 |
| Reference Probe ES3DV2 | SN: 3013 | 30-Dec-14 (No. ES3-3013_Dec14) | Dec-15 |
| DAE4 | SN: 660 | 14-Jan-15 (No. DAE4-660_Jan15) | Jan-16 |
| | | | |
| Secondary Standards | ID | Check Date (in house) | Scheduled Check |
| RF generator HP 8648C | US3642U01700 | 4-Aug-99 (in house check Apr-13) | In house check: Apr-16 |
| Network Analyzer HP 8753E | US37390585 | 18-Oct-01 (in house check Oct-14) | In house check: Oct-15 |

| | Name | Function | Signature |
|---|---|---|---|
| Calibrated by | Israel Sheinin | Laboratory Technician | |
| Approved by | Katja Pokovic | Technical Manager | |

Issued: August 27, 2015

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## Glossary:

| | |
|---|---|
| TSL | tissue simulating liquid |
| NORMx,y,z | sensitivity in free space |
| ConvF | sensitivity in TSL / NORMx,y,z |
| DCP | diode compression point |
| CF | crest factor (1/duty_cycle) of the RF signal |
| A, B, C, D | modulation dependent linearization parameters |
| Polarization φ | φ rotation around probe axis |
| Polarization ϑ | ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., ϑ = 0 is normal to probe axis |
| Connector Angle | information used in DASY system to align probe sensor X to the robot coordinate system |

## Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

## Methods Applied and Interpretation of Parameters:

- *NORMx,y,z*: Assessed for E-field polarization ϑ = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the $E^2$-field uncertainty inside TSL (see below *ConvF*).
- *NORM(f)x,y,z = NORMx,y,z * frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- *DCPx,y,z*: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- *PAR*: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- *Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z*: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. *VR* is the maximum calibration range expressed in RMS voltage across the diode.
- *ConvF and Boundary Effect Parameters*: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to *NORMx,y,z * ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- *Spherical isotropy (3D deviation from isotropy)*: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset*: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- *Connector Angle*: The angle is assessed using the information gained by determining the *NORMx* (no uncertainty required).

# Probe EX3DV4

## SN:3923

Manufactured: March 8, 2013
Calibrated: August 27, 2015

Calibrated for DASY/EASY Systems
(Note: non-compatible with DASY2 system!)





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# DASY/EASY - Parameters of Probe: EX3DV4 - SN:3923

## Basic Calibration Parameters

| | Sensor X | Sensor Y | Sensor Z | Unc (k=2) |
|---|---|---|---|---|
| Norm ($\mu V/(V/m)^2$)[A] | 0.57 | 0.48 | 0.47 | ± 10.1 % |
| DCP (mV)[B] | 103.6 | 96.4 | 101.3 | |

## Modulation Calibration Parameters

| UID | Communication System Name | | A dB | B dB$\sqrt{\mu V}$ | C | D dB | VR mV | Unc[E] (k=2) |
|---|---|---|---|---|---|---|---|---|
| 0 | CW | X | 0.0 | 0.0 | 1.0 | 0.00 | 153.8 | ±3.3 % |
| | | Y | 0.0 | 0.0 | 1.0 | | 155.6 | |
| | | Z | 0.0 | 0.0 | 1.0 | | 157.0 | |

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of Norm X,Y,Z do not affect the $E^2$-field uncertainty inside TSL (see Pages 5 and 6).
[B] Numerical linearization parameter: uncertainty not required.
[E] Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

# DASY/EASY - Parameters of Probe: EX3DV4 - SN:3923

## Calibration Parameter Determined in Head Tissue Simulating Media

| f (MHz) [C] | Relative Permittivity [F] | Conductivity (S/m) [F] | ConvF X | ConvF Y | ConvF Z | Alpha [G] | Depth [G] (mm) | Unc (k=2) |
|---|---|---|---|---|---|---|---|---|
| 750 | 41.9 | 0.89 | 10.66 | 10.66 | 10.66 | 0.34 | 1.00 | ± 12.0 % |
| 835 | 41.5 | 0.90 | 10.45 | 10.45 | 10.45 | 0.42 | 0.80 | ± 12.0 % |
| 900 | 41.5 | 0.97 | 10.07 | 10.07 | 10.07 | 0.35 | 1.00 | ± 12.0 % |
| 1750 | 40.1 | 1.37 | 8.71 | 8.71 | 8.71 | 0.19 | 1.12 | ± 12.0 % |
| 1900 | 40.0 | 1.40 | 8.43 | 8.43 | 8.43 | 0.36 | 0.90 | ± 12.0 % |
| 2000 | 40.0 | 1.40 | 8.48 | 8.48 | 8.48 | 0.35 | 0.80 | ± 12.0 % |
| 2300 | 39.5 | 1.67 | 8.05 | 8.05 | 8.05 | 0.36 | 0.80 | ± 12.0 % |
| 2450 | 39.2 | 1.80 | 7.57 | 7.57 | 7.57 | 0.40 | 0.80 | ± 12.0 % |
| 2600 | 39.0 | 1.96 | 7.45 | 7.45 | 7.45 | 0.39 | 0.80 | ± 12.0 % |
| 5250 | 35.9 | 4.71 | 5.22 | 5.22 | 5.22 | 0.35 | 1.80 | ± 13.1 % |
| 5300 | 35.9 | 4.76 | 5.08 | 5.08 | 5.08 | 0.35 | 1.80 | ± 13.1 % |
| 5600 | 35.5 | 5.07 | 4.78 | 4.78 | 4.78 | 0.40 | 1.80 | ± 13.1 % |
| 5750 | 35.4 | 5.22 | 4.81 | 4.81 | 4.81 | 0.40 | 1.80 | ± 13.1 % |

[C] Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.
[F] At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

# DASY/EASY - Parameters of Probe: EX3DV4 - SN:3923

## Calibration Parameter Determined in Body Tissue Simulating Media

| f (MHz) [C] | Relative Permittivity [F] | Conductivity (S/m) [F] | ConvF X | ConvF Y | ConvF Z | Alpha [G] | Depth [G] (mm) | Unc (k=2) |
|---|---|---|---|---|---|---|---|---|
| 750 | 55.5 | 0.96 | 10.50 | 10.50 | 10.50 | 0.43 | 0.86 | ± 12.0 % |
| 835 | 55.2 | 0.97 | 10.48 | 10.48 | 10.48 | 0.21 | 1.42 | ± 12.0 % |
| 900 | 55.0 | 1.05 | 10.33 | 10.33 | 10.33 | 0.30 | 1.08 | ± 12.0 % |
| 1750 | 53.4 | 1.49 | 8.40 | 8.40 | 8.40 | 0.39 | 0.87 | ± 12.0 % |
| 1900 | 53.3 | 1.52 | 8.11 | 8.11 | 8.11 | 0.41 | 0.80 | ± 12.0 % |
| 2000 | 53.3 | 1.52 | 8.31 | 8.31 | 8.31 | 0.29 | 1.02 | ± 12.0 % |
| 2300 | 52.9 | 1.81 | 7.90 | 7.90 | 7.90 | 0.30 | 0.91 | ± 12.0 % |
| 2450 | 52.7 | 1.95 | 7.63 | 7.63 | 7.63 | 0.29 | 0.90 | ± 12.0 % |
| 2600 | 52.5 | 2.16 | 7.49 | 7.49 | 7.49 | 0.25 | 0.95 | ± 12.0 % |
| 5250 | 48.9 | 5.36 | 4.68 | 4.68 | 4.68 | 0.40 | 1.90 | ± 13.1 % |
| 5300 | 48.9 | 5.42 | 4.56 | 4.56 | 4.56 | 0.40 | 1.90 | ± 13.1 % |
| 5600 | 48.5 | 5.77 | 4.10 | 4.10 | 4.10 | 0.45 | 1.90 | ± 13.1 % |
| 5750 | 48.3 | 5.94 | 4.30 | 4.30 | 4.30 | 0.45 | 1.90 | ± 13.1 % |

[C] Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.
[F] At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.




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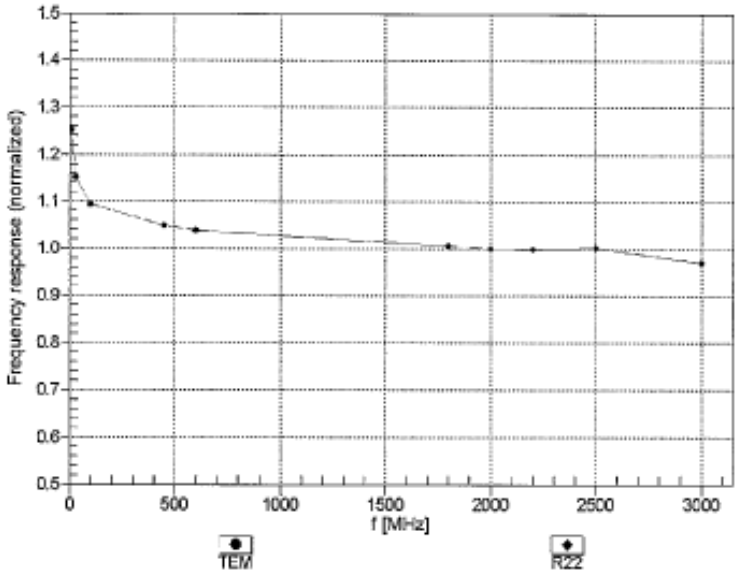
EX3DV4– SN:3923 August 27, 2015

## Frequency Response of E-Field
(TEM-Cell:ifi110 EXX, Waveguide: R22)




Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)





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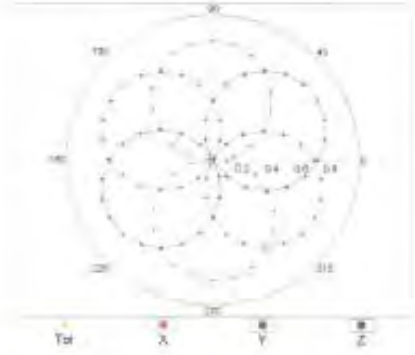
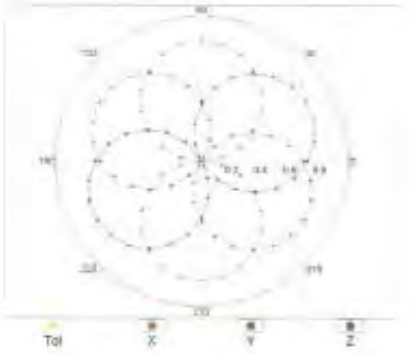
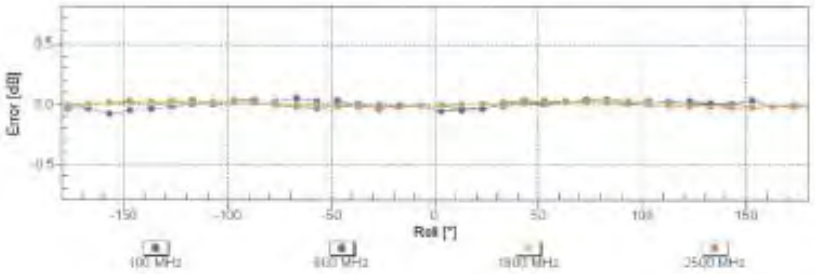
## Receiving Pattern (ϕ), ϑ = 0°

f=600 MHz,TEM




f=1800 MHz,R22




Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)





