# SAR TEST REPORT

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

| | |
|---|---|
| **Equipment Under Test** | Notebook Computer |
| **Brand Name** | HP |
| **Model No.** | HSN-I41C-4 |
| **Company Name** | HP Inc. |
| **Company Address** | 1501 Page Mill Road, Palo Alto CA 94304 USA |
| **Standards** | IEEE/ANSI C95.1-1992, IEEE 1528-2013 |
| **FCC ID** | B94HNI41C4TKR |
| **Date of Receipt** | Sep. 01, 2020 |
| **Date of Test(s)** | Sep. 01, 2020 ~ Oct. 03, 2020 |
| **Date of Issue** | Oct. 21, 2020 |

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.

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**Signed on behalf of SGS**

| Clerk / Ruby Ou | Engineer / Jay Tseng | Asst. Manager / John Yeh |
|---|---|---|
| Ruby Ou | Jay Tseng | John Yeh |

**Date: Oct. 21, 2020**

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# Revision History

| Report Number | Revision | Description | Issue Date |
|---|---|---|---|
| ES/2020/80024 | Rev.00 | Initial creation of document | Oct. 21, 2020 |
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# 0. Guidance applied

The SAR testing method and procedure for this device is in accordance with the following standards:

IEEE/ANSI C95.1-1992
IEEE 1528-2013
KDB616217D04v01r02
KDB865664D01v01r04
KDB865664D02v01r02
KDB941225D01v03r01
KDB941225D05v02r05
KDB941225D05Av01r02
KDB447498D01v06
KDB248227D01v02r02

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# 1. General Information

## 1.1 Testing Laboratory

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

## 1.2 Details of Applicant

| | |
|---|---|
| Company Name | HP Inc. |
| Company Address | 1501 Page Mill Road, Palo Alto CA 94304 USA |

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## 1.3 Description of EUT

| | | |
|---|---|---|
| Equipment Under Test | Notebook Computer | |
| Brand Name | HP | |
| Model No. | HSN-I41C-4 | |
| FCC ID | B94HNI41C4TKR | |
| Integrated Module | WLAN | Brand Name : Intel<br>Model Name : AX201NGW |
| | WWAN | Brand Name : Foxconn<br>Model Name : T99W175 |
| | NFC | Brand Name : WNC<br>Model Name : XRAV-1 |
| Mode of Operation | ☒WCDMA ☒HSDPA ☒HSUPA<br>☒HSPA+ ☒DC-HSDPA<br>☒LTE FDD ☒LTE TDD ☒5G NR<br>☒WLAN802.11 a/b/g/n/ac/ax(20M/40M/80M/160M)<br>☒Bluetooth ☒NFC | |

| | | | | |
|---|---|---|---|---|
| Duty Cycle | WCDMA | 100% | | |
| | LTE FDD | 100% | | |
| | LTE TDD Power Class 3 | 63.3% | | |
| | LTE TDD Power Class 2 | 43.3% | | |
| | 5G NR | 100% | | |
| | WLAN802.11 a/b/g/n/ac/ax(20M/40M/80M/160M) | 100% | | |
| | Bluetooth | 100% | | |
| TX Frequency Range (MHz) | Tx5 antenna | | | |
| | WCDMA Band II | 1850 | – | 1910 |
| | WCDMA Band IV | 1710 | – | 1755 |
| | WCDMA Band V | 824 | – | 849 |
| | LTE FDD Band 2 | 1850 | – | 1910 |
| | LTE FDD Band 4 | 1710 | – | 1755 |
| | LTE FDD Band 5 | 824 | – | 849 |

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| | | | | |
|---|---|---|---|---|
| TX Frequency Range (MHz) | LTE FDD Band 7 | 2500 | – | 2570 |
| | LTE FDD Band 12 | 699 | – | 716 |
| | LTE FDD Band 13 | 777 | – | 787 |
| | LTE FDD Band 14 | 788 | – | 798 |
| | LTE FDD Band 17 | 704 | – | 716 |
| | LTE FDD Band 25 | 1850 | – | 1915 |
| | LTE FDD Band 26 | 814 | – | 849 |
| | LTE FDD Band 30 | 2305 | – | 2315 |
| | LTE TDD Band 38 Power Class 3 | 2570 | – | 2620 |
| | LTE TDD Band 41 Power Class 2/3 | 2496 | – | 2690 |
| | LTE FDD Band 66 | 1710 | – | 1780 |
| | n2 | 1850 | – | 1910 |
| | n5 | 824 | – | 849 |
| | n12 | 699 | – | 716 |
| | n66 | 1710 | – | 1780 |
| | Tx8 antenna | | | |
| | LTE FDD Band 2 | 1850 | – | 1910 |
| | LTE FDD Band 7 | 2500 | – | 2570 |
| | LTE FDD Band 42 Power Class 3 | 3400 | – | 3600 |
| | LTE FDD Band 48 Power Class 3 | 3550 | – | 3700 |
| | LTE FDD Band 66 | 1710 | – | 1780 |
| | n2 | 1850 | – | 1910 |
| | n7 | 2500 | – | 2570 |
| | n41 Power Class 2/3 | 2496 | – | 2690 |
| | n66 | 1710 | – | 1780 |
| | WLAN/BT | | | |
| | WLAN802.11 b/g/n/ax(20M) | 2412 | – | 2472 |
| | WLAN802.11 n/ax(40M) | 2422 | – | 2462 |

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| TX Frequency Range (MHz) | WLAN802.11 a/n/ac/ax(20M) 5.2G | 5180 | — | 5240 |
| | WLAN802.11 n/ac/ax(40M) 5.2G | 5190 | — | 5230 |
| | WLAN802.11 ac/ax(80M) 5.2G | 5210 | | |
| | WLAN802.11 ac/ax(160M) 5.2G | 5250 | | |
| | WLAN802.11 a/n/ac/ax(20M) 5.3G | 5260 | — | 5320 |
| | WLAN802.11 n/ac/ax(40M) 5.3G | 5270 | — | 5310 |
| | WLAN802.11 ac/ax(80M) 5.3G | 5290 | | |
| | WLAN802.11 a/n/ac/ax(20M) 5.6G | 5500 | — | 5720 |
| | WLAN802.11 n/ac/ax(40M) 5.6G | 5510 | — | 5710 |
| | WLAN802.11 ac/ax(80M) 5.6G | 5530 | — | 5690 |
| | WLAN802.11 ac/ax(160M) 5.6G | 5570 | | |
| | WLAN802.11 a/n/ac/ax(20M) 5.8G | 5745 | — | 5825 |
| | WLAN802.11 n/ac/ax(40M) 5.8G | 5755 | — | 5795 |
| | WLAN802.11 ac/ax(80M) 5.8G | 5775 | | |
| | Bluetooth | 2402 | — | 2480 |
| Channel Number (ARFCN) | Tx5 antenna | | | |
| | WCDMA Band II | 9262 | — | 9538 |
| | WCDMA Band IV | 1312 | — | 1513 |
| | WCDMA Band V | 4132 | — | 4233 |
| | LTE FDD Band 2 | 18607 | — | 19193 |
| | LTE FDD Band 4 | 19957 | — | 20393 |
| | LTE FDD Band 5 | 20407 | — | 20643 |
| | LTE FDD Band 7 | 20775 | — | 21425 |
| | LTE FDD Band 12 | 23017 | — | 23173 |
| | LTE FDD Band 13 | 23205 | — | 23255 |
| | LTE FDD Band 14 | 23305 | — | 23355 |
| | LTE FDD Band 17 | 23755 | — | 23825 |

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| | | | | |
|---|---|---|---|---|
| Channel Number (ARFCN) | LTE FDD Band 25 | 26047 | — | 26683 |
| | LTE FDD Band 26 | 26697 | — | 27033 |
| | LTE FDD Band 30 | 27685 | — | 27735 |
| | LTE TDD Band 38 Power Class 3 | 37775 | — | 38225 |
| | LTE TDD Band 41 Power Class 2/3 | 39675 | — | 41565 |
| | LTE FDD Band 66 | 131979 | — | 132665 |
| | n2 | 370500 | — | 381500 |
| | n5 | 165300 | — | 169300 |
| | n12 | 140300 | — | 142200 |
| | n66 | 342500 | — | 355500 |
| | Tx8 antenna | | | |
| | LTE FDD Band 2 | 18607 | — | 19193 |
| | LTE FDD Band 7 | 20775 | — | 21425 |
| | LTE FDD Band 42 Power Class 3 | 41615 | — | 43565 |
| | LTE FDD Band 48 Power Class 3 | 55265 | — | 56715 |
| | LTE FDD Band 66 | 131979 | — | 132665 |
| | n2 | 370500 | — | 381500 |
| | n7 | 500500 | — | 513500 |
| | n41 Power Class 2/3 | 501204 | — | 535998 |
| | n66 | 342500 | — | 355500 |
| | WLAN/BT | | | |
| | WLAN802.11 b/g/n/ax(20M) | 1 | — | 13 |
| | WLAN802.11 n/ax(40M) | 3 | — | 11 |
| | WLAN802.11 a/n/ac/ax(20M) 5.2G | 36 | — | 48 |
| | WLAN802.11 n/ac/ax(40M) 5.2G | 38 | — | 46 |
| | WLAN802.11 ac/ax(80M) 5.2G | | 42 | |
| | WLAN802.11 ac/ax(160M) 5.2G | | 50 | |
| | WLAN802.11 a/n/ac/ax(20M) 5.3G | 52 | — | 64 |
| | WLAN802.11 n/ac/ax(40M) 5.3G | 54 | — | 62 |

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| | | | | |
|---|---|---|---|---|
| Channel Number (ARFCN) | WLAN802.11 ac/ax(80M) 5.3G | 58 | | |
| | WLAN802.11 a/n/ac/ax(20M) 5.6G | 100 | — | 144 |
| | WLAN802.11 n/ac/ax(40M) 5.6G | 102 | — | 142 |
| | WLAN802.11 ac/ax(80M) 5.6G | 106 | — | 138 |
| | WLAN802.11 ac/ax(160M) 5.6G | 114 | | |
| | WLAN802.11 a/n/ac/ax(20M) 5.8G | 149 | — | 165 |
| | WLAN802.11 n/ac/ax(40M) 5.8G | 151 | — | 159 |
| | WLAN802.11 ac/ax(80M) 5.8G | 155 | | |
| | Bluetooth | 0 | — | 78 |

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**Notebook mode (Tx5)**

| **Max. SAR (1 g)** (Unit: W/Kg) | | | | |
|---|---|---|---|---|
| Band | Measured | Reported | Channel | Position |
| WCDMA Band II | 0.02 | 0.03 | 9538 | Bottom side |
| WCDMA Band IV | 0.04 | 0.05 | 1513 | Bottom side |
| WCDMA Band V | 0.01 | 0.01 | 4183 | Bottom side |
| LTE FDD Band 2 | 0.03 | 0.03 | 18900 | Bottom side |
| LTE FDD Band 4 | 0.03 | 0.03 | 20175 | Bottom side |
| LTE FDD Band 5 | 0.02 | 0.02 | 20600 | Bottom side |
| LTE FDD Band 7 | 0.02 | 0.02 | 21100 | Bottom side |
| LTE FDD Band 12 | 0.01 | 0.01 | 23060 | Bottom side |
| LTE FDD Band 13 | 0.02 | 0.03 | 23230 | Bottom side |
| LTE FDD Band 14 | 0.02 | 0.02 | 23330 | Bottom side |
| LTE FDD Band 17 | 0.01 | 0.01 | 23780 | Bottom side |
| LTE FDD Band 25 | 0.02 | 0.03 | 26365 | Bottom side |
| LTE FDD Band 26 | 0.02 | 0.02 | 26825 | Bottom side |
| LTE FDD Band 30 | 0.02 | 0.02 | 27710 | Bottom side |
| LTE TDD Band 38 | 0.02 | 0.02 | 37850 | Bottom side |
| LTE TDD Band 41 | 0.03 | 0.03 | 39750 | Bottom side |
| LTE TDD Band 41(HPUE) | 0.03 | 0.04 | 40620 | Bottom side |
| LTE FDD Band 66 | 0.03 | 0.03 | 132572 | Bottom side |
| 5G n2 | 0.03 | 0.03 | 380000 | Bottom side |
| 5G n5 | 0.01 | 0.01 | 167300 | Bottom side |
| 5G n12 | 0.02 | 0.02 | 141300 | Bottom side |
| 5G n66 | 0.04 | 0.04 | 354000 | Bottom side |

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**Notebook mode (Tx8)**

| **Max. SAR (1 g)** (Unit: W/Kg) | | | | |
|---|---|---|---|---|
| Band | Measured | Reported | Channel | Position |
| LTE FDD Band 2 | 0.37 | 0.50 | 18900 | Bottom side |
| LTE FDD Band 7 | 0.39 | 0.50 | 21100 | Bottom side |
| LTE FDD Band 42 | 0.32 | 0.44 | 43490 | Bottom side |
| LTE FDD Band 48 | 0.42 | 0.47 | 56640 | Bottom side |
| LTE FDD Band 66 | 0.36 | 0.47 | 132572 | Bottom side |
| 5G n2 | 0.38 | 0.48 | 376000 | Bottom side |
| 5G n7 | 0.39 | 0.49 | 502000 | Bottom side |
| 5G n41 | 0.22 | 0.27 | 528000 | Bottom side |
| 5G n41(HPUE) | 0.21 | 0.22 | 528000 | Bottom side |
| 5G n66 | 0.27 | 0.35 | 344000 | Bottom side |

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## Antenna Information

| Vendor | WNC | | | | | | |
|---|---|---|---|---|---|---|---|
| Antenna | Mian Tx5 (PIFA) | | | | | | |
| Part Number | 6036B0255101 (81EABB15.G41) | | | | | | |
| Frequency | 699~716 | 777~798 | 814~849 | 1710~1780 | 1850~1915 | 2300~2400 | 2496~2690 |
| Gain (dBi) | -3.14 | -0.02 | -0.22 | 0.26 | 0.94 | 2.30 | 0.29 |

| Vendor | HONG-BO | | | | | | |
|---|---|---|---|---|---|---|---|
| Antenna | Mian Tx5 (PIFA) | | | | | | |
| Part Number | 6036B0257501 (260-27371) | | | | | | |
| Frequency | 699~716 | 777~798 | 814~849 | 1710~1780 | 1850~1915 | 2300~2400 | 2496~2690 |
| Gain (dBi) | -2.28 | 0.07 | -0.40 | -1.29 | 0.68 | -0.46 | 1.54 |

| Vendor | AWAN | | | | | | |
|---|---|---|---|---|---|---|---|
| Antenna | Mian Tx5 (PIFA) | | | | | | |
| Part Number | 6036B0257001 (AUP6Y-100031 ) | | | | | | |
| Frequency | 699~716 | 777~798 | 814~849 | 1710~1780 | 1850~1915 | 2300~2400 | 2496~2690 |
| Gain (dBi) | -0.80 | -1.33 | -2.20 | 0.07 | 0.64 | 0.47 | -1.05 |

| Vendor | WNC | | | |
|---|---|---|---|---|
| Antenna | Aux3 Tx8 (PIFA) | | | |
| Part Number | 6036B0277601 (81EABD15.G07) | | | |
| Frequency | 1710~1780 | 1850~1910 | 2496~2690 | 3550~3700 |
| Gain (dBi) | -1.64 | -1.21 | -3.39 | 1.59 |

| Vendor | HONG-BO | | | |
|---|---|---|---|---|
| Antenna | Aux3 Tx8 (PIFA) | | | |
| Part Number | 6036B0278401 (260-27440) | | | |
| Frequency | 1710-1780 | 1850-1910 | 2496~2690 | 3550-3700 |
| Gain (dBi) | -0.20 | 0.44 | -2.31 | -0.16 |

| Vendor | AWAN | | | |
|---|---|---|---|---|
| Antenna | Aux3 Tx8 (PIFA) | | | |
| Part Number | 6036B0281201 (AUP6Y-100073) | | | |
| Frequency | 1710-1780 | 1850-1910 | 2496~2690 | 3550-3700 |
| Gain (dBi) | -1.64 | -2.21 | -3.39 | 1.59 |

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## Tx5-WCDMA Band II / Band IV / Band V - HSDPA / HSUPA / HSPA+ / DC-HSDPA conducted power table:

## Unit: dBm

| Band | | WCDMA II | | |
|---|---|---|---|---|
| TX Channel | | 9262 | 9400 | 9538 |
| Frequency (MHz) | | 1852.4 | 1880 | 1907.6 |
| Max. Rated Avg. Power+Max. Tolerance (dBm) | | **24.50** | | |
| 3GPP Rel 99 | RMC 12.2Kbps | 23.80 | 23.79 | 23.86 |
| 3GPP Rel 5 | HSDPA Subtest-1 | 22.54 | 22.52 | 22.55 |
| | HSDPA Subtest-2 | 22.48 | 22.48 | 22.53 |
| | HSDPA Subtest-3 | 21.70 | 22.03 | 22.02 |
| | HSDPA Subtest-4 | 21.63 | 22.00 | 22.01 |
| 3GPP Rel 6 | HSUPA Subtest-1 | 22.55 | 22.47 | 22.57 |
| | HSUPA Subtest-2 | 22.05 | 22.02 | 22.09 |
| | HSUPA Subtest-3 | 22.53 | 22.51 | 22.57 |
| | HSUPA Subtest-4 | 22.52 | 22.53 | 22.56 |
| | HSUPA Subtest-5 | 22.56 | 22.52 | 22.58 |
| 3GPP Rel 7 | HSPA+ | 22.46 | 22.38 | 22.42 |
| 3GPP Rel 8 | DC-HSDPA Subtest-1 | 22.48 | 22.52 | 22.44 |
| | DC-HSDPA Subtest-2 | 22.54 | 22.50 | 22.41 |
| | DC-HSDPA Subtest-3 | 21.67 | 21.90 | 21.85 |
| | DC-HSDPA Subtest-4 | 21.57 | 21.86 | 21.86 |

| Band | | WCDMA IV | | |
|---|---|---|---|---|
| TX Channel | | 1312 | 1412 | 1513 |
| Frequency (MHz) | | 1712.4 | 1732.4 | 1752.6 |
| Max. Rated Avg. Power+Max. Tolerance (dBm) | | **24.50** | | |
| 3GPP Rel 99 | RMC 12.2Kbps | 23.72 | 23.81 | 23.84 |
| 3GPP Rel 5 | HSDPA Subtest-1 | 22.69 | 22.78 | 22.85 |
| | HSDPA Subtest-2 | 22.71 | 22.79 | 22.84 |
| | HSDPA Subtest-3 | 22.20 | 22.34 | 22.33 |
| | HSDPA Subtest-4 | 22.18 | 22.28 | 22.32 |
| 3GPP Rel 6 | HSUPA Subtest-1 | 22.67 | 22.78 | 22.87 |
| | HSUPA Subtest-2 | 22.12 | 22.28 | 22.34 |
| | HSUPA Subtest-3 | 22.69 | 22.75 | 22.82 |
| | HSUPA Subtest-4 | 22.68 | 22.79 | 22.83 |
| | HSUPA Subtest-5 | 22.73 | 22.81 | 22.87 |
| 3GPP Rel 7 | HSPA+ | 22.67 | 22.77 | 22.75 |
| 3GPP Rel 8 | DC-HSDPA Subtest-1 | 22.68 | 22.64 | 22.76 |
| | DC-HSDPA Subtest-2 | 22.63 | 22.71 | 22.81 |
| | DC-HSDPA Subtest-3 | 22.15 | 22.26 | 22.15 |
| | DC-HSDPA Subtest-4 | 22.06 | 22.20 | 22.27 |

| Band | | WCDMA V | | |
|---|---|---|---|---|
| TX Channel | | 4132 | 4183 | 4233 |
| Frequency (MHz) | | 826.4 | 836.6 | 846.6 |
| Max. Rated Avg. Power+Max. Tolerance (dBm) | | **24.50** | | |
| 3GPP Rel 99 | RMC 12.2Kbps | 23.93 | 24.08 | 23.95 |
| 3GPP Rel 5 | HSDPA Subtest-1 | 22.93 | 23.07 | 22.86 |
| | HSDPA Subtest-2 | 22.88 | 23.03 | 22.82 |
| | HSDPA Subtest-3 | 22.34 | 22.58 | 22.35 |
| | HSDPA Subtest-4 | 22.30 | 22.49 | 22.34 |
| 3GPP Rel 6 | HSUPA Subtest-1 | 22.95 | 23.06 | 22.93 |
| | HSUPA Subtest-2 | 22.44 | 22.98 | 22.42 |
| | HSUPA Subtest-3 | 22.96 | 23.05 | 22.88 |
| | HSUPA Subtest-4 | 22.93 | 23.03 | 22.87 |
| | HSUPA Subtest-5 | 22.95 | 22.97 | 22.85 |
| 3GPP Rel 7 | HSPA+ | 22.78 | 22.92 | 22.67 |
| 3GPP Rel 8 | DC-HSDPA Subtest-1 | 22.79 | 22.91 | 22.77 |
| | DC-HSDPA Subtest-2 | 22.80 | 22.91 | 22.68 |
| | DC-HSDPA Subtest-3 | 22.24 | 22.41 | 22.34 |
| | DC-HSDPA Subtest-4 | 22.26 | 22.36 | 22.20 |

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## Sub-Test for HSDPA

| SUB-TEST | $\beta_c$ | $\beta_d$ | $\beta_d$ (SF) | $\beta_c/\beta_d$ | $\beta_{HS}$ (Note1, Note 2) | CM (dB) (Note 3) | MPR (dB) (Note 3) |
|---|---|---|---|---|---|---|---|
| 1 | 2/15 | 15/15 | 64 | 2/15 | 4/15 | 0.0 | 0.0 |
| 2 | 12/15 | 15/15 | 64 | 12/15 | 24/15 | 1.0 | 0.0 |
| 3 | 15/15 | 8/15 | 64 | 15/8 | 30/15 | 1.5 | 0.5 |
| 4 | 15/15 | 4/15 | 64 | 15/4 | 30/15 | 1.5 | 0.5 |

## Sub-Test for HSUPA

| SUB-TEST | $\beta_c$ | $\beta_d$ | $\beta_d$ (SF) | $\beta_c/\beta_d$ | $\beta_{HS}$ (Note1) | $\beta_{ec}$ | $\beta_{ed}$ (Note 5) (Note 6) | $\beta_{ed}$ (SF) | $\beta_{ed}$ (Codes) | CM (dB) (Note 2) | MPR (dB) (Note 2) | AG Index (Note 6) | E-TFCI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11/15 | 15/15 | 64 | 11/15 | 22/15 | 209/225 | 1309/225 | 4 | 1 | 1.0 | 0.0 | 20 | 75 |
| 2 | 6/15 | 15/15 | 64 | 6/15 | 12/15 | 12/15 | 94/75 | 4 | 1 | 3.0 | 2.0 | 12 | 67 |
| 3 | 15/15 | 9/15 | 64 | 15/9 | 30/15 | 30/15 | $\beta_{ed}1$: 47/15<br>$\beta_{ed}2$: 47/15 | 4<br>4 | 2 | 2.0 | 1.0 | 15 | 92 |
| 4 | 2/15 | 15/15 | 64 | 2/15 | 4/15 | 2/15 | 56/75 | 4 | 1 | 3.0 | 2.0 | 17 | 71 |
| 5 | 15/15 | 15/15 | 64 | 15/15 | 30/15 | 24/15 | 134/15 | 4 | 1 | 1.0 | 0.0 | 21 | 81 |

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## Tx5-LTE FDD Band 2 / Band 4 / Band 5 / Band 7 / Band 12 / Band 13 / Band 14 / Band 17 / Band 25 / Band 26 / Band 30 / Band 66 power table:

| LTE Band 2 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1860 | 1880 | 1900 | | |
| Channel | | | | 18700 | 18900 | 19100 | | |
| 20 | QPSK | 1 | 0 | 23.85 | 23.91 | 23.61 | 24.00 | 0 |
| | | 1 | 50 | 23.38 | 23.84 | 22.81 | 24.00 | 0 |
| | | 1 | 99 | 23.15 | 23.83 | 23.33 | 24.00 | 0 |
| | | 50 | 0 | 22.86 | 22.82 | 22.83 | 23.00 | 0-1 |
| | | 50 | 25 | 22.82 | 22.93 | 22.86 | 23.00 | 0-1 |
| | | 50 | 50 | 22.90 | 23.00 | 22.90 | 23.00 | 0-1 |
| | | 100 | 0 | 22.87 | 22.90 | 22.91 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 23.00 | 22.86 | 22.91 | 23.00 | 0-1 |
| | | 1 | 50 | 22.84 | 22.93 | 22.83 | 23.00 | 0-1 |
| | | 1 | 99 | 22.95 | 22.90 | 22.91 | 23.00 | 0-1 |
| | | 50 | 0 | 21.96 | 21.92 | 21.89 | 22.00 | 0-2 |
| | | 50 | 25 | 21.90 | 21.98 | 21.91 | 22.00 | 0-2 |
| | | 50 | 50 | 21.88 | 21.94 | 21.83 | 22.00 | 0-2 |
| | | 100 | 0 | 21.96 | 21.92 | 21.96 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.92 | 21.86 | 21.85 | 22.00 | 0-2 |
| | | 1 | 50 | 21.87 | 21.96 | 21.85 | 22.00 | 0-2 |
| | | 1 | 99 | 21.83 | 21.85 | 21.97 | 22.00 | 0-2 |
| | | 50 | 0 | 20.84 | 20.91 | 20.84 | 21.00 | 0-3 |
| | | 50 | 25 | 20.84 | 20.97 | 21.00 | 21.00 | 0-3 |
| | | 50 | 50 | 20.81 | 20.99 | 20.99 | 21.00 | 0-3 |
| | | 100 | 0 | 20.83 | 20.93 | 20.99 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.81 | 18.81 | 18.84 | 19.00 | 0-5 |
| | | 1 | 50 | 18.81 | 18.99 | 18.82 | 19.00 | 0-5 |
| | | 1 | 99 | 18.84 | 18.93 | 18.95 | 19.00 | 0-5 |
| | | 50 | 0 | 18.93 | 18.93 | 18.89 | 19.00 | 0-5 |
| | | 50 | 25 | 18.94 | 18.88 | 18.85 | 19.00 | 0-5 |
| | | 50 | 50 | 18.85 | 18.92 | 18.82 | 19.00 | 0-5 |
| | | 100 | 0 | 18.99 | 18.89 | 18.91 | 19.00 | 0-5 |
| Frequency (MHz) | | | | 1857.5 | 1880 | 1902.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 18675 | 18900 | 19125 | | |
| 15 | QPSK | 1 | 0 | 23.30 | 23.32 | 23.26 | 24.00 | 0 |
| | | 1 | 36 | 23.43 | 23.30 | 23.43 | 24.00 | 0 |
| | | 1 | 74 | 23.30 | 23.43 | 23.32 | 24.00 | 0 |
| | | 36 | 0 | 22.27 | 22.32 | 22.30 | 23.00 | 0-1 |
| | | 36 | 18 | 22.33 | 22.29 | 22.37 | 23.00 | 0-1 |
| | | 36 | 37 | 22.38 | 22.35 | 22.25 | 23.00 | 0-1 |
| | | 75 | 0 | 22.38 | 22.38 | 22.43 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.40 | 22.32 | 22.34 | 23.00 | 0-1 |
| | | 1 | 36 | 22.27 | 22.32 | 22.36 | 23.00 | 0-1 |
| | | 1 | 74 | 22.40 | 22.41 | 22.36 | 23.00 | 0-1 |
| | | 36 | 0 | 21.44 | 21.35 | 21.43 | 22.00 | 0-2 |
| | | 36 | 18 | 21.39 | 21.40 | 21.34 | 22.00 | 0-2 |
| | | 36 | 37 | 21.38 | 21.37 | 21.34 | 22.00 | 0-2 |
| | | 75 | 0 | 21.41 | 21.25 | 21.26 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.35 | 21.26 | 21.31 | 22.00 | 0-2 |
| | | 1 | 36 | 21.40 | 21.29 | 21.32 | 22.00 | 0-2 |
| | | 1 | 74 | 21.42 | 21.32 | 21.37 | 22.00 | 0-2 |
| | | 36 | 0 | 20.27 | 20.43 | 20.31 | 21.00 | 0-3 |
| | | 36 | 18 | 20.30 | 20.26 | 20.31 | 21.00 | 0-3 |
| | | 36 | 37 | 20.34 | 20.42 | 20.25 | 21.00 | 0-3 |
| | | 75 | 0 | 20.32 | 20.26 | 20.43 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.41 | 18.37 | 18.40 | 19.00 | 0-5 |
| | | 1 | 36 | 18.40 | 18.33 | 18.37 | 19.00 | 0-5 |
| | | 1 | 74 | 18.28 | 18.32 | 18.43 | 19.00 | 0-5 |
| | | 36 | 0 | 18.27 | 18.42 | 18.35 | 19.00 | 0-5 |
| | | 36 | 18 | 18.27 | 18.39 | 18.30 | 19.00 | 0-5 |
| | | 36 | 37 | 18.44 | 18.38 | 18.28 | 19.00 | 0-5 |
| | | 75 | 0 | 18.28 | 18.38 | 18.39 | 19.00 | 0-5 |

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| LTE Band 2 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1855 | 1880 | 1905 | | |
| Channel | | | | 18650 | 18900 | 19150 | | |
| 10 | QPSK | 1 | 0 | 23.32 | 23.25 | 23.29 | 24.00 | 0 |
| | | 1 | 25 | 23.31 | 23.27 | 23.28 | 24.00 | 0 |
| | | 1 | 49 | 23.29 | 23.30 | 23.31 | 24.00 | 0 |
| | | 25 | 0 | 22.26 | 22.43 | 22.27 | 23.00 | 0-1 |
| | | 25 | 12 | 22.41 | 22.39 | 22.27 | 23.00 | 0-1 |
| | | 25 | 25 | 22.34 | 22.39 | 22.42 | 23.00 | 0-1 |
| | | 50 | 0 | 22.31 | 22.32 | 22.34 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.33 | 22.30 | 22.42 | 23.00 | 0-1 |
| | | 1 | 25 | 22.36 | 22.26 | 22.25 | 23.00 | 0-1 |
| | | 1 | 49 | 22.34 | 22.34 | 22.35 | 23.00 | 0-1 |
| | | 25 | 0 | 21.40 | 21.29 | 21.33 | 22.00 | 0-2 |
| | | 25 | 12 | 21.27 | 21.31 | 21.29 | 22.00 | 0-2 |
| | | 25 | 25 | 21.34 | 21.36 | 21.36 | 22.00 | 0-2 |
| | | 50 | 0 | 21.29 | 21.43 | 21.39 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.28 | 21.36 | 21.33 | 22.00 | 0-2 |
| | | 1 | 25 | 21.39 | 21.42 | 21.32 | 22.00 | 0-2 |
| | | 1 | 49 | 21.27 | 21.40 | 21.33 | 22.00 | 0-2 |
| | | 25 | 0 | 20.43 | 20.32 | 20.33 | 21.00 | 0-3 |
| | | 25 | 12 | 20.38 | 20.43 | 20.37 | 21.00 | 0-3 |
| | | 25 | 25 | 20.25 | 20.38 | 20.35 | 21.00 | 0-3 |
| | | 50 | 0 | 20.41 | 20.44 | 20.29 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.34 | 18.39 | 18.31 | 19.00 | 0-5 |
| | | 1 | 25 | 18.31 | 18.39 | 18.30 | 19.00 | 0-5 |
| | | 1 | 49 | 18.41 | 18.25 | 18.33 | 19.00 | 0-5 |
| | | 25 | 0 | 18.37 | 18.42 | 18.26 | 19.00 | 0-5 |
| | | 25 | 12 | 18.43 | 18.41 | 18.32 | 19.00 | 0-5 |
| | | 25 | 25 | 18.34 | 18.27 | 18.41 | 19.00 | 0-5 |
| | | 50 | 0 | 18.32 | 18.28 | 18.35 | 19.00 | 0-5 |
| Frequency (MHz) | | | | 1852.5 | 1880 | 1907.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 18625 | 18900 | 19175 | | |
| 5 | QPSK | 1 | 0 | 23.39 | 23.29 | 23.28 | 24.00 | 0 |
| | | 1 | 12 | 23.28 | 23.38 | 23.43 | 24.00 | 0 |
| | | 1 | 24 | 23.25 | 23.38 | 23.42 | 24.00 | 0 |
| | | 12 | 0 | 22.41 | 22.35 | 22.42 | 23.00 | 0-1 |
| | | 12 | 6 | 22.40 | 22.38 | 22.38 | 23.00 | 0-1 |
| | | 12 | 13 | 22.36 | 22.35 | 22.28 | 23.00 | 0-1 |
| | | 25 | 0 | 22.38 | 22.31 | 22.29 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.34 | 22.38 | 22.40 | 23.00 | 0-1 |
| | | 1 | 12 | 22.43 | 22.33 | 22.40 | 23.00 | 0-1 |
| | | 1 | 24 | 22.44 | 22.26 | 22.35 | 23.00 | 0-1 |
| | | 12 | 0 | 21.36 | 21.36 | 21.27 | 22.00 | 0-2 |
| | | 12 | 6 | 21.41 | 21.37 | 21.42 | 22.00 | 0-2 |
| | | 12 | 13 | 21.29 | 21.43 | 21.34 | 22.00 | 0-2 |
| | | 25 | 0 | 21.27 | 21.41 | 21.39 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.35 | 21.26 | 21.30 | 22.00 | 0-2 |
| | | 1 | 12 | 21.33 | 21.36 | 21.28 | 22.00 | 0-2 |
| | | 1 | 24 | 21.43 | 21.26 | 21.26 | 22.00 | 0-2 |
| | | 12 | 0 | 20.34 | 20.30 | 20.42 | 21.00 | 0-3 |
| | | 12 | 6 | 20.27 | 20.36 | 20.40 | 21.00 | 0-3 |
| | | 12 | 13 | 20.37 | 20.42 | 20.26 | 21.00 | 0-3 |
| | | 25 | 0 | 20.26 | 20.34 | 20.43 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.29 | 18.32 | 18.26 | 19.00 | 0-5 |
| | | 1 | 12 | 18.30 | 18.39 | 18.43 | 19.00 | 0-5 |
| | | 1 | 24 | 18.29 | 18.31 | 18.33 | 19.00 | 0-5 |
| | | 12 | 0 | 18.28 | 18.34 | 18.41 | 19.00 | 0-5 |
| | | 12 | 6 | 18.31 | 18.43 | 18.33 | 19.00 | 0-5 |
| | | 12 | 13 | 18.27 | 18.34 | 18.35 | 19.00 | 0-5 |
| | | 25 | 0 | 18.30 | 18.26 | 18.28 | 19.00 | 0-5 |