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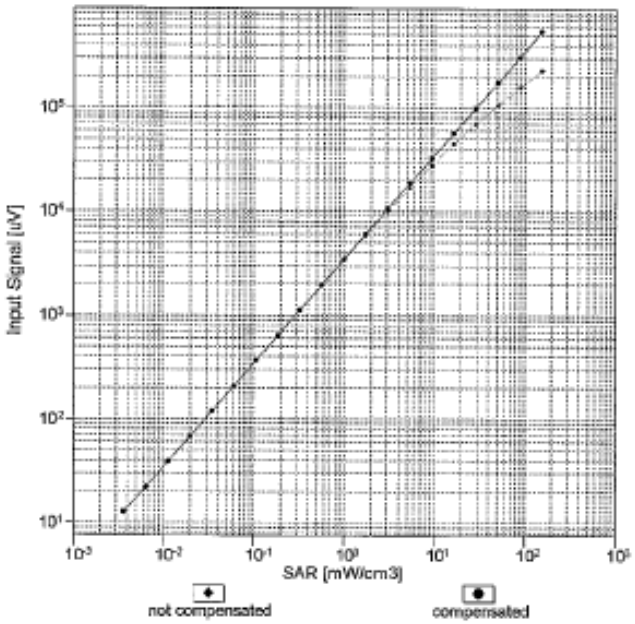
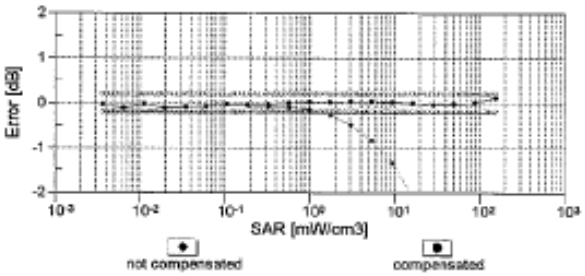
## Dynamic Range f(SAR$_{head}$)
(TEM cell , $f_{eval}$= 1900 MHz)




**Uncertainty of Linearity Assessment: ± 0.6% (k=2)**





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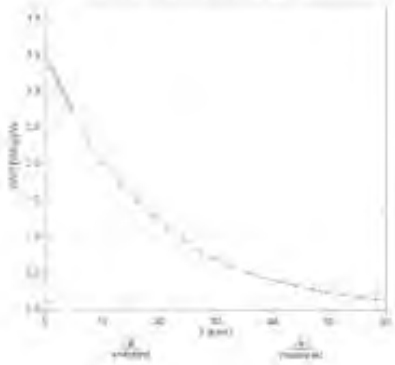
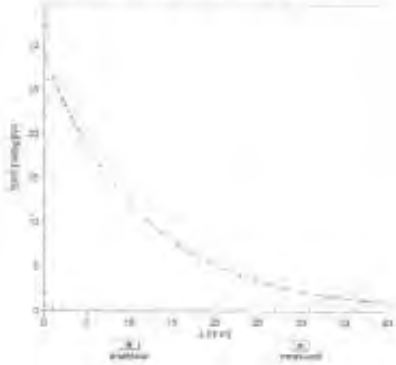
## Conversion Factor Assessment

f = 835 MHz,WGLS R9 (H_convF)

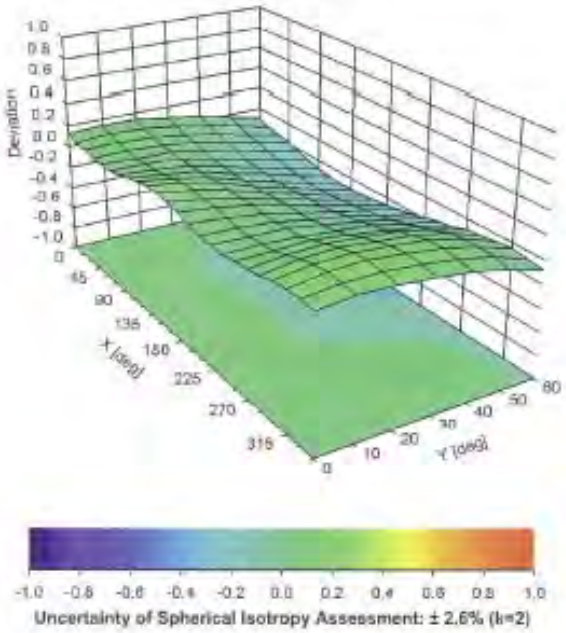


f = 1900 MHz,WGLS R22 (H_convF)



## Deviation from Isotropy in Liquid

Error (ϕ, ϑ), f = 900 MHz







Uncertainty of Spherical Isotropy Assessment: ± 2.6% (k=2)

# DASY/EASY - Parameters of Probe: EX3DV4 - SN:3923

## Other Probe Parameters

| | |
|---|---|
| Sensor Arrangement | Triangular |
| Connector Angle (°) | 123 |
| Mechanical Surface Detection Mode | enabled |
| Optical Surface Detection Mode | disabled |
| Probe Overall Length | 337 mm |
| Probe Body Diameter | 10 mm |
| Tip Length | 9 mm |
| Tip Diameter | 2.5 mm |
| Probe Tip to Sensor X Calibration Point | 1 mm |
| Probe Tip to Sensor Y Calibration Point | 1 mm |
| Probe Tip to Sensor Z Calibration Point | 1 mm |
| Recommended Measurement Distance from Surface | 1.4 mm |

# 8. Uncertainty Budget

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/ Uncertainty | Probability | Div | Div Value | ci (1g) | ci (10g) | Standard uncertainty | Standard uncertainty | vi, or Veff |
| | | | | | | | | | |
| **Measurement system** | | | | | | | | | |
| Probe calibration | 6.00% | N | 1 | 1 | 1 | 1 | 6.00% | 6.00% | ∞ |
| ***Isotropy , Axial*** | 3.50% | R | √3 | 1.732 | 1 | 1 | 2.02% | 2.02% | ∞ |
| ***Isotropy, Hemispherical*** | 9.60% | R | √3 | 1.732 | 1 | 1 | 5.54% | 5.54% | ∞ |
| 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% | ∞ |
| ***Measurement drift (class A evaluation)*** | 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% | ∞ |
| | | | | | | | | | |
| **Test Sample related** | | | | | | | | | |
| 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% | ∞ |
| | | | | | | | | | |
| **Phantom and Setup** | | | | | | | | | |
| Phantom Uncertainty | 4.00% | R | √3 | 1.732 | 1 | 1 | 2.31% | 2.31% | ∞ |
| Deviation from reference liquid target ε 'r(Body) | 3.49% | N | 1 | 1 | 0.64 | 0.43 | 2.23% | 1.50% | M |
| Deviation from reference liquid target σ (Body) | 2.83% | N | 1 | 1 | 0.6 | 0.49 | 1.70% | 1.39% | M |
| Combined standard uncertainty | | RSS | | | | | 11.67% | 11.50% | |
| Expant uncertainty (95% confidence | | | | | | | 23.35% | 23.01% | |

# 9. Phantom Description

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info@speag.com, http://www.speag.com

**Certificate of Conformity / First Article Inspection**

| | |
|---|---|
| Item | SAM Twin Phantom V4.0 |
| Type No | QD 000 P40 C |
| Series No | TP-1150 and higher |
| Manufacturer | SPEAG<br>Zeughausstrasse 43<br>CH-8004 Zürich<br>Switzerland |

**Tests**
The series production process used allows the limitation to test of first articles.
Complete tests were made on the pre-series Type No. QD 000 P40 AA, Serial No. TP-1001 and on the series first article Type No. QD 000 P40 BA, Serial No. TP-1006. Certain parameters have been retested using further series items (called samples) or are tested at each item.

| Test | Requirement | Details | Units tested |
|---|---|---|---|
| Dimensions | Compliant with the geometry according to the CAD model | IT'IS CAD File (*) | First article, Samples |
| Material thickness of shell | Compliant with the requirements according to the standards | 2mm +/- 0.2mm in flat and specific areas of head section | First article, Samples, TP-1314 ff. |
| Material thickness at ERP | Compliant with the requirements according to the standards | 6mm +/- 0.2mm at ERP | First article, All items |
| Material parameters | Dielectric parameters for required frequencies | 300 MHz – 6 GHz: Relative permittivity < 5. Loss tangent < 0.05 | Material samples |
| Material resistivity | The material has been tested to be compatible with the liquids defined in the standards if handled and cleaned according to the instructions. Observe technical Note for material compatibility | DEGMBE based simulating liquids | Pre-series, First article, Material samples |
| Sagging | Compliant with the requirements according to the standards. Sagging of the flat section when filled with tissue simulating liquid | < 1% typical < 0.6% if filled with 155mm of HSL900 and without OUT below | Prototypes, Sample testing |

**Standards**
[1] CENELEC EN 50361
[2] IEEE Std 1528-2003
[3] IEC 62209 Part I
[4] FCC OET Bulletin 65, Supplement C, Edition 01-01
(*) The IT'IS CAD file is derived from [2] and is also within the tolerance requirements of the shapes of the other documents.

**Conformity**
Based on the sample tests above, we certify that this item is in compliance with the uncertainty requirements of SAR measurements specified in standards [1] to [4]

**Date** 07.07.2005

**Signature / Stamp**

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Doc No 581 – QD 000 P40 C – F Page 1 (1)

# 10. System Validation from Original Equipment Supplier

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client SGS-TW (Auden)

Certificate No: D750V3-1015_Aug15

## CALIBRATION CERTIFICATE

| | |
|---|---|
| Object | D750V3 - SN: 1015 |
| Calibration procedure(s) | QA CAL-05.v9<br>Calibration procedure for dipole validation kits above 700 MHz |
| Calibration date: | August 24, 2015 |

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards | ID # | Cal Date (Certificate No.) | Scheduled Calibration |
|---|---|---|---|
| Power meter EPM-442A | GB37480704 | 07-Oct-14 (No. 217-02020) | Oct-15 |
| Power sensor HP 8481A | US37292783 | 07-Oct-14 (No. 217-02020) | Oct-15 |
| Power sensor HP 8481A | MY41092317 | 07-Oct-14 (No. 217-02021) | Oct-15 |
| Reference 20 dB Attenuator | SN: 5058 (20k) | 01-Apr-15 (No. 217-02131) | Mar-16 |
| Type-N mismatch combination | SN: 5047.2 / 06327 | 01-Apr-15 (No. 217-02134) | Mar-16 |
| Reference Probe ES3DV3 | SN: 3205 | 30-Dec-14 (No. ES3-3205_Dec14) | Dec-15 |
| DAE4 | SN: 601 | 17-Aug-15 (No. DAE4-601_Aug15) | Aug-16 |

| Secondary Standards | ID # | Check Date (in house) | Scheduled Check |
|---|---|---|---|
| RF generator R&S SMT-06 | 100005 | 04-Aug-99 (in house check Oct-13) | In house check: Oct-15 |
| Network Analyzer HP 8753E | US37390585 S4206 | 18-Oct-01 (in house check Oct-14) | In house check: Oct-15 |

| | Name | Function | Signature |
|---|---|---|---|
| Calibrated by: | Michael Weber | Laboratory Technician | |
| Approved by: | Katja Pokovic | Technical Manager | |

Issued: August 24, 2015

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

**Calibration Laboratory of**
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S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

**Glossary:**

| | |
|---|---|
| TSL | tissue simulating liquid |
| ConvF | sensitivity in TSL / NORM x,y,z |
| N/A | not applicable or not measured |

**Calibration is Performed According to the Following Standards:**

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

**Additional Documentation:**

e) DASY4/5 System Handbook

**Methods Applied and Interpretation of Parameters:**

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

## Measurement Conditions

DASY system configuration, as far as not given on page 1.

| | | |
|---|---|---|
| **DASY Version** | DASY5 | V52.8.8 |
| **Extrapolation** | Advanced Extrapolation | |
| **Phantom** | Modular Flat Phantom | |
| **Distance Dipole Center - TSL** | 15 mm | with Spacer |
| **Zoom Scan Resolution** | dx, dy, dz = 5 mm | |
| **Frequency** | 750 MHz ± 1 MHz | |

## Head TSL parameters

The following parameters and calculations were applied.

| | Temperature | Permittivity | Conductivity |
|---|---|---|---|
| **Nominal Head TSL parameters** | 22.0 °C | 41.9 | 0.89 mho/m |
| **Measured Head TSL parameters** | (22.0 ± 0.2) °C | 42.1 ± 6 % | 0.91 mho/m ± 6 % |
| **Head TSL temperature change during test** | < 0.5 °C | ---- | ---- |

## SAR result with Head TSL

| **SAR averaged over 1 cm³ (1 g) of Head TSL** | Condition | |
|---|---|---|
| SAR measured | 250 mW input power | 2.07 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | **8.15 W/kg ± 17.0 % (k=2)** |

| **SAR averaged over 10 cm³ (10 g) of Head TSL** | condition | |
|---|---|---|
| SAR measured | 250 mW input power | 1.35 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | **5.33 W/kg ± 16.5 % (k=2)** |

## Body TSL parameters

The following parameters and calculations were applied.

| | Temperature | Permittivity | Conductivity |
|---|---|---|---|
| **Nominal Body TSL parameters** | 22.0 °C | 55.5 | 0.96 mho/m |
| **Measured Body TSL parameters** | (22.0 ± 0.2) °C | 56.3 ± 6 % | 1.00 mho/m ± 6 % |
| **Body TSL temperature change during test** | < 0.5 °C | ---- | ---- |

## SAR result with Body TSL

| **SAR averaged over 1 cm³ (1 g) of Body TSL** | Condition | |
|---|---|---|
| SAR measured | 250 mW input power | 2.19 W/kg |
| SAR for nominal Body TSL parameters | normalized to 1W | **8.52 W/kg ± 17.0 % (k=2)** |

| **SAR averaged over 10 cm³ (10 g) of Body TSL** | condition | |
|---|---|---|
| SAR measured | 250 mW input power | 1.44 W/kg |
| SAR for nominal Body TSL parameters | normalized to 1W | **5.63 W/kg ± 16.5 % (k=2)** |





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## Appendix (Additional assessments outside the scope of SCS 0108)

### Antenna Parameters with Head TSL

| | |
|---|---|
| Impedance, transformed to feed point | 52.2 Ω - 1.1 jΩ |
| Return Loss | - 32.5 dB |

### Antenna Parameters with Body TSL

| | |
|---|---|
| Impedance, transformed to feed point | 48.5 Ω - 2.4 jΩ |
| Return Loss | - 30.9 dB |

### General Antenna Parameters and Design

| | |
|---|---|
| Electrical Delay (one direction) | 1.036 ns |

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.
No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

### Additional EUT Data

| | |
|---|---|
| Manufactured by | SPEAG |
| Manufactured on | March 22, 2010 |





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## DASY5 Validation Report for Head TSL

Date: 21.08.2015

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN: 1015**

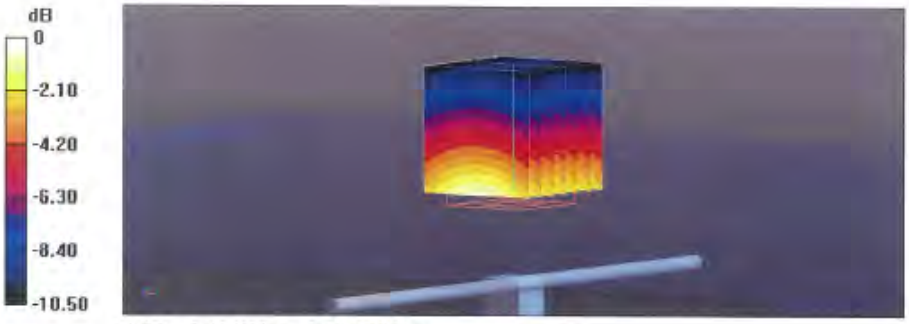
Communication System: UID 0 - CW; Frequency: 750 MHz
Medium parameters used: f = 750 MHz; $\sigma = 0.91$ S/m; $\varepsilon_r = 42.1$; $\rho = 1000$ kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(6.44, 6.44, 6.44); Calibrated: 30.12.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 17.08.2015
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

### Dipole Calibration for Head Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.39 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 3.07 W/kg
**SAR(1 g) = 2.07 W/kg; SAR(10 g) = 1.35 W/kg**
Maximum value of SAR (measured) = 2.43 W/kg




0 dB = 2.43 W/kg = 3.86 dBW/kg





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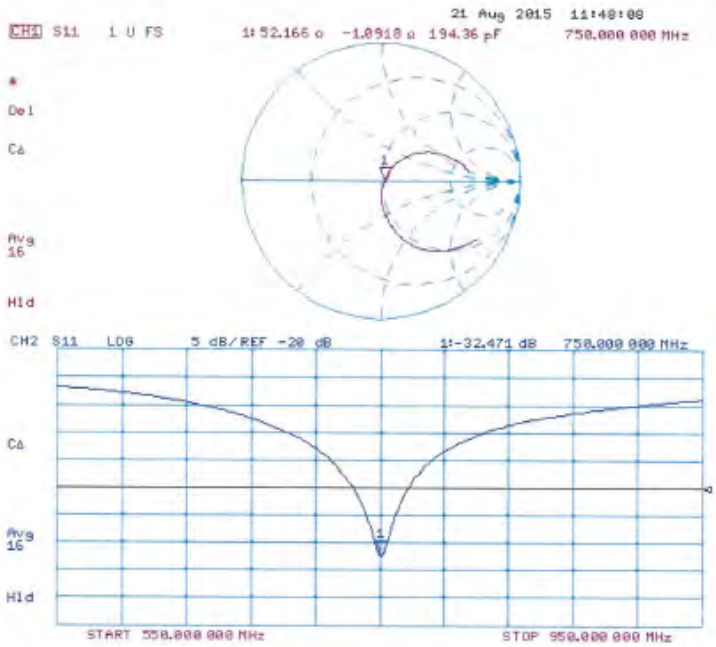
## Impedance Measurement Plot for Head TSL





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## DASY5 Validation Report for Body TSL

Date: 24.08.2015

Test Laboratory: SPEAG, Zurich, Switzerland

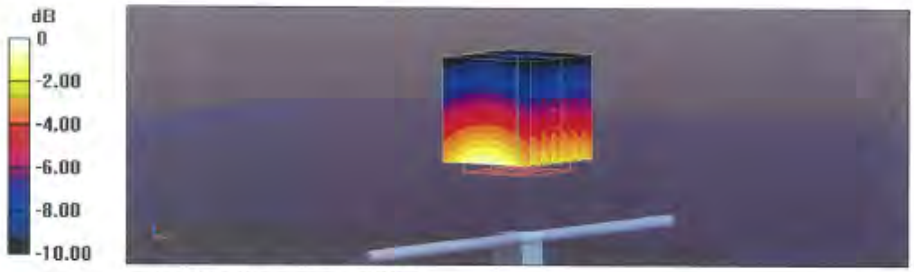
**DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN: 1015**

Communication System: UID 0 - CW; Frequency: 750 MHz
Medium parameters used: f = 750 MHz; $\sigma$ = 1 S/m; $\varepsilon_r$ = 56.3; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(6.21, 6.21, 6.21); Calibrated: 30.12.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 17.08.2015
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Dipole Calibration for Body Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:**
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 52.22 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 3.19 W/kg
**SAR(1 g) = 2.19 W/kg; SAR(10 g) = 1.44 W/kg**
Maximum value of SAR (measured) = 2.56 W/kg




0 dB = 2.56 W/kg = 4.08 dBW/kg





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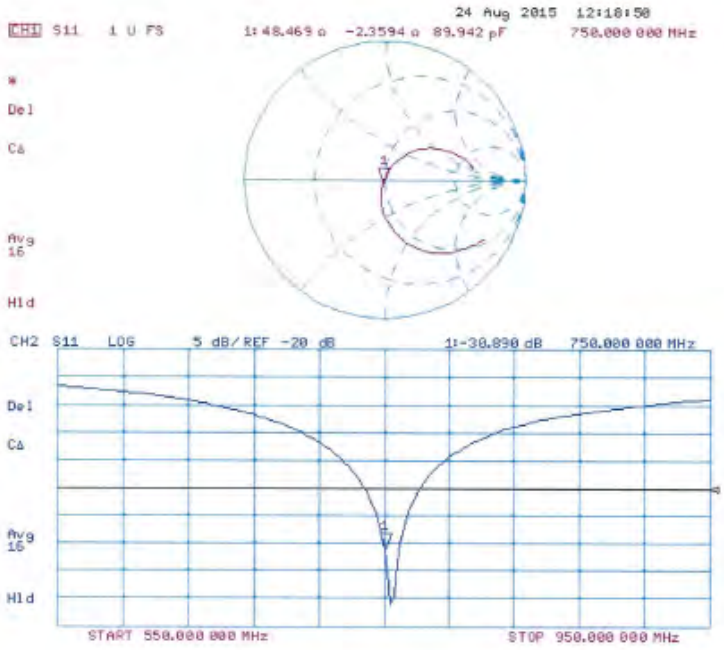
## Impedance Measurement Plot for Body TSL





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Accreditation No.: SCS 0108

Client SGS-TW (Auden)

Certificate No: D835V2-4d063_Aug15

# CALIBRATION CERTIFICATE

| | |
|---|---|
| Object | D835V2 - SN: 4d063 |
| Calibration procedure(s) | QA CAL-05.v9<br>Calibration procedure for dipole validation kits above 700 MHz |
| Calibration date: | August 24, 2015 |

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards | ID # | Cal Date (Certificate No.) | Scheduled Calibration |
|---|---|---|---|
| Power meter EPM-442A | GB37480704 | 07-Oct-14 (No. 217-02020) | Oct-15 |
| Power sensor HP 8481A | US37292783 | 07-Oct-14 (No. 217-02020) | Oct-15 |
| Power sensor HP 8481A | MY41092317 | 07-Oct-14 (No. 217-02021) | Oct-15 |
| Reference 20 dB Attenuator | SN: 5058 (20k) | 01-Apr-15 (No. 217-02131) | Mar-16 |
| Type-N mismatch combination | SN: 5047.2 / 06327 | 01-Apr-15 (No. 217-02134) | Mar-16 |
| Reference Probe ES3DV3 | SN: 3205 | 30-Dec-14 (No. ES3-3205_Dec14) | Dec-15 |
| DAE4 | SN: 601 | 17-Aug-15 (No. DAE4-601_Aug15) | Aug-16 |
| **Secondary Standards** | **ID #** | **Check Date (in house)** | **Scheduled Check** |
| RF generator R&S SMT-06 | 100005 | 04-Aug-99 (in house check Oct-13) | In house check: Oct-15 |
| Network Analyzer HP 8753E | US37390585 S4206 | 18-Oct-01 (in house check Oct-14) | In house check: Oct-15 |

| | Name | Function | Signature |
|---|---|---|---|
| Calibrated by: | Michael Weber | Laboratory Technician | |
| Approved by: | Katja Pokovic | Technical Manager | |