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| LTE Band 4 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1720 | 1732.5 | 1745 | | |
| Channel | | | | 20050 | 20175 | 20300 | | |
| 20 | QPSK | 1 | 0 | 22.87 | 23.82 | 23.12 | 24.00 | 0 |
| | | 1 | 50 | 23.55 | 23.69 | 23.67 | 24.00 | 0 |
| | | 1 | 99 | 23.81 | 23.78 | 23.61 | 24.00 | 0 |
| | | 50 | 0 | 22.27 | 22.21 | 22.33 | 23.00 | 0-1 |
| | | 50 | 25 | 22.26 | 22.17 | 22.29 | 23.00 | 0-1 |
| | | 50 | 50 | 22.39 | 22.25 | 22.35 | 23.00 | 0-1 |
| | | 100 | 0 | 22.42 | 22.27 | 22.33 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.40 | 22.26 | 22.30 | 23.00 | 0-1 |
| | | 1 | 50 | 22.38 | 22.36 | 22.42 | 23.00 | 0-1 |
| | | 1 | 99 | 22.38 | 22.29 | 22.30 | 23.00 | 0-1 |
| | | 50 | 0 | 21.35 | 21.27 | 21.39 | 22.00 | 0-2 |
| | | 50 | 25 | 21.40 | 21.44 | 21.41 | 22.00 | 0-2 |
| | | 50 | 50 | 21.33 | 21.41 | 21.26 | 22.00 | 0-2 |
| | | 100 | 0 | 21.35 | 21.26 | 21.31 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.29 | 21.34 | 21.25 | 22.00 | 0-2 |
| | | 1 | 50 | 21.26 | 21.26 | 21.25 | 22.00 | 0-2 |
| | | 1 | 99 | 21.31 | 21.44 | 21.29 | 22.00 | 0-2 |
| | | 50 | 0 | 20.35 | 20.32 | 20.40 | 21.00 | 0-3 |
| | | 50 | 25 | 20.35 | 20.40 | 20.41 | 21.00 | 0-3 |
| | | 50 | 50 | 20.42 | 20.42 | 20.39 | 21.00 | 0-3 |
| | | 100 | 0 | 20.39 | 20.37 | 20.44 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.33 | 18.27 | 18.36 | 19.00 | 0-5 |
| | | 1 | 50 | 18.32 | 18.41 | 18.35 | 19.00 | 0-5 |
| | | 1 | 99 | 18.40 | 18.30 | 18.29 | 19.00 | 0-5 |
| | | 50 | 0 | 18.37 | 18.35 | 18.38 | 19.00 | 0-5 |
| | | 50 | 25 | 18.36 | 18.30 | 18.28 | 19.00 | 0-5 |
| | | 50 | 50 | 18.32 | 18.37 | 18.44 | 19.00 | 0-5 |
| | | 100 | 0 | 18.26 | 18.40 | 18.28 | 19.00 | 0-5 |
| Frequency (MHz) | | | | 1717.5 | 1732.5 | 1747.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 20025 | 20175 | 20325 | | |
| 15 | QPSK | 1 | 0 | 23.37 | 23.25 | 23.43 | 24.00 | 0 |
| | | 1 | 36 | 23.36 | 23.34 | 23.26 | 24.00 | 0 |
| | | 1 | 74 | 23.29 | 23.44 | 23.27 | 24.00 | 0 |
| | | 36 | 0 | 22.39 | 22.44 | 22.42 | 23.00 | 0-1 |
| | | 36 | 18 | 22.39 | 22.40 | 22.27 | 23.00 | 0-1 |
| | | 36 | 37 | 22.30 | 22.42 | 22.38 | 23.00 | 0-1 |
| | | 75 | 0 | 22.27 | 22.29 | 22.40 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.25 | 22.31 | 22.42 | 23.00 | 0-1 |
| | | 1 | 36 | 22.25 | 22.26 | 22.32 | 23.00 | 0-1 |
| | | 1 | 74 | 22.27 | 22.31 | 22.31 | 23.00 | 0-1 |
| | | 36 | 0 | 21.27 | 21.34 | 21.30 | 22.00 | 0-2 |
| | | 36 | 18 | 21.26 | 21.41 | 21.28 | 22.00 | 0-2 |
| | | 36 | 37 | 21.28 | 21.33 | 21.40 | 22.00 | 0-2 |
| | | 75 | 0 | 21.29 | 21.34 | 21.39 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.29 | 21.26 | 21.34 | 22.00 | 0-2 |
| | | 1 | 36 | 21.34 | 21.32 | 21.39 | 22.00 | 0-2 |
| | | 1 | 74 | 21.38 | 21.29 | 21.36 | 22.00 | 0-2 |
| | | 36 | 0 | 20.38 | 20.40 | 20.34 | 21.00 | 0-3 |
| | | 36 | 18 | 20.25 | 20.30 | 20.36 | 21.00 | 0-3 |
| | | 36 | 37 | 20.26 | 20.39 | 20.43 | 21.00 | 0-3 |
| | | 75 | 0 | 20.41 | 20.33 | 20.40 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.26 | 18.36 | 18.33 | 19.00 | 0-5 |
| | | 1 | 36 | 18.30 | 18.31 | 18.27 | 19.00 | 0-5 |
| | | 1 | 74 | 18.37 | 18.42 | 18.40 | 19.00 | 0-5 |
| | | 36 | 0 | 18.42 | 18.26 | 18.35 | 19.00 | 0-5 |
| | | 36 | 18 | 18.43 | 18.40 | 18.30 | 19.00 | 0-5 |
| | | 36 | 37 | 18.25 | 18.30 | 18.44 | 19.00 | 0-5 |
| | | 75 | 0 | 18.25 | 18.33 | 18.39 | 19.00 | 0-5 |

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| LTE Band 4 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1715 | 1732.5 | 1750 | | |
| Channel | | | | 20000 | 20175 | 20350 | | |
| 10 | QPSK | 1 | 0 | 23.44 | 23.38 | 23.25 | 24.00 | 0 |
| | | 1 | 25 | 23.27 | 23.42 | 23.41 | 24.00 | 0 |
| | | 1 | 49 | 23.32 | 23.39 | 23.41 | 24.00 | 0 |
| | | 25 | 0 | 22.40 | 22.37 | 22.25 | 23.00 | 0-1 |
| | | 25 | 12 | 22.27 | 22.40 | 22.31 | 23.00 | 0-1 |
| | | 25 | 25 | 22.29 | 22.36 | 22.32 | 23.00 | 0-1 |
| | | 50 | 0 | 22.36 | 22.38 | 22.42 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.34 | 22.44 | 22.44 | 23.00 | 0-1 |
| | | 1 | 25 | 22.25 | 22.40 | 22.36 | 23.00 | 0-1 |
| | | 1 | 49 | 22.32 | 22.40 | 22.38 | 23.00 | 0-1 |
| | | 25 | 0 | 21.32 | 21.41 | 21.30 | 22.00 | 0-2 |
| | | 25 | 12 | 21.29 | 21.34 | 21.38 | 22.00 | 0-2 |
| | | 25 | 25 | 21.30 | 21.38 | 21.26 | 22.00 | 0-2 |
| | | 50 | 0 | 21.29 | 21.27 | 21.37 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.39 | 21.44 | 21.31 | 22.00 | 0-2 |
| | | 1 | 25 | 21.44 | 21.37 | 21.42 | 22.00 | 0-2 |
| | | 1 | 49 | 21.40 | 21.29 | 21.30 | 22.00 | 0-2 |
| | | 25 | 0 | 20.31 | 20.27 | 20.33 | 21.00 | 0-3 |
| | | 25 | 12 | 20.28 | 20.39 | 20.38 | 21.00 | 0-3 |
| | | 25 | 25 | 20.34 | 20.40 | 20.44 | 21.00 | 0-3 |
| | | 50 | 0 | 20.41 | 20.29 | 20.25 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.28 | 18.31 | 18.31 | 19.00 | 0-5 |
| | | 1 | 25 | 18.28 | 18.36 | 18.28 | 19.00 | 0-5 |
| | | 1 | 49 | 18.37 | 18.26 | 18.36 | 19.00 | 0-5 |
| | | 25 | 0 | 18.26 | 18.42 | 18.44 | 19.00 | 0-5 |
| | | 25 | 12 | 18.43 | 18.38 | 18.26 | 19.00 | 0-5 |
| | | 25 | 25 | 18.27 | 18.36 | 18.38 | 19.00 | 0-5 |
| | | 50 | 0 | 18.38 | 18.37 | 18.34 | 19.00 | 0-5 |
| Frequency (MHz) | | | | 1712.5 | 1732.5 | 1752.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 19975 | 20175 | 20375 | | |
| 5 | QPSK | 1 | 0 | 23.37 | 23.39 | 23.32 | 24.00 | 0 |
| | | 1 | 12 | 23.32 | 23.31 | 23.31 | 24.00 | 0 |
| | | 1 | 24 | 23.37 | 23.32 | 23.37 | 24.00 | 0 |
| | | 12 | 0 | 22.39 | 22.42 | 22.29 | 23.00 | 0-1 |
| | | 12 | 6 | 22.36 | 22.39 | 22.42 | 23.00 | 0-1 |
| | | 12 | 13 | 22.37 | 22.32 | 22.34 | 23.00 | 0-1 |
| | | 25 | 0 | 22.32 | 22.30 | 22.34 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.32 | 22.28 | 22.25 | 23.00 | 0-1 |
| | | 1 | 12 | 22.31 | 22.42 | 22.30 | 23.00 | 0-1 |
| | | 1 | 24 | 22.35 | 22.34 | 22.32 | 23.00 | 0-1 |
| | | 12 | 0 | 21.26 | 21.29 | 21.25 | 22.00 | 0-2 |
| | | 12 | 6 | 21.43 | 21.31 | 21.25 | 22.00 | 0-2 |
| | | 12 | 13 | 21.26 | 21.40 | 21.40 | 22.00 | 0-2 |
| | | 25 | 0 | 21.39 | 21.36 | 21.42 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.42 | 21.38 | 21.40 | 22.00 | 0-2 |
| | | 1 | 12 | 21.29 | 21.25 | 21.34 | 22.00 | 0-2 |
| | | 1 | 24 | 21.26 | 21.26 | 21.38 | 22.00 | 0-2 |
| | | 12 | 0 | 20.37 | 20.28 | 20.36 | 21.00 | 0-3 |
| | | 12 | 6 | 20.39 | 20.36 | 20.25 | 21.00 | 0-3 |
| | | 12 | 13 | 20.41 | 20.34 | 20.39 | 21.00 | 0-3 |
| | | 25 | 0 | 20.34 | 20.37 | 20.42 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.41 | 18.36 | 18.42 | 19.00 | 0-5 |
| | | 1 | 12 | 18.32 | 18.30 | 18.43 | 19.00 | 0-5 |
| | | 1 | 24 | 18.44 | 18.44 | 18.25 | 19.00 | 0-5 |
| | | 12 | 0 | 18.28 | 18.30 | 18.34 | 19.00 | 0-5 |
| | | 12 | 6 | 18.25 | 18.36 | 18.25 | 19.00 | 0-5 |
| | | 12 | 13 | 18.29 | 18.26 | 18.25 | 19.00 | 0-5 |
| | | 25 | 0 | 18.32 | 18.33 | 18.37 | 19.00 | 0-5 |

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| LTE Band 4 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1711.5 | 1732.5 | 1753.5 | | |
| Channel | | | | 19965 | 20175 | 20385 | | |
| 3 | QPSK | 1 | 0 | 23.30 | 23.41 | 23.33 | 24.00 | 0 |
| | | 1 | 7 | 23.35 | 23.44 | 23.33 | 24.00 | 0 |
| | | 1 | 14 | 23.25 | 23.42 | 23.31 | 24.00 | 0 |
| | | 8 | 0 | 22.37 | 22.27 | 22.25 | 23.00 | 0-1 |
| | | 8 | 4 | 22.38 | 22.25 | 22.35 | 23.00 | 0-1 |
| | | 8 | 7 | 22.31 | 22.40 | 22.25 | 23.00 | 0-1 |
| | | 15 | 0 | 22.44 | 22.42 | 22.36 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.43 | 22.37 | 22.26 | 23.00 | 0-1 |
| | | 1 | 7 | 22.29 | 22.29 | 22.36 | 23.00 | 0-1 |
| | | 1 | 14 | 22.33 | 22.36 | 22.35 | 23.00 | 0-1 |
| | | 8 | 0 | 21.29 | 21.43 | 21.43 | 22.00 | 0-2 |
| | | 8 | 4 | 21.31 | 21.30 | 21.43 | 22.00 | 0-2 |
| | | 8 | 7 | 21.26 | 21.30 | 21.25 | 22.00 | 0-2 |
| | | 15 | 0 | 21.40 | 21.42 | 21.34 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.27 | 21.32 | 21.26 | 22.00 | 0-2 |
| | | 1 | 7 | 21.36 | 21.39 | 21.26 | 22.00 | 0-2 |
| | | 1 | 14 | 21.29 | 21.44 | 21.44 | 22.00 | 0-2 |
| | | 8 | 0 | 20.42 | 20.33 | 20.37 | 21.00 | 0-3 |
| | | 8 | 4 | 20.39 | 20.34 | 20.37 | 21.00 | 0-3 |
| | | 8 | 7 | 20.32 | 20.36 | 20.41 | 21.00 | 0-3 |
| | | 15 | 0 | 20.41 | 20.30 | 20.30 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.26 | 18.37 | 18.43 | 19.00 | 0-5 |
| | | 1 | 7 | 18.28 | 18.44 | 18.37 | 19.00 | 0-5 |
| | | 1 | 14 | 18.27 | 18.30 | 18.36 | 19.00 | 0-5 |
| | | 8 | 0 | 18.43 | 18.35 | 18.25 | 19.00 | 0-5 |
| | | 8 | 4 | 18.30 | 18.33 | 18.31 | 19.00 | 0-5 |
| | | 8 | 7 | 18.39 | 18.27 | 18.39 | 19.00 | 0-5 |
| | | 15 | 0 | 18.31 | 18.29 | 18.41 | 19.00 | 0-5 |
| Frequency (MHz) | | | | 1710.7 | 1732.5 | 1754.3 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 19957 | 20175 | 20393 | | |
| 1.4 | QPSK | 1 | 0 | 23.41 | 23.25 | 23.31 | 24.00 | 0 |
| | | 1 | 2 | 23.40 | 23.29 | 23.44 | 24.00 | 0 |
| | | 1 | 5 | 23.36 | 23.40 | 23.40 | 24.00 | 0 |
| | | 3 | 0 | 23.38 | 23.21 | 23.28 | 24.00 | 0.00 |
| | | 3 | 2 | 23.36 | 23.19 | 23.42 | 24.00 | 0.00 |
| | | 3 | 3 | 23.29 | 23.29 | 23.29 | 24.00 | 0.00 |
| | | 6 | 0 | 22.32 | 22.40 | 22.37 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.30 | 22.37 | 22.42 | 23.00 | 0-1 |
| | | 1 | 2 | 22.30 | 22.26 | 22.33 | 23.00 | 0-1 |
| | | 1 | 5 | 22.39 | 22.43 | 22.41 | 23.00 | 0-1 |
| | | 3 | 0 | 22.21 | 22.29 | 22.31 | 23.00 | 0-1 |
| | | 3 | 2 | 22.23 | 22.16 | 22.30 | 23.00 | 0-1 |
| | | 3 | 3 | 22.30 | 22.39 | 22.31 | 23.00 | 0-1 |
| | | 6 | 0 | 21.38 | 21.44 | 21.32 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.25 | 21.25 | 21.40 | 22.00 | 0-2 |
| | | 1 | 2 | 21.42 | 21.40 | 21.36 | 22.00 | 0-2 |
| | | 1 | 5 | 21.27 | 21.40 | 21.28 | 22.00 | 0-2 |
| | | 3 | 0 | 21.17 | 21.20 | 21.32 | 22.00 | 0-2 |
| | | 3 | 2 | 21.36 | 21.35 | 21.31 | 22.00 | 0-2 |
| | | 3 | 3 | 21.17 | 21.30 | 21.18 | 22.00 | 0-2 |
| | | 6 | 0 | 20.29 | 20.29 | 20.28 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.41 | 18.41 | 18.31 | 19.00 | 0-5 |
| | | 1 | 2 | 18.25 | 18.35 | 18.33 | 19.00 | 0-5 |
| | | 1 | 5 | 18.30 | 18.34 | 18.31 | 19.00 | 0-5 |
| | | 3 | 0 | 18.32 | 18.33 | 18.32 | 19.00 | 0-5 |
| | | 3 | 2 | 18.31 | 18.34 | 18.28 | 19.00 | 0-5 |
| | | 3 | 3 | 18.25 | 18.28 | 18.31 | 19.00 | 0-5 |
| | | 6 | 0 | 18.35 | 18.30 | 18.35 | 19.00 | 0-5 |

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| LTE Band 5 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 829 | 836.5 | 844 | | |
| Channel | | | | 20450 | 20525 | 20600 | | |
| 10 | QPSK | 1 | 0 | 23.91 | 23.72 | 23.95 | 24.50 | 0 |
| | | 1 | 25 | 23.90 | 23.66 | 23.94 | 24.50 | 0 |
| | | 1 | 49 | 23.63 | 23.87 | 23.89 | 24.50 | 0 |
| | | 25 | 0 | 22.60 | 22.52 | 22.71 | 23.50 | 0-1 |
| | | 25 | 12 | 22.67 | 22.61 | 22.60 | 23.50 | 0-1 |
| | | 25 | 25 | 22.63 | 22.65 | 22.59 | 23.50 | 0-1 |
| | | 50 | 0 | 22.64 | 22.68 | 22.62 | 23.50 | 0-1 |
| | 16-QAM | 1 | 0 | 22.63 | 22.53 | 22.52 | 23.50 | 0-1 |
| | | 1 | 25 | 22.68 | 22.54 | 22.55 | 23.50 | 0-1 |
| | | 1 | 49 | 22.67 | 22.68 | 22.68 | 23.50 | 0-1 |
| | | 25 | 0 | 21.60 | 21.61 | 21.53 | 22.50 | 0-2 |
| | | 25 | 12 | 21.56 | 21.66 | 21.63 | 22.50 | 0-2 |
| | | 25 | 25 | 21.60 | 21.71 | 21.54 | 22.50 | 0-2 |
| | | 50 | 0 | 21.58 | 21.70 | 21.71 | 22.50 | 0-2 |
| | 64-QAM | 1 | 0 | 21.57 | 21.66 | 21.52 | 22.50 | 0-2 |
| | | 1 | 25 | 21.59 | 21.60 | 21.53 | 22.50 | 0-2 |
| | | 1 | 49 | 21.64 | 21.53 | 21.52 | 22.50 | 0-2 |
| | | 25 | 0 | 20.67 | 20.54 | 20.65 | 21.50 | 0-3 |
| | | 25 | 12 | 20.52 | 20.61 | 20.67 | 21.50 | 0-3 |
| | | 25 | 25 | 20.52 | 20.68 | 20.52 | 21.50 | 0-3 |
| | | 50 | 0 | 20.56 | 20.70 | 20.56 | 21.50 | 0-3 |
| | 256-QAM | 1 | 0 | 18.63 | 18.66 | 18.59 | 19.50 | 0-5 |
| | | 1 | 25 | 18.53 | 18.64 | 18.61 | 19.50 | 0-5 |
| | | 1 | 49 | 18.68 | 18.69 | 18.56 | 19.50 | 0-5 |
| | | 25 | 0 | 18.60 | 18.52 | 18.64 | 19.50 | 0-5 |
| | | 25 | 12 | 18.60 | 18.58 | 18.65 | 19.50 | 0-5 |
| | | 25 | 25 | 18.65 | 18.58 | 18.56 | 19.50 | 0-5 |
| | | 50 | 0 | 18.64 | 18.71 | 18.60 | 19.50 | 0-5 |
| Frequency (MHz) | | | | 826.5 | 836.5 | 846.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 20425 | 20525 | 20625 | | |
| 5 | QPSK | 1 | 0 | 23.58 | 23.53 | 23.54 | 24.50 | 0 |
| | | 1 | 12 | 23.67 | 23.61 | 23.60 | 24.50 | 0 |
| | | 1 | 24 | 23.59 | 23.71 | 23.52 | 24.50 | 0 |
| | | 12 | 0 | 22.56 | 22.65 | 22.58 | 23.50 | 0-1 |
| | | 12 | 6 | 22.58 | 22.54 | 22.67 | 23.50 | 0-1 |
| | | 12 | 13 | 22.52 | 22.52 | 22.70 | 23.50 | 0-1 |
| | | 25 | 0 | 22.62 | 22.62 | 22.65 | 23.50 | 0-1 |
| | 16-QAM | 1 | 0 | 22.60 | 22.64 | 22.68 | 23.50 | 0-1 |
| | | 1 | 12 | 22.57 | 22.54 | 22.69 | 23.50 | 0-1 |
| | | 1 | 24 | 22.67 | 22.56 | 22.68 | 23.50 | 0-1 |
| | | 12 | 0 | 21.70 | 21.70 | 21.56 | 22.50 | 0-2 |
| | | 12 | 6 | 21.55 | 21.63 | 21.59 | 22.50 | 0-2 |
| | | 12 | 13 | 21.70 | 21.53 | 21.64 | 22.50 | 0-2 |
| | | 25 | 0 | 21.54 | 21.65 | 21.63 | 22.50 | 0-2 |
| | 64-QAM | 1 | 0 | 21.70 | 21.62 | 21.64 | 22.50 | 0-2 |
| | | 1 | 12 | 21.65 | 21.65 | 21.53 | 22.50 | 0-2 |
| | | 1 | 24 | 21.68 | 21.62 | 21.60 | 22.50 | 0-2 |
| | | 12 | 0 | 20.70 | 20.70 | 20.69 | 21.50 | 0-3 |
| | | 12 | 6 | 20.69 | 20.63 | 20.62 | 21.50 | 0-3 |
| | | 12 | 13 | 20.61 | 20.66 | 20.57 | 21.50 | 0-3 |
| | | 25 | 0 | 20.57 | 20.62 | 20.55 | 21.50 | 0-3 |
| | 256-QAM | 1 | 0 | 18.60 | 18.62 | 18.70 | 19.50 | 0-5 |
| | | 1 | 12 | 18.55 | 18.52 | 18.54 | 19.50 | 0-5 |
| | | 1 | 24 | 18.60 | 18.63 | 18.70 | 19.50 | 0-5 |
| | | 12 | 0 | 18.66 | 18.69 | 18.56 | 19.50 | 0-5 |
| | | 12 | 6 | 18.57 | 18.68 | 18.68 | 19.50 | 0-5 |
| | | 12 | 13 | 18.62 | 18.53 | 18.53 | 19.50 | 0-5 |
| | | 25 | 0 | 18.60 | 18.66 | 18.67 | 19.50 | 0-5 |

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| LTE Band 5 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 825.5 | 836.5 | 847.5 | | |
| Channel | | | | 20415 | 20525 | 20635 | | |
| 3 | QPSK | 1 | 0 | 23.59 | 23.64 | 23.62 | 24.50 | 0 |
| | | 1 | 7 | 23.63 | 23.64 | 23.66 | 24.50 | 0 |
| | | 1 | 14 | 23.57 | 23.56 | 23.71 | 24.50 | 0 |
| | | 8 | 0 | 22.69 | 22.70 | 22.69 | 23.50 | 0-1 |
| | | 8 | 4 | 22.52 | 22.54 | 22.63 | 23.50 | 0-1 |
| | | 8 | 7 | 22.55 | 22.56 | 22.58 | 23.50 | 0-1 |
| | | 15 | 0 | 22.66 | 22.71 | 22.57 | 23.50 | 0-1 |
| | 16-QAM | 1 | 0 | 22.69 | 22.53 | 22.64 | 23.50 | 0-1 |
| | | 1 | 7 | 22.60 | 22.63 | 22.67 | 23.50 | 0-1 |
| | | 1 | 14 | 22.53 | 22.68 | 22.63 | 23.50 | 0-1 |
| | | 8 | 0 | 21.58 | 21.70 | 21.54 | 22.50 | 0-2 |
| | | 8 | 4 | 21.60 | 21.64 | 21.60 | 22.50 | 0-2 |
| | | 8 | 7 | 21.59 | 21.64 | 21.57 | 22.50 | 0-2 |
| | | 15 | 0 | 21.67 | 21.53 | 21.58 | 22.50 | 0-2 |
| | 64-QAM | 1 | 0 | 21.54 | 21.54 | 21.60 | 22.50 | 0-2 |
| | | 1 | 7 | 21.53 | 21.71 | 21.57 | 22.50 | 0-2 |
| | | 1 | 14 | 21.59 | 21.56 | 21.59 | 22.50 | 0-2 |
| | | 8 | 0 | 20.68 | 20.52 | 20.71 | 21.50 | 0-3 |
| | | 8 | 4 | 20.70 | 20.53 | 20.56 | 21.50 | 0-3 |
| | | 8 | 7 | 20.61 | 20.55 | 20.54 | 21.50 | 0-3 |
| | | 15 | 0 | 20.57 | 20.64 | 20.58 | 21.50 | 0-3 |
| | 256-QAM | 1 | 0 | 18.69 | 18.53 | 18.66 | 19.50 | 0-5 |
| | | 1 | 7 | 18.67 | 18.65 | 18.55 | 19.50 | 0-5 |
| | | 1 | 14 | 18.52 | 18.52 | 18.60 | 19.50 | 0-5 |
| | | 8 | 0 | 18.63 | 18.52 | 18.67 | 19.50 | 0-5 |
| | | 8 | 4 | 18.62 | 18.62 | 18.61 | 19.50 | 0-5 |
| | | 8 | 7 | 18.56 | 18.68 | 18.53 | 19.50 | 0-5 |
| | | 15 | 0 | 18.62 | 18.52 | 18.65 | 19.50 | 0-5 |
| Frequency (MHz) | | | | 824.7 | 836.5 | 848.3 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 20407 | 20525 | 20643 | | |
| 1.4 | QPSK | 1 | 0 | 23.61 | 23.58 | 23.69 | 24.50 | 0 |
| | | 1 | 2 | 23.65 | 23.70 | 23.62 | 24.50 | 0 |
| | | 1 | 5 | 23.68 | 23.60 | 23.59 | 24.50 | 0 |
| | | 3 | 0 | 23.51 | 23.56 | 23.58 | 24.50 | 0.00 |
| | | 3 | 2 | 23.56 | 23.68 | 23.57 | 24.50 | 0.00 |
| | | 3 | 3 | 23.64 | 23.58 | 23.54 | 24.50 | 0.00 |
| | | 6 | 0 | 22.67 | 22.66 | 22.63 | 23.50 | 0-1 |
| | 16-QAM | 1 | 0 | 22.60 | 22.66 | 22.68 | 23.50 | 0-1 |
| | | 1 | 2 | 22.60 | 22.68 | 22.59 | 23.50 | 0-1 |
| | | 1 | 5 | 22.54 | 22.56 | 22.69 | 23.50 | 0-1 |
| | | 3 | 0 | 22.51 | 22.57 | 22.63 | 23.50 | 0-1 |
| | | 3 | 2 | 22.56 | 22.60 | 22.53 | 23.50 | 0-1 |
| | | 3 | 3 | 22.52 | 22.45 | 22.61 | 23.50 | 0-1 |
| | | 6 | 0 | 21.64 | 21.54 | 21.62 | 22.50 | 0-2 |
| | 64-QAM | 1 | 0 | 21.63 | 21.57 | 21.52 | 22.50 | 0-2 |
| | | 1 | 2 | 21.62 | 21.66 | 21.67 | 22.50 | 0-2 |
| | | 1 | 5 | 21.58 | 21.52 | 21.67 | 22.50 | 0-2 |
| | | 3 | 0 | 21.57 | 21.47 | 21.44 | 22.50 | 0-2 |
| | | 3 | 2 | 21.60 | 21.62 | 21.59 | 22.50 | 0-2 |
| | | 3 | 3 | 21.47 | 21.46 | 21.65 | 22.50 | 0-2 |
| | | 6 | 0 | 20.54 | 20.59 | 20.68 | 21.50 | 0-3 |
| | 256-QAM | 1 | 0 | 18.64 | 18.63 | 18.69 | 19.50 | 0-5 |
| | | 1 | 2 | 18.60 | 18.55 | 18.61 | 19.50 | 0-5 |
| | | 1 | 5 | 18.55 | 18.65 | 18.53 | 19.50 | 0-5 |
| | | 3 | 0 | 18.58 | 18.55 | 18.64 | 19.50 | 0-5 |
| | | 3 | 2 | 18.61 | 18.65 | 18.54 | 19.50 | 0-5 |
| | | 3 | 3 | 18.69 | 18.61 | 18.64 | 19.50 | 0-5 |
| | | 6 | 0 | 18.70 | 18.58 | 18.71 | 19.50 | 0-5 |

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| LTE Band 7 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 2510 | 2535 | 2560 | | |
| Channel | | | | 20850 | 21100 | 21350 | | |
| 20 | QPSK | 1 | 0 | 23.38 | 23.44 | 23.36 | 24.00 | 0 |
| | | 1 | 50 | 23.37 | 23.42 | 22.95 | 24.00 | 0 |
| | | 1 | 99 | 23.42 | 23.51 | 22.60 | 24.00 | 0 |
| | | 50 | 0 | 22.34 | 22.34 | 22.39 | 23.00 | 0-1 |
| | | 50 | 25 | 22.37 | 22.46 | 22.47 | 23.00 | 0-1 |
| | | 50 | 50 | 22.33 | 22.35 | 22.48 | 23.00 | 0-1 |
| | | 100 | 0 | 22.34 | 22.33 | 22.43 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.39 | 22.45 | 22.37 | 23.00 | 0-1 |
| | | 1 | 50 | 22.42 | 22.32 | 22.49 | 23.00 | 0-1 |
| | | 1 | 99 | 22.33 | 22.39 | 22.43 | 23.00 | 0-1 |
| | | 50 | 0 | 21.38 | 21.43 | 21.46 | 22.00 | 0-2 |
| | | 50 | 25 | 21.47 | 21.31 | 21.39 | 22.00 | 0-2 |
| | | 50 | 50 | 21.42 | 21.31 | 21.50 | 22.00 | 0-2 |
| | | 100 | 0 | 21.42 | 21.39 | 21.40 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.43 | 21.43 | 21.32 | 22.00 | 0-2 |
| | | 1 | 50 | 21.41 | 21.35 | 21.44 | 22.00 | 0-2 |
| | | 1 | 99 | 21.46 | 21.49 | 21.47 | 22.00 | 0-2 |
| | | 50 | 0 | 20.37 | 20.49 | 20.37 | 21.00 | 0-3 |
| | | 50 | 25 | 20.41 | 20.39 | 20.38 | 21.00 | 0-3 |
| | | 50 | 50 | 20.37 | 20.35 | 20.36 | 21.00 | 0-3 |
| | | 100 | 0 | 20.37 | 20.33 | 20.32 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.47 | 18.32 | 18.34 | 19.00 | 0-5 |
| | | 1 | 50 | 18.36 | 18.42 | 18.42 | 19.00 | 0-5 |
| | | 1 | 99 | 18.45 | 18.45 | 18.42 | 19.00 | 0-5 |
| | | 50 | 0 | 18.39 | 18.45 | 18.47 | 19.00 | 0-5 |
| | | 50 | 25 | 18.50 | 18.46 | 18.40 | 19.00 | 0-5 |
| | | 50 | 50 | 18.31 | 18.32 | 18.49 | 19.00 | 0-5 |
| | | 100 | 0 | 18.50 | 18.48 | 18.34 | 19.00 | 0-5 |
| Frequency (MHz) | | | | 2507.5 | 2535 | 2562.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 20825 | 21100 | 21375 | | |
| 15 | QPSK | 1 | 0 | 23.45 | 23.45 | 23.39 | 24.00 | 0 |
| | | 1 | 36 | 23.34 | 23.43 | 23.38 | 24.00 | 0 |
| | | 1 | 74 | 23.46 | 23.36 | 23.44 | 24.00 | 0 |
| | | 36 | 0 | 22.31 | 22.34 | 22.39 | 23.00 | 0-1 |
| | | 36 | 18 | 22.40 | 22.31 | 22.38 | 23.00 | 0-1 |
| | | 36 | 37 | 22.32 | 22.45 | 22.34 | 23.00 | 0-1 |
| | | 75 | 0 | 22.50 | 22.49 | 22.45 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.40 | 22.49 | 22.45 | 23.00 | 0-1 |
| | | 1 | 36 | 22.43 | 22.50 | 22.40 | 23.00 | 0-1 |
| | | 1 | 74 | 22.32 | 22.45 | 22.49 | 23.00 | 0-1 |
| | | 36 | 0 | 21.38 | 21.34 | 21.34 | 22.00 | 0-2 |
| | | 36 | 18 | 21.44 | 21.41 | 21.48 | 22.00 | 0-2 |
| | | 36 | 37 | 21.48 | 21.32 | 21.46 | 22.00 | 0-2 |
| | | 75 | 0 | 21.50 | 21.45 | 21.38 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.38 | 21.46 | 21.38 | 22.00 | 0-2 |
| | | 1 | 36 | 21.46 | 21.38 | 21.50 | 22.00 | 0-2 |
| | | 1 | 74 | 21.50 | 21.31 | 21.42 | 22.00 | 0-2 |
| | | 36 | 0 | 20.38 | 20.42 | 20.44 | 21.00 | 0-3 |
| | | 36 | 18 | 20.39 | 20.42 | 20.46 | 21.00 | 0-3 |
| | | 36 | 37 | 20.38 | 20.38 | 20.33 | 21.00 | 0-3 |
| | | 75 | 0 | 20.39 | 20.47 | 20.42 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.47 | 18.46 | 18.49 | 19.00 | 0-5 |
| | | 1 | 36 | 18.47 | 18.40 | 18.37 | 19.00 | 0-5 |
| | | 1 | 74 | 18.31 | 18.46 | 18.49 | 19.00 | 0-5 |
| | | 36 | 0 | 18.44 | 18.33 | 18.40 | 19.00 | 0-5 |
| | | 36 | 18 | 18.44 | 18.44 | 18.44 | 19.00 | 0-5 |
| | | 36 | 37 | 18.42 | 18.40 | 18.43 | 19.00 | 0-5 |
| | | 75 | 0 | 18.47 | 18.50 | 18.43 | 19.00 | 0-5 |