Issued: August 25, 2015

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Accreditation No.: SCS 0108

**Glossary:**

| | |
|---|---|
| TSL | tissue simulating liquid |
| ConvF | sensitivity in TSL / NORM x,y,z |
| N/A | not applicable or not measured |

**Calibration is Performed According to the Following Standards:**

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

**Additional Documentation:**

e) DASY4/5 System Handbook

**Methods Applied and Interpretation of Parameters:**

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

## Measurement Conditions

DASY system configuration, as far as not given on page 1.

| | | |
|---|---|---|
| **DASY Version** | DASY5 | V52.8.8 |
| **Extrapolation** | Advanced Extrapolation | |
| **Phantom** | Modular Flat Phantom | |
| **Distance Dipole Center - TSL** | 15 mm | with Spacer |
| **Zoom Scan Resolution** | dx, dy, dz = 5 mm | |
| **Frequency** | 835 MHz ± 1 MHz | |

## Head TSL parameters

The following parameters and calculations were applied.

| | Temperature | Permittivity | Conductivity |
|---|---|---|---|
| **Nominal Head TSL parameters** | 22.0 °C | 41.5 | 0.90 mho/m |
| **Measured Head TSL parameters** | (22.0 ± 0.2) °C | 41.9 ± 6 % | 0.93 mho/m ± 6 % |
| **Head TSL temperature change during test** | < 0.5 °C | ---- | ---- |

## SAR result with Head TSL

| **SAR averaged over 1 cm³ (1 g) of Head TSL** | Condition | |
|---|---|---|
| SAR measured | 250 mW input power | 2.33 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | **9.11 W/kg ± 17.0 % (k=2)** |

| **SAR averaged over 10 cm³ (10 g) of Head TSL** | condition | |
|---|---|---|
| SAR measured | 250 mW input power | 1.52 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | **5.97 W/kg ± 16.5 % (k=2)** |

## Body TSL parameters

The following parameters and calculations were applied.

| | Temperature | Permittivity | Conductivity |
|---|---|---|---|
| **Nominal Body TSL parameters** | 22.0 °C | 55.2 | 0.97 mho/m |
| **Measured Body TSL parameters** | (22.0 ± 0.2) °C | 56.1 ± 6 % | 1.02 mho/m ± 6 % |
| **Body TSL temperature change during test** | < 0.5 °C | ---- | ---- |

## SAR result with Body TSL

| **SAR averaged over 1 cm³ (1 g) of Body TSL** | Condition | |
|---|---|---|
| SAR measured | 250 mW input power | 2.40 W/kg |
| SAR for nominal Body TSL parameters | normalized to 1W | **9.28 W/kg ± 17.0 % (k=2)** |

| **SAR averaged over 10 cm³ (10 g) of Body TSL** | condition | |
|---|---|---|
| SAR measured | 250 mW input power | 1.57 W/kg |
| SAR for nominal Body TSL parameters | normalized to 1W | **6.11 W/kg ± 16.5 % (k=2)** |





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## Appendix (Additional assessments outside the scope of SCS 0108)

### Antenna Parameters with Head TSL

| | |
|---|---|
| Impedance, transformed to feed point | 51.3 Ω - 1.7 jΩ |
| Return Loss | - 33.4 dB |

### Antenna Parameters with Body TSL

| | |
|---|---|
| Impedance, transformed to feed point | 47.9 Ω - 2.7 jΩ |
| Return Loss | - 29.1 dB |

### General Antenna Parameters and Design

| | |
|---|---|
| Electrical Delay (one direction) | 1.394 ns |

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.
No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

### Additional EUT Data

| | |
|---|---|
| Manufactured by | SPEAG |
| Manufactured on | November 27, 2006 |





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## DASY5 Validation Report for Head TSL

Date: 21.08.2015

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d063**

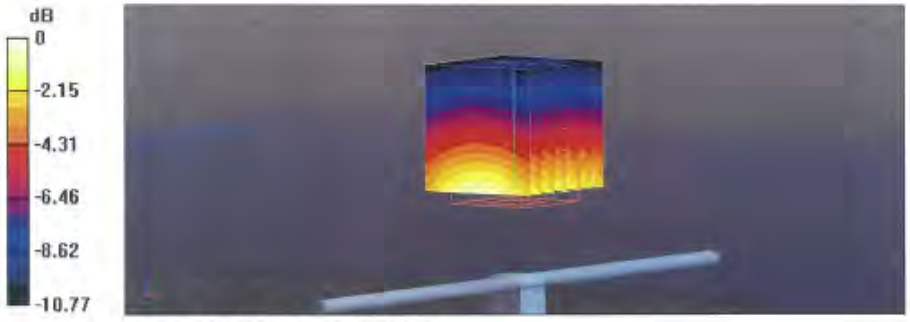
Communication System: UID 0 - CW; Frequency: 835 MHz
Medium parameters used: f = 835 MHz; $\sigma$ = 0.93 S/m; $\varepsilon_r$ = 41.9; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(6.2, 6.2, 6.2); Calibrated: 30.12.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 17.08.2015
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

### Dipole Calibration for Head Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.92 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 3.44 W/kg
**SAR(1 g) = 2.33 W/kg; SAR(10 g) = 1.52 W/kg**
Maximum value of SAR (measured) = 2.73 W/kg




0 dB = 2.73 W/kg = 4.36 dBW/kg





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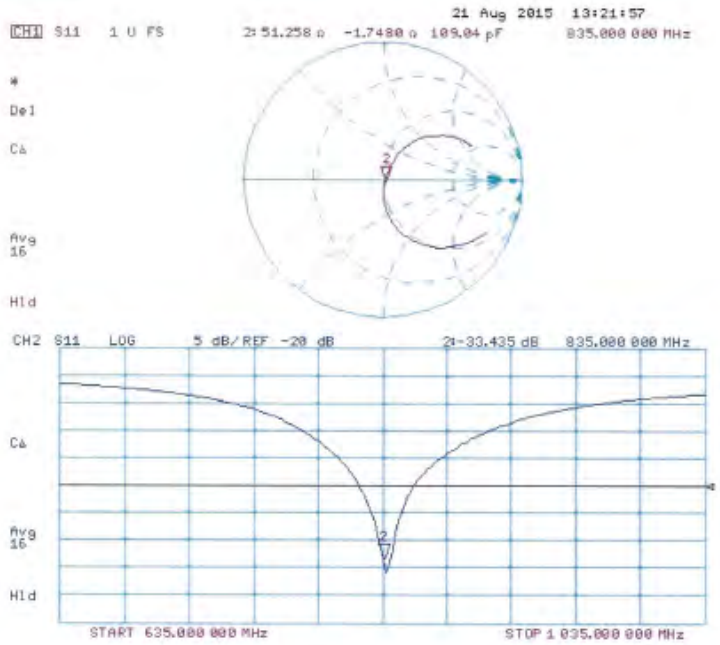
## Impedance Measurement Plot for Head TSL





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## DASY5 Validation Report for Body TSL

Date: 24.08.2015

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d063**

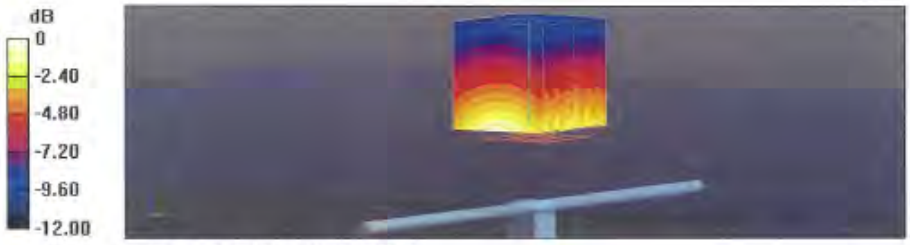
Communication System: UID 0 - CW; Frequency: 835 MHz
Medium parameters used: f = 835 MHz; $\sigma$ = 1.02 S/m; $\varepsilon_r$ = 56.1; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(6.17, 6.17, 6.17); Calibrated: 30.12.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 17.08.2015
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

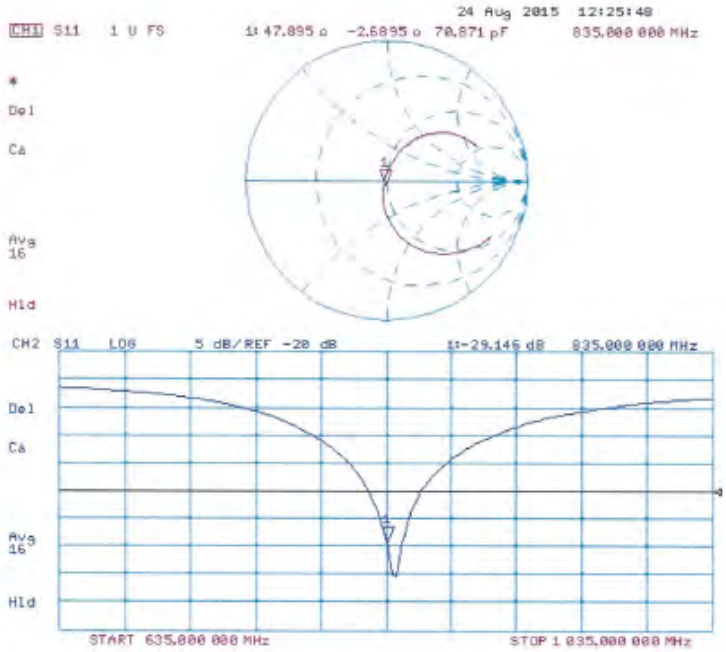
### Dipole Calibration for Body Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.07 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 3.52 W/kg
**SAR(1 g) = 2.4 W/kg; SAR(10 g) = 1.57 W/kg**
Maximum value of SAR (measured) = 2.81 W/kg




0 dB = 2.81 W/kg = 4.49 dBW/kg

## Impedance Measurement Plot for Body TSL





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Accreditation No.: SCS 0108

Client SGS-TW (Auden)

Certificate No: D1750V2-1008_Aug15

# CALIBRATION CERTIFICATE

| | |
|---|---|
| Object | D1750V2 - SN: 1008 |
| Calibration procedure(s) | QA CAL-05.v9<br>Calibration procedure for dipole validation kits above 700 MHz |
| Calibration date: | August 20, 2015 |

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards | ID # | Cal Date (Certificate No.) | Scheduled Calibration |
|---|---|---|---|
| Power meter EPM-442A | GB37480704 | 07-Oct-14 (No. 217-02020) | Oct-15 |
| Power sensor HP 8481A | US37292783 | 07-Oct-14 (No. 217-02020) | Oct-15 |
| Power sensor HP 8481A | MY41092317 | 07-Oct-14 (No. 217-02021) | Oct-15 |
| Reference 20 dB Attenuator | SN: 5058 (20k) | 01-Apr-15 (No. 217-02131) | Mar-16 |
| Type-N mismatch combination | SN: 5047.2 / 06327 | 01-Apr-15 (No. 217-02134) | Mar-16 |
| Reference Probe ES3DV3 | SN: 3205 | 30-Dec-14 (No. ES3-3205_Dec14) | Dec-15 |
| DAE4 | SN: 601 | 17-Aug-15 (No. DAE4-601_Aug15) | Aug-16 |

| Secondary Standards | ID # | Check Date (in house) | Scheduled Check |
|---|---|---|---|
| RF generator R&S SMT-06 | 100005 | 04-Aug-99 (in house check Oct-13) | In house check: Oct-15 |
| Network Analyzer HP 8753E | US37390585 S4206 | 18-Oct-01 (in house check Oct-14) | In house check: Oct-15 |

| | Name | Function | Signature |
|---|---|---|---|
| Calibrated by: | Michael Weber | Laboratory Technician | |
| Approved by: | Katja Pokovic | Technical Manager | |