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| LTE Band 7 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 2505 | 2535 | 2565 | | |
| Channel | | | | 20800 | 21100 | 21400 | | |
| 10 | QPSK | 1 | 0 | 23.31 | 23.38 | 23.46 | 24.00 | 0 |
| | | 1 | 25 | 23.45 | 23.44 | 23.46 | 24.00 | 0 |
| | | 1 | 49 | 23.31 | 23.33 | 23.40 | 24.00 | 0 |
| | | 25 | 0 | 22.34 | 22.41 | 22.40 | 23.00 | 0-1 |
| | | 25 | 12 | 22.33 | 22.45 | 22.39 | 23.00 | 0-1 |
| | | 25 | 25 | 22.35 | 22.44 | 22.48 | 23.00 | 0-1 |
| | | 50 | 0 | 22.44 | 22.34 | 22.49 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.46 | 22.47 | 22.45 | 23.00 | 0-1 |
| | | 1 | 25 | 22.34 | 22.50 | 22.43 | 23.00 | 0-1 |
| | | 1 | 49 | 22.33 | 22.50 | 22.48 | 23.00 | 0-1 |
| | | 25 | 0 | 21.31 | 21.35 | 21.33 | 22.00 | 0-2 |
| | | 25 | 12 | 21.49 | 21.40 | 21.47 | 22.00 | 0-2 |
| | | 25 | 25 | 21.49 | 21.40 | 21.43 | 22.00 | 0-2 |
| | | 50 | 0 | 21.44 | 21.47 | 21.32 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.41 | 21.44 | 21.31 | 22.00 | 0-2 |
| | | 1 | 25 | 21.37 | 21.39 | 21.31 | 22.00 | 0-2 |
| | | 1 | 49 | 21.41 | 21.47 | 21.41 | 22.00 | 0-2 |
| | | 25 | 0 | 20.42 | 20.45 | 20.50 | 21.00 | 0-3 |
| | | 25 | 12 | 20.47 | 20.37 | 20.31 | 21.00 | 0-3 |
| | | 25 | 25 | 20.45 | 20.33 | 20.33 | 21.00 | 0-3 |
| | | 50 | 0 | 20.48 | 20.48 | 20.43 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.47 | 18.37 | 18.37 | 19.00 | 0-5 |
| | | 1 | 25 | 18.36 | 18.44 | 18.38 | 19.00 | 0-5 |
| | | 1 | 49 | 18.39 | 18.40 | 18.46 | 19.00 | 0-5 |
| | | 25 | 0 | 18.36 | 18.43 | 18.37 | 19.00 | 0-5 |
| | | 25 | 12 | 18.36 | 18.44 | 18.42 | 19.00 | 0-5 |
| | | 25 | 25 | 18.48 | 18.38 | 18.43 | 19.00 | 0-5 |
| | | 50 | 0 | 18.46 | 18.46 | 18.41 | 19.00 | 0-5 |
| Frequency (MHz) | | | | 2502.5 | 2535 | 2567.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 20775 | 21100 | 21425 | | |
| 5 | QPSK | 1 | 0 | 23.31 | 23.46 | 23.45 | 24.00 | 0 |
| | | 1 | 12 | 23.33 | 23.34 | 23.46 | 24.00 | 0 |
| | | 1 | 24 | 23.44 | 23.31 | 23.32 | 24.00 | 0 |
| | | 12 | 0 | 22.31 | 22.36 | 22.46 | 23.00 | 0-1 |
| | | 12 | 6 | 22.37 | 22.36 | 22.36 | 23.00 | 0-1 |
| | | 12 | 13 | 22.42 | 22.47 | 22.50 | 23.00 | 0-1 |
| | | 25 | 0 | 22.50 | 22.43 | 22.50 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.31 | 22.43 | 22.40 | 23.00 | 0-1 |
| | | 1 | 12 | 22.48 | 22.44 | 22.37 | 23.00 | 0-1 |
| | | 1 | 24 | 22.50 | 22.44 | 22.50 | 23.00 | 0-1 |
| | | 12 | 0 | 21.42 | 21.47 | 21.36 | 22.00 | 0-2 |
| | | 12 | 6 | 21.35 | 21.50 | 21.42 | 22.00 | 0-2 |
| | | 12 | 13 | 21.32 | 21.39 | 21.34 | 22.00 | 0-2 |
| | | 25 | 0 | 21.39 | 21.45 | 21.31 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.35 | 21.31 | 21.34 | 22.00 | 0-2 |
| | | 1 | 12 | 21.49 | 21.44 | 21.37 | 22.00 | 0-2 |
| | | 1 | 24 | 21.49 | 21.37 | 21.36 | 22.00 | 0-2 |
| | | 12 | 0 | 20.33 | 20.40 | 20.40 | 21.00 | 0-3 |
| | | 12 | 6 | 20.42 | 20.32 | 20.47 | 21.00 | 0-3 |
| | | 12 | 13 | 20.32 | 20.43 | 20.41 | 21.00 | 0-3 |
| | | 25 | 0 | 20.50 | 20.43 | 20.47 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.37 | 18.36 | 18.40 | 19.00 | 0-5 |
| | | 1 | 12 | 18.36 | 18.42 | 18.39 | 19.00 | 0-5 |
| | | 1 | 24 | 18.41 | 18.48 | 18.37 | 19.00 | 0-5 |
| | | 12 | 0 | 18.39 | 18.50 | 18.49 | 19.00 | 0-5 |
| | | 12 | 6 | 18.44 | 18.40 | 18.50 | 19.00 | 0-5 |
| | | 12 | 13 | 18.31 | 18.41 | 18.37 | 19.00 | 0-5 |
| | | 25 | 0 | 18.38 | 18.39 | 18.39 | 19.00 | 0-5 |

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| LTE Band 12 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 704 | 707.5 | 711 | | |
| Channel | | | | 23060 | 23095 | 23130 | | |
| 10 | QPSK | 1 | 0 | 23.46 | 23.56 | 23.54 | 24.50 | 0 |
| | | 1 | 25 | 23.44 | 23.38 | 23.53 | 24.50 | 0 |
| | | 1 | 49 | 23.59 | 23.32 | 23.42 | 24.50 | 0 |
| | | 25 | 0 | 22.19 | 22.25 | 22.27 | 23.50 | 0-1 |
| | | 25 | 12 | 22.21 | 22.30 | 22.33 | 23.50 | 0-1 |
| | | 25 | 25 | 22.23 | 22.31 | 22.25 | 23.50 | 0-1 |
| | | 50 | 0 | 22.21 | 22.16 | 22.15 | 23.50 | 0-1 |
| | 16-QAM | 1 | 0 | 22.25 | 22.24 | 22.26 | 23.50 | 0-1 |
| | | 1 | 25 | 22.15 | 22.22 | 22.21 | 23.50 | 0-1 |
| | | 1 | 49 | 22.28 | 22.31 | 22.24 | 23.50 | 0-1 |
| | | 25 | 0 | 21.21 | 21.25 | 21.30 | 22.50 | 0-2 |
| | | 25 | 12 | 21.17 | 21.15 | 21.23 | 22.50 | 0-2 |
| | | 25 | 25 | 21.33 | 21.22 | 21.23 | 22.50 | 0-2 |
| | | 50 | 0 | 21.18 | 21.28 | 21.31 | 22.50 | 0-2 |
| | 64-QAM | 1 | 0 | 21.21 | 21.15 | 21.26 | 22.50 | 0-2 |
| | | 1 | 25 | 21.22 | 21.31 | 21.19 | 22.50 | 0-2 |
| | | 1 | 49 | 21.31 | 21.29 | 21.22 | 22.50 | 0-2 |
| | | 25 | 0 | 20.14 | 20.32 | 20.19 | 21.50 | 0-3 |
| | | 25 | 12 | 20.30 | 20.19 | 20.26 | 21.50 | 0-3 |
| | | 25 | 25 | 20.21 | 20.15 | 20.32 | 21.50 | 0-3 |
| | | 50 | 0 | 20.31 | 20.15 | 20.17 | 21.50 | 0-3 |
| | 256-QAM | 1 | 0 | 18.15 | 18.33 | 18.20 | 19.50 | 0-5 |
| | | 1 | 25 | 18.24 | 18.28 | 18.22 | 19.50 | 0-5 |
| | | 1 | 49 | 18.29 | 18.22 | 18.17 | 19.50 | 0-5 |
| | | 25 | 0 | 18.29 | 18.28 | 18.29 | 19.50 | 0-5 |
| | | 25 | 12 | 18.26 | 18.30 | 18.15 | 19.50 | 0-5 |
| | | 25 | 25 | 18.18 | 18.16 | 18.19 | 19.50 | 0-5 |
| | | 50 | 0 | 18.28 | 18.18 | 18.30 | 19.50 | 0-5 |
| Frequency (MHz) | | | | 701.5 | 707.5 | 713.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 23035 | 23095 | 23155 | | |
| 5 | QPSK | 1 | 0 | 23.32 | 23.15 | 23.23 | 24.50 | 0 |
| | | 1 | 12 | 23.28 | 23.23 | 23.31 | 24.50 | 0 |
| | | 1 | 24 | 23.27 | 23.25 | 23.24 | 24.50 | 0 |
| | | 12 | 0 | 22.33 | 22.23 | 22.18 | 23.50 | 0-1 |
| | | 12 | 6 | 22.23 | 22.31 | 22.22 | 23.50 | 0-1 |
| | | 12 | 13 | 22.25 | 22.19 | 22.17 | 23.50 | 0-1 |
| | | 25 | 0 | 22.19 | 22.15 | 22.18 | 23.50 | 0-1 |
| | 16-QAM | 1 | 0 | 22.27 | 22.20 | 22.17 | 23.50 | 0-1 |
| | | 1 | 12 | 22.26 | 22.16 | 22.18 | 23.50 | 0-1 |
| | | 1 | 24 | 22.24 | 22.16 | 22.19 | 23.50 | 0-1 |
| | | 12 | 0 | 21.29 | 21.29 | 21.20 | 22.50 | 0-2 |
| | | 12 | 6 | 21.19 | 21.17 | 21.22 | 22.50 | 0-2 |
| | | 12 | 13 | 21.16 | 21.24 | 21.25 | 22.50 | 0-2 |
| | | 25 | 0 | 21.31 | 21.14 | 21.18 | 22.50 | 0-2 |
| | 64-QAM | 1 | 0 | 21.16 | 21.14 | 21.32 | 22.50 | 0-2 |
| | | 1 | 12 | 21.17 | 21.23 | 21.18 | 22.50 | 0-2 |
| | | 1 | 24 | 21.17 | 21.31 | 21.14 | 22.50 | 0-2 |
| | | 12 | 0 | 20.27 | 20.16 | 20.17 | 21.50 | 0-3 |
| | | 12 | 6 | 20.22 | 20.16 | 20.16 | 21.50 | 0-3 |
| | | 12 | 13 | 20.21 | 20.18 | 20.28 | 21.50 | 0-3 |
| | | 25 | 0 | 20.24 | 20.23 | 20.25 | 21.50 | 0-3 |
| | 256-QAM | 1 | 0 | 18.23 | 18.30 | 18.20 | 19.50 | 0-5 |
| | | 1 | 12 | 18.27 | 18.33 | 18.20 | 19.50 | 0-5 |
| | | 1 | 24 | 18.21 | 18.21 | 18.14 | 19.50 | 0-5 |
| | | 12 | 0 | 18.20 | 18.17 | 18.23 | 19.50 | 0-5 |
| | | 12 | 6 | 18.16 | 18.18 | 18.14 | 19.50 | 0-5 |
| | | 12 | 13 | 18.30 | 18.24 | 18.21 | 19.50 | 0-5 |
| | | 25 | 0 | 18.22 | 18.24 | 18.23 | 19.50 | 0-5 |

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| LTE Band 12 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 700.5 | 707.5 | 714.5 | | |
| Channel | | | | 23025 | 23095 | 23165 | | |
| 3 | QPSK | 1 | 0 | 23.16 | 23.26 | 23.27 | 24.50 | 0 |
| | | 1 | 7 | 23.18 | 23.19 | 23.21 | 24.50 | 0 |
| | | 1 | 14 | 23.24 | 23.28 | 23.15 | 24.50 | 0 |
| | | 8 | 0 | 22.20 | 22.15 | 22.23 | 23.50 | 0-1 |
| | | 8 | 4 | 22.33 | 22.28 | 22.27 | 23.50 | 0-1 |
| | | 8 | 7 | 22.16 | 22.28 | 22.21 | 23.50 | 0-1 |
| | | 15 | 0 | 22.23 | 22.25 | 22.26 | 23.50 | 0-1 |
| | 16-QAM | 1 | 0 | 22.20 | 22.28 | 22.23 | 23.50 | 0-1 |
| | | 1 | 7 | 22.32 | 22.15 | 22.16 | 23.50 | 0-1 |
| | | 1 | 14 | 22.30 | 22.28 | 22.19 | 23.50 | 0-1 |
| | | 8 | 0 | 21.20 | 21.17 | 21.28 | 22.50 | 0-2 |
| | | 8 | 4 | 21.27 | 21.23 | 21.26 | 22.50 | 0-2 |
| | | 8 | 7 | 21.32 | 21.28 | 21.32 | 22.50 | 0-2 |
| | | 15 | 0 | 21.32 | 21.17 | 21.19 | 22.50 | 0-2 |
| | 64-QAM | 1 | 0 | 21.14 | 21.27 | 21.18 | 22.50 | 0-2 |
| | | 1 | 7 | 21.26 | 21.25 | 21.18 | 22.50 | 0-2 |
| | | 1 | 14 | 21.32 | 21.17 | 21.32 | 22.50 | 0-2 |
| | | 8 | 0 | 20.14 | 20.30 | 20.26 | 21.50 | 0-3 |
| | | 8 | 4 | 20.15 | 20.30 | 20.32 | 21.50 | 0-3 |
| | | 8 | 7 | 20.26 | 20.14 | 20.30 | 21.50 | 0-3 |
| | | 15 | 0 | 20.15 | 20.33 | 20.32 | 21.50 | 0-3 |
| | 256-QAM | 1 | 0 | 18.19 | 18.28 | 18.31 | 19.50 | 0-5 |
| | | 1 | 7 | 18.15 | 18.18 | 18.19 | 19.50 | 0-5 |
| | | 1 | 14 | 18.33 | 18.25 | 18.30 | 19.50 | 0-5 |
| | | 8 | 0 | 18.32 | 18.16 | 18.16 | 19.50 | 0-5 |
| | | 8 | 4 | 18.26 | 18.20 | 18.15 | 19.50 | 0-5 |
| | | 8 | 7 | 18.21 | 18.32 | 18.25 | 19.50 | 0-5 |
| | | 15 | 0 | 18.27 | 18.15 | 18.24 | 19.50 | 0-5 |
| Frequency (MHz) | | | | 699.7 | 707.5 | 715.3 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 23017 | 23095 | 23173 | | |
| 1.4 | QPSK | 1 | 0 | 23.26 | 23.21 | 23.21 | 24.50 | 0 |
| | | 1 | 2 | 23.32 | 23.32 | 23.30 | 24.50 | 0 |
| | | 1 | 5 | 23.24 | 23.15 | 23.27 | 24.50 | 0 |
| | | 3 | 0 | 23.17 | 23.11 | 23.16 | 24.50 | 0.00 |
| | | 3 | 2 | 23.27 | 23.28 | 23.22 | 24.50 | 0.00 |
| | | 3 | 3 | 23.21 | 23.05 | 23.23 | 24.50 | 0.00 |
| | | 6 | 0 | 22.25 | 22.30 | 22.16 | 23.50 | 0-1 |
| | 16-QAM | 1 | 0 | 22.18 | 22.16 | 22.22 | 23.50 | 0-1 |
| | | 1 | 2 | 22.21 | 22.24 | 22.31 | 23.50 | 0-1 |
| | | 1 | 5 | 22.22 | 22.16 | 22.16 | 23.50 | 0-1 |
| | | 3 | 0 | 22.11 | 22.07 | 22.18 | 23.50 | 0-1 |
| | | 3 | 2 | 22.15 | 22.22 | 22.20 | 23.50 | 0-1 |
| | | 3 | 3 | 22.12 | 22.11 | 22.10 | 23.50 | 0-1 |
| | | 6 | 0 | 21.28 | 21.25 | 21.16 | 22.50 | 0-2 |
| | 64-QAM | 1 | 0 | 21.22 | 21.17 | 21.16 | 22.50 | 0-2 |
| | | 1 | 2 | 21.26 | 21.21 | 21.24 | 22.50 | 0-2 |
| | | 1 | 5 | 21.26 | 21.24 | 21.14 | 22.50 | 0-2 |
| | | 3 | 0 | 21.18 | 21.13 | 21.06 | 22.50 | 0-2 |
| | | 3 | 2 | 21.18 | 21.18 | 21.18 | 22.50 | 0-2 |
| | | 3 | 3 | 21.24 | 21.15 | 21.05 | 22.50 | 0-2 |
| | | 6 | 0 | 20.18 | 20.29 | 20.19 | 21.50 | 0-3 |
| | 256-QAM | 1 | 0 | 18.21 | 18.17 | 18.30 | 19.50 | 0-5 |
| | | 1 | 2 | 18.33 | 18.18 | 18.30 | 19.50 | 0-5 |
| | | 1 | 5 | 18.16 | 18.33 | 18.24 | 19.50 | 0-5 |
| | | 3 | 0 | 18.32 | 18.15 | 18.22 | 19.50 | 0-5 |
| | | 3 | 2 | 18.28 | 18.31 | 18.25 | 19.50 | 0-5 |
| | | 3 | 3 | 18.25 | 18.31 | 18.18 | 19.50 | 0-5 |
| | | 6 | 0 | 18.19 | 18.16 | 18.15 | 19.50 | 0-5 |

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| LTE Band 13 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 782 | 782 | 782 | | |
| Channel | | | | 23230 | 23230 | 23230 | | |
| 10 | QPSK | 1 | 0 | 23.30 | | | 24.50 | 0 |
| | | 1 | 25 | 23.43 | | | 24.50 | 0 |
| | | 1 | 49 | 23.36 | | | 24.50 | 0 |
| | | 25 | 0 | 22.19 | | | 23.50 | 0-1 |
| | | 25 | 12 | 22.23 | | | 23.50 | 0-1 |
| | | 25 | 25 | 22.29 | | | 23.50 | 0-1 |
| | | 50 | 0 | 22.13 | | | 23.50 | 0-1 |
| | 16-QAM | 1 | 0 | 22.22 | | | 23.50 | 0-1 |
| | | 1 | 25 | 22.14 | | | 23.50 | 0-1 |
| | | 1 | 49 | 22.15 | | | 23.50 | 0-1 |
| | | 25 | 0 | 21.10 | | | 22.50 | 0-2 |
| | | 25 | 12 | 21.11 | | | 22.50 | 0-2 |
| | | 25 | 25 | 21.10 | | | 22.50 | 0-2 |
| | | 50 | 0 | 21.21 | | | 22.50 | 0-2 |
| | 64-QAM | 1 | 0 | 21.18 | | | 22.50 | 0-2 |
| | | 1 | 25 | 21.22 | | | 22.50 | 0-2 |
| | | 1 | 49 | 21.17 | | | 22.50 | 0-2 |
| | | 25 | 0 | 20.19 | | | 21.50 | 0-3 |
| | | 25 | 12 | 20.19 | | | 21.50 | 0-3 |
| | | 25 | 25 | 20.12 | | | 21.50 | 0-3 |
| | | 50 | 0 | 20.15 | | | 21.50 | 0-3 |
| | 256-QAM | 1 | 0 | 18.14 | | | 19.50 | 0-5 |
| | | 1 | 25 | 18.22 | | | 19.50 | 0-5 |
| | | 1 | 49 | 18.29 | | | 19.50 | 0-5 |
| | | 25 | 0 | 18.10 | | | 19.50 | 0-5 |
| | | 25 | 12 | 18.12 | | | 19.50 | 0-5 |
| | | 25 | 25 | 18.20 | | | 19.50 | 0-5 |
| | | 50 | 0 | 18.12 | | | 19.50 | 0-5 |
| Frequency (MHz) | | | | 779.5 | 782 | 784.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 23205 | 23230 | 23255 | | |
| 5 | QPSK | 1 | 0 | 23.26 | 23.21 | 23.15 | 24.50 | 0 |
| | | 1 | 12 | 23.19 | 23.20 | 23.27 | 24.50 | 0 |
| | | 1 | 24 | 23.23 | 23.28 | 23.20 | 24.50 | 0 |
| | | 12 | 0 | 22.26 | 22.20 | 22.24 | 23.50 | 0-1 |
| | | 12 | 6 | 22.20 | 22.25 | 22.21 | 23.50 | 0-1 |
| | | 12 | 13 | 22.24 | 22.25 | 22.15 | 23.50 | 0-1 |
| | | 25 | 0 | 22.25 | 22.13 | 22.23 | 23.50 | 0-1 |
| | 16-QAM | 1 | 0 | 22.16 | 22.14 | 22.24 | 23.50 | 0-1 |
| | | 1 | 12 | 22.10 | 22.25 | 22.23 | 23.50 | 0-1 |
| | | 1 | 24 | 22.15 | 22.10 | 22.12 | 23.50 | 0-1 |
| | | 12 | 0 | 21.26 | 21.17 | 21.15 | 22.50 | 0-2 |
| | | 12 | 6 | 21.27 | 21.18 | 21.14 | 22.50 | 0-2 |
| | | 12 | 13 | 21.17 | 21.17 | 21.19 | 22.50 | 0-2 |
| | | 25 | 0 | 21.29 | 21.22 | 21.14 | 22.50 | 0-2 |
| | 64-QAM | 1 | 0 | 21.15 | 21.14 | 21.26 | 22.50 | 0-2 |
| | | 1 | 12 | 21.20 | 21.16 | 21.17 | 22.50 | 0-2 |
| | | 1 | 24 | 21.22 | 21.14 | 21.15 | 22.50 | 0-2 |
| | | 12 | 0 | 20.19 | 20.28 | 20.12 | 21.50 | 0-3 |
| | | 12 | 6 | 20.20 | 20.13 | 20.24 | 21.50 | 0-3 |
| | | 12 | 13 | 20.21 | 20.25 | 20.16 | 21.50 | 0-3 |
| | | 25 | 0 | 20.23 | 20.20 | 20.28 | 21.50 | 0-3 |
| | 256-QAM | 1 | 0 | 18.13 | 18.13 | 18.17 | 19.50 | 0-5 |
| | | 1 | 12 | 18.10 | 18.28 | 18.19 | 19.50 | 0-5 |
| | | 1 | 24 | 18.26 | 18.16 | 18.24 | 19.50 | 0-5 |
| | | 12 | 0 | 18.18 | 18.14 | 18.19 | 19.50 | 0-5 |
| | | 12 | 6 | 18.28 | 18.19 | 18.20 | 19.50 | 0-5 |
| | | 12 | 13 | 18.12 | 18.27 | 18.13 | 19.50 | 0-5 |
| | | 25 | 0 | 18.15 | 18.14 | 18.18 | 19.50 | 0-5 |

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| LTE Band 14 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 793 | 793 | 793 | | |
| Channel | | | | 23330 | 23330 | 23330 | | |
| 10 | QPSK | 1 | 0 | 23.62 | | | 24.50 | 0 |
| | | 1 | 25 | 23.69 | | | 24.50 | 0 |
| | | 1 | 49 | 23.63 | | | 24.50 | 0 |
| | | 25 | 0 | 22.46 | | | 23.50 | 0-1 |
| | | 25 | 12 | 22.45 | | | 23.50 | 0-1 |
| | | 25 | 25 | 22.42 | | | 23.50 | 0-1 |
| | | 50 | 0 | 22.50 | | | 23.50 | 0-1 |
| | 16-QAM | 1 | 0 | 22.43 | | | 23.50 | 0-1 |
| | | 1 | 25 | 22.39 | | | 23.50 | 0-1 |
| | | 1 | 49 | 22.47 | | | 23.50 | 0-1 |
| | | 25 | 0 | 21.49 | | | 22.50 | 0-2 |
| | | 25 | 12 | 21.51 | | | 22.50 | 0-2 |
| | | 25 | 25 | 21.52 | | | 22.50 | 0-2 |
| | | 50 | 0 | 21.38 | | | 22.50 | 0-2 |
| | 64-QAM | 1 | 0 | 21.43 | | | 22.50 | 0-2 |
| | | 1 | 25 | 21.38 | | | 22.50 | 0-2 |
| | | 1 | 49 | 21.54 | | | 22.50 | 0-2 |
| | | 25 | 0 | 20.47 | | | 21.50 | 0-3 |
| | | 25 | 12 | 20.41 | | | 21.50 | 0-3 |
| | | 25 | 25 | 20.40 | | | 21.50 | 0-3 |
| | | 50 | 0 | 20.43 | | | 21.50 | 0-3 |
| | 256-QAM | 1 | 0 | 18.48 | | | 19.50 | 0-5 |
| | | 1 | 25 | 18.40 | | | 19.50 | 0-5 |
| | | 1 | 49 | 18.44 | | | 19.50 | 0-5 |
| | | 25 | 0 | 18.54 | | | 19.50 | 0-5 |
| | | 25 | 12 | 18.48 | | | 19.50 | 0-5 |
| | | 25 | 25 | 18.45 | | | 19.50 | 0-5 |
| | | 50 | 0 | 18.37 | | | 19.50 | 0-5 |
| Frequency (MHz) | | | | 790.5 | 793 | 795.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 23305 | 23330 | 23355 | | |
| 5 | QPSK | 1 | 0 | 23.43 | 23.40 | 23.37 | 24.50 | 0 |
| | | 1 | 12 | 23.43 | 23.45 | 23.50 | 24.50 | 0 |
| | | 1 | 24 | 23.53 | 23.37 | 23.49 | 24.50 | 0 |
| | | 12 | 0 | 22.48 | 22.47 | 22.53 | 23.50 | 0-1 |
| | | 12 | 6 | 22.48 | 22.44 | 22.51 | 23.50 | 0-1 |
| | | 12 | 13 | 22.36 | 22.38 | 22.48 | 23.50 | 0-1 |
| | | 25 | 0 | 22.52 | 22.45 | 22.48 | 23.50 | 0-1 |
| | 16-QAM | 1 | 0 | 22.46 | 22.40 | 22.41 | 23.50 | 0-1 |
| | | 1 | 12 | 22.55 | 22.37 | 22.55 | 23.50 | 0-1 |
| | | 1 | 24 | 22.51 | 22.52 | 22.45 | 23.50 | 0-1 |
| | | 12 | 0 | 21.40 | 21.40 | 21.55 | 22.50 | 0-2 |
| | | 12 | 6 | 21.53 | 21.43 | 21.38 | 22.50 | 0-2 |
| | | 12 | 13 | 21.38 | 21.46 | 21.42 | 22.50 | 0-2 |
| | | 25 | 0 | 21.46 | 21.52 | 21.45 | 22.50 | 0-2 |
| | 64-QAM | 1 | 0 | 21.46 | 21.42 | 21.55 | 22.50 | 0-2 |
| | | 1 | 12 | 21.53 | 21.46 | 21.44 | 22.50 | 0-2 |
| | | 1 | 24 | 21.51 | 21.43 | 21.45 | 22.50 | 0-2 |
| | | 12 | 0 | 20.37 | 20.49 | 20.51 | 21.50 | 0-3 |
| | | 12 | 6 | 20.39 | 20.44 | 20.55 | 21.50 | 0-3 |
| | | 12 | 13 | 20.51 | 20.36 | 20.50 | 21.50 | 0-3 |
| | | 25 | 0 | 20.37 | 20.38 | 20.43 | 21.50 | 0-3 |
| | 256-QAM | 1 | 0 | 18.55 | 18.55 | 18.48 | 19.50 | 0-5 |
| | | 1 | 12 | 18.47 | 18.52 | 18.48 | 19.50 | 0-5 |
| | | 1 | 24 | 18.44 | 18.43 | 18.48 | 19.50 | 0-5 |
| | | 12 | 0 | 18.38 | 18.43 | 18.55 | 19.50 | 0-5 |
| | | 12 | 6 | 18.41 | 18.54 | 18.52 | 19.50 | 0-5 |
| | | 12 | 13 | 18.39 | 18.37 | 18.51 | 19.50 | 0-5 |
| | | 25 | 0 | 18.40 | 18.53 | 18.53 | 19.50 | 0-5 |

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| LTE Band 17 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 709 | 710 | 711 | | |
| Channel | | | | 23780 | 23790 | 23800 | | |
| 10 | QPSK | 1 | 0 | 23.44 | 23.45 | 23.32 | 24.50 | 0 |
| | | 1 | 25 | 23.46 | 23.42 | 23.31 | 24.50 | 0 |
| | | 1 | 49 | 23.43 | 23.41 | 23.29 | 24.50 | 0 |
| | | 25 | 0 | 22.20 | 22.25 | 22.28 | 23.50 | 0-1 |
| | | 25 | 12 | 22.18 | 22.21 | 22.22 | 23.50 | 0-1 |
| | | 25 | 25 | 22.25 | 22.11 | 22.23 | 23.50 | 0-1 |
| | | 50 | 0 | 22.19 | 22.11 | 22.24 | 23.50 | 0-1 |
| | 16-QAM | 1 | 0 | 22.16 | 22.21 | 22.15 | 23.50 | 0-1 |
| | | 1 | 25 | 22.29 | 22.26 | 22.29 | 23.50 | 0-1 |
| | | 1 | 49 | 22.28 | 22.16 | 22.20 | 23.50 | 0-1 |
| | | 25 | 0 | 21.11 | 21.17 | 21.22 | 22.50 | 0-2 |
| | | 25 | 12 | 21.14 | 21.21 | 21.16 | 22.50 | 0-2 |
| | | 25 | 25 | 21.18 | 21.29 | 21.20 | 22.50 | 0-2 |
| | | 50 | 0 | 21.25 | 21.14 | 21.27 | 22.50 | 0-2 |
| | 64-QAM | 1 | 0 | 21.24 | 21.10 | 21.15 | 22.50 | 0-2 |
| | | 1 | 25 | 21.17 | 21.19 | 21.28 | 22.50 | 0-2 |
| | | 1 | 49 | 21.14 | 21.29 | 21.15 | 22.50 | 0-2 |
| | | 25 | 0 | 20.28 | 20.10 | 20.15 | 21.50 | 0-3 |
| | | 25 | 12 | 20.10 | 20.11 | 20.14 | 21.50 | 0-3 |
| | | 25 | 25 | 20.11 | 20.25 | 20.16 | 21.50 | 0-3 |
| | | 50 | 0 | 20.22 | 20.12 | 20.11 | 21.50 | 0-3 |
| | 256-QAM | 1 | 0 | 18.20 | 18.29 | 18.13 | 19.50 | 0-5 |
| | | 1 | 25 | 18.23 | 18.27 | 18.13 | 19.50 | 0-5 |
| | | 1 | 49 | 18.16 | 18.27 | 18.15 | 19.50 | 0-5 |
| | | 25 | 0 | 18.11 | 18.23 | 18.22 | 19.50 | 0-5 |
| | | 25 | 12 | 18.25 | 18.24 | 18.22 | 19.50 | 0-5 |
| | | 25 | 25 | 18.19 | 18.26 | 18.14 | 19.50 | 0-5 |
| | | 50 | 0 | 18.10 | 18.21 | 18.20 | 19.50 | 0-5 |
| Frequency (MHz) | | | | 706.5 | 710 | 713.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 23755 | 23790 | 23825 | | |
| 5 | QPSK | 1 | 0 | 23.28 | 23.16 | 23.15 | 24.50 | 0 |
| | | 1 | 12 | 23.13 | 23.28 | 23.14 | 24.50 | 0 |
| | | 1 | 24 | 23.19 | 23.12 | 23.19 | 24.50 | 0 |
| | | 12 | 0 | 22.27 | 22.11 | 22.17 | 23.50 | 0-1 |
| | | 12 | 6 | 22.16 | 22.18 | 22.25 | 23.50 | 0-1 |
| | | 12 | 13 | 22.23 | 22.25 | 22.10 | 23.50 | 0-1 |
| | | 25 | 0 | 22.24 | 22.29 | 22.12 | 23.50 | 0-1 |
| | 16-QAM | 1 | 0 | 22.26 | 22.10 | 22.19 | 23.50 | 0-1 |
| | | 1 | 12 | 22.12 | 22.10 | 22.28 | 23.50 | 0-1 |
| | | 1 | 24 | 22.14 | 22.15 | 22.15 | 23.50 | 0-1 |
| | | 12 | 0 | 21.18 | 21.14 | 21.20 | 22.50 | 0-2 |
| | | 12 | 6 | 21.28 | 21.18 | 21.10 | 22.50 | 0-2 |
| | | 12 | 13 | 21.12 | 21.22 | 21.23 | 22.50 | 0-2 |
| | | 25 | 0 | 21.18 | 21.10 | 21.21 | 22.50 | 0-2 |
| | 64-QAM | 1 | 0 | 21.10 | 21.23 | 21.12 | 22.50 | 0-2 |
| | | 1 | 12 | 21.22 | 21.16 | 21.23 | 22.50 | 0-2 |
| | | 1 | 24 | 21.29 | 21.17 | 21.29 | 22.50 | 0-2 |
| | | 12 | 0 | 20.15 | 20.22 | 20.26 | 21.50 | 0-3 |
| | | 12 | 6 | 20.23 | 20.10 | 20.22 | 21.50 | 0-3 |
| | | 12 | 13 | 20.29 | 20.24 | 20.11 | 21.50 | 0-3 |
| | | 25 | 0 | 20.22 | 20.22 | 20.27 | 21.50 | 0-3 |
| | 256-QAM | 1 | 0 | 18.28 | 18.15 | 18.17 | 19.50 | 0-5 |
| | | 1 | 12 | 18.24 | 18.27 | 18.19 | 19.50 | 0-5 |
| | | 1 | 24 | 18.26 | 18.23 | 18.18 | 19.50 | 0-5 |
| | | 12 | 0 | 18.21 | 18.22 | 18.17 | 19.50 | 0-5 |
| | | 12 | 6 | 18.16 | 18.15 | 18.18 | 19.50 | 0-5 |
| | | 12 | 13 | 18.13 | 18.23 | 18.19 | 19.50 | 0-5 |
| | | 25 | 0 | 18.25 | 18.10 | 18.28 | 19.50 | 0-5 |

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| LTE Band 25 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1860 | 1882.5 | 1905 | | |
| Channel | | | | 26140 | 26365 | 26590 | | |
| 20 | QPSK | 1 | 0 | 23.29 | 23.57 | 22.65 | 24.00 | 0 |
| | | 1 | 50 | 23.07 | 22.61 | 22.64 | 24.00 | 0 |
| | | 1 | 99 | 22.58 | 23.37 | 22.12 | 24.00 | 0 |
| | | 50 | 0 | 21.23 | 21.35 | 21.30 | 23.00 | 0-1 |
| | | 50 | 25 | 21.18 | 21.21 | 21.28 | 23.00 | 0-1 |
| | | 50 | 50 | 21.19 | 21.27 | 21.25 | 23.00 | 0-1 |
| | | 100 | 0 | 21.25 | 21.34 | 21.22 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 21.36 | 21.32 | 21.29 | 23.00 | 0-1 |
| | | 1 | 50 | 21.20 | 21.31 | 21.31 | 23.00 | 0-1 |
| | | 1 | 99 | 21.33 | 21.31 | 21.35 | 23.00 | 0-1 |
| | | 50 | 0 | 20.34 | 20.20 | 20.35 | 22.00 | 0-2 |
| | | 50 | 25 | 20.31 | 20.36 | 20.31 | 22.00 | 0-2 |
| | | 50 | 50 | 20.32 | 20.20 | 20.28 | 22.00 | 0-2 |
| | | 100 | 0 | 20.21 | 20.18 | 20.25 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 20.18 | 20.26 | 20.30 | 22.00 | 0-2 |
| | | 1 | 50 | 20.31 | 20.26 | 20.26 | 22.00 | 0-2 |
| | | 1 | 99 | 20.23 | 20.18 | 20.35 | 22.00 | 0-2 |
| | | 50 | 0 | 19.34 | 19.22 | 19.17 | 21.00 | 0-3 |
| | | 50 | 25 | 19.22 | 19.27 | 19.25 | 21.00 | 0-3 |
| | | 50 | 50 | 19.32 | 19.18 | 19.29 | 21.00 | 0-3 |
| | | 100 | 0 | 19.32 | 19.26 | 19.22 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 17.17 | 17.29 | 17.24 | 19.00 | 0-5 |
| | | 1 | 50 | 17.32 | 17.32 | 17.27 | 19.00 | 0-5 |
| | | 1 | 99 | 17.27 | 17.29 | 17.20 | 19.00 | 0-5 |
| | | 50 | 0 | 17.24 | 17.25 | 17.23 | 19.00 | 0-5 |
| | | 50 | 25 | 17.17 | 17.30 | 17.21 | 19.00 | 0-5 |
| | | 50 | 50 | 17.17 | 17.29 | 17.23 | 19.00 | 0-5 |
| | | 100 | 0 | 17.36 | 17.24 | 17.28 | 19.00 | 0-5 |
| Frequency (MHz) | | | | 1857.5 | 1882.5 | 1907.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 26115 | 26365 | 26615 | | |
| 15 | QPSK | 1 | 0 | 22.19 | 22.19 | 22.22 | 24.00 | 0 |
| | | 1 | 36 | 22.27 | 22.29 | 22.35 | 24.00 | 0 |
| | | 1 | 74 | 22.24 | 22.26 | 22.17 | 24.00 | 0 |
| | | 36 | 0 | 21.35 | 21.30 | 21.32 | 23.00 | 0-1 |
| | | 36 | 18 | 21.17 | 21.31 | 21.30 | 23.00 | 0-1 |
| | | 36 | 37 | 21.26 | 21.21 | 21.18 | 23.00 | 0-1 |
| | | 75 | 0 | 21.36 | 21.25 | 21.20 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 21.24 | 21.30 | 21.28 | 23.00 | 0-1 |
| | | 1 | 36 | 21.20 | 21.32 | 21.36 | 23.00 | 0-1 |
| | | 1 | 74 | 21.27 | 21.29 | 21.34 | 23.00 | 0-1 |
| | | 36 | 0 | 20.29 | 20.34 | 20.28 | 22.00 | 0-2 |
| | | 36 | 18 | 20.21 | 20.24 | 20.28 | 22.00 | 0-2 |
| | | 36 | 37 | 20.29 | 20.23 | 20.18 | 22.00 | 0-2 |
| | | 75 | 0 | 20.21 | 20.26 | 20.29 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 20.23 | 20.24 | 20.27 | 22.00 | 0-2 |
| | | 1 | 36 | 20.27 | 20.31 | 20.19 | 22.00 | 0-2 |
| | | 1 | 74 | 20.17 | 20.23 | 20.19 | 22.00 | 0-2 |
| | | 36 | 0 | 19.33 | 19.29 | 19.26 | 21.00 | 0-3 |
| | | 36 | 18 | 19.18 | 19.35 | 19.27 | 21.00 | 0-3 |
| | | 36 | 37 | 19.24 | 19.33 | 19.21 | 21.00 | 0-3 |
| | | 75 | 0 | 19.25 | 19.23 | 19.32 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 17.21 | 17.20 | 17.32 | 19.00 | 0-5 |
| | | 1 | 36 | 17.25 | 17.30 | 17.28 | 19.00 | 0-5 |
| | | 1 | 74 | 17.25 | 17.29 | 17.31 | 19.00 | 0-5 |
| | | 36 | 0 | 17.19 | 17.28 | 17.27 | 19.00 | 0-5 |
| | | 36 | 18 | 17.30 | 17.35 | 17.27 | 19.00 | 0-5 |
| | | 36 | 37 | 17.36 | 17.19 | 17.35 | 19.00 | 0-5 |
| | | 75 | 0 | 17.19 | 17.29 | 17.34 | 19.00 | 0-5 |

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| LTE Band 25 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1855 | 1882.5 | 1910 | | |
| Channel | | | | 26090 | 26365 | 26640 | | |
| 10 | QPSK | 1 | 0 | 22.36 | 22.23 | 22.36 | 24.00 | 0 |
| | | 1 | 25 | 22.31 | 22.27 | 22.19 | 24.00 | 0 |
| | | 1 | 49 | 22.17 | 22.33 | 22.33 | 24.00 | 0 |
| | | 25 | 0 | 21.23 | 21.29 | 21.24 | 23.00 | 0-1 |
| | | 25 | 12 | 21.31 | 21.27 | 21.22 | 23.00 | 0-1 |
| | | 25 | 25 | 21.24 | 21.23 | 21.30 | 23.00 | 0-1 |
| | | 50 | 0 | 21.26 | 21.27 | 21.31 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 21.30 | 21.29 | 21.25 | 23.00 | 0-1 |
| | | 1 | 25 | 21.32 | 21.24 | 21.33 | 23.00 | 0-1 |
| | | 1 | 49 | 21.36 | 21.28 | 21.21 | 23.00 | 0-1 |
| | | 25 | 0 | 20.36 | 20.21 | 20.25 | 22.00 | 0-2 |
| | | 25 | 12 | 20.23 | 20.35 | 20.35 | 22.00 | 0-2 |
| | | 25 | 25 | 20.26 | 20.28 | 20.18 | 22.00 | 0-2 |
| | | 50 | 0 | 20.25 | 20.26 | 20.34 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 20.24 | 20.21 | 20.32 | 22.00 | 0-2 |
| | | 1 | 25 | 20.25 | 20.20 | 20.20 | 22.00 | 0-2 |
| | | 1 | 49 | 20.34 | 20.28 | 20.21 | 22.00 | 0-2 |
| | | 25 | 0 | 19.33 | 19.36 | 19.20 | 21.00 | 0-3 |
| | | 25 | 12 | 19.18 | 19.33 | 19.17 | 21.00 | 0-3 |
| | | 25 | 25 | 19.20 | 19.23 | 19.18 | 21.00 | 0-3 |
| | | 50 | 0 | 19.24 | 19.29 | 19.23 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 17.28 | 17.31 | 17.23 | 19.00 | 0-5 |
| | | 1 | 25 | 17.24 | 17.35 | 17.33 | 19.00 | 0-5 |
| | | 1 | 49 | 17.23 | 17.35 | 17.23 | 19.00 | 0-5 |
| | | 25 | 0 | 17.33 | 17.30 | 17.22 | 19.00 | 0-5 |
| | | 25 | 12 | 17.32 | 17.30 | 17.20 | 19.00 | 0-5 |
| | | 25 | 25 | 17.22 | 17.25 | 17.34 | 19.00 | 0-5 |
| | | 50 | 0 | 17.36 | 17.19 | 17.17 | 19.00 | 0-5 |
| Frequency (MHz) | | | | 1852.5 | 1882.5 | 1912.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 26065 | 26365 | 26665 | | |
| 5 | QPSK | 1 | 0 | 22.24 | 22.21 | 22.26 | 24.00 | 0 |
| | | 1 | 12 | 22.28 | 22.26 | 22.28 | 24.00 | 0 |
| | | 1 | 24 | 22.34 | 22.30 | 22.26 | 24.00 | 0 |
| | | 12 | 0 | 21.24 | 21.29 | 21.25 | 23.00 | 0-1 |
| | | 12 | 6 | 21.31 | 21.25 | 21.24 | 23.00 | 0-1 |
| | | 12 | 13 | 21.31 | 21.18 | 21.22 | 23.00 | 0-1 |
| | | 25 | 0 | 21.23 | 21.18 | 21.25 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 21.35 | 21.25 | 21.28 | 23.00 | 0-1 |
| | | 1 | 12 | 21.20 | 21.21 | 21.29 | 23.00 | 0-1 |
| | | 1 | 24 | 21.18 | 21.31 | 21.35 | 23.00 | 0-1 |
| | | 12 | 0 | 20.33 | 20.31 | 20.20 | 22.00 | 0-2 |
| | | 12 | 6 | 20.27 | 20.26 | 20.36 | 22.00 | 0-2 |
| | | 12 | 13 | 20.28 | 20.28 | 20.27 | 22.00 | 0-2 |
| | | 25 | 0 | 20.20 | 20.30 | 20.33 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 20.34 | 20.24 | 20.28 | 22.00 | 0-2 |
| | | 1 | 12 | 20.36 | 20.26 | 20.35 | 22.00 | 0-2 |
| | | 1 | 24 | 20.30 | 20.32 | 20.27 | 22.00 | 0-2 |
| | | 12 | 0 | 19.32 | 19.26 | 19.28 | 21.00 | 0-3 |
| | | 12 | 6 | 19.27 | 19.33 | 19.19 | 21.00 | 0-3 |
| | | 12 | 13 | 19.29 | 19.26 | 19.21 | 21.00 | 0-3 |
| | | 25 | 0 | 19.25 | 19.32 | 19.30 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 17.25 | 17.19 | 17.28 | 19.00 | 0-5 |
| | | 1 | 12 | 17.18 | 17.18 | 17.22 | 19.00 | 0-5 |
| | | 1 | 24 | 17.22 | 17.26 | 17.17 | 19.00 | 0-5 |
| | | 12 | 0 | 17.33 | 17.28 | 17.23 | 19.00 | 0-5 |
| | | 12 | 6 | 17.25 | 17.19 | 17.26 | 19.00 | 0-5 |
| | | 12 | 13 | 17.27 | 17.23 | 17.32 | 19.00 | 0-5 |
| | | 25 | 0 | 17.28 | 17.19 | 17.24 | 19.00 | 0-5 |

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| LTE Band 25 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1851.5 | 1882.5 | 1913.5 | | |
| Channel | | | | 26055 | 26365 | 26675 | | |
| 3 | QPSK | 1 | 0 | 22.18 | 22.31 | 22.21 | 24.00 | 0 |
| | | 1 | 7 | 22.25 | 22.22 | 22.32 | 24.00 | 0 |
| | | 1 | 14 | 22.21 | 22.35 | 22.34 | 24.00 | 0 |
| | | 8 | 0 | 21.30 | 21.26 | 21.27 | 23.00 | 0-1 |
| | | 8 | 4 | 21.21 | 21.19 | 21.18 | 23.00 | 0-1 |
| | | 8 | 7 | 21.34 | 21.20 | 21.26 | 23.00 | 0-1 |
| | | 15 | 0 | 21.31 | 21.30 | 21.26 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 21.23 | 21.18 | 21.20 | 23.00 | 0-1 |
| | | 1 | 7 | 21.31 | 21.27 | 21.23 | 23.00 | 0-1 |
| | | 1 | 14 | 21.26 | 21.24 | 21.18 | 23.00 | 0-1 |
| | | 8 | 0 | 20.22 | 20.30 | 20.24 | 22.00 | 0-2 |
| | | 8 | 4 | 20.25 | 20.27 | 20.21 | 22.00 | 0-2 |
| | | 8 | 7 | 20.36 | 20.23 | 20.31 | 22.00 | 0-2 |
| | | 15 | 0 | 20.33 | 20.24 | 20.17 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 20.17 | 20.28 | 20.33 | 22.00 | 0-2 |
| | | 1 | 7 | 20.26 | 20.36 | 20.35 | 22.00 | 0-2 |
| | | 1 | 14 | 20.21 | 20.35 | 20.20 | 22.00 | 0-2 |
| | | 8 | 0 | 19.19 | 19.25 | 19.35 | 21.00 | 0-3 |
| | | 8 | 4 | 19.28 | 19.32 | 19.33 | 21.00 | 0-3 |
| | | 8 | 7 | 19.18 | 19.25 | 19.22 | 21.00 | 0-3 |
| | | 15 | 0 | 19.24 | 19.35 | 19.17 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 17.33 | 17.35 | 17.31 | 19.00 | 0-5 |
| | | 1 | 7 | 17.22 | 17.29 | 17.17 | 19.00 | 0-5 |
| | | 1 | 14 | 17.26 | 17.36 | 17.25 | 19.00 | 0-5 |
| | | 8 | 0 | 17.17 | 17.25 | 17.30 | 19.00 | 0-5 |
| | | 8 | 4 | 17.36 | 17.35 | 17.20 | 19.00 | 0-5 |
| | | 8 | 7 | 17.35 | 17.18 | 17.19 | 19.00 | 0-5 |
| | | 15 | 0 | 17.18 | 17.23 | 17.34 | 19.00 | 0-5 |
| Frequency (MHz) | | | | 1850.7 | 1882.5 | 1914.3 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 26047 | 26365 | 26683 | | |
| 1.4 | QPSK | 1 | 0 | 22.17 | 22.26 | 22.21 | 24.00 | 0 |
| | | 1 | 2 | 22.19 | 22.31 | 22.25 | 24.00 | 0 |
| | | 1 | 5 | 22.20 | 22.25 | 22.35 | 24.00 | 0 |
| | | 3 | 0 | 22.09 | 22.15 | 22.12 | 24.00 | 0.00 |
| | | 3 | 2 | 22.15 | 22.23 | 22.19 | 24.00 | 0.00 |
| | | 3 | 3 | 22.18 | 22.14 | 22.26 | 24.00 | 0.00 |
| | | 6 | 0 | 21.32 | 21.17 | 21.24 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 21.23 | 21.20 | 21.26 | 23.00 | 0-1 |
| | | 1 | 2 | 21.28 | 21.34 | 21.33 | 23.00 | 0-1 |
| | | 1 | 5 | 21.20 | 21.27 | 21.19 | 23.00 | 0-1 |
| | | 3 | 0 | 21.15 | 21.10 | 21.16 | 23.00 | 0-1 |
| | | 3 | 2 | 21.26 | 21.23 | 21.24 | 23.00 | 0-1 |
| | | 3 | 3 | 21.15 | 21.24 | 21.14 | 23.00 | 0-1 |
| | | 6 | 0 | 20.30 | 20.35 | 20.21 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 20.22 | 20.24 | 20.19 | 22.00 | 0-2 |
| | | 1 | 2 | 20.20 | 20.22 | 20.32 | 22.00 | 0-2 |
| | | 1 | 5 | 20.27 | 20.33 | 20.29 | 22.00 | 0-2 |
| | | 3 | 0 | 20.11 | 20.21 | 20.12 | 22.00 | 0-2 |
| | | 3 | 2 | 20.12 | 20.13 | 20.23 | 22.00 | 0-2 |
| | | 3 | 3 | 20.18 | 20.29 | 20.23 | 22.00 | 0-2 |
| | | 6 | 0 | 19.33 | 19.17 | 19.31 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 17.31 | 17.24 | 17.23 | 19.00 | 0-5 |
| | | 1 | 2 | 17.24 | 17.25 | 17.30 | 19.00 | 0-5 |
| | | 1 | 5 | 17.18 | 17.36 | 17.28 | 19.00 | 0-5 |
| | | 3 | 0 | 17.18 | 17.31 | 17.33 | 19.00 | 0-5 |
| | | 3 | 2 | 17.28 | 17.29 | 17.36 | 19.00 | 0-5 |
| | | 3 | 3 | 17.29 | 17.35 | 17.24 | 19.00 | 0-5 |
| | | 6 | 0 | 17.33 | 17.20 | 17.23 | 19.00 | 0-5 |

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| LTE Band 26 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 821.5 | 831.5 | 841.5 | | |
| Channel | | | | 26765 | 26865 | 26965 | | |
| 15 | QPSK | 1 | 0 | 23.85 | 24.25 | 24.08 | 24.50 | 0 |
| | | 1 | 36 | 23.71 | 24.06 | 23.89 | 24.50 | 0 |
| | | 1 | 74 | 24.09 | 23.81 | 23.29 | 24.50 | 0 |
| | | 36 | 0 | 22.15 | 22.16 | 22.11 | 23.50 | 0-1 |
| | | 36 | 18 | 22.09 | 22.21 | 22.19 | 23.50 | 0-1 |
| | | 36 | 37 | 22.25 | 22.14 | 22.22 | 23.50 | 0-1 |
| | | 75 | 0 | 22.16 | 22.14 | 22.17 | 23.50 | 0-1 |
| | 16-QAM | 1 | 0 | 22.21 | 22.22 | 22.18 | 23.50 | 0-1 |
| | | 1 | 36 | 22.21 | 22.21 | 22.13 | 23.50 | 0-1 |
| | | 1 | 74 | 22.24 | 22.23 | 22.18 | 23.50 | 0-1 |
| | | 36 | 0 | 21.18 | 21.24 | 21.26 | 22.50 | 0-2 |
| | | 36 | 18 | 21.17 | 21.13 | 21.09 | 22.50 | 0-2 |
| | | 36 | 37 | 21.19 | 21.26 | 21.22 | 22.50 | 0-2 |
| | | 75 | 0 | 21.08 | 21.25 | 21.10 | 22.50 | 0-2 |
| | 64-QAM | 1 | 0 | 21.11 | 21.26 | 21.18 | 22.50 | 0-2 |
| | | 1 | 36 | 21.24 | 21.07 | 21.25 | 22.50 | 0-2 |
| | | 1 | 74 | 21.25 | 21.10 | 21.12 | 22.50 | 0-2 |
| | | 36 | 0 | 20.08 | 20.19 | 20.14 | 21.50 | 0-3 |
| | | 36 | 18 | 20.23 | 20.20 | 20.11 | 21.50 | 0-3 |
| | | 36 | 37 | 20.10 | 20.16 | 20.08 | 21.50 | 0-3 |
| | | 75 | 0 | 20.12 | 20.12 | 20.07 | 21.50 | 0-3 |
| | 256-QAM | 1 | 0 | 18.19 | 18.11 | 18.21 | 19.50 | 0-5 |
| | | 1 | 36 | 18.25 | 18.09 | 18.19 | 19.50 | 0-5 |
| | | 1 | 74 | 18.25 | 18.25 | 18.07 | 19.50 | 0-5 |
| | | 36 | 0 | 18.24 | 18.25 | 18.23 | 19.50 | 0-5 |
| | | 36 | 18 | 18.19 | 18.12 | 18.26 | 19.50 | 0-5 |
| | | 36 | 37 | 18.22 | 18.21 | 18.08 | 19.50 | 0-5 |
| | | 75 | 0 | 18.23 | 18.18 | 18.12 | 19.50 | 0-5 |
| Frequency (MHz) | | | | 819 | 831.5 | 844 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 26740 | 26865 | 26990 | | |
| 10 | QPSK | 1 | 0 | 23.18 | 23.12 | 23.20 | 24.50 | 0 |
| | | 1 | 25 | 23.11 | 23.18 | 23.25 | 24.50 | 0 |
| | | 1 | 49 | 23.23 | 23.13 | 23.22 | 24.50 | 0 |
| | | 25 | 0 | 22.10 | 22.07 | 22.20 | 23.50 | 0-1 |
| | | 25 | 12 | 22.13 | 22.13 | 22.13 | 23.50 | 0-1 |
| | | 25 | 25 | 22.09 | 22.12 | 22.20 | 23.50 | 0-1 |
| | | 50 | 0 | 22.23 | 22.26 | 22.25 | 23.50 | 0-1 |
| | 16-QAM | 1 | 0 | 22.15 | 22.17 | 22.07 | 23.50 | 0-1 |
| | | 1 | 25 | 22.25 | 22.08 | 22.19 | 23.50 | 0-1 |
| | | 1 | 49 | 22.22 | 22.09 | 22.22 | 23.50 | 0-1 |
| | | 25 | 0 | 21.23 | 21.12 | 21.14 | 22.50 | 0-2 |
| | | 25 | 12 | 21.11 | 21.18 | 21.13 | 22.50 | 0-2 |
| | | 25 | 25 | 21.23 | 21.21 | 21.18 | 22.50 | 0-2 |
| | | 50 | 0 | 21.12 | 21.08 | 21.16 | 22.50 | 0-2 |
| | 64-QAM | 1 | 0 | 21.10 | 21.14 | 21.17 | 22.50 | 0-2 |
| | | 1 | 25 | 21.21 | 21.21 | 21.21 | 22.50 | 0-2 |
| | | 1 | 49 | 21.21 | 21.14 | 21.14 | 22.50 | 0-2 |
| | | 25 | 0 | 20.14 | 20.24 | 20.24 | 21.50 | 0-3 |
| | | 25 | 12 | 20.08 | 20.16 | 20.19 | 21.50 | 0-3 |
| | | 25 | 25 | 20.18 | 20.22 | 20.18 | 21.50 | 0-3 |
| | | 50 | 0 | 20.15 | 20.11 | 20.16 | 21.50 | 0-3 |
| | 256-QAM | 1 | 0 | 18.14 | 18.10 | 18.15 | 19.50 | 0-5 |
| | | 1 | 25 | 18.24 | 18.19 | 18.10 | 19.50 | 0-5 |
| | | 1 | 49 | 18.25 | 18.20 | 18.07 | 19.50 | 0-5 |
| | | 25 | 0 | 18.11 | 18.22 | 18.24 | 19.50 | 0-5 |
| | | 25 | 12 | 18.24 | 18.10 | 18.20 | 19.50 | 0-5 |
| | | 25 | 25 | 18.24 | 18.11 | 18.09 | 19.50 | 0-5 |
| | | 50 | 0 | 18.15 | 18.13 | 18.25 | 19.50 | 0-5 |

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| LTE Band 26 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 816.5 | 831.5 | 846.5 | | |
| Channel | | | | 26715 | 26865 | 27015 | | |
| 5 | QPSK | 1 | 0 | 23.25 | 23.08 | 23.23 | 24.50 | 0 |
| | | 1 | 12 | 23.07 | 23.14 | 23.14 | 24.50 | 0 |
| | | 1 | 24 | 23.12 | 23.21 | 23.13 | 24.50 | 0 |
| | | 12 | 0 | 22.16 | 22.25 | 22.24 | 23.50 | 0-1 |
| | | 12 | 6 | 22.14 | 22.14 | 22.20 | 23.50 | 0-1 |
| | | 12 | 13 | 22.18 | 22.19 | 22.15 | 23.50 | 0-1 |
| | | 25 | 0 | 22.19 | 22.20 | 22.12 | 23.50 | 0-1 |
| | 16-QAM | 1 | 0 | 22.13 | 22.10 | 22.12 | 23.50 | 0-1 |
| | | 1 | 12 | 22.20 | 22.25 | 22.24 | 23.50 | 0-1 |
| | | 1 | 24 | 22.15 | 22.21 | 22.16 | 23.50 | 0-1 |
| | | 12 | 0 | 21.22 | 21.09 | 21.26 | 22.50 | 0-2 |
| | | 12 | 6 | 21.19 | 21.10 | 21.24 | 22.50 | 0-2 |
| | | 12 | 13 | 21.25 | 21.12 | 21.23 | 22.50 | 0-2 |
| | | 25 | 0 | 21.23 | 21.09 | 21.07 | 22.50 | 0-2 |
| | 64-QAM | 1 | 0 | 21.11 | 21.08 | 21.19 | 22.50 | 0-2 |
| | | 1 | 12 | 21.14 | 21.13 | 21.26 | 22.50 | 0-2 |
| | | 1 | 24 | 21.18 | 21.07 | 21.25 | 22.50 | 0-2 |
| | | 12 | 0 | 20.22 | 20.25 | 20.11 | 21.50 | 0-3 |
| | | 12 | 6 | 20.23 | 20.24 | 20.20 | 21.50 | 0-3 |
| | | 12 | 13 | 20.10 | 20.19 | 20.18 | 21.50 | 0-3 |
| | | 25 | 0 | 20.12 | 20.13 | 20.10 | 21.50 | 0-3 |
| | 256-QAM | 1 | 0 | 18.26 | 18.16 | 18.25 | 19.50 | 0-5 |
| | | 1 | 12 | 18.10 | 18.16 | 18.22 | 19.50 | 0-5 |
| | | 1 | 24 | 18.13 | 18.23 | 18.07 | 19.50 | 0-5 |
| | | 12 | 0 | 18.16 | 18.21 | 18.24 | 19.50 | 0-5 |
| | | 12 | 6 | 18.26 | 18.20 | 18.07 | 19.50 | 0-5 |
| | | 12 | 13 | 18.08 | 18.07 | 18.25 | 19.50 | 0-5 |
| | | 25 | 0 | 18.13 | 18.10 | 18.15 | 19.50 | 0-5 |
| Frequency (MHz) | | | | 815.5 | 831.5 | 847.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 26705 | 26865 | 27025 | | |
| 3 | QPSK | 1 | 0 | 23.20 | 23.24 | 23.24 | 24.50 | 0 |
| | | 1 | 7 | 23.19 | 23.23 | 23.21 | 24.50 | 0 |
| | | 1 | 14 | 23.15 | 23.15 | 23.13 | 24.50 | 0 |
| | | 8 | 0 | 22.14 | 22.18 | 22.13 | 23.50 | 0-1 |
| | | 8 | 4 | 22.09 | 22.26 | 22.10 | 23.50 | 0-1 |
| | | 8 | 7 | 22.16 | 22.24 | 22.12 | 23.50 | 0-1 |
| | | 15 | 0 | 22.26 | 22.16 | 22.19 | 23.50 | 0-1 |
| | 16-QAM | 1 | 0 | 22.17 | 22.16 | 22.07 | 23.50 | 0-1 |
| | | 1 | 7 | 22.20 | 22.10 | 22.16 | 23.50 | 0-1 |
| | | 1 | 14 | 22.16 | 22.16 | 22.11 | 23.50 | 0-1 |
| | | 8 | 0 | 21.20 | 21.23 | 21.16 | 22.50 | 0-2 |
| | | 8 | 4 | 21.17 | 21.21 | 21.10 | 22.50 | 0-2 |
| | | 8 | 7 | 21.11 | 21.13 | 21.21 | 22.50 | 0-2 |
| | | 15 | 0 | 21.11 | 21.24 | 21.11 | 22.50 | 0-2 |
| | 64-QAM | 1 | 0 | 21.18 | 21.13 | 21.13 | 22.50 | 0-2 |
| | | 1 | 7 | 21.16 | 21.09 | 21.19 | 22.50 | 0-2 |
| | | 1 | 14 | 21.18 | 21.14 | 21.08 | 22.50 | 0-2 |
| | | 8 | 0 | 20.08 | 20.08 | 20.09 | 21.50 | 0-3 |
| | | 8 | 4 | 20.26 | 20.21 | 20.09 | 21.50 | 0-3 |
| | | 8 | 7 | 20.26 | 20.11 | 20.09 | 21.50 | 0-3 |
| | | 15 | 0 | 20.08 | 20.22 | 20.20 | 21.50 | 0-3 |
| | 256-QAM | 1 | 0 | 18.09 | 18.11 | 18.07 | 19.50 | 0-5 |
| | | 1 | 7 | 18.09 | 18.09 | 18.12 | 19.50 | 0-5 |
| | | 1 | 14 | 18.12 | 18.13 | 18.11 | 19.50 | 0-5 |
| | | 8 | 0 | 18.21 | 18.24 | 18.14 | 19.50 | 0-5 |
| | | 8 | 4 | 18.08 | 18.13 | 18.23 | 19.50 | 0-5 |
| | | 8 | 7 | 18.19 | 18.23 | 18.23 | 19.50 | 0-5 |
| | | 15 | 0 | 18.22 | 18.08 | 18.12 | 19.50 | 0-5 |

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| LTE Band 26 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 814.7 | 831.5 | 848.3 | | |
| Channel | | | | 26697 | 26865 | 27033 | | |
| 1.4 | QPSK | 1 | 0 | 23.14 | 23.23 | 23.22 | 24.50 | 0 |
| | | 1 | 2 | 23.10 | 23.26 | 23.13 | 24.50 | 0 |
| | | 1 | 5 | 23.12 | 23.23 | 23.19 | 24.50 | 0 |
| | | 3 | 0 | 23.08 | 23.17 | 23.15 | 24.50 | 0.00 |
| | | 3 | 2 | 23.02 | 23.20 | 23.06 | 24.50 | 0.00 |
| | | 3 | 3 | 23.10 | 23.14 | 23.17 | 24.50 | 0.00 |
| | | 6 | 0 | 22.18 | 22.24 | 22.12 | 23.50 | 0-1 |
| | 16-QAM | 1 | 0 | 22.07 | 22.24 | 22.18 | 23.50 | 0-1 |
| | | 1 | 2 | 22.07 | 22.13 | 22.11 | 23.50 | 0-1 |
| | | 1 | 5 | 22.13 | 22.24 | 22.13 | 23.50 | 0-1 |
| | | 3 | 0 | 22.02 | 22.14 | 22.16 | 23.50 | 0-1 |
| | | 3 | 2 | 22.01 | 22.08 | 22.06 | 23.50 | 0-1 |
| | | 3 | 3 | 22.08 | 22.19 | 22.02 | 23.50 | 0-1 |
| | | 6 | 0 | 21.09 | 21.16 | 21.10 | 22.50 | 0-2 |
| | 64-QAM | 1 | 0 | 21.19 | 21.08 | 21.22 | 22.50 | 0-2 |
| | | 1 | 2 | 21.08 | 21.12 | 21.12 | 22.50 | 0-2 |
| | | 1 | 5 | 21.15 | 21.12 | 21.17 | 22.50 | 0-2 |
| | | 3 | 0 | 21.08 | 20.99 | 21.19 | 22.50 | 0-2 |
| | | 3 | 2 | 21.04 | 21.03 | 21.08 | 22.50 | 0-2 |
| | | 3 | 3 | 21.12 | 21.03 | 21.10 | 22.50 | 0-2 |
| | | 6 | 0 | 20.13 | 20.08 | 20.11 | 21.50 | 0-3 |
| | 256-QAM | 1 | 0 | 18.17 | 18.15 | 18.13 | 19.50 | 0-5 |
| | | 1 | 2 | 18.12 | 18.15 | 18.23 | 19.50 | 0-5 |
| | | 1 | 5 | 18.21 | 18.07 | 18.09 | 19.50 | 0-5 |
| | | 3 | 0 | 18.21 | 18.24 | 18.11 | 19.50 | 0-5 |
| | | 3 | 2 | 18.22 | 18.25 | 18.11 | 19.50 | 0-5 |
| | | 3 | 3 | 18.13 | 18.19 | 18.09 | 19.50 | 0-5 |
| | | 6 | 0 | 18.21 | 18.09 | 18.10 | 19.50 | 0-5 |