Issued: August 21, 2015

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Accreditation No.: SCS 0108

**Glossary:**

| | |
|---|---|
| TSL | tissue simulating liquid |
| ConvF | sensitivity in TSL / NORM x,y,z |
| N/A | not applicable or not measured |

**Calibration is Performed According to the Following Standards:**

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

**Additional Documentation:**

e) DASY4/5 System Handbook

**Methods Applied and Interpretation of Parameters:**

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

## Measurement Conditions

DASY system configuration, as far as not given on page 1.

| | | |
|---|---|---|
| **DASY Version** | DASY5 | V52.8.8 |
| **Extrapolation** | Advanced Extrapolation | |
| **Phantom** | Modular Flat Phantom | |
| **Distance Dipole Center - TSL** | 10 mm | with Spacer |
| **Zoom Scan Resolution** | dx, dy, dz = 5 mm | |
| **Frequency** | 1750 MHz ± 1 MHz | |

## Head TSL parameters

The following parameters and calculations were applied.

| | Temperature | Permittivity | Conductivity |
|---|---|---|---|
| **Nominal Head TSL parameters** | 22.0 °C | 40.1 | 1.37 mho/m |
| **Measured Head TSL parameters** | (22.0 ± 0.2) °C | 39.8 ± 6 % | 1.36 mho/m ± 6 % |
| **Head TSL temperature change during test** | < 0.5 °C | ---- | ---- |

## SAR result with Head TSL

| **SAR averaged over 1 cm³ (1 g) of Head TSL** | Condition | |
|---|---|---|
| SAR measured | 250 mW input power | 9.12 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | **36.6 W/kg ± 17.0 % (k=2)** |

| **SAR averaged over 10 cm³ (10 g) of Head TSL** | condition | |
|---|---|---|
| SAR measured | 250 mW input power | 4.85 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | **19.4 W/kg ± 16.5 % (k=2)** |

## Body TSL parameters

The following parameters and calculations were applied.

| | Temperature | Permittivity | Conductivity |
|---|---|---|---|
| **Nominal Body TSL parameters** | 22.0 °C | 53.4 | 1.49 mho/m |
| **Measured Body TSL parameters** | (22.0 ± 0.2) °C | 52.1 ± 6 % | 1.48 mho/m ± 6 % |
| **Body TSL temperature change during test** | < 0.5 °C | ---- | ---- |

## SAR result with Body TSL

| **SAR averaged over 1 cm³ (1 g) of Body TSL** | Condition | |
|---|---|---|
| SAR measured | 250 mW input power | 9.36 W/kg |
| SAR for nominal Body TSL parameters | normalized to 1W | **37.4 W/kg ± 17.0 % (k=2)** |

| **SAR averaged over 10 cm³ (10 g) of Body TSL** | condition | |
|---|---|---|
| SAR measured | 250 mW input power | 5.05 W/kg |
| SAR for nominal Body TSL parameters | normalized to 1W | **20.2 W/kg ± 16.5 % (k=2)** |





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## Appendix (Additional assessments outside the scope of SCS 0108)

### Antenna Parameters with Head TSL

| | |
|---|---|
| Impedance, transformed to feed point | 50.5 Ω + 1.1 jΩ |
| Return Loss | - 38.7 dB |

### Antenna Parameters with Body TSL

| | |
|---|---|
| Impedance, transformed to feed point | 46.9 Ω + 1.0 jΩ |
| Return Loss | - 29.5 dB |

### General Antenna Parameters and Design

| | |
|---|---|
| Electrical Delay (one direction) | 1.221 ns |

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.
No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

### Additional EUT Data

| | |
|---|---|
| Manufactured by | SPEAG |
| Manufactured on | February 11, 2009 |





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## DASY5 Validation Report for Head TSL

Date: 20.08.2015

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2 - SN: 1008**

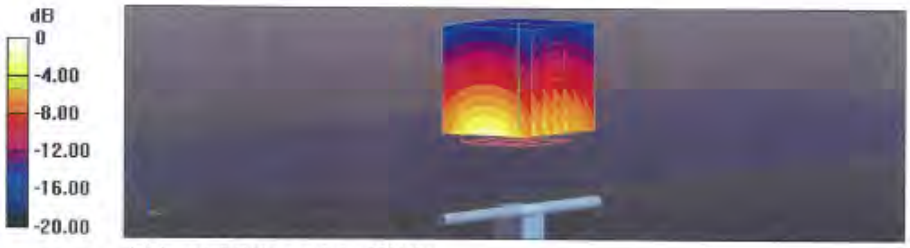
Communication System: UID 0 - CW; Frequency: 1750 MHz
Medium parameters used: f = 1750 MHz; $\sigma$ = 1.36 S/m; $\varepsilon_r$ = 39.8; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(5.2, 5.2, 5.2); Calibrated: 30.12.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 17.08.2015
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

### Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 95.15 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 16.3 W/kg
**SAR(1 g) = 9.12 W/kg; SAR(10 g) = 4.85 W/kg**
Maximum value of SAR (measured) = 11.5 W/kg




0 dB = 11.5 W/kg = 10.61 dBW/kg





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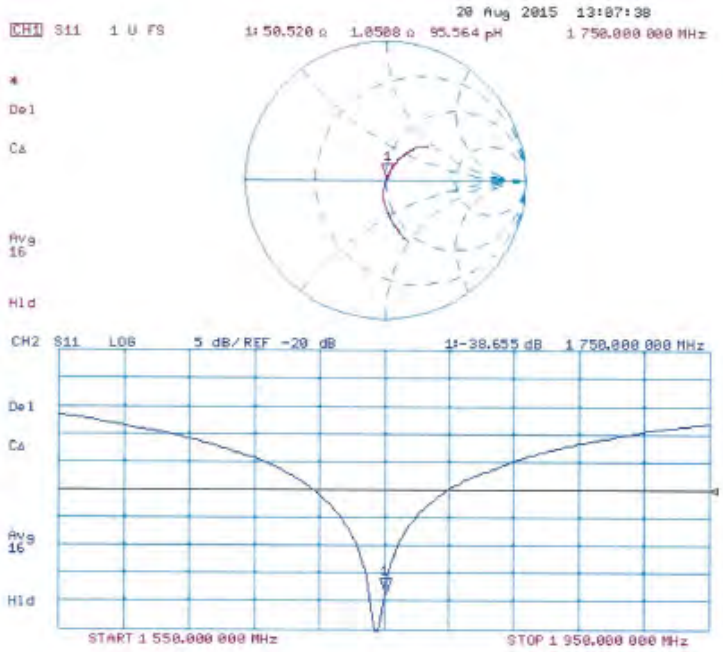
## Impedance Measurement Plot for Head TSL





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## DASY5 Validation Report for Body TSL

Date: 20.08.2015

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2 - SN: 1008**

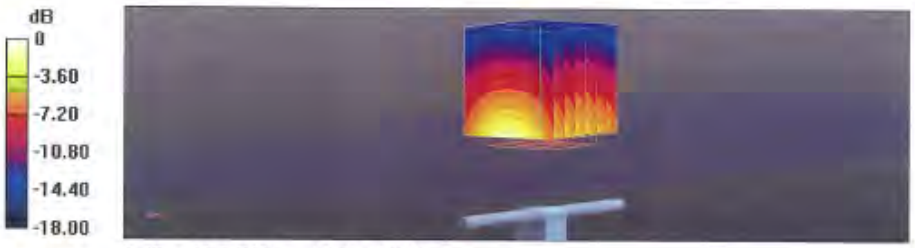
Communication System: UID 0 - CW; Frequency: 1750 MHz
Medium parameters used: f = 1750 MHz; $\sigma$ = 1.48 S/m; $\varepsilon_r$ = 52.1; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(4.88, 4.88, 4.88); Calibrated: 30.12.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 17.08.2015
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

### Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 93.12 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 16.1 W/kg
**SAR(1 g) = 9.36 W/kg; SAR(10 g) = 5.05 W/kg**
Maximum value of SAR (measured) = 11.8 W/kg




0 dB = 11.8 W/kg = 10.72 dBW/kg





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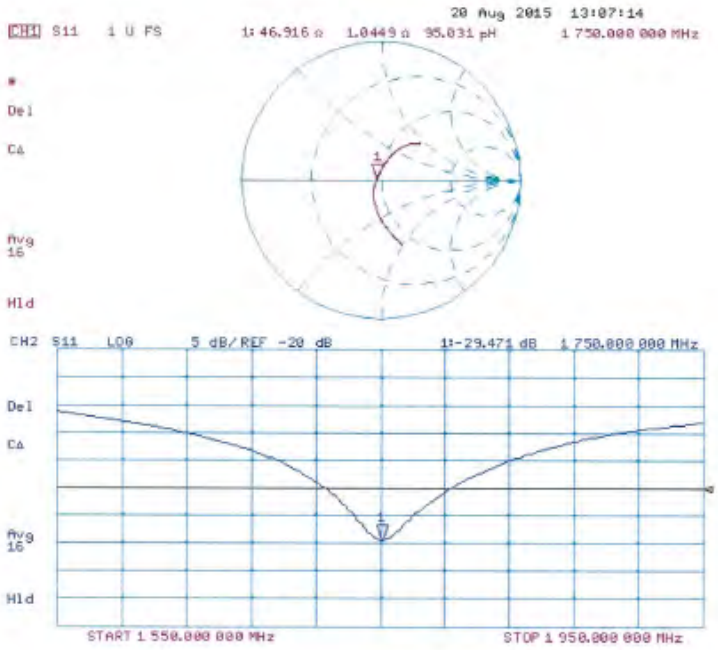
## Impedance Measurement Plot for Body TSL





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Accreditation No.: SCS 0108

Client SGS-TW (Auden)

Certificate No: D1900V2-5d027_Apr15

# CALIBRATION CERTIFICATE

| | |
|---|---|
| Object | D1900V2 - SN:5d027 |
| Calibration procedure(s) | QA CAL-05.v9<br>Calibration procedure for dipole validation kits above 700 MHz |
| Calibration date: | April 29, 2015 |

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards | ID # | Cal Date (Certificate No.) | Scheduled Calibration |
|---|---|---|---|
| Power meter EPM-442A | GB37480704 | 07-Oct-14 (No. 217-02020) | Oct-15 |
| Power sensor HP 8481A | US37292783 | 07-Oct-14 (No. 217-02020) | Oct-15 |
| Power sensor HP 8481A | MY41092317 | 07-Oct-14 (No. 217-02021) | Oct-15 |
| Reference 20 dB Attenuator | SN: 5058 (20k) | 01-Apr-15 (No. 217-02131) | Mar-16 |
| Type-N mismatch combination | SN: 5047.2 / 06327 | 01-Apr-15 (No. 217-02134) | Mar-16 |
| Reference Probe ES3DV3 | SN: 3205 | 30-Dec-14 (No. ES3-3205_Dec14) | Dec-15 |
| DAE4 | SN: 601 | 18-Aug-14 (No. DAE4-601_Aug14) | Aug-15 |

| Secondary Standards | ID # | Check Date (in house) | Scheduled Check |
|---|---|---|---|
| RF generator R&S SMT-06 | 100005 | 04-Aug-99 (in house check Oct-13) | In house check: Oct-16 |
| Network Analyzer HP 8753E | US37390585 S4206 | 18-Oct-01 (in house check Oct-14) | In house check: Oct-15 |

| | Name | Function | Signature |
|---|---|---|---|
| Calibrated by: | Claudio Leubler | Laboratory Technician | |
| Approved by: | Katja Pokovic | Technical Manager | |