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| LTE Band 30 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 2310 | 2310 | 2310 | | |
| Channel | | | | 27710 | 27710 | 27710 | | |
| 10 | QPSK | 1 | 0 | 22.97 | | | 23.00 | 0 |
| | | 1 | 25 | 22.96 | | | 23.00 | 0 |
| | | 1 | 49 | 22.85 | | | 23.00 | 0 |
| | | 25 | 0 | 21.50 | | | 22.00 | 0-1 |
| | | 25 | 12 | 21.59 | | | 22.00 | 0-1 |
| | | 25 | 25 | 21.54 | | | 22.00 | 0-1 |
| | | 50 | 0 | 21.60 | | | 22.00 | 0-1 |
| | 16-QAM | 1 | 0 | 21.50 | | | 22.00 | 0-1 |
| | | 1 | 25 | 21.51 | | | 22.00 | 0-1 |
| | | 1 | 49 | 21.50 | | | 22.00 | 0-1 |
| | | 25 | 0 | 20.58 | | | 21.00 | 0-2 |
| | | 25 | 12 | 20.48 | | | 21.00 | 0-2 |
| | | 25 | 25 | 20.54 | | | 21.00 | 0-2 |
| | | 50 | 0 | 20.54 | | | 21.00 | 0-2 |
| | 64-QAM | 1 | 0 | 20.50 | | | 21.00 | 0-2 |
| | | 1 | 25 | 20.56 | | | 21.00 | 0-2 |
| | | 1 | 49 | 20.57 | | | 21.00 | 0-2 |
| | | 25 | 0 | 19.63 | | | 20.00 | 0-3 |
| | | 25 | 12 | 19.63 | | | 20.00 | 0-3 |
| | | 25 | 25 | 19.49 | | | 20.00 | 0-3 |
| | | 50 | 0 | 19.66 | | | 20.00 | 0-3 |
| | 256-QAM | 1 | 0 | 17.64 | | | 18.00 | 0-5 |
| | | 1 | 25 | 17.54 | | | 18.00 | 0-5 |
| | | 1 | 49 | 17.61 | | | 18.00 | 0-5 |
| | | 25 | 0 | 17.63 | | | 18.00 | 0-5 |
| | | 25 | 12 | 17.56 | | | 18.00 | 0-5 |
| | | 25 | 25 | 17.64 | | | 18.00 | 0-5 |
| | | 50 | 0 | 17.59 | | | 18.00 | 0-5 |
| Frequency (MHz) | | | | 2307.5 | 2310 | 2312.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 27685 | 27710 | 27735 | | |
| 5 | QPSK | 1 | 0 | 22.54 | 22.57 | 22.49 | 23.00 | 0 |
| | | 1 | 12 | 22.56 | 22.49 | 22.47 | 23.00 | 0 |
| | | 1 | 24 | 22.49 | 22.48 | 22.66 | 23.00 | 0 |
| | | 12 | 0 | 21.48 | 21.51 | 21.50 | 22.00 | 0-1 |
| | | 12 | 6 | 21.50 | 21.58 | 21.55 | 22.00 | 0-1 |
| | | 12 | 13 | 21.51 | 21.49 | 21.50 | 22.00 | 0-1 |
| | | 25 | 0 | 21.52 | 21.66 | 21.55 | 22.00 | 0-1 |
| | 16-QAM | 1 | 0 | 21.52 | 21.55 | 21.54 | 22.00 | 0-1 |
| | | 1 | 12 | 21.60 | 21.49 | 21.48 | 22.00 | 0-1 |
| | | 1 | 24 | 21.55 | 21.51 | 21.64 | 22.00 | 0-1 |
| | | 12 | 0 | 20.59 | 20.53 | 20.47 | 21.00 | 0-2 |
| | | 12 | 6 | 20.62 | 20.63 | 20.59 | 21.00 | 0-2 |
| | | 12 | 13 | 20.52 | 20.66 | 20.56 | 21.00 | 0-2 |
| | | 25 | 0 | 20.55 | 20.59 | 20.64 | 21.00 | 0-2 |
| | 64-QAM | 1 | 0 | 20.62 | 20.53 | 20.55 | 21.00 | 0-2 |
| | | 1 | 12 | 20.59 | 20.59 | 20.59 | 21.00 | 0-2 |
| | | 1 | 24 | 20.57 | 20.52 | 20.63 | 21.00 | 0-2 |
| | | 12 | 0 | 19.51 | 19.66 | 19.47 | 20.00 | 0-3 |
| | | 12 | 6 | 19.61 | 19.65 | 19.65 | 20.00 | 0-3 |
| | | 12 | 13 | 19.52 | 19.62 | 19.60 | 20.00 | 0-3 |
| | | 25 | 0 | 19.52 | 19.63 | 19.47 | 20.00 | 0-3 |
| | 256-QAM | 1 | 0 | 17.60 | 17.53 | 17.65 | 18.00 | 0-5 |
| | | 1 | 12 | 17.61 | 17.48 | 17.61 | 18.00 | 0-5 |
| | | 1 | 24 | 17.51 | 17.49 | 17.65 | 18.00 | 0-5 |
| | | 12 | 0 | 17.54 | 17.51 | 17.50 | 18.00 | 0-5 |
| | | 12 | 6 | 17.49 | 17.57 | 17.55 | 18.00 | 0-5 |
| | | 12 | 13 | 17.56 | 17.52 | 17.62 | 18.00 | 0-5 |
| | | 25 | 0 | 17.62 | 17.60 | 17.60 | 18.00 | 0-5 |

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| LTE Band 66 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1720 | 1745 | 1770 | | |
| Channel | | | | 132072 | 132322 | 132572 | | |
| 20 | QPSK | 1 | 0 | 22.98 | 23.29 | 24.00 | 24.00 | 0 |
| | | 1 | 50 | 23.56 | 23.89 | 23.32 | 24.00 | 0 |
| | | 1 | 99 | 23.81 | 23.92 | 23.96 | 24.00 | 0 |
| | | 50 | 0 | 22.27 | 22.25 | 22.19 | 23.00 | 0-1 |
| | | 50 | 25 | 22.29 | 22.29 | 22.24 | 23.00 | 0-1 |
| | | 50 | 50 | 22.33 | 22.23 | 22.35 | 23.00 | 0-1 |
| | | 100 | 0 | 22.34 | 22.26 | 22.23 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.28 | 22.31 | 22.19 | 23.00 | 0-1 |
| | | 1 | 50 | 22.24 | 22.35 | 22.22 | 23.00 | 0-1 |
| | | 1 | 99 | 22.29 | 22.17 | 22.17 | 23.00 | 0-1 |
| | | 50 | 0 | 21.22 | 21.26 | 21.24 | 22.00 | 0-2 |
| | | 50 | 25 | 21.34 | 21.26 | 21.16 | 22.00 | 0-2 |
| | | 50 | 50 | 21.27 | 21.19 | 21.22 | 22.00 | 0-2 |
| | | 100 | 0 | 21.22 | 21.17 | 21.34 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.33 | 21.25 | 21.29 | 22.00 | 0-2 |
| | | 1 | 50 | 21.33 | 21.31 | 21.21 | 22.00 | 0-2 |
| | | 1 | 99 | 21.30 | 21.23 | 21.22 | 22.00 | 0-2 |
| | | 50 | 0 | 20.23 | 20.21 | 20.28 | 21.00 | 0-3 |
| | | 50 | 25 | 20.33 | 20.35 | 20.17 | 21.00 | 0-3 |
| | | 50 | 50 | 20.24 | 20.31 | 20.17 | 21.00 | 0-3 |
| | | 100 | 0 | 20.20 | 20.20 | 20.16 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.20 | 18.28 | 18.23 | 19.00 | 0-5 |
| | | 1 | 50 | 18.27 | 18.16 | 18.18 | 19.00 | 0-5 |
| | | 1 | 99 | 18.19 | 18.35 | 18.18 | 19.00 | 0-5 |
| | | 50 | 0 | 18.25 | 18.33 | 18.26 | 19.00 | 0-5 |
| | | 50 | 25 | 18.22 | 18.16 | 18.34 | 19.00 | 0-5 |
| | | 50 | 50 | 18.27 | 18.20 | 18.21 | 19.00 | 0-5 |
| | | 100 | 0 | 18.35 | 18.35 | 18.31 | 19.00 | 0-5 |
| Frequency (MHz) | | | | 1717.5 | 1745 | 1772.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 132047 | 132322 | 132597 | | |
| 15 | QPSK | 1 | 0 | 23.34 | 23.35 | 23.17 | 24.00 | 0 |
| | | 1 | 36 | 23.33 | 23.35 | 23.27 | 24.00 | 0 |
| | | 1 | 74 | 23.33 | 23.25 | 23.18 | 24.00 | 0 |
| | | 36 | 0 | 22.25 | 22.31 | 22.22 | 23.00 | 0-1 |
| | | 36 | 18 | 22.25 | 22.27 | 22.18 | 23.00 | 0-1 |
| | | 36 | 37 | 22.32 | 22.30 | 22.18 | 23.00 | 0-1 |
| | | 75 | 0 | 22.16 | 22.27 | 22.19 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.20 | 22.31 | 22.29 | 23.00 | 0-1 |
| | | 1 | 36 | 22.24 | 22.19 | 22.20 | 23.00 | 0-1 |
| | | 1 | 74 | 22.19 | 22.22 | 22.32 | 23.00 | 0-1 |
| | | 36 | 0 | 21.31 | 21.25 | 21.17 | 22.00 | 0-2 |
| | | 36 | 18 | 21.16 | 21.21 | 21.30 | 22.00 | 0-2 |
| | | 36 | 37 | 21.25 | 21.17 | 21.30 | 22.00 | 0-2 |
| | | 75 | 0 | 21.23 | 21.25 | 21.26 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.25 | 21.18 | 21.32 | 22.00 | 0-2 |
| | | 1 | 36 | 21.20 | 21.22 | 21.35 | 22.00 | 0-2 |
| | | 1 | 74 | 21.16 | 21.26 | 21.32 | 22.00 | 0-2 |
| | | 36 | 0 | 20.30 | 20.23 | 20.25 | 21.00 | 0-3 |
| | | 36 | 18 | 20.25 | 20.22 | 20.17 | 21.00 | 0-3 |
| | | 36 | 37 | 20.17 | 20.26 | 20.21 | 21.00 | 0-3 |
| | | 75 | 0 | 20.19 | 20.30 | 20.28 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.19 | 18.29 | 18.29 | 19.00 | 0-5 |
| | | 1 | 36 | 18.20 | 18.23 | 18.32 | 19.00 | 0-5 |
| | | 1 | 74 | 18.23 | 18.27 | 18.32 | 19.00 | 0-5 |
| | | 36 | 0 | 18.22 | 18.27 | 18.19 | 19.00 | 0-5 |
| | | 36 | 18 | 18.24 | 18.30 | 18.27 | 19.00 | 0-5 |
| | | 36 | 37 | 18.25 | 18.27 | 18.17 | 19.00 | 0-5 |
| | | 75 | 0 | 18.16 | 18.35 | 18.32 | 19.00 | 0-5 |

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| LTE Band 66 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1715 | 1745 | 1775 | | |
| Channel | | | | 132022 | 132322 | 132622 | | |
| 10 | QPSK | 1 | 0 | 23.29 | 23.27 | 23.23 | 24.00 | 0 |
| | | 1 | 25 | 23.27 | 23.19 | 23.34 | 24.00 | 0 |
| | | 1 | 49 | 23.27 | 23.33 | 23.34 | 24.00 | 0 |
| | | 25 | 0 | 22.32 | 22.28 | 22.32 | 23.00 | 0-1 |
| | | 25 | 12 | 22.29 | 22.27 | 22.25 | 23.00 | 0-1 |
| | | 25 | 25 | 22.32 | 22.34 | 22.20 | 23.00 | 0-1 |
| | | 50 | 0 | 22.27 | 22.28 | 22.32 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.20 | 22.28 | 22.23 | 23.00 | 0-1 |
| | | 1 | 25 | 22.17 | 22.18 | 22.30 | 23.00 | 0-1 |
| | | 1 | 49 | 22.22 | 22.27 | 22.28 | 23.00 | 0-1 |
| | | 25 | 0 | 21.22 | 21.17 | 21.24 | 22.00 | 0-2 |
| | | 25 | 12 | 21.33 | 21.30 | 21.23 | 22.00 | 0-2 |
| | | 25 | 25 | 21.22 | 21.18 | 21.25 | 22.00 | 0-2 |
| | | 50 | 0 | 21.31 | 21.19 | 21.16 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.16 | 21.28 | 21.35 | 22.00 | 0-2 |
| | | 1 | 25 | 21.20 | 21.19 | 21.22 | 22.00 | 0-2 |
| | | 1 | 49 | 21.27 | 21.21 | 21.26 | 22.00 | 0-2 |
| | | 25 | 0 | 20.16 | 20.31 | 20.23 | 21.00 | 0-3 |
| | | 25 | 12 | 20.17 | 20.25 | 20.30 | 21.00 | 0-3 |
| | | 25 | 25 | 20.31 | 20.28 | 20.16 | 21.00 | 0-3 |
| | | 50 | 0 | 20.20 | 20.20 | 20.18 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.21 | 18.21 | 18.20 | 19.00 | 0-5 |
| | | 1 | 25 | 18.34 | 18.27 | 18.32 | 19.00 | 0-5 |
| | | 1 | 49 | 18.28 | 18.26 | 18.24 | 19.00 | 0-5 |
| | | 25 | 0 | 18.28 | 18.16 | 18.19 | 19.00 | 0-5 |
| | | 25 | 12 | 18.25 | 18.21 | 18.19 | 19.00 | 0-5 |
| | | 25 | 25 | 18.30 | 18.25 | 18.35 | 19.00 | 0-5 |
| | | 50 | 0 | 18.24 | 18.29 | 18.34 | 19.00 | 0-5 |
| Frequency (MHz) | | | | 1712.5 | 1745 | 1777.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 131997 | 132322 | 132647 | | |
| 5 | QPSK | 1 | 0 | 23.26 | 23.20 | 23.26 | 24.00 | 0 |
| | | 1 | 12 | 23.27 | 23.33 | 23.22 | 24.00 | 0 |
| | | 1 | 24 | 23.20 | 23.35 | 23.19 | 24.00 | 0 |
| | | 12 | 0 | 22.30 | 22.26 | 22.26 | 23.00 | 0-1 |
| | | 12 | 6 | 22.29 | 22.20 | 22.25 | 23.00 | 0-1 |
| | | 12 | 13 | 22.24 | 22.17 | 22.30 | 23.00 | 0-1 |
| | | 25 | 0 | 22.30 | 22.22 | 22.23 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.25 | 22.22 | 22.26 | 23.00 | 0-1 |
| | | 1 | 12 | 22.23 | 22.29 | 22.24 | 23.00 | 0-1 |
| | | 1 | 24 | 22.31 | 22.22 | 22.33 | 23.00 | 0-1 |
| | | 12 | 0 | 21.25 | 21.22 | 21.16 | 22.00 | 0-2 |
| | | 12 | 6 | 21.26 | 21.17 | 21.17 | 22.00 | 0-2 |
| | | 12 | 13 | 21.18 | 21.18 | 21.24 | 22.00 | 0-2 |
| | | 25 | 0 | 21.29 | 21.20 | 21.17 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.20 | 21.35 | 21.23 | 22.00 | 0-2 |
| | | 1 | 12 | 21.31 | 21.21 | 21.26 | 22.00 | 0-2 |
| | | 1 | 24 | 21.16 | 21.33 | 21.34 | 22.00 | 0-2 |
| | | 12 | 0 | 20.29 | 20.24 | 20.27 | 21.00 | 0-3 |
| | | 12 | 6 | 20.32 | 20.24 | 20.19 | 21.00 | 0-3 |
| | | 12 | 13 | 20.33 | 20.32 | 20.26 | 21.00 | 0-3 |
| | | 25 | 0 | 20.16 | 20.26 | 20.24 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.25 | 18.24 | 18.25 | 19.00 | 0-5 |
| | | 1 | 12 | 18.25 | 18.27 | 18.31 | 19.00 | 0-5 |
| | | 1 | 24 | 18.18 | 18.35 | 18.27 | 19.00 | 0-5 |
| | | 12 | 0 | 18.24 | 18.17 | 18.33 | 19.00 | 0-5 |
| | | 12 | 6 | 18.22 | 18.19 | 18.24 | 19.00 | 0-5 |
| | | 12 | 13 | 18.28 | 18.18 | 18.27 | 19.00 | 0-5 |
| | | 25 | 0 | 18.24 | 18.25 | 18.22 | 19.00 | 0-5 |

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| LTE Band 66 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1711.5 | 1745 | 1778.5 | | |
| Channel | | | | 131987 | 132322 | 132657 | | |
| 3 | QPSK | 1 | 0 | 23.27 | 23.19 | 23.30 | 24.00 | 0 |
| | | 1 | 7 | 23.35 | 23.16 | 23.24 | 24.00 | 0 |
| | | 1 | 14 | 23.28 | 23.29 | 23.22 | 24.00 | 0 |
| | | 8 | 0 | 22.26 | 22.30 | 22.33 | 23.00 | 0-1 |
| | | 8 | 4 | 22.24 | 22.30 | 22.28 | 23.00 | 0-1 |
| | | 8 | 7 | 22.30 | 22.29 | 22.22 | 23.00 | 0-1 |
| | | 15 | 0 | 22.33 | 22.32 | 22.24 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.16 | 22.24 | 22.17 | 23.00 | 0-1 |
| | | 1 | 7 | 22.26 | 22.33 | 22.17 | 23.00 | 0-1 |
| | | 1 | 14 | 22.23 | 22.33 | 22.21 | 23.00 | 0-1 |
| | | 8 | 0 | 21.23 | 21.22 | 21.25 | 22.00 | 0-2 |
| | | 8 | 4 | 21.35 | 21.25 | 21.19 | 22.00 | 0-2 |
| | | 8 | 7 | 21.21 | 21.35 | 21.25 | 22.00 | 0-2 |
| | | 15 | 0 | 21.32 | 21.25 | 21.23 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.24 | 21.25 | 21.28 | 22.00 | 0-2 |
| | | 1 | 7 | 21.25 | 21.26 | 21.25 | 22.00 | 0-2 |
| | | 1 | 14 | 21.16 | 21.27 | 21.30 | 22.00 | 0-2 |
| | | 8 | 0 | 20.27 | 20.19 | 20.29 | 21.00 | 0-3 |
| | | 8 | 4 | 20.24 | 20.32 | 20.25 | 21.00 | 0-3 |
| | | 8 | 7 | 20.23 | 20.30 | 20.17 | 21.00 | 0-3 |
| | | 15 | 0 | 20.22 | 20.25 | 20.17 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.30 | 18.32 | 18.19 | 19.00 | 0-5 |
| | | 1 | 7 | 18.24 | 18.18 | 18.28 | 19.00 | 0-5 |
| | | 1 | 14 | 18.27 | 18.35 | 18.19 | 19.00 | 0-5 |
| | | 8 | 0 | 18.23 | 18.24 | 18.16 | 19.00 | 0-5 |
| | | 8 | 4 | 18.17 | 18.27 | 18.29 | 19.00 | 0-5 |
| | | 8 | 7 | 18.31 | 18.24 | 18.30 | 19.00 | 0-5 |
| | | 15 | 0 | 18.31 | 18.21 | 18.23 | 19.00 | 0-5 |
| Frequency (MHz) | | | | 1710.7 | 1745 | 1779.3 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 131979 | 132322 | 132665 | | |
| 1.4 | QPSK | 1 | 0 | 23.27 | 23.27 | 23.27 | 24.00 | 0 |
| | | 1 | 2 | 23.16 | 23.25 | 23.27 | 24.00 | 0 |
| | | 1 | 5 | 23.28 | 23.27 | 23.34 | 24.00 | 0 |
| | | 3 | 0 | 23.23 | 23.16 | 23.22 | 24.00 | 0.00 |
| | | 3 | 2 | 23.10 | 23.22 | 23.18 | 24.00 | 0.00 |
| | | 3 | 3 | 23.24 | 23.17 | 23.31 | 24.00 | 0.00 |
| | | 6 | 0 | 22.28 | 22.35 | 22.34 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.26 | 22.24 | 22.28 | 23.00 | 0-1 |
| | | 1 | 2 | 22.18 | 22.31 | 22.33 | 23.00 | 0-1 |
| | | 1 | 5 | 22.23 | 22.26 | 22.21 | 23.00 | 0-1 |
| | | 3 | 0 | 22.15 | 22.19 | 22.26 | 23.00 | 0-1 |
| | | 3 | 2 | 22.14 | 22.21 | 22.30 | 23.00 | 0-1 |
| | | 3 | 3 | 22.17 | 22.15 | 22.13 | 23.00 | 0-1 |
| | | 6 | 0 | 21.20 | 21.28 | 21.24 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.27 | 21.33 | 21.21 | 22.00 | 0-2 |
| | | 1 | 2 | 21.30 | 21.18 | 21.20 | 22.00 | 0-2 |
| | | 1 | 5 | 21.26 | 21.25 | 21.34 | 22.00 | 0-2 |
| | | 3 | 0 | 21.23 | 21.31 | 21.14 | 22.00 | 0-2 |
| | | 3 | 2 | 21.27 | 21.10 | 21.13 | 22.00 | 0-2 |
| | | 3 | 3 | 21.21 | 21.15 | 21.26 | 22.00 | 0-2 |
| | | 6 | 0 | 20.33 | 20.20 | 20.24 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.19 | 18.29 | 18.22 | 19.00 | 0-5 |
| | | 1 | 2 | 18.19 | 18.22 | 18.30 | 19.00 | 0-5 |
| | | 1 | 5 | 18.24 | 18.31 | 18.33 | 19.00 | 0-5 |
| | | 3 | 0 | 18.16 | 18.19 | 18.21 | 19.00 | 0-5 |
| | | 3 | 2 | 18.34 | 18.28 | 18.21 | 19.00 | 0-5 |
| | | 3 | 3 | 18.24 | 18.32 | 18.17 | 19.00 | 0-5 |
| | | 6 | 0 | 18.26 | 18.22 | 18.17 | 19.00 | 0-5 |

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## Tx5-LTE TDD Band 38 / Band 41 power table:

| LTE Band 38 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 2580 | 2595 | 2610 | | |
| Channel | | | | 37850 | 38000 | 38150 | | |
| 20 | QPSK | 1 | 0 | 23.96 | 23.83 | 23.68 | 24.00 | 0 |
| | | 1 | 50 | 23.86 | 23.77 | 23.87 | 24.00 | 0 |
| | | 1 | 99 | 23.85 | 23.63 | 23.88 | 24.00 | 0 |
| | | 50 | 0 | 22.22 | 22.34 | 22.39 | 23.00 | 0-1 |
| | | 50 | 25 | 22.34 | 22.41 | 22.28 | 23.00 | 0-1 |
| | | 50 | 50 | 22.31 | 22.28 | 22.38 | 23.00 | 0-1 |
| | | 100 | 0 | 22.36 | 22.38 | 22.41 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.35 | 22.27 | 22.24 | 23.00 | 0-1 |
| | | 1 | 50 | 22.32 | 22.22 | 22.32 | 23.00 | 0-1 |
| | | 1 | 99 | 22.38 | 22.32 | 22.25 | 23.00 | 0-1 |
| | | 50 | 0 | 21.33 | 21.33 | 21.35 | 22.00 | 0-2 |
| | | 50 | 25 | 21.31 | 21.35 | 21.22 | 22.00 | 0-2 |
| | | 50 | 50 | 21.29 | 21.30 | 21.23 | 22.00 | 0-2 |
| | | 100 | 0 | 21.33 | 21.41 | 21.24 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.32 | 21.30 | 21.23 | 22.00 | 0-2 |
| | | 1 | 50 | 21.30 | 21.38 | 21.22 | 22.00 | 0-2 |
| | | 1 | 99 | 21.31 | 21.34 | 21.40 | 22.00 | 0-2 |
| | | 50 | 0 | 20.25 | 20.40 | 20.23 | 21.00 | 0-3 |
| | | 50 | 25 | 20.39 | 20.33 | 20.28 | 21.00 | 0-3 |
| | | 50 | 50 | 20.37 | 20.31 | 20.40 | 21.00 | 0-3 |
| | | 100 | 0 | 20.41 | 20.39 | 20.39 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.33 | 18.41 | 18.38 | 19.00 | 0-5 |
| | | 1 | 50 | 18.27 | 18.31 | 18.33 | 19.00 | 0-5 |
| | | 1 | 99 | 18.28 | 18.26 | 18.36 | 19.00 | 0-5 |
| | | 50 | 0 | 18.33 | 18.32 | 18.23 | 19.00 | 0-5 |
| | | 50 | 25 | 18.25 | 18.34 | 18.37 | 19.00 | 0-5 |
| | | 50 | 50 | 18.26 | 18.34 | 18.24 | 19.00 | 0-5 |
| | | 100 | 0 | 18.24 | 18.26 | 18.24 | 19.00 | 0-5 |
| Frequency (MHz) | | | | 2577.5 | 2595 | 2612.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 37825 | 38000 | 38175 | | |
| 15 | QPSK | 1 | 0 | 23.29 | 23.23 | 23.33 | 24.00 | 0 |
| | | 1 | 36 | 23.29 | 23.25 | 23.26 | 24.00 | 0 |
| | | 1 | 74 | 23.40 | 23.27 | 23.32 | 24.00 | 0 |
| | | 36 | 0 | 22.25 | 22.28 | 22.41 | 23.00 | 0-1 |
| | | 36 | 18 | 22.37 | 22.22 | 22.22 | 23.00 | 0-1 |
| | | 36 | 37 | 22.22 | 22.24 | 22.33 | 23.00 | 0-1 |
| | | 75 | 0 | 22.25 | 22.40 | 22.22 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.23 | 22.30 | 22.33 | 23.00 | 0-1 |
| | | 1 | 36 | 22.41 | 22.39 | 22.39 | 23.00 | 0-1 |
| | | 1 | 74 | 22.28 | 22.40 | 22.37 | 23.00 | 0-1 |
| | | 36 | 0 | 21.35 | 21.22 | 21.25 | 22.00 | 0-2 |
| | | 36 | 18 | 21.33 | 21.24 | 21.23 | 22.00 | 0-2 |
| | | 36 | 37 | 21.29 | 21.27 | 21.40 | 22.00 | 0-2 |
| | | 75 | 0 | 21.25 | 21.40 | 21.23 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.37 | 21.38 | 21.34 | 22.00 | 0-2 |
| | | 1 | 36 | 21.22 | 21.29 | 21.24 | 22.00 | 0-2 |
| | | 1 | 74 | 21.38 | 21.29 | 21.31 | 22.00 | 0-2 |
| | | 36 | 0 | 20.31 | 20.36 | 20.28 | 21.00 | 0-3 |
| | | 36 | 18 | 20.23 | 20.35 | 20.26 | 21.00 | 0-3 |
| | | 36 | 37 | 20.30 | 20.34 | 20.33 | 21.00 | 0-3 |
| | | 75 | 0 | 20.31 | 20.29 | 20.38 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.32 | 18.35 | 18.25 | 19.00 | 0-5 |
| | | 1 | 36 | 18.28 | 18.34 | 18.34 | 19.00 | 0-5 |
| | | 1 | 74 | 18.22 | 18.29 | 18.26 | 19.00 | 0-5 |
| | | 36 | 0 | 18.28 | 18.33 | 18.26 | 19.00 | 0-5 |
| | | 36 | 18 | 18.31 | 18.41 | 18.30 | 19.00 | 0-5 |
| | | 36 | 37 | 18.38 | 18.29 | 18.34 | 19.00 | 0-5 |
| | | 75 | 0 | 18.22 | 18.34 | 18.30 | 19.00 | 0-5 |

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| LTE Band 38 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 2575 | 2595 | 2615 | | |
| Channel | | | | 37800 | 38000 | 38200 | | |
| 10 | QPSK | 1 | 0 | 23.39 | 23.34 | 23.36 | 24.00 | 0 |
| | | 1 | 25 | 23.34 | 23.40 | 23.34 | 24.00 | 0 |
| | | 1 | 49 | 23.34 | 23.31 | 23.24 | 24.00 | 0 |
| | | 25 | 0 | 22.31 | 22.25 | 22.41 | 23.00 | 0-1 |
| | | 25 | 12 | 22.37 | 22.32 | 22.34 | 23.00 | 0-1 |
| | | 25 | 25 | 22.25 | 22.40 | 22.25 | 23.00 | 0-1 |
| | | 50 | 0 | 22.31 | 22.28 | 22.31 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.41 | 22.33 | 22.39 | 23.00 | 0-1 |
| | | 1 | 25 | 22.28 | 22.39 | 22.35 | 23.00 | 0-1 |
| | | 1 | 49 | 22.33 | 22.39 | 22.27 | 23.00 | 0-1 |
| | | 25 | 0 | 21.22 | 21.40 | 21.25 | 22.00 | 0-2 |
| | | 25 | 12 | 21.30 | 21.33 | 21.31 | 22.00 | 0-2 |
| | | 25 | 25 | 21.37 | 21.35 | 21.30 | 22.00 | 0-2 |
| | | 50 | 0 | 21.32 | 21.24 | 21.22 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.30 | 21.37 | 21.29 | 22.00 | 0-2 |
| | | 1 | 25 | 21.33 | 21.39 | 21.32 | 22.00 | 0-2 |
| | | 1 | 49 | 21.29 | 21.29 | 21.32 | 22.00 | 0-2 |
| | | 25 | 0 | 20.35 | 20.24 | 20.26 | 21.00 | 0-3 |
| | | 25 | 12 | 20.30 | 20.24 | 20.31 | 21.00 | 0-3 |
| | | 25 | 25 | 20.35 | 20.24 | 20.34 | 21.00 | 0-3 |
| | | 50 | 0 | 20.29 | 20.32 | 20.32 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.34 | 18.22 | 18.40 | 19.00 | 0-5 |
| | | 1 | 25 | 18.39 | 18.30 | 18.30 | 19.00 | 0-5 |
| | | 1 | 49 | 18.33 | 18.23 | 18.28 | 19.00 | 0-5 |
| | | 25 | 0 | 18.29 | 18.29 | 18.33 | 19.00 | 0-5 |
| | | 25 | 12 | 18.39 | 18.36 | 18.38 | 19.00 | 0-5 |
| | | 25 | 25 | 18.37 | 18.33 | 18.22 | 19.00 | 0-5 |
| | | 50 | 0 | 18.29 | 18.35 | 18.39 | 19.00 | 0-5 |
| Frequency (MHz) | | | | 2572.5 | 2595 | 2617.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 37775 | 38000 | 38225 | | |
| 5 | QPSK | 1 | 0 | 23.24 | 23.37 | 23.23 | 24.00 | 0 |
| | | 1 | 12 | 23.34 | 23.40 | 23.29 | 24.00 | 0 |
| | | 1 | 24 | 23.41 | 23.23 | 23.40 | 24.00 | 0 |
| | | 12 | 0 | 22.40 | 22.32 | 22.40 | 23.00 | 0-1 |
| | | 12 | 6 | 22.30 | 22.23 | 22.31 | 23.00 | 0-1 |
| | | 12 | 13 | 22.41 | 22.29 | 22.30 | 23.00 | 0-1 |
| | | 25 | 0 | 22.30 | 22.31 | 22.37 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.37 | 22.31 | 22.39 | 23.00 | 0-1 |
| | | 1 | 12 | 22.22 | 22.36 | 22.36 | 23.00 | 0-1 |
| | | 1 | 24 | 22.26 | 22.41 | 22.41 | 23.00 | 0-1 |
| | | 12 | 0 | 21.26 | 21.23 | 21.36 | 22.00 | 0-2 |
| | | 12 | 6 | 21.23 | 21.32 | 21.29 | 22.00 | 0-2 |
| | | 12 | 13 | 21.36 | 21.31 | 21.27 | 22.00 | 0-2 |
| | | 25 | 0 | 21.34 | 21.41 | 21.35 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.36 | 21.25 | 21.27 | 22.00 | 0-2 |
| | | 1 | 12 | 21.34 | 21.37 | 21.39 | 22.00 | 0-2 |
| | | 1 | 24 | 21.35 | 21.28 | 21.34 | 22.00 | 0-2 |
| | | 12 | 0 | 20.25 | 20.31 | 20.25 | 21.00 | 0-3 |
| | | 12 | 6 | 20.30 | 20.38 | 20.30 | 21.00 | 0-3 |
| | | 12 | 13 | 20.41 | 20.33 | 20.26 | 21.00 | 0-3 |
| | | 25 | 0 | 20.39 | 20.25 | 20.36 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.24 | 18.37 | 18.25 | 19.00 | 0-5 |
| | | 1 | 12 | 18.23 | 18.33 | 18.37 | 19.00 | 0-5 |
| | | 1 | 24 | 18.39 | 18.37 | 18.28 | 19.00 | 0-5 |
| | | 12 | 0 | 18.35 | 18.36 | 18.28 | 19.00 | 0-5 |
| | | 12 | 6 | 18.39 | 18.37 | 18.36 | 19.00 | 0-5 |
| | | 12 | 13 | 18.26 | 18.22 | 18.40 | 19.00 | 0-5 |
| | | 25 | 0 | 18.32 | 18.25 | 18.39 | 19.00 | 0-5 |