Issued: April 29, 2015

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: D1900V2-5d027_Apr15 Page 1 of 8

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Accreditation No.: SCS 0108

**Glossary:**

| | |
|---|---|
| TSL | tissue simulating liquid |
| ConvF | sensitivity in TSL / NORM x,y,z |
| N/A | not applicable or not measured |

**Calibration is Performed According to the Following Standards:**

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
c) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

**Additional Documentation:**

d) DASY4/5 System Handbook

**Methods Applied and Interpretation of Parameters:**

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

## Measurement Conditions

DASY system configuration, as far as not given on page 1.

| | | |
|---|---|---|
| **DASY Version** | DASY5 | V52.8.8 |
| **Extrapolation** | Advanced Extrapolation | |
| **Phantom** | Modular Flat Phantom | |
| **Distance Dipole Center - TSL** | 10 mm | with Spacer |
| **Zoom Scan Resolution** | dx, dy, dz = 5 mm | |
| **Frequency** | 1900 MHz ± 1 MHz | |

## Head TSL parameters

The following parameters and calculations were applied.

| | **Temperature** | **Permittivity** | **Conductivity** |
|---|---|---|---|
| **Nominal Head TSL parameters** | 22.0 °C | 40.0 | 1.40 mho/m |
| **Measured Head TSL parameters** | (22.0 ± 0.2) °C | 38.6 ± 6 % | 1.37 mho/m ± 6 % |
| **Head TSL temperature change during test** | < 0.5 °C | ---- | ---- |

## SAR result with Head TSL

| **SAR averaged over 1 cm³ (1 g) of Head TSL** | Condition | |
|---|---|---|
| SAR measured | 250 mW input power | 10.1 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | **40.6 W/kg ± 17.0 % (k=2)** |

| **SAR averaged over 10 cm³ (10 g) of Head TSL** | condition | |
|---|---|---|
| SAR measured | 250 mW input power | 5.30 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | **21.3 W/kg ± 16.5 % (k=2)** |

## Body TSL parameters

The following parameters and calculations were applied.

| | **Temperature** | **Permittivity** | **Conductivity** |
|---|---|---|---|
| **Nominal Body TSL parameters** | 22.0 °C | 53.3 | 1.52 mho/m |
| **Measured Body TSL parameters** | (22.0 ± 0.2) °C | 52.8 ± 6 % | 1.50 mho/m ± 6 % |
| **Body TSL temperature change during test** | < 0.5 °C | ---- | ---- |

## SAR result with Body TSL

| **SAR averaged over 1 cm³ (1 g) of Body TSL** | Condition | |
|---|---|---|
| SAR measured | 250 mW input power | 9.78 W/kg |
| SAR for nominal Body TSL parameters | normalized to 1W | **39.3 W/kg ± 17.0 % (k=2)** |

| **SAR averaged over 10 cm³ (10 g) of Body TSL** | condition | |
|---|---|---|
| SAR measured | 250 mW input power | 5.20 W/kg |
| SAR for nominal Body TSL parameters | normalized to 1W | **20.9 W/kg ± 16.5 % (k=2)** |





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## Appendix (Additional assessments outside the scope of SCS 0108)

### Antenna Parameters with Head TSL

| | |
|---|---|
| Impedance, transformed to feed point | 50.2 Ω + 2.5 jΩ |
| Return Loss | - 32.2 dB |

### Antenna Parameters with Body TSL

| | |
|---|---|
| Impedance, transformed to feed point | 46.5 Ω + 2.5 jΩ |
| Return Loss | - 27.0 dB |

### General Antenna Parameters and Design

| | |
|---|---|
| Electrical Delay (one direction) | 1.197 ns |

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.
No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

### Additional EUT Data

| | |
|---|---|
| Manufactured by | SPEAG |
| Manufactured on | December 17, 2002 |





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## DASY5 Validation Report for Head TSL

Date: 29.04.2015

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d027**

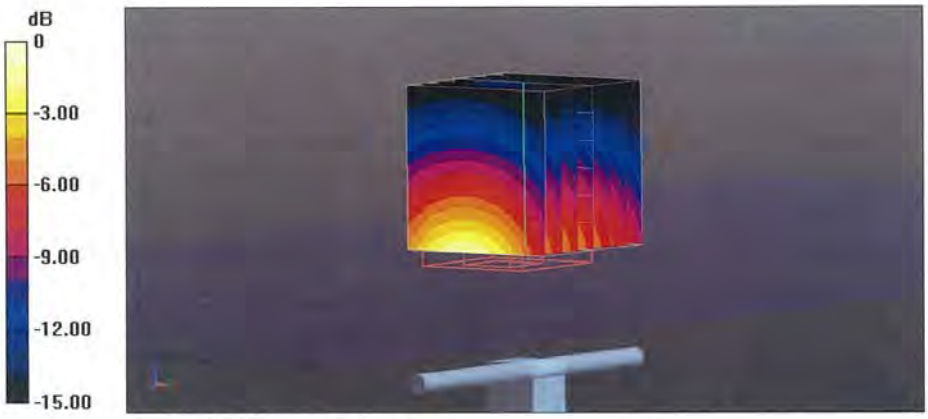
Communication System: UID 0 - CW; Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; $\sigma$ = 1.37 S/m; $\varepsilon_r$ = 38.6; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(5, 5, 5); Calibrated: 30.12.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 18.08.2014
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

### Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 97.71 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 18.5 W/kg
**SAR(1 g) = 10.1 W/kg; SAR(10 g) = 5.3 W/kg**
Maximum value of SAR (measured) = 12.3 W/kg




0 dB = 12.3 W/kg = 10.90 dBW/kg





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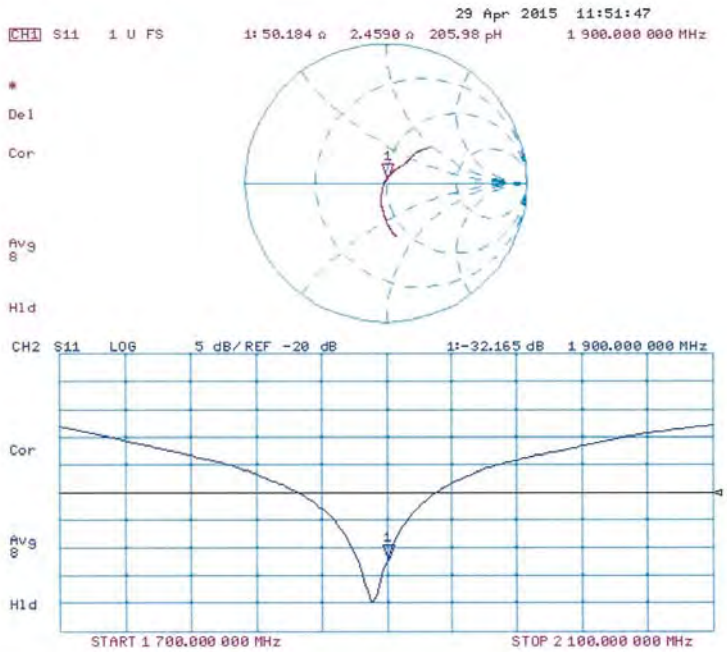
## Impedance Measurement Plot for Head TSL





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## DASY5 Validation Report for Body TSL

Date: 29.04.2015

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN: 5d027**

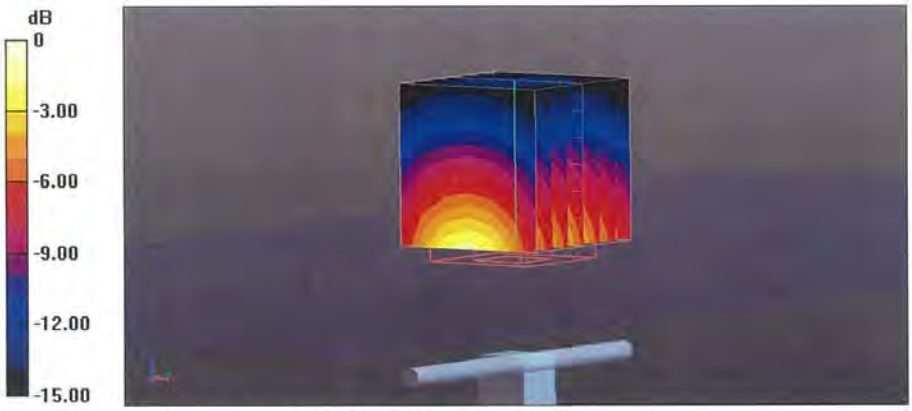
Communication System: UID 0 - CW; Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; $\sigma$ = 1.5 S/m; $\varepsilon_r$ = 52.8; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(4.65, 4.65, 4.65); Calibrated: 30.12.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 18.08.2014
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

### Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 94.63 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 16.7 W/kg
**SAR(1 g) = 9.78 W/kg; SAR(10 g) = 5.2 W/kg**
Maximum value of SAR (measured) = 12.4 W/kg




0 dB = 12.4 W/kg = 10.93 dBW/kg





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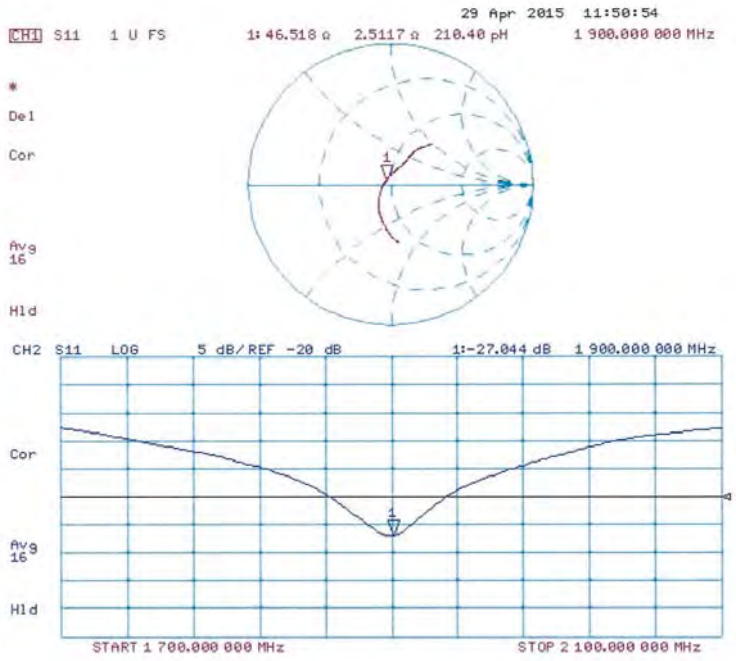
## Impedance Measurement Plot for Body TSL





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Accreditation No.: SCS 0108

Client SGS-TW (Auden)

Certificate No: D2450V2-727_Apr15

# CALIBRATION CERTIFICATE

Object D2450V2 - SN: 727

Calibration procedure(s) QA CAL-05.v9
Calibration procedure for dipole validation kits above 700 MHz

Calibration date: April 22, 2015

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards | ID # | Cal Date (Certificate No.) | Scheduled Calibration |
|---|---|---|---|
| Power meter EPM-442A | GB37480704 | 07-Oct-14 (No. 217-02020) | Oct-15 |
| Power sensor HP 8481A | US37292783 | 07-Oct-14 (No. 217-02020) | Oct-15 |
| Power sensor HP 8481A | MY41092317 | 07-Oct-14 (No. 217-02021) | Oct-15 |
| Reference 20 dB Attenuator | SN: 5058 (20k) | 01-Apr-15 (No. 217-02131) | Mar-16 |
| Type-N mismatch combination | SN: 5047.2 / 06327 | 01-Apr-15 (No. 217-02134) | Mar-16 |
| Reference Probe ES3DV3 | SN: 3205 | 30-Dec-14 (No. ES3-3205_Dec14) | Dec-15 |
| DAE4 | SN: 601 | 18-Aug-14 (No. DAE4-601_Aug14) | Aug-15 |

| Secondary Standards | ID # | Check Date (in house) | Scheduled Check |
|---|---|---|---|
| RF generator R&S SMT-06 | 100005 | 04-Aug-99 (in house check Oct-13) | In house check: Oct-16 |
| Network Analyzer HP 8753E | US37390585 S4206 | 18-Oct-01 (in house check Oct-14) | In house check: Oct-15 |

| | Name | Function | Signature |
|---|---|---|---|
| Calibrated by: | Michael Weber | Laboratory Technician | M.Webes |
| Approved by: | Katja Pokovic | Technical Manager | |

Issued: April 23, 2015

**Calibration Laboratory of**
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

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S Swiss Calibration Service

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Accreditation No.: SCS 0108

**Glossary:**

| | |
|---|---|
| TSL | tissue simulating liquid |
| ConvF | sensitivity in TSL / NORM x,y,z |
| N/A | not applicable or not measured |

**Calibration is Performed According to the Following Standards:**

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
c) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

**Additional Documentation:**

d) DASY4/5 System Handbook

**Methods Applied and Interpretation of Parameters:**

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

## Measurement Conditions

DASY system configuration, as far as not given on page 1.

| | | |
|---|---|---|
| **DASY Version** | DASY5 | V52.8.8 |
| **Extrapolation** | Advanced Extrapolation | |
| **Phantom** | Modular Flat Phantom | |
| **Distance Dipole Center - TSL** | 10 mm | with Spacer |
| **Zoom Scan Resolution** | dx, dy, dz = 5 mm | |
| **Frequency** | 2450 MHz ± 1 MHz | |

## Head TSL parameters

The following parameters and calculations were applied.

| | Temperature | Permittivity | Conductivity |
|---|---|---|---|
| **Nominal Head TSL parameters** | 22.0 °C | 39.2 | 1.80 mho/m |
| **Measured Head TSL parameters** | (22.0 ± 0.2) °C | 37.6 ± 6 % | 1.82 mho/m ± 6 % |
| **Head TSL temperature change during test** | < 0.5 °C | ---- | ---- |

## SAR result with Head TSL

| **SAR averaged over 1 cm³ (1 g) of Head TSL** | Condition | |
|---|---|---|
| SAR measured | 250 mW input power | 13.2 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | **52.0 W/kg ± 17.0 % (k=2)** |

| **SAR averaged over 10 cm³ (10 g) of Head TSL** | condition | |
|---|---|---|
| SAR measured | 250 mW input power | 6.10 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | **24.2 W/kg ± 16.5 % (k=2)** |

## Body TSL parameters

The following parameters and calculations were applied.

| | Temperature | Permittivity | Conductivity |
|---|---|---|---|
| **Nominal Body TSL parameters** | 22.0 °C | 52.7 | 1.95 mho/m |
| **Measured Body TSL parameters** | (22.0 ± 0.2) °C | 50.6 ± 6 % | 2.02 mho/m ± 6 % |
| **Body TSL temperature change during test** | < 0.5 °C | ---- | ---- |

## SAR result with Body TSL

| **SAR averaged over 1 cm³ (1 g) of Body TSL** | Condition | |
|---|---|---|
| SAR measured | 250 mW input power | 13.1 W/kg |
| SAR for nominal Body TSL parameters | normalized to 1W | **51.0 W/kg ± 17.0 % (k=2)** |

| **SAR averaged over 10 cm³ (10 g) of Body TSL** | condition | |
|---|---|---|
| SAR measured | 250 mW input power | 6.10 W/kg |
| SAR for nominal Body TSL parameters | normalized to 1W | **24.0 W/kg ± 16.5 % (k=2)** |





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## Appendix (Additional assessments outside the scope of SCS 0108)

### Antenna Parameters with Head TSL

| | |
|---|---|
| Impedance, transformed to feed point | 56.2 Ω + 1.3 jΩ |
| Return Loss | - 24.6 dB |

### Antenna Parameters with Body TSL

| | |
|---|---|
| Impedance, transformed to feed point | 51.8 Ω + 3.3 jΩ |
| Return Loss | - 28.6 dB |

### General Antenna Parameters and Design

| | |
|---|---|
| Electrical Delay (one direction) | 1.149 ns |

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.
No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

### Additional EUT Data

| | |
|---|---|
| Manufactured by | SPEAG |
| Manufactured on | January 09, 2003 |





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## DASY5 Validation Report for Head TSL

Date: 22.04.2015

Test Laboratory: SPEAG, Zurich, Switzerland

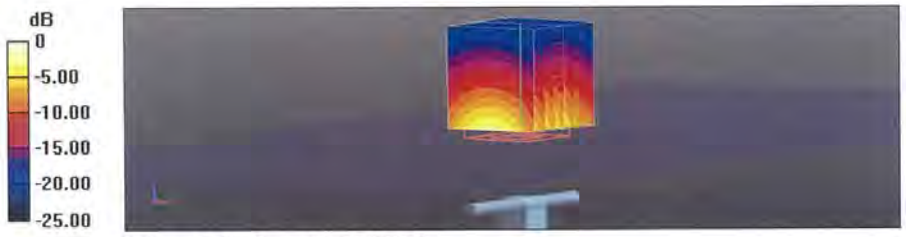
**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 727**

Communication System: UID 0 - CW; Frequency: 2450 MHz
Medium parameters used: f = 2450 MHz; $\sigma$ = 1.82 S/m; $\varepsilon_r$ = 37.6; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(4.54, 4.54, 4.54); Calibrated: 30.12.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 18.08.2014
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:**
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 101.5 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 27.4 W/kg
**SAR(1 g) = 13.2 W/kg; SAR(10 g) = 6.1 W/kg**
Maximum value of SAR (measured) = 17.5 W/kg




0 dB = 17.5 W/kg = 12.43 dBW/kg





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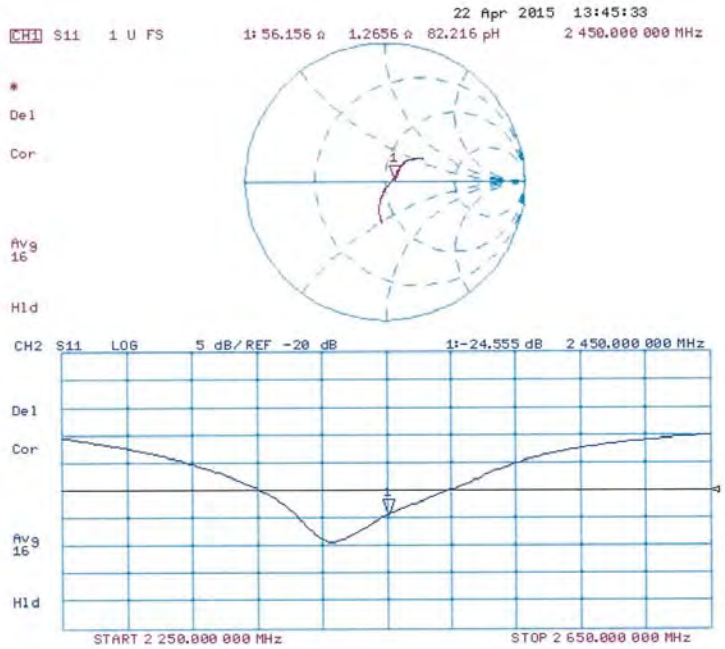
## Impedance Measurement Plot for Head TSL





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## DASY5 Validation Report for Body TSL

Date: 22.04.2015

Test Laboratory: SPEAG, Zurich, Switzerland

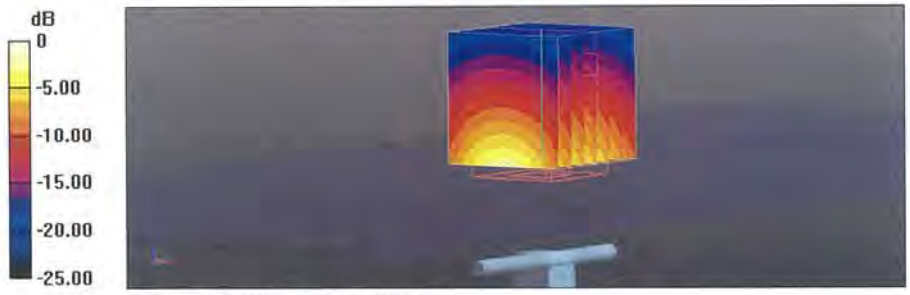
**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 727**

Communication System: UID 0 - CW; Frequency: 2450 MHz
Medium parameters used: f = 2450 MHz; $\sigma$ = 2.02 S/m; $\varepsilon_r$ = 50.6; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(4.32, 4.32, 4.32); Calibrated: 30.12.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 18.08.2014
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:**
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 95.54 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 27.2 W/kg
**SAR(1 g) = 13.1 W/kg; SAR(10 g) = 6.1 W/kg**
Maximum value of SAR (measured) = 17.4 W/kg




0 dB = 17.4 W/kg = 12.41 dBW/kg





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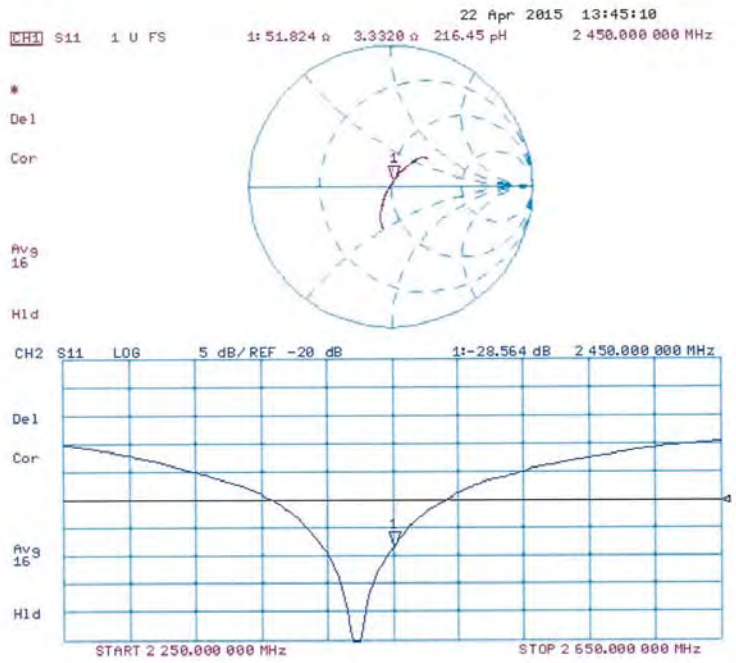
## Impedance Measurement Plot for Body TSL