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| LTE Band 41 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 2506 | 2549.5 | 2593 | 2636.5 | 2680 | | |
| Channel | | | | 39750 | 40185 | 40620 | 41055 | 41490 | | |
| 20 | QPSK | 1 | 0 | 23.92 | 23.73 | 23.72 | 23.43 | 23.68 | 24.00 | 0 |
| | | 1 | 50 | 23.93 | 23.57 | 23.44 | 23.31 | 23.57 | 24.00 | 0 |
| | | 1 | 99 | 23.95 | 23.63 | 23.52 | 23.58 | 23.31 | 24.00 | 0 |
| | | 50 | 0 | 22.44 | 22.38 | 22.34 | 22.27 | 22.36 | 23.00 | 0-1 |
| | | 50 | 25 | 22.31 | 22.43 | 22.29 | 22.34 | 22.35 | 23.00 | 0-1 |
| | | 50 | 50 | 22.35 | 22.37 | 22.27 | 22.26 | 22.31 | 23.00 | 0-1 |
| | | 100 | 0 | 22.39 | 22.25 | 22.27 | 22.31 | 22.33 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.36 | 22.27 | 22.33 | 22.40 | 22.27 | 23.00 | 0-1 |
| | | 1 | 50 | 22.28 | 22.35 | 22.33 | 22.44 | 22.35 | 23.00 | 0-1 |
| | | 1 | 99 | 22.42 | 22.40 | 22.28 | 22.36 | 22.30 | 23.00 | 0-1 |
| | | 50 | 0 | 21.44 | 21.35 | 21.32 | 21.40 | 21.25 | 22.00 | 0-2 |
| | | 50 | 25 | 21.43 | 21.38 | 21.37 | 21.31 | 21.38 | 22.00 | 0-2 |
| | | 50 | 50 | 21.39 | 21.44 | 21.28 | 21.39 | 21.28 | 22.00 | 0-2 |
| | | 100 | 0 | 21.40 | 21.25 | 21.28 | 21.27 | 21.38 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.43 | 21.34 | 21.41 | 21.42 | 21.26 | 22.00 | 0-2 |
| | | 1 | 50 | 21.36 | 21.38 | 21.27 | 21.29 | 21.32 | 22.00 | 0-2 |
| | | 1 | 99 | 21.38 | 21.42 | 21.30 | 21.38 | 21.39 | 22.00 | 0-2 |
| | | 50 | 0 | 20.28 | 20.39 | 20.29 | 20.40 | 20.38 | 21.00 | 0-3 |
| | | 50 | 25 | 20.44 | 20.35 | 20.43 | 20.40 | 20.41 | 21.00 | 0-3 |
| | | 50 | 50 | 20.28 | 20.40 | 20.28 | 20.34 | 20.31 | 21.00 | 0-3 |
| | | 100 | 0 | 20.34 | 20.34 | 20.41 | 20.28 | 20.36 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.25 | 18.36 | 18.34 | 18.31 | 18.39 | 19.00 | 0-5 |
| | | 1 | 50 | 18.44 | 18.41 | 18.42 | 18.34 | 18.38 | 19.00 | 0-5 |
| | | 1 | 99 | 18.25 | 18.42 | 18.33 | 18.38 | 18.33 | 19.00 | 0-5 |
| | | 50 | 0 | 18.26 | 18.33 | 18.35 | 18.34 | 18.36 | 19.00 | 0-5 |
| | | 50 | 25 | 18.34 | 18.42 | 18.36 | 18.41 | 18.30 | 19.00 | 0-5 |
| | | 50 | 50 | 18.44 | 18.27 | 18.34 | 18.37 | 18.44 | 19.00 | 0-5 |
| | | 100 | 0 | 18.44 | 18.40 | 18.35 | 18.42 | 18.41 | 19.00 | 0-5 |
| Frequency (MHz) | | | | 2503.5 | 2548.3 | 2593 | 2637.8 | 2682.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 39725 | 40173 | 40620 | 41068 | 41515 | | |
| 15 | QPSK | 1 | 0 | 23.26 | 23.39 | 23.40 | 23.25 | 23.25 | 24.00 | 0 |
| | | 1 | 36 | 23.43 | 23.37 | 23.34 | 23.35 | 23.26 | 24.00 | 0 |
| | | 1 | 74 | 23.27 | 23.32 | 23.40 | 23.27 | 23.43 | 24.00 | 0 |
| | | 36 | 0 | 22.27 | 22.44 | 22.34 | 22.43 | 22.39 | 23.00 | 0-1 |
| | | 36 | 18 | 22.38 | 22.27 | 22.33 | 22.25 | 22.36 | 23.00 | 0-1 |
| | | 36 | 37 | 22.44 | 22.40 | 22.36 | 22.35 | 22.33 | 23.00 | 0-1 |
| | | 75 | 0 | 22.36 | 22.34 | 22.33 | 22.33 | 22.35 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.40 | 22.36 | 22.29 | 22.26 | 22.27 | 23.00 | 0-1 |
| | | 1 | 36 | 22.33 | 22.36 | 22.36 | 22.35 | 22.38 | 23.00 | 0-1 |
| | | 1 | 74 | 22.42 | 22.29 | 22.33 | 22.40 | 22.26 | 23.00 | 0-1 |
| | | 36 | 0 | 21.31 | 21.33 | 21.42 | 21.37 | 21.40 | 22.00 | 0-2 |
| | | 36 | 18 | 21.29 | 21.35 | 21.43 | 21.26 | 21.38 | 22.00 | 0-2 |
| | | 36 | 37 | 21.41 | 21.42 | 21.39 | 21.25 | 21.42 | 22.00 | 0-2 |
| | | 75 | 0 | 21.44 | 21.37 | 21.28 | 21.30 | 21.29 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.28 | 21.37 | 21.32 | 21.37 | 21.35 | 22.00 | 0-2 |
| | | 1 | 36 | 21.25 | 21.27 | 21.44 | 21.31 | 21.33 | 22.00 | 0-2 |
| | | 1 | 74 | 21.37 | 21.43 | 21.36 | 21.25 | 21.37 | 22.00 | 0-2 |
| | | 36 | 0 | 20.25 | 20.32 | 20.34 | 20.34 | 20.43 | 21.00 | 0-3 |
| | | 36 | 18 | 20.43 | 20.40 | 20.33 | 20.44 | 20.33 | 21.00 | 0-3 |
| | | 36 | 37 | 20.41 | 20.37 | 20.30 | 20.38 | 20.30 | 21.00 | 0-3 |
| | | 75 | 0 | 20.33 | 20.28 | 20.38 | 20.31 | 20.30 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.36 | 18.27 | 18.25 | 18.30 | 18.35 | 19.00 | 0-5 |
| | | 1 | 36 | 18.33 | 18.34 | 18.37 | 18.41 | 18.38 | 19.00 | 0-5 |
| | | 1 | 74 | 18.40 | 18.39 | 18.41 | 18.27 | 18.30 | 19.00 | 0-5 |
| | | 36 | 0 | 18.31 | 18.35 | 18.34 | 18.28 | 18.42 | 19.00 | 0-5 |
| | | 36 | 18 | 18.27 | 18.25 | 18.40 | 18.35 | 18.26 | 19.00 | 0-5 |
| | | 36 | 37 | 18.43 | 18.38 | 18.38 | 18.34 | 18.43 | 19.00 | 0-5 |
| | | 75 | 0 | 18.30 | 18.34 | 18.31 | 18.42 | 18.39 | 19.00 | 0-5 |

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| LTE Band 41 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 2501 | 2547 | 2593 | 2639 | 2685 | | |
| Channel | | | | 39700 | 40160 | 40620 | 41080 | 41540 | | |
| 10 | QPSK | 1 | 0 | 23.27 | 23.34 | 23.32 | 23.31 | 23.29 | 24.00 | 0 |
| | | 1 | 25 | 23.42 | 23.36 | 23.31 | 23.40 | 23.31 | 24.00 | 0 |
| | | 1 | 49 | 23.31 | 23.43 | 23.43 | 23.25 | 23.44 | 24.00 | 0 |
| | | 25 | 0 | 22.27 | 22.32 | 22.29 | 22.27 | 22.39 | 23.00 | 0-1 |
| | | 25 | 12 | 22.39 | 22.29 | 22.25 | 22.36 | 22.25 | 23.00 | 0-1 |
| | | 25 | 25 | 22.36 | 22.39 | 22.40 | 22.40 | 22.33 | 23.00 | 0-1 |
| | | 50 | 0 | 22.41 | 22.34 | 22.32 | 22.28 | 22.26 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.39 | 22.44 | 22.32 | 22.40 | 22.42 | 23.00 | 0-1 |
| | | 1 | 25 | 22.36 | 22.42 | 22.33 | 22.33 | 22.28 | 23.00 | 0-1 |
| | | 1 | 49 | 22.38 | 22.32 | 22.36 | 22.41 | 22.40 | 23.00 | 0-1 |
| | | 25 | 0 | 21.43 | 21.25 | 21.26 | 21.42 | 21.33 | 22.00 | 0-2 |
| | | 25 | 12 | 21.41 | 21.42 | 21.40 | 21.28 | 21.43 | 22.00 | 0-2 |
| | | 25 | 25 | 21.27 | 21.42 | 21.41 | 21.35 | 21.31 | 22.00 | 0-2 |
| | | 50 | 0 | 21.33 | 21.25 | 21.26 | 21.30 | 21.28 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.34 | 21.40 | 21.30 | 21.35 | 21.33 | 22.00 | 0-2 |
| | | 1 | 25 | 21.39 | 21.44 | 21.38 | 21.28 | 21.44 | 22.00 | 0-2 |
| | | 1 | 49 | 21.37 | 21.25 | 21.43 | 21.44 | 21.41 | 22.00 | 0-2 |
| | | 25 | 0 | 20.42 | 20.43 | 20.34 | 20.28 | 20.38 | 21.00 | 0-3 |
| | | 25 | 12 | 20.44 | 20.27 | 20.33 | 20.39 | 20.42 | 21.00 | 0-3 |
| | | 25 | 25 | 20.30 | 20.34 | 20.27 | 20.31 | 20.29 | 21.00 | 0-3 |
| | | 50 | 0 | 20.25 | 20.27 | 20.29 | 20.35 | 20.36 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.25 | 18.42 | 18.27 | 18.30 | 18.36 | 19.00 | 0-5 |
| | | 1 | 25 | 18.43 | 18.35 | 18.29 | 18.38 | 18.32 | 19.00 | 0-5 |
| | | 1 | 49 | 18.31 | 18.26 | 18.35 | 18.39 | 18.34 | 19.00 | 0-5 |
| | | 25 | 0 | 18.37 | 18.42 | 18.39 | 18.43 | 18.37 | 19.00 | 0-5 |
| | | 25 | 12 | 18.43 | 18.30 | 18.37 | 18.35 | 18.41 | 19.00 | 0-5 |
| | | 25 | 25 | 18.33 | 18.27 | 18.34 | 18.28 | 18.44 | 19.00 | 0-5 |
| | | 50 | 0 | 18.34 | 18.38 | 18.28 | 18.34 | 18.40 | 19.00 | 0-5 |
| Frequency (MHz) | | | | 2498.5 | 2547.8 | 2593 | 2640.3 | 2687.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 39675 | 40148 | 40620 | 41093 | 41565 | | |
| 5 | QPSK | 1 | 0 | 23.36 | 23.39 | 23.34 | 23.36 | 23.31 | 24.00 | 0 |
| | | 1 | 12 | 23.35 | 23.43 | 23.43 | 23.30 | 23.27 | 24.00 | 0 |
| | | 1 | 24 | 23.39 | 23.25 | 23.30 | 23.38 | 23.33 | 24.00 | 0 |
| | | 12 | 0 | 22.31 | 22.36 | 22.25 | 22.28 | 22.31 | 23.00 | 0-1 |
| | | 12 | 6 | 22.41 | 22.35 | 22.33 | 22.31 | 22.42 | 23.00 | 0-1 |
| | | 12 | 13 | 22.37 | 22.36 | 22.34 | 22.35 | 22.26 | 23.00 | 0-1 |
| | | 25 | 0 | 22.37 | 22.44 | 22.28 | 22.41 | 22.40 | 23.00 | 0-1 |
| | 16-QAM | 1 | 0 | 22.33 | 22.43 | 22.43 | 22.25 | 22.30 | 23.00 | 0-1 |
| | | 1 | 12 | 22.40 | 22.36 | 22.36 | 22.40 | 22.41 | 23.00 | 0-1 |
| | | 1 | 24 | 22.41 | 22.36 | 22.41 | 22.43 | 22.25 | 23.00 | 0-1 |
| | | 12 | 0 | 21.37 | 21.33 | 21.32 | 21.31 | 21.35 | 22.00 | 0-2 |
| | | 12 | 6 | 21.39 | 21.31 | 21.32 | 21.39 | 21.26 | 22.00 | 0-2 |
| | | 12 | 13 | 21.36 | 21.39 | 21.39 | 21.26 | 21.25 | 22.00 | 0-2 |
| | | 25 | 0 | 21.40 | 21.37 | 21.42 | 21.38 | 21.34 | 22.00 | 0-2 |
| | 64-QAM | 1 | 0 | 21.42 | 21.38 | 21.39 | 21.42 | 21.33 | 22.00 | 0-2 |
| | | 1 | 12 | 21.41 | 21.37 | 21.25 | 21.35 | 21.33 | 22.00 | 0-2 |
| | | 1 | 24 | 21.39 | 21.29 | 21.29 | 21.38 | 21.30 | 22.00 | 0-2 |
| | | 12 | 0 | 20.39 | 20.31 | 20.42 | 20.31 | 20.41 | 21.00 | 0-3 |
| | | 12 | 6 | 20.26 | 20.42 | 20.35 | 20.35 | 20.29 | 21.00 | 0-3 |
| | | 12 | 13 | 20.36 | 20.25 | 20.32 | 20.30 | 20.30 | 21.00 | 0-3 |
| | | 25 | 0 | 20.33 | 20.43 | 20.31 | 20.33 | 20.27 | 21.00 | 0-3 |
| | 256-QAM | 1 | 0 | 18.30 | 18.36 | 18.40 | 18.29 | 18.32 | 19.00 | 0-5 |
| | | 1 | 12 | 18.35 | 18.35 | 18.28 | 18.44 | 18.40 | 19.00 | 0-5 |
| | | 1 | 24 | 18.33 | 18.35 | 18.29 | 18.28 | 18.37 | 19.00 | 0-5 |
| | | 12 | 0 | 18.26 | 18.28 | 18.42 | 18.30 | 18.43 | 19.00 | 0-5 |
| | | 12 | 6 | 18.28 | 18.40 | 18.41 | 18.35 | 18.32 | 19.00 | 0-5 |
| | | 12 | 13 | 18.35 | 18.32 | 18.38 | 18.38 | 18.28 | 19.00 | 0-5 |
| | | 25 | 0 | 18.28 | 18.26 | 18.41 | 18.33 | 18.25 | 19.00 | 0-5 |

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| LTE Band 41 (HPUE) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 2506 | 2549.5 | 2593 | 2636.5 | 2680 | | |
| Channel | | | | 39750 | 40185 | 40620 | 41055 | 41490 | | |
| 20 | QPSK | 1 | 0 | 25.93 | 26.04 | 26.12 | 26.10 | 26.08 | 27.00 | 0 |
| | | 1 | 50 | 26.00 | 26.01 | 26.10 | 26.06 | 26.03 | 27.00 | 0 |
| | | 1 | 99 | 25.81 | 25.99 | 26.07 | 26.09 | 25.99 | 27.00 | 0 |
| | | 50 | 0 | 25.12 | 25.32 | 25.14 | 25.36 | 25.23 | 26.00 | 0-1 |
| | | 50 | 25 | 25.20 | 25.17 | 25.07 | 25.03 | 25.19 | 26.00 | 0-1 |
| | | 50 | 50 | 25.18 | 25.08 | 25.05 | 25.05 | 25.14 | 26.00 | 0-1 |
| | | 100 | 0 | 25.07 | 25.07 | 25.18 | 25.00 | 25.10 | 26.00 | 0-1 |
| | 16-QAM | 1 | 0 | 25.10 | 25.09 | 25.02 | 25.04 | 25.02 | 26.00 | 0-1 |
| | | 1 | 50 | 25.12 | 25.05 | 25.05 | 25.10 | 25.11 | 26.00 | 0-1 |
| | | 1 | 99 | 25.02 | 25.12 | 25.10 | 25.05 | 25.13 | 26.00 | 0-1 |
| | | 50 | 0 | 23.11 | 23.04 | 23.08 | 23.02 | 23.11 | 25.00 | 0-2 |
| | | 50 | 25 | 23.17 | 23.16 | 23.13 | 23.15 | 23.14 | 25.00 | 0-2 |
| | | 50 | 50 | 23.12 | 23.09 | 23.04 | 23.04 | 23.03 | 25.00 | 0-2 |
| | | 100 | 0 | 23.07 | 23.00 | 23.03 | 23.06 | 23.18 | 25.00 | 0-2 |
| | 64-QAM | 1 | 0 | 23.08 | 23.03 | 23.01 | 23.07 | 23.14 | 25.00 | 0-2 |
| | | 1 | 50 | 23.06 | 23.01 | 23.14 | 23.11 | 23.22 | 25.00 | 0-2 |
| | | 1 | 99 | 23.04 | 22.99 | 23.00 | 23.07 | 23.16 | 25.00 | 0-2 |
| | | 50 | 0 | 22.43 | 22.42 | 22.56 | 22.55 | 22.38 | 24.00 | 0-3 |
| | | 50 | 25 | 22.51 | 22.48 | 22.41 | 22.50 | 22.41 | 24.00 | 0-3 |
| | | 50 | 50 | 22.24 | 22.39 | 22.37 | 22.52 | 22.29 | 24.00 | 0-3 |
| | | 100 | 0 | 22.36 | 22.31 | 22.42 | 22.46 | 22.37 | 24.00 | 0-3 |
| | 256-QAM | 1 | 0 | 20.42 | 20.34 | 20.55 | 20.51 | 20.42 | 22.00 | 0-5 |
| | | 1 | 50 | 20.47 | 20.39 | 20.37 | 20.45 | 20.36 | 22.00 | 0-5 |
| | | 1 | 99 | 20.17 | 20.33 | 20.31 | 20.49 | 20.45 | 22.00 | 0-5 |
| | | 50 | 0 | 20.32 | 20.27 | 20.37 | 20.41 | 20.32 | 22.00 | 0-5 |
| | | 50 | 25 | 20.41 | 20.40 | 20.44 | 20.43 | 20.43 | 22.00 | 0-5 |
| | | 50 | 50 | 20.40 | 20.45 | 20.47 | 20.42 | 20.41 | 22.00 | 0-5 |
| | | 100 | 0 | 20.37 | 20.40 | 20.38 | 20.41 | 20.36 | 22.00 | 0-5 |
| Frequency (MHz) | | | | 2503.5 | 2548.3 | 2593 | 2637.8 | 2682.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 39725 | 40173 | 40620 | 41068 | 41515 | | |
| 15 | QPSK | 1 | 0 | 26.11 | 26.11 | 26.06 | 26.08 | 26.07 | 27.00 | 0 |
| | | 1 | 36 | 26.04 | 26.07 | 26.03 | 26.08 | 26.01 | 27.00 | 0 |
| | | 1 | 74 | 25.98 | 25.98 | 26.05 | 26.04 | 26.00 | 27.00 | 0 |
| | | 36 | 0 | 25.13 | 25.11 | 25.13 | 25.07 | 25.14 | 26.00 | 0-1 |
| | | 36 | 18 | 25.04 | 25.00 | 25.10 | 25.00 | 25.07 | 26.00 | 0-1 |
| | | 36 | 37 | 25.00 | 25.08 | 25.13 | 25.04 | 25.03 | 26.00 | 0-1 |
| | | 75 | 0 | 25.14 | 25.10 | 25.10 | 25.11 | 25.12 | 26.00 | 0-1 |
| | 16-QAM | 1 | 0 | 25.12 | 25.20 | 25.01 | 25.03 | 25.21 | 26.00 | 0-1 |
| | | 1 | 36 | 25.03 | 25.05 | 25.00 | 25.12 | 25.04 | 26.00 | 0-1 |
| | | 1 | 74 | 25.01 | 25.08 | 25.10 | 25.06 | 25.07 | 26.00 | 0-1 |
| | | 36 | 0 | 23.08 | 23.04 | 23.07 | 23.03 | 23.01 | 25.00 | 0-2 |
| | | 36 | 18 | 23.10 | 23.07 | 23.07 | 23.08 | 23.06 | 25.00 | 0-2 |
| | | 36 | 37 | 22.09 | 23.21 | 23.10 | 23.16 | 23.02 | 25.00 | 0-2 |
| | | 75 | 0 | 23.02 | 23.09 | 23.24 | 23.02 | 23.07 | 25.00 | 0-2 |
| | 64-QAM | 1 | 0 | 23.01 | 23.04 | 23.01 | 23.15 | 23.09 | 25.00 | 0-2 |
| | | 1 | 36 | 23.11 | 23.09 | 23.05 | 23.09 | 23.08 | 25.00 | 0-2 |
| | | 1 | 74 | 23.09 | 23.18 | 23.12 | 23.09 | 23.14 | 25.00 | 0-2 |
| | | 36 | 0 | 22.56 | 22.50 | 22.52 | 22.49 | 22.55 | 24.00 | 0-3 |
| | | 36 | 18 | 22.39 | 22.32 | 22.37 | 22.41 | 22.39 | 24.00 | 0-3 |
| | | 36 | 37 | 22.30 | 22.37 | 22.29 | 22.34 | 22.34 | 24.00 | 0-3 |
| | | 75 | 0 | 22.36 | 22.39 | 22.38 | 22.37 | 22.42 | 24.00 | 0-3 |
| | 256-QAM | 1 | 0 | 20.54 | 20.50 | 20.48 | 20.48 | 20.49 | 22.00 | 0-5 |
| | | 1 | 36 | 20.35 | 20.30 | 20.35 | 20.30 | 20.32 | 22.00 | 0-5 |
| | | 1 | 74 | 20.22 | 20.22 | 20.22 | 20.31 | 20.28 | 22.00 | 0-5 |
| | | 36 | 0 | 20.30 | 20.37 | 20.34 | 20.33 | 20.31 | 22.00 | 0-5 |
| | | 36 | 18 | 20.35 | 20.37 | 20.44 | 20.38 | 20.41 | 22.00 | 0-5 |
| | | 36 | 37 | 20.43 | 20.39 | 20.46 | 20.38 | 20.47 | 22.00 | 0-5 |
| | | 75 | 0 | 20.33 | 20.35 | 20.29 | 20.36 | 20.31 | 22.00 | 0-5 |

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| LTE Band 41 (HPUE) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 2501 | 2547 | 2593 | 2639 | 2685 | | |
| Channel | | | | 39700 | 40160 | 40620 | 41080 | 41540 | | |
| 10 | QPSK | 1 | 0 | 26.05 | 26.06 | 26.05 | 26.06 | 26.05 | 27.00 | 0 |
| | | 1 | 25 | 26.08 | 26.06 | 26.01 | 26.09 | 26.10 | 27.00 | 0 |
| | | 1 | 49 | 26.02 | 26.02 | 26.03 | 26.04 | 26.07 | 27.00 | 0 |
| | | 25 | 0 | 25.13 | 25.06 | 25.10 | 25.06 | 25.11 | 26.00 | 0-1 |
| | | 25 | 12 | 25.00 | 25.00 | 25.03 | 25.06 | 25.02 | 26.00 | 0-1 |
| | | 25 | 25 | 25.02 | 25.01 | 25.04 | 25.02 | 25.01 | 26.00 | 0-1 |
| | | 50 | 0 | 25.13 | 25.16 | 25.18 | 25.18 | 25.09 | 26.00 | 0-1 |
| | 16-QAM | 1 | 0 | 25.12 | 25.01 | 25.01 | 25.17 | 25.10 | 26.00 | 0-1 |
| | | 1 | 25 | 25.02 | 25.08 | 25.00 | 25.00 | 25.01 | 26.00 | 0-1 |
| | | 1 | 49 | 25.05 | 25.09 | 25.07 | 25.08 | 25.07 | 26.00 | 0-1 |
| | | 25 | 0 | 23.07 | 23.02 | 23.14 | 23.09 | 23.08 | 25.00 | 0-2 |
| | | 25 | 12 | 23.10 | 23.08 | 23.11 | 23.06 | 23.05 | 25.00 | 0-2 |
| | | 25 | 25 | 23.13 | 23.11 | 23.04 | 23.08 | 23.06 | 25.00 | 0-2 |
| | | 50 | 0 | 23.12 | 23.01 | 23.00 | 23.02 | 23.04 | 25.00 | 0-2 |
| | 64-QAM | 1 | 0 | 23.05 | 23.14 | 23.00 | 23.00 | 23.06 | 25.00 | 0-2 |
| | | 1 | 25 | 23.12 | 23.12 | 23.09 | 23.07 | 23.05 | 25.00 | 0-2 |
| | | 1 | 49 | 23.00 | 23.16 | 23.11 | 23.15 | 23.10 | 25.00 | 0-2 |
| | | 25 | 0 | 22.52 | 22.56 | 22.54 | 22.53 | 22.56 | 24.00 | 0-3 |
| | | 25 | 12 | 22.37 | 22.32 | 22.37 | 22.36 | 22.36 | 24.00 | 0-3 |
| | | 25 | 25 | 22.35 | 22.36 | 22.29 | 22.29 | 22.29 | 24.00 | 0-3 |
| | | 50 | 0 | 22.42 | 22.38 | 22.36 | 22.35 | 22.35 | 24.00 | 0-3 |
| | 256-QAM | 1 | 0 | 20.46 | 20.55 | 20.46 | 20.55 | 20.50 | 22.00 | 0-5 |
| | | 1 | 25 | 20.33 | 20.30 | 20.29 | 20.34 | 20.31 | 22.00 | 0-5 |
| | | 1 | 49 | 20.27 | 20.23 | 20.28 | 20.26 | 20.23 | 22.00 | 0-5 |
| | | 25 | 0 | 20.32 | 20.28 | 20.35 | 20.37 | 20.34 | 22.00 | 0-5 |
| | | 25 | 12 | 20.35 | 20.37 | 20.35 | 20.39 | 20.44 | 22.00 | 0-5 |
| | | 25 | 25 | 20.42 | 20.43 | 20.43 | 20.44 | 20.39 | 22.00 | 0-5 |
| | | 50 | 0 | 20.37 | 20.38 | 20.33 | 20.30 | 20.34 | 22.00 | 0-5 |
| Frequency (MHz) | | | | 2498.5 | 2547.8 | 2593 | 2640.3 | 2687.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 39675 | 40148 | 40620 | 41093 | 41565 | | |
| 5 | QPSK | 1 | 0 | 25.84 | 25.87 | 25.92 | 25.87 | 25.86 | 27.00 | 0 |
| | | 1 | 12 | 26.00 | 25.95 | 25.97 | 25.95 | 25.97 | 27.00 | 0 |
| | | 1 | 24 | 25.74 | 25.72 | 25.74 | 25.78 | 25.73 | 27.00 | 0 |
| | | 12 | 0 | 25.04 | 25.04 | 25.03 | 25.03 | 25.06 | 26.00 | 0-1 |
| | | 12 | 6 | 25.11 | 25.15 | 25.12 | 25.14 | 25.14 | 26.00 | 0-1 |
| | | 12 | 13 | 25.16 | 25.12 | 25.10 | 25.13 | 25.11 | 26.00 | 0-1 |
| | | 25 | 0 | 25.07 | 25.03 | 25.02 | 25.07 | 25.05 | 26.00 | 0-1 |
| | 16-QAM | 1 | 0 | 25.03 | 25.01 | 25.05 | 25.03 | 25.05 | 26.00 | 0-1 |
| | | 1 | 12 | 25.08 | 25.12 | 25.05 | 25.09 | 25.03 | 26.00 | 0-1 |
| | | 1 | 24 | 25.01 | 25.00 | 25.12 | 25.09 | 25.02 | 26.00 | 0-1 |
| | | 12 | 0 | 23.08 | 23.05 | 23.07 | 23.08 | 23.03 | 25.00 | 0-2 |
| | | 12 | 6 | 23.09 | 23.16 | 23.17 | 23.15 | 23.16 | 25.00 | 0-2 |
| | | 12 | 13 | 23.03 | 23.06 | 23.08 | 23.03 | 23.09 | 25.00 | 0-2 |
| | | 25 | 0 | 23.05 | 23.07 | 23.06 | 23.04 | 23.02 | 25.00 | 0-2 |
| | 64-QAM | 1 | 0 | 23.08 | 23.06 | 23.03 | 23.01 | 23.05 | 25.00 | 0-2 |
| | | 1 | 12 | 23.02 | 23.03 | 23.05 | 23.02 | 23.02 | 25.00 | 0-2 |
| | | 1 | 24 | 23.03 | 23.03 | 23.09 | 23.01 | 23.08 | 25.00 | 0-2 |
| | | 12 | 0 | 22.42 | 22.37 | 22.34 | 22.42 | 22.42 | 24.00 | 0-3 |
| | | 12 | 6 | 22.50 | 22.46 | 22.47 | 22.51 | 22.50 | 24.00 | 0-3 |
| | | 12 | 13 | 22.19 | 22.21 | 22.19 | 22.15 | 22.24 | 24.00 | 0-3 |
| | | 25 | 0 | 22.35 | 22.29 | 22.29 | 22.34 | 22.28 | 24.00 | 0-3 |
| | 256-QAM | 1 | 0 | 20.42 | 20.35 | 20.36 | 20.33 | 20.35 | 22.00 | 0-5 |
| | | 1 | 12 | 20.43 | 20.41 | 20.45 | 20.45 | 20.42 | 22.00 | 0-5 |
| | | 1 | 24 | 20.11 | 20.09 | 20.15 | 20.13 | 20.11 | 22.00 | 0-5 |
| | | 12 | 0 | 20.27 | 20.32 | 20.24 | 20.29 | 20.28 | 22.00 | 0-5 |
| | | 12 | 6 | 20.33 | 20.34 | 20.36 | 20.38 | 20.37 | 22.00 | 0-5 |
| | | 12 | 13 | 20.39 | 20.37 | 20.35 | 20.40 | 20.38 | 22.00 | 0-5 |
| | | 25 | 0 | 20.35 | 20.30 | 20.30 | 20.32 | 20.31 | 22.00 | 0-5 |

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## Tx5-5G NR n2 / n5 / n12 / n66 power table:

| 5G NR n2 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1860 | 1880 | 1900 | | |
| Channel | | | | 372000 | 376000 | 380000 | | |
| 20 | Pi/2 BPSK | 1 | 1 | 23.83 | 23.32 | 23.91 | 24.00 | 0 |
| | | 1 | 53 | 23.20 | 23.17 | 23.07 | 24.00 | 0 |
| | | 1 | 104 | 23.21 | 23.14 | 23.09 | 24.00 | 0 |
| | | 50 | 0 | 23.11 | 23.20 | 23.09 | 24.00 | 0 |
| | | 50 | 28 | 23.19 | 23.13 | 23.15 | 24.00 | 0 |
| | | 50 | 56 | 23.14 | 23.11 | 23.05 | 24.00 | 0 |
| | | 100 | 0 | 22.73 | 22.72 | 22.71 | 23.50 | 0-0.5 |
| | QPSK | 1 | 1 | 23.14 | 23.13 | 23.05 | 24.00 | 0 |
| | | 1 | 53 | 23.19 | 23.11 | 23.15 | 24.00 | 0 |
| | | 1 | 104 | 23.20 | 23.12 | 23.12 | 24.00 | 0 |
| | | 50 | 0 | 23.09 | 23.06 | 23.20 | 24.00 | 0 |
| | | 50 | 28 | 23.17 | 23.15 | 23.15 | 24.00 | 0 |
| | | 50 | 56 | 23.07 | 23.22 | 23.13 | 24.00 | 0 |
| | | 100 | 0 | 22.15 | 22.16 | 22.12 | 23.00 | 0-1 |
| | 16-QAM | 1 | 1 | 22.04 | 22.14 | 22.23 | 23.00 | 0-1 |
| | 64QAM | 1 | 1 | 20.57 | 20.57 | 20.55 | 21.50 | 0-2.5 |
| | 256-QAM | 1 | 1 | 18.71 | 18.63 | 18.54 | 19.50 | 0-4.5 |
| Frequency (MHz) | | | | 1857.5 | 1880 | 1902.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 371500 | 376000 | 380500 | | |
| 15 | Pi/2 BPSK | 1 | 1 | 23.04 | 23.20 | 23.22 | 24.00 | 0 |
| Frequency (MHz) | | | | 1855 | 1880 | 1905 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 371000 | 376000 | 381000 | | |
| 10 | Pi/2 BPSK | 1 | 1 | 23.21 | 23.12 | 23.23 | 24.00 | 0 |
| Frequency (MHz) | | | | 1852.5 | 1880 | 1907.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 370500 | 376000 | 381500 | | |
| 5 | Pi/2 BPSK | 1 | 1 | 23.15 | 23.08 | 23.15 | 24.00 | 0 |

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| 5G NR n5 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 834 | 836.5 | 839 | | |
| Channel | | | | 166800 | 167300 | 167800 | | |
| 20 | Pi/2 BPSK | 1 | 1 | 23.91 | 23.98 | 23.93 | 24.00 | 0 |
| | | 1 | 53 | 23.62 | 23.53 | 23.49 | 24.00 | 0 |
| | | 1 | 104 | 23.58 | 23.51 | 23.47 | 24.00 | 0 |
| | | 50 | 0 | 23.58 | 23.65 | 23.55 | 24.00 | 0 |
| | | 50 | 28 | 23.55 | 23.54 | 23.50 | 24.00 | 0 |
| | | 50 | 56 | 23.63 | 23.48 | 23.56 | 24.00 | 0 |
| | | 100 | 0 | 23.01 | 23.03 | 23.15 | 23.50 | 0-0.5 |
| | QPSK | 1 | 1 | 23.47 | 23.64 | 23.53 | 24.00 | 0 |
| | | 1 | 53 | 23.60 | 23.55 | 23.61 | 24.00 | 0 |
| | | 1 | 104 | 23.48 | 23.56 | 23.60 | 24.00 | 0 |
| | | 50 | 0 | 23.66 | 23.56 | 23.57 | 24.00 | 0 |
| | | 50 | 28 | 23.51 | 23.61 | 23.58 | 24.00 | 0 |
| | | 50 | 56 | 23.59 | 23.57 | 23.51 | 24.00 | 0 |
| | | 100 | 0 | 22.63 | 22.55 | 22.49 | 23.00 | 0-1 |
| | 16-QAM | 1 | 1 | 22.49 | 22.49 | 22.59 | 23.00 | 0-1 |
| | 64QAM | 1 | 1 | 21.07 | 21.09 | 20.99 | 21.50 | 0-2.5 |
| | 256-QAM | 1 | 1 | 18.97 | 19.08 | 18.99 | 19.50 | 0-4.5 |
| Frequency (MHz) | | | | 831.5 | 836.5 | 841.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 166300 | 167300 | 168300 | | |
| 15 | Pi/2 BPSK | 1 | 1 | 23.58 | 23.61 | 23.48 | 24.00 | 0 |
| Frequency (MHz) | | | | 829 | 836.5 | 844 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 166300 | 167300 | 168800 | | |
| 10 | Pi/2 BPSK | 1 | 1 | 23.66 | 23.49 | 23.60 | 24.00 | 0 |
| Frequency (MHz) | | | | 826.5 | 836.5 | 846.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 165300 | 167300 | 169300 | | |
| 5 | Pi/2 BPSK | 1 | 1 | 23.61 | 23.62 | 23.62 | 24.00 | 0 |

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| 5G NR n12 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 706.5 | 707.5 | 708.5 | | |
| Channel | | | | 141300 | 141500 | 141700 | | |
| 15 | Pi/2 BPSK | 1 | 1 | 23.91 | 23.89 | 23.84 | 24.00 | 0 |
| | | 1 | 40 | 23.77 | 23.68 | 23.64 | 24.00 | 0 |
| | | 1 | 77 | 23.73 | 23.66 | 23.62 | 24.00 | 0 |
| | | 36 | 0 | 23.73 | 23.80 | 23.70 | 24.00 | 0 |
| | | 36 | 22 | 23.70 | 23.69 | 23.65 | 24.00 | 0 |
| | | 36 | 43 | 23.78 | 23.63 | 23.71 | 24.00 | 0 |
| | | 75 | 0 | 23.16 | 23.18 | 23.30 | 23.50 | 0-0.5 |
| | QPSK | 1 | 1 | 23.62 | 23.79 | 23.68 | 24.00 | 0 |
| | | 1 | 40 | 23.75 | 23.70 | 23.76 | 24.00 | 0 |
| | | 1 | 77 | 23.63 | 23.71 | 23.75 | 24.00 | 0 |
| | | 36 | 0 | 23.81 | 23.71 | 23.72 | 24.00 | 0 |
| | | 36 | 22 | 23.66 | 23.76 | 23.73 | 24.00 | 0 |
| | | 36 | 43 | 23.74 | 23.72 | 23.66 | 24.00 | 0 |
| | | 75 | 0 | 22.78 | 22.70 | 22.64 | 23.00 | 0-1 |
| | 16-QAM | 1 | 1 | 22.64 | 22.64 | 22.74 | 23.00 | 0-1 |
| | 64QAM | 1 | 1 | 21.22 | 21.24 | 21.14 | 21.50 | 0-2.5 |
| | 256-QAM | 1 | 1 | 19.12 | 19.23 | 19.14 | 19.50 | 0-4.5 |
| Frequency (MHz) | | | | 704 | 707.5 | 711 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 140800 | 141500 | 142200 | | |
| 10 | Pi/2 BPSK | 1 | 1 | 23.73 | 23.76 | 23.63 | 24.00 | 0 |
| Frequency (MHz) | | | | 701.5 | 707.5 | 713.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 140300 | 141500 | 142200 | | |
| 5 | Pi/2 BPSK | 1 | 1 | 23.81 | 23.64 | 23.75 | 24.00 | 0 |

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| 5G NR n66 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1720 | 1745 | 1770 | | |
| Channel | | | | 344000 | 349000 | 354000 | | |
| 20 | Pi/2 BPSK | 1 | 1 | 23.78 | 23.84 | 23.98 | 24.00 | 0 |
| | | 1 | 53 | 23.67 | 23.58 | 23.54 | 24.00 | 0 |
| | | 1 | 104 | 23.63 | 23.56 | 23.52 | 24.00 | 0 |
| | | 50 | 0 | 23.63 | 23.70 | 23.60 | 24.00 | 0 |
| | | 50 | 28 | 23.60 | 23.59 | 23.55 | 24.00 | 0 |
| | | 50 | 56 | 23.68 | 23.53 | 23.61 | 24.00 | 0 |
| | | 100 | 0 | 23.06 | 23.08 | 23.20 | 23.50 | 0-0.5 |
| | QPSK | 1 | 1 | 23.52 | 23.69 | 23.58 | 24.00 | 0 |
| | | 1 | 53 | 23.65 | 23.60 | 23.66 | 24.00 | 0 |
| | | 1 | 104 | 23.53 | 23.61 | 23.65 | 24.00 | 0 |
| | | 50 | 0 | 23.71 | 23.61 | 23.62 | 24.00 | 0 |
| | | 50 | 28 | 23.56 | 23.66 | 23.63 | 24.00 | 0 |
| | | 50 | 56 | 23.64 | 23.62 | 23.56 | 24.00 | 0 |
| | | 100 | 0 | 22.68 | 22.60 | 22.54 | 23.00 | 0-1 |
| | 16-QAM | 1 | 1 | 22.54 | 22.54 | 22.64 | 23.00 | 0-1 |
| | 64QAM | 1 | 1 | 21.12 | 21.14 | 21.04 | 21.50 | 0-2.5 |
| | 256-QAM | 1 | 1 | 19.02 | 19.13 | 19.04 | 19.50 | 0-4.5 |
| Frequency (MHz) | | | | 1717.5 | 1745 | 1772.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 343500 | 349000 | 354500 | | |
| 15 | Pi/2 BPSK | 1 | 1 | 23.63 | 23.66 | 23.53 | 24.00 | 0 |
| Frequency (MHz) | | | | 1715 | 1745 | 1775 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 343000 | 349000 | 355000 | | |
| 10 | Pi/2 BPSK | 1 | 1 | 23.71 | 23.54 | 23.65 | 24.00 | 0 |
| Frequency (MHz) | | | | 1712.5 | 1745 | 1777.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 342500 | 349000 | 355500 | | |
| 5 | Pi/2 BPSK | 1 | 1 | 23.54 | 23.54 | 23.53 | 24.00 | 0 |

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## Tx8-LTE FDD Band 2 / Band 7 / Band 66 power table:

| LTE Band 2 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1860 | 1880 | 1900 | | |
| Channel | | | | 18700 | 18900 | 19100 | | |
| 20 | QPSK | 1 | 0 | 20.49 | 20.59 | 20.43 | 21.90 | 0 |
| | | 1 | 50 | 20.47 | 20.41 | 20.40 | 21.90 | 0 |
| | | 1 | 99 | 20.32 | 20.25 | 20.28 | 21.90 | 0 |
| | | 50 | 0 | 20.21 | 20.23 | 20.33 | 21.90 | 0 |
| | | 50 | 25 | 20.27 | 20.30 | 20.34 | 21.90 | 0 |
| | | 50 | 50 | 20.26 | 20.37 | 20.36 | 21.90 | 0 |
| | | 100 | 0 | 20.33 | 20.23 | 20.22 | 21.90 | 0 |
| | 16-QAM | 1 | 0 | 20.37 | 20.40 | 20.37 | 21.90 | 0 |
| | | 1 | 50 | 20.33 | 20.34 | 20.38 | 21.90 | 0 |
| | | 1 | 99 | 20.28 | 20.27 | 20.27 | 21.90 | 0 |
| | | 50 | 0 | 20.24 | 20.36 | 20.24 | 21.90 | 0 |
| | | 50 | 25 | 20.21 | 20.24 | 20.37 | 21.90 | 0 |
| | | 50 | 50 | 20.40 | 20.39 | 20.37 | 21.90 | 0 |
| | | 100 | 0 | 20.32 | 20.40 | 20.27 | 21.90 | 0 |
| | 64-QAM | 1 | 0 | 20.29 | 20.39 | 20.35 | 21.90 | 0 |
| | | 1 | 50 | 20.24 | 20.21 | 20.34 | 21.90 | 0 |
| | | 1 | 99 | 20.21 | 20.30 | 20.28 | 21.90 | 0 |
| | | 50 | 0 | 20.34 | 20.26 | 20.36 | 21.90 | 0 |
| | | 50 | 25 | 20.34 | 20.22 | 20.24 | 21.90 | 0 |
| | | 50 | 50 | 20.34 | 20.28 | 20.39 | 21.90 | 0 |
| | | 100 | 0 | 20.21 | 20.30 | 20.38 | 21.90 | 0 |
| | 256-QAM | 1 | 0 | 20.21 | 20.26 | 20.38 | 21.90 | 0 |
| | | 1 | 50 | 20.40 | 20.29 | 20.39 | 21.90 | 0 |
| | | 1 | 99 | 20.30 | 20.29 | 20.32 | 21.90 | 0 |
| | | 50 | 0 | 20.36 | 20.23 | 20.39 | 21.90 | 0 |
| | | 50 | 25 | 20.25 | 20.23 | 20.33 | 21.90 | 0 |
| | | 50 | 50 | 20.25 | 20.23 | 20.39 | 21.90 | 0 |
| | | 100 | 0 | 20.23 | 20.40 | 20.22 | 21.90 | 0 |
| Frequency (MHz) | | | | 1857.5 | 1880 | 1902.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 18675 | 18900 | 19125 | | |
| 15 | QPSK | 1 | 0 | 20.45 | 20.55 | 20.39 | 21.90 | 0 |
| | | 1 | 36 | 20.40 | 20.34 | 20.33 | 21.90 | 0 |
| | | 1 | 74 | 20.28 | 20.21 | 20.24 | 21.90 | 0 |
| | | 36 | 0 | 20.26 | 20.24 | 20.24 | 21.90 | 0 |
| | | 36 | 18 | 20.39 | 20.34 | 20.38 | 21.90 | 0 |
| | | 36 | 37 | 20.33 | 20.24 | 20.34 | 21.90 | 0 |
| | | 75 | 0 | 20.27 | 20.28 | 20.36 | 21.90 | 0 |
| | 16-QAM | 1 | 0 | 20.33 | 20.21 | 20.35 | 21.90 | 0 |
| | | 1 | 36 | 20.32 | 20.40 | 20.35 | 21.90 | 0 |
| | | 1 | 74 | 20.38 | 20.33 | 20.21 | 21.90 | 0 |
| | | 36 | 0 | 20.21 | 20.32 | 20.25 | 21.90 | 0 |
| | | 36 | 18 | 20.26 | 20.37 | 20.33 | 21.90 | 0 |
| | | 36 | 37 | 20.21 | 20.24 | 20.25 | 21.90 | 0 |
| | | 75 | 0 | 20.26 | 20.32 | 20.29 | 21.90 | 0 |
| | 64-QAM | 1 | 0 | 20.36 | 20.30 | 20.39 | 21.90 | 0 |
| | | 1 | 36 | 20.39 | 20.37 | 20.27 | 21.90 | 0 |
| | | 1 | 74 | 20.21 | 20.21 | 20.35 | 21.90 | 0 |
| | | 36 | 0 | 20.32 | 20.33 | 20.40 | 21.90 | 0 |
| | | 36 | 18 | 20.40 | 20.30 | 20.38 | 21.90 | 0 |
| | | 36 | 37 | 20.31 | 20.25 | 20.25 | 21.90 | 0 |
| | | 75 | 0 | 20.26 | 20.36 | 20.30 | 21.90 | 0 |
| | 256-QAM | 1 | 0 | 20.30 | 20.21 | 20.35 | 21.90 | 0 |
| | | 1 | 36 | 20.33 | 20.35 | 20.23 | 21.90 | 0 |
| | | 1 | 74 | 20.40 | 20.28 | 20.38 | 21.90 | 0 |
| | | 36 | 0 | 20.28 | 20.27 | 20.26 | 21.90 | 0 |
| | | 36 | 18 | 20.35 | 20.31 | 20.25 | 21.90 | 0 |
| | | 36 | 37 | 20.37 | 20.37 | 20.24 | 21.90 | 0 |
| | | 75 | 0 | 20.29 | 20.28 | 20.33 | 21.90 | 0 |

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| LTE Band 2 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1855 | 1880 | 1905 | | |
| Channel | | | | 18650 | 18900 | 19150 | | |
| 10 | QPSK | 1 | 0 | 20.40 | 20.50 | 20.34 | 21.90 | 0 |
| | | 1 | 25 | 20.33 | 20.27 | 20.26 | 21.90 | 0 |
| | | 1 | 49 | 20.23 | 20.16 | 20.19 | 21.90 | 0 |
| | | 25 | 0 | 20.25 | 20.21 | 20.23 | 21.90 | 0 |
| | | 25 | 12 | 20.27 | 20.21 | 20.37 | 21.90 | 0 |
| | | 25 | 25 | 20.25 | 20.34 | 20.31 | 21.90 | 0 |
| | | 50 | 0 | 20.22 | 20.21 | 20.37 | 21.90 | 0 |
| | 16-QAM | 1 | 0 | 20.36 | 20.37 | 20.22 | 21.90 | 0 |
| | | 1 | 25 | 20.35 | 20.35 | 20.40 | 21.90 | 0 |
| | | 1 | 49 | 20.30 | 20.27 | 20.30 | 21.90 | 0 |
| | | 25 | 0 | 20.39 | 20.31 | 20.21 | 21.90 | 0 |
| | | 25 | 12 | 20.38 | 20.29 | 20.32 | 21.90 | 0 |
| | | 25 | 25 | 20.24 | 20.21 | 20.28 | 21.90 | 0 |
| | | 50 | 0 | 20.23 | 20.40 | 20.36 | 21.90 | 0 |
| | 64-QAM | 1 | 0 | 20.29 | 20.32 | 20.34 | 21.90 | 0 |
| | | 1 | 25 | 20.26 | 20.34 | 20.21 | 21.90 | 0 |
| | | 1 | 49 | 20.33 | 20.34 | 20.39 | 21.90 | 0 |
| | | 25 | 0 | 20.21 | 20.30 | 20.37 | 21.90 | 0 |
| | | 25 | 12 | 20.31 | 20.31 | 20.37 | 21.90 | 0 |
| | | 25 | 25 | 20.30 | 20.23 | 20.24 | 21.90 | 0 |
| | | 50 | 0 | 20.31 | 20.33 | 20.24 | 21.90 | 0 |
| | 256-QAM | 1 | 0 | 20.21 | 20.28 | 20.30 | 21.90 | 0 |
| | | 1 | 25 | 20.22 | 20.21 | 20.24 | 21.90 | 0 |
| | | 1 | 49 | 20.24 | 20.37 | 20.39 | 21.90 | 0 |
| | | 25 | 0 | 20.22 | 20.40 | 20.34 | 21.90 | 0 |
| | | 25 | 12 | 20.24 | 20.38 | 20.23 | 21.90 | 0 |
| | | 25 | 25 | 20.36 | 20.22 | 20.22 | 21.90 | 0 |
| | | 50 | 0 | 20.26 | 20.22 | 20.35 | 21.90 | 0 |
| Frequency (MHz) | | | | 1852.5 | 1880 | 1907.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 18625 | 18900 | 19175 | | |
| 5 | QPSK | 1 | 0 | 20.36 | 20.46 | 20.30 | 21.90 | 0 |
| | | 1 | 12 | 20.27 | 20.21 | 20.20 | 21.90 | 0 |
| | | 1 | 24 | 20.21 | 20.14 | 20.17 | 21.90 | 0 |
| | | 12 | 0 | 20.22 | 20.31 | 20.36 | 21.90 | 0 |
| | | 12 | 6 | 20.22 | 20.24 | 20.39 | 21.90 | 0 |
| | | 12 | 13 | 20.36 | 20.25 | 20.33 | 21.90 | 0 |
| | | 25 | 0 | 20.38 | 20.30 | 20.37 | 21.90 | 0 |
| | 16-QAM | 1 | 0 | 20.27 | 20.32 | 20.37 | 21.90 | 0 |
| | | 1 | 12 | 20.37 | 20.29 | 20.22 | 21.90 | 0 |
| | | 1 | 24 | 20.36 | 20.40 | 20.25 | 21.90 | 0 |
| | | 12 | 0 | 20.35 | 20.33 | 20.39 | 21.90 | 0 |
| | | 12 | 6 | 20.39 | 20.22 | 20.28 | 21.90 | 0 |
| | | 12 | 13 | 20.34 | 20.32 | 20.37 | 21.90 | 0 |
| | | 25 | 0 | 20.31 | 20.23 | 20.30 | 21.90 | 0 |
| | 64-QAM | 1 | 0 | 20.34 | 20.30 | 20.26 | 21.90 | 0 |
| | | 1 | 12 | 20.26 | 20.38 | 20.31 | 21.90 | 0 |
| | | 1 | 24 | 20.21 | 20.34 | 20.26 | 21.90 | 0 |
| | | 12 | 0 | 20.24 | 20.21 | 20.40 | 21.90 | 0 |
| | | 12 | 6 | 20.36 | 20.38 | 20.25 | 21.90 | 0 |
| | | 12 | 13 | 20.22 | 20.32 | 20.34 | 21.90 | 0 |
| | | 25 | 0 | 20.31 | 20.39 | 20.30 | 21.90 | 0 |
| | 256-QAM | 1 | 0 | 20.26 | 20.29 | 20.23 | 21.90 | 0 |
| | | 1 | 12 | 20.38 | 20.22 | 20.25 | 21.90 | 0 |
| | | 1 | 24 | 20.29 | 20.38 | 20.22 | 21.90 | 0 |
| | | 12 | 0 | 20.35 | 20.26 | 20.31 | 21.90 | 0 |
| | | 12 | 6 | 20.29 | 20.28 | 20.27 | 21.90 | 0 |
| | | 12 | 13 | 20.28 | 20.33 | 20.26 | 21.90 | 0 |
| | | 25 | 0 | 20.32 | 20.39 | 20.36 | 21.90 | 0 |

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| LTE Band 7 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 2510 | 2535 | 2560 | | |
| Channel | | | | 20850 | 21100 | 21350 | | |
| 20 | QPSK | 1 | 0 | 19.25 | 19.42 | 19.33 | 20.50 | 0 |
| | | 1 | 50 | 19.20 | 19.19 | 19.20 | 20.50 | 0 |
| | | 1 | 99 | 19.12 | 19.16 | 19.17 | 20.50 | 0 |
| | | 50 | 0 | 19.14 | 19.23 | 19.07 | 20.50 | 0 |
| | | 50 | 25 | 19.10 | 19.07 | 19.17 | 20.50 | 0 |
| | | 50 | 50 | 19.08 | 19.15 | 19.14 | 20.50 | 0 |
| | | 100 | 0 | 19.09 | 19.05 | 19.15 | 20.50 | 0 |
| | 16-QAM | 1 | 0 | 19.17 | 19.22 | 19.16 | 20.50 | 0 |
| | | 1 | 50 | 19.23 | 19.09 | 19.09 | 20.50 | 0 |
| | | 1 | 99 | 19.05 | 19.23 | 19.20 | 20.50 | 0 |
| | | 50 | 0 | 19.12 | 19.11 | 19.11 | 20.50 | 0 |
| | | 50 | 25 | 19.20 | 19.15 | 19.12 | 20.50 | 0 |
| | | 50 | 50 | 19.10 | 19.09 | 19.10 | 20.50 | 0 |
| | | 100 | 0 | 19.09 | 19.21 | 19.07 | 20.50 | 0 |
| | 64-QAM | 1 | 0 | 19.22 | 19.20 | 19.18 | 20.50 | 0 |
| | | 1 | 50 | 19.07 | 19.19 | 19.16 | 20.50 | 0 |
| | | 1 | 99 | 19.22 | 19.07 | 19.15 | 20.50 | 0 |
| | | 50 | 0 | 19.10 | 19.13 | 19.10 | 20.50 | 0 |
| | | 50 | 25 | 19.21 | 19.08 | 19.19 | 20.50 | 0 |
| | | 50 | 50 | 19.08 | 19.14 | 19.10 | 20.50 | 0 |
| | | 100 | 0 | 19.09 | 19.10 | 19.22 | 20.50 | 0 |
| | 256-QAM | 1 | 0 | 19.04 | 19.04 | 19.22 | 20.50 | 0 |
| | | 1 | 50 | 19.09 | 19.16 | 19.16 | 20.50 | 0 |
| | | 1 | 99 | 19.16 | 19.04 | 19.22 | 20.50 | 0 |
| | | 50 | 0 | 19.08 | 19.22 | 19.10 | 20.50 | 0 |
| | | 50 | 25 | 19.09 | 19.17 | 19.21 | 20.50 | 0 |
| | | 50 | 50 | 19.18 | 19.08 | 19.10 | 20.50 | 0 |
| | | 100 | 0 | 19.17 | 19.22 | 19.12 | 20.50 | 0 |
| Frequency (MHz) | | | | 2507.5 | 2535 | 2562.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 20825 | 21100 | 21375 | | |
| 15 | QPSK | 1 | 0 | 19.13 | 19.30 | 19.21 | 20.50 | 0 |
| | | 1 | 36 | 18.78 | 18.77 | 18.78 | 20.50 | 0 |
| | | 1 | 74 | 18.72 | 18.79 | 18.77 | 20.50 | 0 |
| | | 36 | 0 | 19.18 | 19.11 | 19.14 | 20.50 | 0 |
| | | 36 | 18 | 19.05 | 19.05 | 19.07 | 20.50 | 0 |
| | | 36 | 37 | 19.17 | 19.20 | 19.09 | 20.50 | 0 |
| | | 75 | 0 | 19.10 | 19.04 | 19.18 | 20.50 | 0 |
| | 16-QAM | 1 | 0 | 19.12 | 19.06 | 19.16 | 20.50 | 0 |
| | | 1 | 36 | 19.11 | 19.13 | 19.18 | 20.50 | 0 |
| | | 1 | 74 | 19.09 | 19.15 | 19.04 | 20.50 | 0 |
| | | 36 | 0 | 19.12 | 19.20 | 19.23 | 20.50 | 0 |
| | | 36 | 18 | 19.07 | 19.06 | 19.11 | 20.50 | 0 |
| | | 36 | 37 | 19.07 | 19.14 | 19.17 | 20.50 | 0 |
| | | 75 | 0 | 19.15 | 19.16 | 19.05 | 20.50 | 0 |
| | 64-QAM | 1 | 0 | 19.14 | 19.17 | 19.11 | 20.50 | 0 |
| | | 1 | 36 | 19.16 | 19.11 | 19.08 | 20.50 | 0 |
| | | 1 | 74 | 19.11 | 19.15 | 19.18 | 20.50 | 0 |
| | | 36 | 0 | 19.19 | 19.15 | 19.11 | 20.50 | 0 |
| | | 36 | 18 | 19.21 | 19.18 | 19.18 | 20.50 | 0 |
| | | 36 | 37 | 19.23 | 19.20 | 19.20 | 20.50 | 0 |
| | | 75 | 0 | 19.04 | 19.05 | 19.15 | 20.50 | 0 |
| | 256-QAM | 1 | 0 | 19.12 | 19.12 | 19.12 | 20.50 | 0 |
| | | 1 | 36 | 19.10 | 19.15 | 19.07 | 20.50 | 0 |
| | | 1 | 74 | 19.20 | 19.20 | 19.13 | 20.50 | 0 |
| | | 36 | 0 | 19.20 | 19.04 | 19.07 | 20.50 | 0 |
| | | 36 | 18 | 19.20 | 19.10 | 19.04 | 20.50 | 0 |
| | | 36 | 37 | 19.10 | 19.04 | 19.12 | 20.50 | 0 |
| | | 75 | 0 | 19.17 | 19.05 | 19.08 | 20.50 | 0 |

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| LTE Band 7 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 2505 | 2535 | 2565 | | |
| Channel | | | | 20800 | 21100 | 21400 | | |
| 10 | QPSK | 1 | 0 | 18.76 | 18.93 | 18.84 | 20.50 | 0 |
| | | 1 | 25 | 18.62 | 18.63 | 18.64 | 20.50 | 0 |
| | | 1 | 49 | 18.73 | 18.73 | 18.56 | 20.50 | 0 |
| | | 25 | 0 | 19.16 | 19.23 | 19.07 | 20.50 | 0 |
| | | 25 | 12 | 19.19 | 19.23 | 19.04 | 20.50 | 0 |
| | | 25 | 25 | 19.07 | 19.12 | 19.17 | 20.50 | 0 |
| | | 50 | 0 | 19.21 | 19.09 | 19.08 | 20.50 | 0 |
| | 16-QAM | 1 | 0 | 19.23 | 19.08 | 19.18 | 20.50 | 0 |
| | | 1 | 25 | 19.21 | 19.17 | 19.16 | 20.50 | 0 |
| | | 1 | 49 | 19.08 | 19.15 | 19.13 | 20.50 | 0 |
| | | 25 | 0 | 19.17 | 19.19 | 19.15 | 20.50 | 0 |
| | | 25 | 12 | 19.19 | 19.12 | 19.10 | 20.50 | 0 |
| | | 25 | 25 | 19.07 | 19.11 | 19.05 | 20.50 | 0 |
| | | 50 | 0 | 19.22 | 19.08 | 19.13 | 20.50 | 0 |
| | 64-QAM | 1 | 0 | 19.19 | 19.20 | 19.18 | 20.50 | 0 |
| | | 1 | 25 | 19.22 | 19.04 | 19.11 | 20.50 | 0 |
| | | 1 | 49 | 19.16 | 19.19 | 19.10 | 20.50 | 0 |
| | | 25 | 0 | 19.11 | 19.09 | 19.16 | 20.50 | 0 |
| | | 25 | 12 | 19.17 | 19.17 | 19.11 | 20.50 | 0 |
| | | 25 | 25 | 19.21 | 19.15 | 19.15 | 20.50 | 0 |
| | | 50 | 0 | 19.14 | 19.07 | 19.10 | 20.50 | 0 |
| | 256-QAM | 1 | 0 | 19.18 | 19.12 | 19.06 | 20.50 | 0 |
| | | 1 | 25 | 19.05 | 19.14 | 19.11 | 20.50 | 0 |
| | | 1 | 49 | 19.04 | 19.04 | 19.17 | 20.50 | 0 |
| | | 25 | 0 | 19.11 | 19.04 | 19.19 | 20.50 | 0 |
| | | 25 | 12 | 19.13 | 19.16 | 19.09 | 20.50 | 0 |
| | | 25 | 25 | 19.11 | 19.21 | 19.20 | 20.50 | 0 |
| | | 50 | 0 | 19.21 | 19.05 | 19.06 | 20.50 | 0 |
| Frequency (MHz) | | | | 2502.5 | 2535 | 2567.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 20775 | 21100 | 21425 | | |
| 5 | QPSK | 1 | 0 | 18.75 | 18.92 | 18.83 | 20.50 | 0 |
| | | 1 | 12 | 18.67 | 18.67 | 18.72 | 20.50 | 0 |
| | | 1 | 24 | 18.87 | 18.87 | 18.56 | 20.50 | 0 |
| | | 12 | 0 | 19.17 | 19.11 | 19.13 | 20.50 | 0.00 |
| | | 12 | 6 | 19.09 | 19.15 | 19.13 | 20.50 | 0.00 |
| | | 12 | 13 | 19.15 | 19.16 | 19.18 | 20.50 | 0.00 |
| | | 25 | 0 | 19.17 | 19.19 | 19.21 | 20.50 | 0.00 |
| | 16-QAM | 1 | 0 | 19.18 | 19.07 | 19.18 | 20.50 | 0.00 |
| | | 1 | 12 | 19.11 | 19.16 | 19.20 | 20.50 | 0.00 |
| | | 1 | 24 | 19.06 | 19.13 | 19.22 | 20.50 | 0.00 |
| | | 12 | 0 | 19.12 | 19.14 | 19.20 | 20.50 | 0.00 |
| | | 12 | 6 | 19.17 | 19.14 | 19.21 | 20.50 | 0.00 |
| | | 12 | 13 | 19.19 | 19.11 | 19.23 | 20.50 | 0.00 |
| | | 25 | 0 | 19.22 | 19.20 | 19.04 | 20.50 | 0.00 |
| | 64-QAM | 1 | 0 | 19.05 | 19.10 | 19.18 | 20.50 | 0.00 |
| | | 1 | 12 | 19.14 | 19.19 | 19.08 | 20.50 | 0.00 |
| | | 1 | 24 | 19.06 | 19.19 | 19.08 | 20.50 | 0.00 |
| | | 12 | 0 | 19.11 | 19.16 | 19.19 | 20.50 | 0.00 |
| | | 12 | 6 | 19.08 | 19.19 | 19.14 | 20.50 | 0.00 |
| | | 12 | 13 | 19.19 | 19.07 | 19.16 | 20.50 | 0.00 |
| | | 25 | 0 | 19.13 | 19.23 | 19.19 | 20.50 | 0.00 |
| | 256-QAM | 1 | 0 | 19.04 | 19.09 | 19.15 | 20.50 | 0.00 |
| | | 1 | 12 | 19.09 | 19.06 | 19.20 | 20.50 | 0.00 |
| | | 1 | 24 | 19.14 | 19.12 | 19.06 | 20.50 | 0.00 |
| | | 12 | 0 | 19.10 | 19.22 | 19.13 | 20.50 | 0.00 |
| | | 12 | 6 | 19.07 | 19.11 | 19.08 | 20.50 | 0.00 |
| | | 12 | 13 | 19.21 | 19.05 | 19.10 | 20.50 | 0.00 |
| | | 25 | 0 | 19.16 | 19.13 | 19.07 | 20.50 | 0.00 |

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| LTE Band 66 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1720 | 1745 | 1770 | | |
| Channel | | | | 132072 | 132322 | 132572 | | |
| 20 | QPSK | 1 | 0 | 20.37 | 20.22 | 20.44 | 21.60 | 0 |
| | | 1 | 50 | 20.33 | 20.26 | 20.28 | 21.60 | 0 |
| | | 1 | 99 | 20.28 | 20.17 | 20.18 | 21.60 | 0 |
| | | 50 | 0 | 20.17 | 20.03 | 20.20 | 21.60 | 0 |
| | | 50 | 25 | 20.07 | 20.14 | 20.05 | 21.60 | 0 |
| | | 50 | 50 | 20.08 | 20.15 | 20.07 | 21.60 | 0 |
| | | 100 | 0 | 20.13 | 20.20 | 20.15 | 21.60 | 0 |
| | 16-QAM | 1 | 0 | 20.13 | 20.06 | 20.11 | 21.60 | 0 |
| | | 1 | 50 | 20.11 | 20.03 | 20.16 | 21.60 | 0 |
| | | 1 | 99 | 20.16 | 20.06 | 20.18 | 21.60 | 0 |
| | | 50 | 0 | 20.16 | 20.11 | 20.21 | 21.60 | 0 |
| | | 50 | 25 | 20.17 | 20.21 | 20.15 | 21.60 | 0 |
| | | 50 | 50 | 20.05 | 20.19 | 20.20 | 21.60 | 0 |
| | | 100 | 0 | 20.04 | 20.18 | 20.03 | 21.60 | 0 |
| | 64-QAM | 1 | 0 | 20.16 | 20.11 | 20.10 | 21.60 | 0 |
| | | 1 | 50 | 20.09 | 20.13 | 20.11 | 21.60 | 0 |
| | | 1 | 99 | 20.02 | 20.09 | 20.03 | 21.60 | 0 |
| | | 50 | 0 | 20.10 | 20.21 | 20.07 | 21.60 | 0 |
| | | 50 | 25 | 20.10 | 20.16 | 20.04 | 21.60 | 0 |
| | | 50 | 50 | 20.15 | 20.10 | 20.10 | 21.60 | 0 |
| | | 100 | 0 | 20.04 | 20.17 | 20.14 | 21.60 | 0 |
| | 256-QAM | 1 | 0 | 20.04 | 20.10 | 20.10 | 21.60 | 0 |
| | | 1 | 50 | 20.12 | 20.10 | 20.12 | 21.60 | 0 |
| | | 1 | 99 | 20.14 | 20.21 | 20.18 | 21.60 | 0 |
| | | 50 | 0 | 20.13 | 20.02 | 20.04 | 21.60 | 0 |
| | | 50 | 25 | 20.10 | 20.05 | 20.02 | 21.60 | 0 |
| | | 50 | 50 | 20.09 | 20.08 | 20.14 | 21.60 | 0 |
| | | 100 | 0 | 20.17 | 20.17 | 20.13 | 21.60 | 0 |
| Frequency (MHz) | | | | 1717.5 | 1745 | 1772.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 132047 | 132322 | 132597 | | |
| 15 | QPSK | 1 | 0 | 20.15 | 20.10 | 20.10 | 21.60 | 0 |
| | | 1 | 36 | 20.06 | 20.05 | 20.09 | 21.60 | 0 |
| | | 1 | 74 | 20.10 | 20.08 | 20.07 | 21.60 | 0 |
| | | 36 | 0 | 20.18 | 20.14 | 20.12 | 21.60 | 0 |
| | | 36 | 18 | 20.06 | 20.13 | 20.15 | 21.60 | 0 |
| | | 36 | 37 | 20.08 | 20.05 | 20.13 | 21.60 | 0 |
| | | 75 | 0 | 20.02 | 20.21 | 20.11 | 21.60 | 0 |
| | 16-QAM | 1 | 0 | 20.02 | 20.13 | 20.14 | 21.60 | 0 |
| | | 1 | 36 | 20.07 | 20.15 | 20.07 | 21.60 | 0 |
| | | 1 | 74 | 20.07 | 20.08 | 20.16 | 21.60 | 0 |
| | | 36 | 0 | 20.20 | 20.21 | 20.06 | 21.60 | 0 |
| | | 36 | 18 | 20.03 | 20.07 | 20.16 | 21.60 | 0 |
| | | 36 | 37 | 20.11 | 20.10 | 20.18 | 21.60 | 0 |
| | | 75 | 0 | 20.10 | 20.02 | 20.21 | 21.60 | 0 |
| | 64-QAM | 1 | 0 | 20.04 | 20.15 | 20.04 | 21.60 | 0 |
| | | 1 | 36 | 20.04 | 20.20 | 20.08 | 21.60 | 0 |
| | | 1 | 74 | 20.12 | 20.09 | 20.19 | 21.60 | 0 |
| | | 36 | 0 | 20.10 | 20.18 | 20.12 | 21.60 | 0 |
| | | 36 | 18 | 20.02 | 20.20 | 20.08 | 21.60 | 0 |
| | | 36 | 37 | 20.06 | 20.17 | 20.16 | 21.60 | 0 |
| | | 75 | 0 | 20.17 | 20.04 | 20.04 | 21.60 | 0 |
| | 256-QAM | 1 | 0 | 20.11 | 20.11 | 20.17 | 21.60 | 0 |
| | | 1 | 36 | 20.07 | 20.19 | 20.19 | 21.60 | 0 |
| | | 1 | 74 | 20.14 | 20.02 | 20.04 | 21.60 | 0 |
| | | 36 | 0 | 20.08 | 20.07 | 20.15 | 21.60 | 0 |
| | | 36 | 18 | 20.04 | 20.12 | 20.06 | 21.60 | 0 |
| | | 36 | 37 | 20.20 | 20.19 | 20.16 | 21.60 | 0 |
| | | 75 | 0 | 20.15 | 20.18 | 20.04 | 21.60 | 0 |