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Accreditation No.: SCS 0108

Client SGS-TW (Auden)

Certificate No: D2600V2-1005_Jan15

# CALIBRATION CERTIFICATE

| | |
|---|---|
| Object | D2600V2 - SN: 1005 |
| Calibration procedure(s) | QA CAL-05.v9<br>Calibration procedure for dipole validation kits above 700 MHz |
| Calibration date | January 27, 2015 |

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards | ID # | Cal Date (Certificate No.) | Scheduled Calibration |
|---|---|---|---|
| Power meter EPM-442A | GB37480704 | 07-Oct-14 (No. 217-02020) | Oct-15 |
| Power sensor HP 8481A | US37292783 | 07-Oct-14 (No. 217-02020) | Oct-15 |
| Power sensor HP 8481A | MY41092317 | 07-Oct-14 (No. 217-02021) | Oct-15 |
| Reference 20 dB Attenuator | SN: 5058 (20k) | 03-Apr-14 (No. 217-01916) | Apr-15 |
| Type-N mismatch combination | SN: 5047.2 / 06327 | 03-Apr-14 (No. 217-01921) | Apr-15 |
| Reference Probe ES3DV3 | SN: 3205 | 30-Dec-14 (No. ES3-3205_Dec14) | Dec-15 |
| DAE4 | SN: 601 | 18-Aug-14 (No. DAE4-601_Aug14) | Aug-15 |

| Secondary Standards | ID # | Check Date (in house) | Scheduled Check |
|---|---|---|---|
| RF generator R&S SMT-06 | 100005 | 05-Aug-05 (in house check Oct-13) | In house check: Oct-15 |
| Network Analyzer HP 8753E | US37390585 S4206 | 18-Oct-01 (in house check Oct-14) | In house check: Oct-15 |

| | Name | Function | Signature |
|---|---|---|---|
| Calibrated by: | Claudio Leubler | Laboratory Technician | |
| Approved by: | Katja Pokovic | Technical Manager | |

Issued: January 27, 2015

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

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Accreditation No.: SCS 0108

**Glossary:**

| | |
|---|---|
| TSL | tissue simulating liquid |
| ConvF | sensitivity in TSL / NORM x,y,z |
| N/A | not applicable or not measured |

**Calibration is Performed According to the Following Standards:**

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
c) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

**Additional Documentation:**

d) DASY4/5 System Handbook

**Methods Applied and Interpretation of Parameters:**

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

## Measurement Conditions

DASY system configuration, as far as not given on page 1.

| | | |
|---|---|---|
| DASY Version | DASY5 | V52.8.8 |
| Extrapolation | Advanced Extrapolation | |
| Phantom | Modular Flat Phantom | |
| Distance Dipole Center - TSL | 10 mm | with Spacer |
| Zoom Scan Resolution | dx, dy, dz = 5 mm | |
| Frequency | 2600 MHz ± 1 MHz | |

## Head TSL parameters

The following parameters and calculations were applied.

| | Temperature | Permittivity | Conductivity |
|---|---|---|---|
| Nominal Head TSL parameters | 22.0 °C | 39.0 | 1.96 mho/m |
| Measured Head TSL parameters | (22.0 ± 0.2) °C | 38.6 ± 6 % | 2.05 mho/m ± 6 % |
| Head TSL temperature change during test | < 0.5 °C | — | — |

## SAR result with Head TSL

| SAR averaged over 1 $cm^3$ (1 g) of Head TSL | Condition | |
|---|---|---|
| SAR measured | 250 mW input power | 14.5 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | **56.8 W/kg ± 17.0 % (k=2)** |

| SAR averaged over 10 $cm^3$ (10 g) of Head TSL | condition | |
|---|---|---|
| SAR measured | 250 mW input power | 6.42 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | **25.4 W/kg ± 16.5 % (k=2)** |

## Body TSL parameters

The following parameters and calculations were applied.

| | Temperature | Permittivity | Conductivity |
|---|---|---|---|
| Nominal Body TSL parameters | 22.0 °C | 52.5 | 2.16 mho/m |
| Measured Body TSL parameters | (22.0 ± 0.2) °C | 51.1 ± 6 % | 2.21 mho/m ± 6 % |
| Body TSL temperature change during test | < 0.5 °C | — | — |

## SAR result with Body TSL

| SAR averaged over 1 $cm^3$ (1 g) of Body TSL | Condition | |
|---|---|---|
| SAR measured | 250 mW input power | 14.0 W/kg |
| SAR for nominal Body TSL parameters | normalized to 1W | **55.1 W/kg ± 17.0 % (k=2)** |

| SAR averaged over 10 $cm^3$ (10 g) of Body TSL | condition | |
|---|---|---|
| SAR measured | 250 mW input power | 6.20 W/kg |
| SAR for nominal Body TSL parameters | normalized to 1W | **24.6 W/kg ± 16.5 % (k=2)** |

## Appendix (Additional assessments outside the scope of SCS0108)

### Antenna Parameters with Head TSL

| | |
|---|---|
| Impedance, transformed to feed point | 49.4 Ω - 3.3 jΩ |
| Return Loss | - 29.3 dB |

### Antenna Parameters with Body TSL

| | |
|---|---|
| Impedance, transformed to feed point | 46.8 Ω - 2.5 jΩ |
| Return Loss | - 27.6 dB |

### General Antenna Parameters and Design

| | |
|---|---|
| Electrical Delay (one direction) | 1.134 ns |

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.
No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

### Additional EUT Data

| | |
|---|---|
| Manufactured by | SPEAG |
| Manufactured on | December 23, 2006 |





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**DASY5 Validation Report for Head TSL**

Date: 27.01.2015

Test Laboratory: SPEAG, Zurich, Switzerland

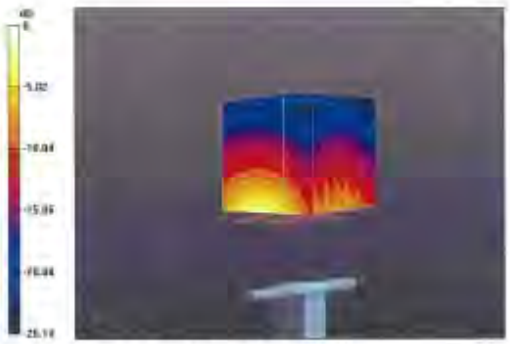
**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1005**

Communication System: UID 0 - CW; Frequency: 2600 MHz
Medium parameters used: f = 2600 MHz; $\sigma$ = 2.05 S/m; $\varepsilon_r$ = 38.8; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

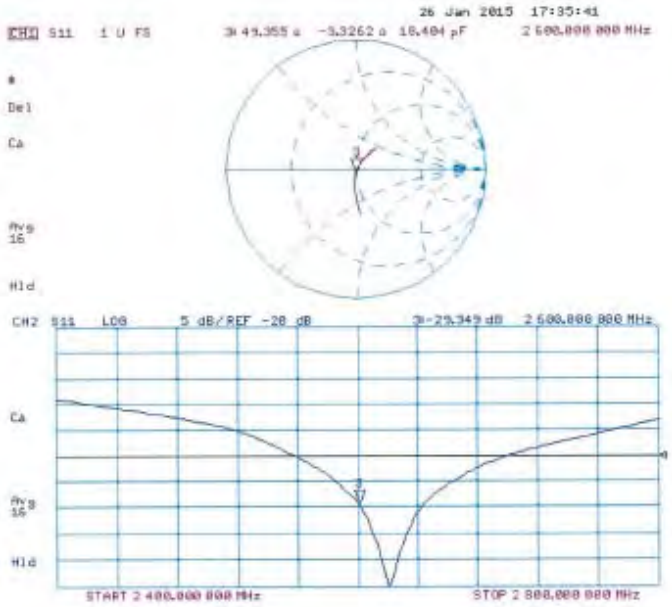
- Probe: ES3DV3 - SN3205; ConvF(4.49, 4.49, 4.49); Calibrated: 30.12.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 18.08.2014
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:**
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 98.94 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 30.6 W/kg
**SAR(1 g) = 14.5 W/kg; SAR(10 g) = 6.42 W/kg**
Maximum value of SAR (measured) = 18.6 W/kg



0 dB = 18.6 W/kg = 12.70 dBW/kg

## Impedance Measurement Plot for Head TSL





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**DASY5 Validation Report for Body TSL**

Date: 27.01.2015

Test Laboratory: SPEAG, Zurich, Switzerland

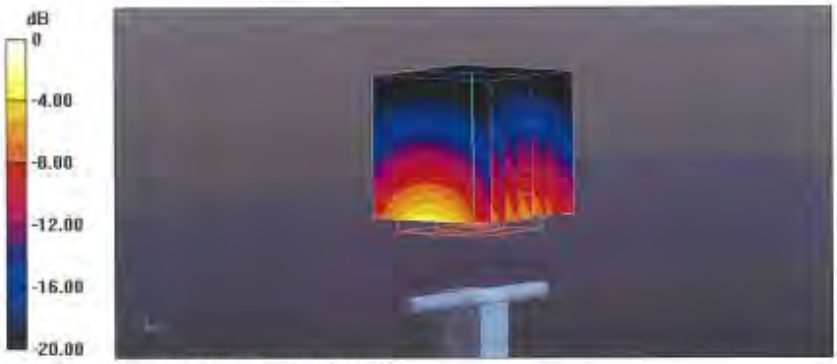
**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1005**

Communication System: UID 0 - CW; Frequency: 2600 MHz
Medium parameters used: f = 2600 MHz; $\sigma$ = 2.21 S/m; $\varepsilon_r$ = 51.1; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

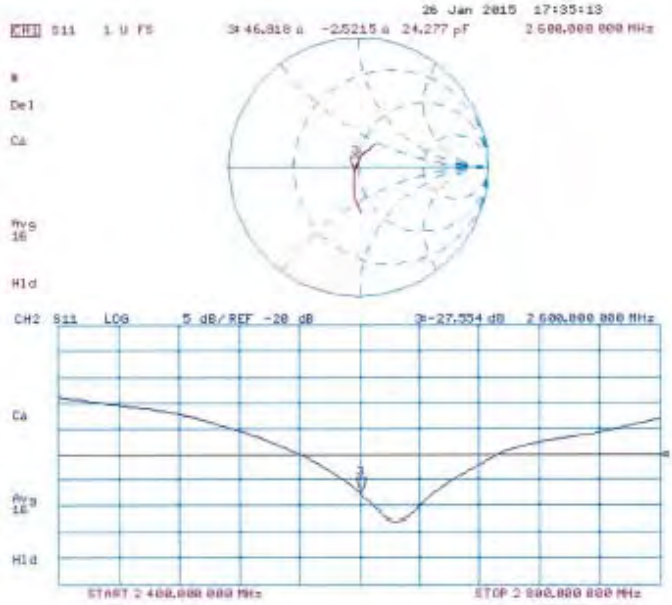
- Probe: ES3DV3 - SN3205; ConvF(4.13, 4.13, 4.13); Calibrated: 30.12.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 18.08.2014
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:**
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 96.04 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 29.6 W/kg
**SAR(1 g) = 14 W/kg; SAR(10 g) = 6.2 W/kg**
Maximum value of SAR (measured) = 18.7 W/kg




0 dB = 18.7 W/kg = 12.72 dBW/kg

Impedance Measurement Plot for Body TSL






**- End of 1st part of report -**



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