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| LTE Band 66 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1715 | 1745 | 1775 | | |
| Channel | | | | 132022 | 132322 | 132622 | | |
| 10 | QPSK | 1 | 0 | 20.20 | 20.06 | 20.17 | 21.60 | 0 |
| | | 1 | 25 | 20.15 | 20.08 | 20.21 | 21.60 | 0 |
| | | 1 | 49 | 20.19 | 20.10 | 20.15 | 21.60 | 0 |
| | | 25 | 0 | 20.07 | 20.16 | 20.18 | 21.60 | 0 |
| | | 25 | 12 | 20.18 | 20.03 | 20.13 | 21.60 | 0 |
| | | 25 | 25 | 20.08 | 20.15 | 20.14 | 21.60 | 0 |
| | | 50 | 0 | 20.04 | 20.19 | 20.11 | 21.60 | 0 |
| | 16-QAM | 1 | 0 | 20.08 | 20.02 | 20.09 | 21.60 | 0 |
| | | 1 | 25 | 20.09 | 20.05 | 20.20 | 21.60 | 0 |
| | | 1 | 49 | 20.19 | 20.16 | 20.05 | 21.60 | 0 |
| | | 25 | 0 | 20.16 | 20.12 | 20.17 | 21.60 | 0 |
| | | 25 | 12 | 20.18 | 20.15 | 20.15 | 21.60 | 0 |
| | | 25 | 25 | 20.08 | 20.09 | 20.07 | 21.60 | 0 |
| | | 50 | 0 | 20.09 | 20.11 | 20.07 | 21.60 | 0 |
| | 64-QAM | 1 | 0 | 20.06 | 20.20 | 20.20 | 21.60 | 0 |
| | | 1 | 25 | 20.08 | 20.15 | 20.17 | 21.60 | 0 |
| | | 1 | 49 | 20.09 | 20.08 | 20.13 | 21.60 | 0 |
| | | 25 | 0 | 20.06 | 20.08 | 20.20 | 21.60 | 0 |
| | | 25 | 12 | 20.10 | 20.02 | 20.05 | 21.60 | 0 |
| | | 25 | 25 | 20.09 | 20.16 | 20.13 | 21.60 | 0 |
| | | 50 | 0 | 20.07 | 20.07 | 20.04 | 21.60 | 0 |
| | 256-QAM | 1 | 0 | 20.15 | 20.08 | 20.12 | 21.60 | 0 |
| | | 1 | 25 | 20.02 | 20.05 | 20.07 | 21.60 | 0 |
| | | 1 | 49 | 20.05 | 20.18 | 20.07 | 21.60 | 0 |
| | | 25 | 0 | 20.21 | 20.03 | 20.08 | 21.60 | 0 |
| | | 25 | 12 | 20.15 | 20.06 | 20.02 | 21.60 | 0 |
| | | 25 | 25 | 20.12 | 20.04 | 20.13 | 21.60 | 0 |
| | | 50 | 0 | 20.10 | 20.07 | 20.13 | 21.60 | 0 |
| Frequency (MHz) | | | | 1712.5 | 1745 | 1777.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 131997 | 132322 | 132647 | | |
| 5 | QPSK | 1 | 0 | 20.05 | 20.14 | 20.20 | 21.60 | 0 |
| | | 1 | 12 | 20.06 | 20.20 | 20.16 | 21.60 | 0 |
| | | 1 | 24 | 20.11 | 20.17 | 20.05 | 21.60 | 0 |
| | | 12 | 0 | 20.14 | 20.09 | 20.14 | 21.60 | 0 |
| | | 12 | 6 | 20.13 | 20.19 | 20.06 | 21.60 | 0 |
| | | 12 | 13 | 20.10 | 20.18 | 20.21 | 21.60 | 0 |
| | | 25 | 0 | 20.05 | 20.11 | 20.17 | 21.60 | 0 |
| | 16-QAM | 1 | 0 | 20.16 | 20.19 | 20.19 | 21.60 | 0 |
| | | 1 | 12 | 20.07 | 20.11 | 20.11 | 21.60 | 0 |
| | | 1 | 24 | 20.20 | 20.16 | 20.08 | 21.60 | 0 |
| | | 12 | 0 | 20.04 | 20.11 | 20.08 | 21.60 | 0 |
| | | 12 | 6 | 20.14 | 20.02 | 20.10 | 21.60 | 0 |
| | | 12 | 13 | 20.09 | 20.20 | 20.16 | 21.60 | 0 |
| | | 25 | 0 | 20.18 | 20.16 | 20.20 | 21.60 | 0 |
| | 64-QAM | 1 | 0 | 20.11 | 20.19 | 20.05 | 21.60 | 0 |
| | | 1 | 12 | 20.07 | 20.10 | 20.14 | 21.60 | 0 |
| | | 1 | 24 | 20.06 | 20.19 | 20.09 | 21.60 | 0 |
| | | 12 | 0 | 20.13 | 20.20 | 20.14 | 21.60 | 0 |
| | | 12 | 6 | 20.12 | 20.17 | 20.21 | 21.60 | 0 |
| | | 12 | 13 | 20.06 | 20.15 | 20.17 | 21.60 | 0 |
| | | 25 | 0 | 20.09 | 20.21 | 20.21 | 21.60 | 0 |
| | 256-QAM | 1 | 0 | 20.14 | 20.18 | 20.10 | 21.60 | 0 |
| | | 1 | 12 | 20.16 | 20.04 | 20.12 | 21.60 | 0 |
| | | 1 | 24 | 20.11 | 20.10 | 20.09 | 21.60 | 0 |
| | | 12 | 0 | 20.13 | 20.21 | 20.20 | 21.60 | 0 |
| | | 12 | 6 | 20.16 | 20.04 | 20.15 | 21.60 | 0 |
| | | 12 | 13 | 20.15 | 20.12 | 20.10 | 21.60 | 0 |
| | | 25 | 0 | 20.04 | 20.17 | 20.13 | 21.60 | 0 |

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| LTE Band 66 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1711.5 | 1745 | 1778.5 | | |
| Channel | | | | 131987 | 132322 | 132657 | | |
| 3 | QPSK | 1 | 0 | 20.02 | 20.13 | 20.17 | 21.60 | 0 |
| | | 1 | 7 | 20.16 | 20.05 | 20.10 | 21.60 | 0 |
| | | 1 | 14 | 20.11 | 20.14 | 20.16 | 21.60 | 0 |
| | | 8 | 0 | 20.09 | 20.10 | 20.16 | 21.60 | 0 |
| | | 8 | 4 | 20.04 | 20.04 | 20.21 | 21.60 | 0 |
| | | 8 | 7 | 20.19 | 20.11 | 20.21 | 21.60 | 0 |
| | | 15 | 0 | 20.20 | 20.19 | 20.18 | 21.60 | 0 |
| | 16-QAM | 1 | 0 | 20.21 | 20.06 | 20.18 | 21.60 | 0 |
| | | 1 | 7 | 20.05 | 20.05 | 20.07 | 21.60 | 0 |
| | | 1 | 14 | 20.13 | 20.05 | 20.02 | 21.60 | 0 |
| | | 8 | 0 | 20.17 | 20.15 | 20.09 | 21.60 | 0 |
| | | 8 | 4 | 20.18 | 20.02 | 20.05 | 21.60 | 0 |
| | | 8 | 7 | 20.05 | 20.04 | 20.09 | 21.60 | 0 |
| | | 15 | 0 | 20.12 | 20.04 | 20.09 | 21.60 | 0 |
| | 64-QAM | 1 | 0 | 20.06 | 20.18 | 20.03 | 21.60 | 0 |
| | | 1 | 7 | 20.07 | 20.02 | 20.19 | 21.60 | 0 |
| | | 1 | 14 | 20.21 | 20.08 | 20.13 | 21.60 | 0 |
| | | 8 | 0 | 20.19 | 20.11 | 20.04 | 21.60 | 0 |
| | | 8 | 4 | 20.05 | 20.04 | 20.08 | 21.60 | 0 |
| | | 8 | 7 | 20.18 | 20.08 | 20.13 | 21.60 | 0 |
| | | 15 | 0 | 20.20 | 20.14 | 20.12 | 21.60 | 0 |
| | 256-QAM | 1 | 0 | 20.10 | 20.09 | 20.11 | 21.60 | 0 |
| | | 1 | 7 | 20.16 | 20.06 | 20.17 | 21.60 | 0 |
| | | 1 | 14 | 20.19 | 20.07 | 20.15 | 21.60 | 0 |
| | | 8 | 0 | 20.19 | 20.20 | 20.10 | 21.60 | 0 |
| | | 8 | 4 | 20.09 | 20.20 | 20.20 | 21.60 | 0 |
| | | 8 | 7 | 20.18 | 20.05 | 20.08 | 21.60 | 0 |
| | | 15 | 0 | 20.03 | 20.05 | 20.19 | 21.60 | 0 |
| Frequency (MHz) | | | | 1710.7 | 1745 | 1779.3 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 131979 | 132322 | 132665 | | |
| 1.4 | QPSK | 1 | 0 | 20.03 | 20.04 | 20.10 | 21.60 | 0 |
| | | 1 | 2 | 20.04 | 20.05 | 20.20 | 21.60 | 0 |
| | | 1 | 5 | 20.12 | 20.04 | 20.15 | 21.60 | 0 |
| | | 3 | 0 | 20.12 | 20.19 | 20.13 | 21.60 | 0 |
| | | 3 | 2 | 20.14 | 20.09 | 20.16 | 21.60 | 0 |
| | | 3 | 3 | 20.17 | 20.12 | 20.10 | 21.60 | 0 |
| | | 6 | 0 | 20.10 | 20.14 | 20.12 | 21.60 | 0 |
| | 16-QAM | 1 | 0 | 20.12 | 20.02 | 20.03 | 21.60 | 0 |
| | | 1 | 2 | 20.05 | 20.05 | 20.21 | 21.60 | 0 |
| | | 1 | 5 | 20.05 | 20.04 | 20.05 | 21.60 | 0 |
| | | 3 | 0 | 20.12 | 20.11 | 20.07 | 21.60 | 0 |
| | | 3 | 2 | 20.19 | 20.17 | 20.18 | 21.60 | 0 |
| | | 3 | 3 | 20.09 | 20.04 | 20.17 | 21.60 | 0 |
| | | 6 | 0 | 20.09 | 20.10 | 20.18 | 21.60 | 0 |
| | 64-QAM | 1 | 0 | 20.11 | 20.08 | 20.12 | 21.60 | 0 |
| | | 1 | 2 | 20.04 | 20.11 | 20.17 | 21.60 | 0 |
| | | 1 | 5 | 20.19 | 20.19 | 20.10 | 21.60 | 0 |
| | | 3 | 0 | 20.16 | 20.11 | 20.14 | 21.60 | 0 |
| | | 3 | 2 | 20.21 | 20.10 | 20.18 | 21.60 | 0 |
| | | 3 | 3 | 20.06 | 20.18 | 20.06 | 21.60 | 0 |
| | | 6 | 0 | 20.19 | 20.18 | 20.17 | 21.60 | 0 |
| | 256-QAM | 1 | 0 | 20.20 | 20.21 | 20.04 | 21.60 | 0 |
| | | 1 | 2 | 20.18 | 20.04 | 20.21 | 21.60 | 0 |
| | | 1 | 5 | 20.12 | 20.12 | 20.17 | 21.60 | 0 |
| | | 3 | 0 | 20.05 | 20.14 | 20.12 | 21.60 | 0 |
| | | 3 | 2 | 20.03 | 20.21 | 20.14 | 21.60 | 0 |
| | | 3 | 3 | 20.07 | 20.20 | 20.02 | 21.60 | 0 |
| | | 6 | 0 | 20.10 | 20.07 | 20.16 | 21.60 | 0 |

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## Tx8-LTE TDD Band 42 / Band 48 power table:

| LTE Band 42 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 3560 | 3575 | 3590 | | |
| Channel | | | | 43190 | 43340 | 43490 | | |
| 20 | QPSK | 1 | 0 | 18.93 | 19.09 | 19.16 | 20.50 | 0 |
| | | 1 | 50 | 18.95 | 19.00 | 19.04 | 20.50 | 0 |
| | | 1 | 99 | 18.91 | 18.98 | 19.02 | 20.50 | 0 |
| | | 50 | 0 | 18.82 | 18.90 | 18.82 | 20.50 | 0 |
| | | 50 | 25 | 18.86 | 18.85 | 18.87 | 20.50 | 0 |
| | | 50 | 50 | 18.88 | 18.75 | 18.76 | 20.50 | 0 |
| | | 100 | 0 | 18.84 | 18.80 | 18.90 | 20.50 | 0 |
| | 16-QAM | 1 | 0 | 18.87 | 18.72 | 18.85 | 20.50 | 0 |
| | | 1 | 50 | 18.90 | 18.86 | 18.91 | 20.50 | 0 |
| | | 1 | 99 | 18.82 | 18.82 | 18.78 | 20.50 | 0 |
| | | 50 | 0 | 18.83 | 18.72 | 18.86 | 20.50 | 0 |
| | | 50 | 25 | 18.79 | 18.83 | 18.87 | 20.50 | 0 |
| | | 50 | 50 | 18.78 | 18.75 | 18.88 | 20.50 | 0 |
| | | 100 | 0 | 18.91 | 18.73 | 18.87 | 20.50 | 0 |
| | 64-QAM | 1 | 0 | 18.75 | 18.89 | 18.76 | 20.50 | 0 |
| | | 1 | 50 | 18.78 | 18.81 | 18.77 | 20.50 | 0 |
| | | 1 | 99 | 18.83 | 18.79 | 18.76 | 20.50 | 0 |
| | | 50 | 0 | 18.82 | 18.91 | 18.89 | 20.50 | 0 |
| | | 50 | 25 | 18.83 | 18.91 | 18.80 | 20.50 | 0 |
| | | 50 | 50 | 18.72 | 18.85 | 18.76 | 20.50 | 0 |
| | | 100 | 0 | 18.79 | 18.82 | 18.85 | 20.50 | 0 |
| | 256-QAM | 1 | 0 | 18.87 | 18.90 | 18.80 | 20.50 | 0 |
| | | 1 | 50 | 18.76 | 18.82 | 18.72 | 20.50 | 0 |
| | | 1 | 99 | 18.72 | 18.73 | 18.74 | 20.50 | 0 |
| | | 50 | 0 | 18.91 | 18.80 | 18.85 | 20.50 | 0 |
| | | 50 | 25 | 18.86 | 18.74 | 18.80 | 20.50 | 0 |
| | | 50 | 50 | 18.81 | 18.75 | 18.77 | 20.50 | 0 |
| | | 100 | 0 | 18.76 | 18.83 | 18.84 | 20.50 | 0 |
| Frequency (MHz) | | | | 3407.5 | 3453.8 | 3592.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 41665 | 42128 | 43515 | | |
| 15 | QPSK | 1 | 0 | 18.90 | 19.06 | 19.13 | 20.50 | 0 |
| | | 1 | 36 | 18.93 | 18.98 | 19.02 | 20.50 | 0 |
| | | 1 | 74 | 18.92 | 18.97 | 19.01 | 20.50 | 0 |
| | | 36 | 0 | 18.89 | 18.86 | 18.73 | 20.50 | 0 |
| | | 36 | 18 | 18.81 | 18.86 | 18.72 | 20.50 | 0 |
| | | 36 | 37 | 18.86 | 18.74 | 18.86 | 20.50 | 0 |
| | | 75 | 0 | 18.73 | 18.88 | 18.76 | 20.50 | 0 |
| | 16-QAM | 1 | 0 | 18.79 | 18.90 | 18.75 | 20.50 | 0 |
| | | 1 | 36 | 18.74 | 18.84 | 18.89 | 20.50 | 0 |
| | | 1 | 74 | 18.85 | 18.73 | 18.83 | 20.50 | 0 |
| | | 36 | 0 | 18.88 | 18.87 | 18.73 | 20.50 | 0 |
| | | 36 | 18 | 18.82 | 18.87 | 18.89 | 20.50 | 0 |
| | | 36 | 37 | 18.80 | 18.75 | 18.79 | 20.50 | 0 |
| | | 75 | 0 | 18.87 | 18.85 | 18.86 | 20.50 | 0 |
| | 64-QAM | 1 | 0 | 18.80 | 18.74 | 18.75 | 20.50 | 0 |
| | | 1 | 36 | 18.74 | 18.89 | 18.90 | 20.50 | 0 |
| | | 1 | 74 | 18.85 | 18.83 | 18.87 | 20.50 | 0 |
| | | 36 | 0 | 18.88 | 18.73 | 18.77 | 20.50 | 0 |
| | | 36 | 18 | 18.77 | 18.90 | 18.87 | 20.50 | 0 |
| | | 36 | 37 | 18.90 | 18.84 | 18.74 | 20.50 | 0 |
| | | 75 | 0 | 18.85 | 18.73 | 18.81 | 20.50 | 0 |
| | 256-QAM | 1 | 0 | 18.72 | 18.76 | 18.78 | 20.50 | 0 |
| | | 1 | 36 | 18.91 | 18.84 | 18.82 | 20.50 | 0 |
| | | 1 | 74 | 18.90 | 18.88 | 18.86 | 20.50 | 0 |
| | | 36 | 0 | 18.82 | 18.86 | 18.86 | 20.50 | 0 |
| | | 36 | 18 | 18.86 | 18.79 | 18.76 | 20.50 | 0 |
| | | 36 | 37 | 18.79 | 18.89 | 18.89 | 20.50 | 0 |
| | | 75 | 0 | 18.76 | 18.86 | 18.89 | 20.50 | 0 |

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| LTE Band 42 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 3405 | 3452.5 | 3595 | | |
| Channel | | | | 41640 | 42115 | 43540 | | |
| 10 | QPSK | 1 | 0 | 18.83 | 18.99 | 19.06 | 20.50 | 0 |
| | | 1 | 25 | 18.88 | 18.93 | 18.97 | 20.50 | 0 |
| | | 1 | 49 | 18.88 | 18.93 | 18.97 | 20.50 | 0 |
| | | 25 | 0 | 18.74 | 18.85 | 18.85 | 20.50 | 0 |
| | | 25 | 12 | 18.84 | 18.89 | 18.79 | 20.50 | 0 |
| | | 25 | 25 | 18.75 | 18.77 | 18.91 | 20.50 | 0 |
| | | 50 | 0 | 18.84 | 18.80 | 18.77 | 20.50 | 0 |
| | 16-QAM | 1 | 0 | 18.75 | 18.83 | 18.77 | 20.50 | 0 |
| | | 1 | 25 | 18.75 | 18.79 | 18.89 | 20.50 | 0 |
| | | 1 | 49 | 18.72 | 18.77 | 18.83 | 20.50 | 0 |
| | | 25 | 0 | 18.82 | 18.91 | 18.72 | 20.50 | 0 |
| | | 25 | 12 | 18.76 | 18.75 | 18.75 | 20.50 | 0 |
| | | 25 | 25 | 18.86 | 18.84 | 18.82 | 20.50 | 0 |
| | | 50 | 0 | 18.81 | 18.72 | 18.90 | 20.50 | 0 |
| | 64-QAM | 1 | 0 | 18.81 | 18.89 | 18.85 | 20.50 | 0 |
| | | 1 | 25 | 18.75 | 18.80 | 18.81 | 20.50 | 0 |
| | | 1 | 49 | 18.88 | 18.80 | 18.87 | 20.50 | 0 |
| | | 25 | 0 | 18.91 | 18.75 | 18.88 | 20.50 | 0 |
| | | 25 | 12 | 18.72 | 18.74 | 18.89 | 20.50 | 0 |
| | | 25 | 25 | 18.81 | 18.81 | 18.80 | 20.50 | 0 |
| | | 50 | 0 | 18.75 | 18.88 | 18.75 | 20.50 | 0 |
| | 256-QAM | 1 | 0 | 18.87 | 18.83 | 18.91 | 20.50 | 0 |
| | | 1 | 25 | 18.81 | 18.74 | 18.85 | 20.50 | 0 |
| | | 1 | 49 | 18.78 | 18.81 | 18.75 | 20.50 | 0 |
| | | 25 | 0 | 18.88 | 18.77 | 18.90 | 20.50 | 0 |
| | | 25 | 12 | 18.91 | 18.77 | 18.82 | 20.50 | 0 |
| | | 25 | 25 | 18.89 | 18.91 | 18.81 | 20.50 | 0 |
| | | 50 | 0 | 18.79 | 18.85 | 18.90 | 20.50 | 0 |
| Frequency (MHz) | | | | 3402.5 | 3451.3 | 3597.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 41615 | 42103 | 43565 | | |
| 5 | QPSK | 1 | 0 | 18.80 | 18.96 | 19.03 | 20.50 | 0 |
| | | 1 | 12 | 18.86 | 18.91 | 18.95 | 20.50 | 0 |
| | | 1 | 24 | 18.84 | 18.89 | 18.93 | 20.50 | 0 |
| | | 12 | 0 | 18.90 | 18.79 | 18.86 | 20.50 | 0 |
| | | 12 | 6 | 18.90 | 18.78 | 18.81 | 20.50 | 0 |
| | | 12 | 13 | 18.86 | 18.74 | 18.83 | 20.50 | 0 |
| | | 25 | 0 | 18.91 | 18.87 | 18.87 | 20.50 | 0 |
| | 16-QAM | 1 | 0 | 18.75 | 18.74 | 18.89 | 20.50 | 0 |
| | | 1 | 12 | 18.72 | 18.73 | 18.85 | 20.50 | 0 |
| | | 1 | 24 | 18.72 | 18.82 | 18.74 | 20.50 | 0 |
| | | 12 | 0 | 18.76 | 18.74 | 18.75 | 20.50 | 0 |
| | | 12 | 6 | 18.85 | 18.90 | 18.88 | 20.50 | 0 |
| | | 12 | 13 | 18.74 | 18.78 | 18.75 | 20.50 | 0 |
| | | 25 | 0 | 18.87 | 18.80 | 18.82 | 20.50 | 0 |
| | 64-QAM | 1 | 0 | 18.83 | 18.89 | 18.72 | 20.50 | 0 |
| | | 1 | 12 | 18.73 | 18.73 | 18.90 | 20.50 | 0 |
| | | 1 | 24 | 18.89 | 18.85 | 18.90 | 20.50 | 0 |
| | | 12 | 0 | 18.81 | 18.77 | 18.78 | 20.50 | 0 |
| | | 12 | 6 | 18.89 | 18.80 | 18.81 | 20.50 | 0 |
| | | 12 | 13 | 18.88 | 18.91 | 18.89 | 20.50 | 0 |
| | | 25 | 0 | 18.79 | 18.75 | 18.85 | 20.50 | 0 |
| | 256-QAM | 1 | 0 | 18.89 | 18.85 | 18.72 | 20.50 | 0 |
| | | 1 | 12 | 18.77 | 18.77 | 18.89 | 20.50 | 0 |
| | | 1 | 24 | 18.91 | 18.75 | 18.90 | 20.50 | 0 |
| | | 12 | 0 | 18.86 | 18.73 | 18.88 | 20.50 | 0 |
| | | 12 | 6 | 18.75 | 18.77 | 18.89 | 20.50 | 0 |
| | | 12 | 13 | 18.79 | 18.76 | 18.78 | 20.50 | 0 |
| | | 25 | 0 | 18.83 | 18.73 | 18.79 | 20.50 | 0 |

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| LTE Band 48 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 3560 | 3603.3 | 3646.7 | 3690 | | |
| Channel | | | | 55340 | 55773 | 56207 | 56640 | | |
| 20 | QPSK | 1 | 0 | 19.23 | 19.13 | 19.18 | 19.25 | 19.80 | 0 |
| | | 1 | 50 | 19.12 | 19.04 | 19.17 | 19.22 | 19.80 | 0 |
| | | 1 | 99 | 19.17 | 19.09 | 19.22 | 19.21 | 19.80 | 0 |
| | | 50 | 0 | 19.06 | 18.93 | 18.99 | 18.92 | 19.80 | 0 |
| | | 50 | 25 | 19.00 | 19.05 | 19.07 | 18.98 | 19.80 | 0 |
| | | 50 | 50 | 19.08 | 18.91 | 18.92 | 18.99 | 19.80 | 0 |
| | | 100 | 0 | 18.96 | 19.06 | 18.99 | 18.91 | 19.80 | 0 |
| | 16-QAM | 1 | 0 | 18.99 | 18.92 | 19.02 | 18.98 | 19.80 | 0 |
| | | 1 | 50 | 18.92 | 19.06 | 19.02 | 18.97 | 19.80 | 0 |
| | | 1 | 99 | 19.01 | 18.98 | 18.97 | 19.00 | 19.80 | 0 |
| | | 50 | 0 | 18.94 | 18.91 | 19.05 | 19.02 | 19.80 | 0 |
| | | 50 | 25 | 18.95 | 19.06 | 18.91 | 18.95 | 19.80 | 0 |
| | | 50 | 50 | 18.94 | 19.05 | 18.99 | 19.04 | 19.80 | 0 |
| | | 100 | 0 | 19.07 | 18.95 | 18.93 | 18.96 | 19.80 | 0 |
| | 64-QAM | 1 | 0 | 18.99 | 18.98 | 19.05 | 18.96 | 19.80 | 0 |
| | | 1 | 50 | 19.06 | 18.98 | 18.94 | 19.10 | 19.80 | 0 |
| | | 1 | 99 | 19.06 | 19.07 | 18.93 | 19.04 | 19.80 | 0 |
| | | 50 | 0 | 19.10 | 19.06 | 19.02 | 19.09 | 19.80 | 0 |
| | | 50 | 25 | 18.98 | 19.10 | 19.09 | 19.06 | 19.80 | 0 |
| | | 50 | 50 | 18.94 | 19.05 | 19.01 | 18.92 | 19.80 | 0 |
| | | 100 | 0 | 19.05 | 19.06 | 18.98 | 18.91 | 19.80 | 0 |
| | 256-QAM | 1 | 0 | 18.91 | 18.98 | 19.00 | 19.07 | 19.80 | 0 |
| | | 1 | 50 | 18.96 | 19.02 | 18.95 | 18.95 | 19.80 | 0 |
| | | 1 | 99 | 19.00 | 19.01 | 19.09 | 19.05 | 19.80 | 0 |
| | | 50 | 0 | 18.99 | 19.00 | 18.99 | 19.05 | 19.80 | 0 |
| | | 50 | 25 | 19.08 | 19.06 | 19.00 | 18.96 | 19.80 | 0 |
| | | 50 | 50 | 19.08 | 19.06 | 19.10 | 19.07 | 19.80 | 0 |
| | | 100 | 0 | 19.04 | 19.10 | 19.10 | 19.02 | 19.80 | 0 |
| Frequency (MHz) | | | | 3557.5 | 3602.5 | 3647.5 | 3692.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 55315 | 55765 | 56215 | 56665 | | |
| 15 | QPSK | 1 | 0 | 18.91 | 19.07 | 18.97 | 18.93 | 19.80 | 0 |
| | | 1 | 36 | 18.95 | 19.09 | 19.03 | 18.97 | 19.80 | 0 |
| | | 1 | 74 | 19.00 | 19.10 | 19.07 | 18.93 | 19.80 | 0 |
| | | 36 | 0 | 18.94 | 18.95 | 18.97 | 19.00 | 19.80 | 0 |
| | | 36 | 18 | 18.95 | 19.04 | 19.05 | 19.01 | 19.80 | 0 |
| | | 36 | 37 | 18.95 | 18.91 | 19.05 | 19.07 | 19.80 | 0 |
| | | 75 | 0 | 19.04 | 18.92 | 19.08 | 19.01 | 19.80 | 0 |
| | 16-QAM | 1 | 0 | 18.97 | 19.07 | 19.10 | 19.10 | 19.80 | 0 |
| | | 1 | 36 | 19.10 | 19.09 | 18.93 | 18.96 | 19.80 | 0 |
| | | 1 | 74 | 18.96 | 18.92 | 19.02 | 19.01 | 19.80 | 0 |
| | | 36 | 0 | 18.93 | 18.98 | 19.05 | 18.91 | 19.80 | 0 |
| | | 36 | 18 | 18.91 | 19.07 | 18.97 | 18.92 | 19.80 | 0 |
| | | 36 | 37 | 19.06 | 18.98 | 19.01 | 19.00 | 19.80 | 0 |
| | | 75 | 0 | 19.01 | 18.93 | 18.95 | 19.10 | 19.80 | 0 |
| | 64-QAM | 1 | 0 | 19.03 | 18.93 | 19.00 | 18.92 | 19.80 | 0 |
| | | 1 | 36 | 19.01 | 19.05 | 19.07 | 19.10 | 19.80 | 0 |
| | | 1 | 74 | 18.94 | 19.10 | 19.01 | 19.00 | 19.80 | 0 |
| | | 36 | 0 | 19.04 | 18.96 | 18.94 | 18.98 | 19.80 | 0 |
| | | 36 | 18 | 19.01 | 18.99 | 18.96 | 19.00 | 19.80 | 0 |
| | | 36 | 37 | 19.09 | 18.96 | 18.95 | 19.03 | 19.80 | 0 |
| | | 75 | 0 | 19.08 | 19.00 | 18.97 | 18.97 | 19.80 | 0 |
| | 256-QAM | 1 | 0 | 18.95 | 19.07 | 19.09 | 19.05 | 19.80 | 0 |
| | | 1 | 36 | 18.94 | 19.02 | 19.03 | 19.02 | 19.80 | 0 |
| | | 1 | 74 | 18.99 | 19.06 | 19.08 | 19.04 | 19.80 | 0 |
| | | 36 | 0 | 19.05 | 19.02 | 19.08 | 19.01 | 19.80 | 0 |
| | | 36 | 18 | 18.91 | 18.91 | 18.91 | 19.03 | 19.80 | 0 |
| | | 36 | 37 | 19.02 | 19.03 | 19.00 | 19.08 | 19.80 | 0 |
| | | 75 | 0 | 19.06 | 19.02 | 18.91 | 19.05 | 19.80 | 0 |

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| LTE Band 48 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 3555 | 3601.7 | 3648.3 | 3695 | | |
| Channel | | | | 55290 | 55757 | 56223 | 56690 | | |
| 10 | QPSK | 1 | 0 | 19.03 | 18.96 | 18.91 | 19.03 | 19.80 | 0 |
| | | 1 | 25 | 19.05 | 18.91 | 18.95 | 18.94 | 19.80 | 0 |
| | | 1 | 49 | 19.03 | 18.99 | 19.01 | 19.00 | 19.80 | 0 |
| | | 25 | 0 | 18.95 | 19.07 | 19.05 | 18.99 | 19.80 | 0 |
| | | 25 | 12 | 19.10 | 19.08 | 19.02 | 19.04 | 19.80 | 0 |
| | | 25 | 25 | 18.98 | 18.93 | 18.93 | 19.02 | 19.80 | 0 |
| | | 50 | 0 | 19.03 | 19.04 | 18.93 | 19.04 | 19.80 | 0 |
| | 16-QAM | 1 | 0 | 19.09 | 19.03 | 18.99 | 18.91 | 19.80 | 0 |
| | | 1 | 25 | 19.02 | 18.98 | 19.05 | 19.10 | 19.80 | 0 |
| | | 1 | 49 | 19.03 | 19.00 | 18.96 | 19.06 | 19.80 | 0 |
| | | 25 | 0 | 18.91 | 19.06 | 18.97 | 19.04 | 19.80 | 0 |
| | | 25 | 12 | 18.94 | 18.92 | 19.06 | 19.09 | 19.80 | 0 |
| | | 25 | 25 | 18.94 | 19.04 | 19.05 | 19.09 | 19.80 | 0 |
| | | 50 | 0 | 18.92 | 19.00 | 19.07 | 18.97 | 19.80 | 0 |
| | 64-QAM | 1 | 0 | 18.95 | 19.07 | 19.08 | 19.09 | 19.80 | 0 |
| | | 1 | 25 | 19.03 | 19.04 | 18.99 | 18.91 | 19.80 | 0 |
| | | 1 | 49 | 18.96 | 18.97 | 19.07 | 18.95 | 19.80 | 0 |
| | | 25 | 0 | 19.09 | 19.01 | 19.04 | 18.91 | 19.80 | 0 |
| | | 25 | 12 | 19.07 | 19.01 | 19.03 | 18.93 | 19.80 | 0 |
| | | 25 | 25 | 19.09 | 19.02 | 18.94 | 19.00 | 19.80 | 0 |
| | | 50 | 0 | 18.91 | 19.06 | 19.08 | 18.99 | 19.80 | 0 |
| | 256-QAM | 1 | 0 | 19.02 | 18.94 | 18.99 | 19.10 | 19.80 | 0 |
| | | 1 | 25 | 19.04 | 19.01 | 19.09 | 19.02 | 19.80 | 0 |
| | | 1 | 49 | 19.06 | 19.06 | 18.98 | 18.98 | 19.80 | 0 |
| | | 25 | 0 | 19.08 | 18.96 | 19.09 | 19.08 | 19.80 | 0 |
| | | 25 | 12 | 19.00 | 18.93 | 18.91 | 18.96 | 19.80 | 0 |
| | | 25 | 25 | 18.98 | 18.94 | 19.07 | 19.04 | 19.80 | 0 |
| | | 50 | 0 | 19.09 | 18.97 | 19.04 | 19.08 | 19.80 | 0 |
| Frequency (MHz) | | | | 3552.5 | 3600.8 | 3649.2 | 3697.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 55265 | 55748 | 56232 | 56715 | | |
| 5 | QPSK | 1 | 0 | 19.06 | 19.01 | 18.96 | 19.07 | 19.80 | 0 |
| | | 1 | 12 | 19.02 | 19.01 | 18.99 | 19.01 | 19.80 | 0 |
| | | 1 | 24 | 19.03 | 18.99 | 18.91 | 18.92 | 19.80 | 0 |
| | | 12 | 0 | 18.94 | 18.96 | 19.10 | 18.97 | 19.80 | 0 |
| | | 12 | 6 | 18.92 | 19.06 | 19.05 | 19.02 | 19.80 | 0 |
| | | 12 | 13 | 18.91 | 19.09 | 19.05 | 19.01 | 19.80 | 0 |
| | | 25 | 0 | 18.92 | 19.07 | 19.07 | 18.98 | 19.80 | 0 |
| | 16-QAM | 1 | 0 | 18.95 | 19.02 | 19.07 | 19.09 | 19.80 | 0 |
| | | 1 | 12 | 19.01 | 19.07 | 19.06 | 19.10 | 19.80 | 0 |
| | | 1 | 24 | 18.97 | 19.00 | 19.00 | 18.97 | 19.80 | 0 |
| | | 12 | 0 | 19.04 | 18.91 | 18.95 | 18.98 | 19.80 | 0 |
| | | 12 | 6 | 19.09 | 19.02 | 19.09 | 19.02 | 19.80 | 0 |
| | | 12 | 13 | 18.94 | 19.06 | 19.03 | 19.10 | 19.80 | 0 |
| | | 25 | 0 | 19.03 | 18.94 | 19.02 | 18.93 | 19.80 | 0 |
| | 64-QAM | 1 | 0 | 19.08 | 18.92 | 18.94 | 18.94 | 19.80 | 0 |
| | | 1 | 12 | 19.05 | 19.02 | 19.07 | 19.05 | 19.80 | 0 |
| | | 1 | 24 | 18.91 | 19.00 | 18.97 | 18.95 | 19.80 | 0 |
| | | 12 | 0 | 18.96 | 19.01 | 18.95 | 19.02 | 19.80 | 0 |
| | | 12 | 6 | 18.95 | 18.95 | 18.95 | 19.05 | 19.80 | 0 |
| | | 12 | 13 | 19.05 | 19.10 | 19.00 | 18.98 | 19.80 | 0 |
| | | 25 | 0 | 19.03 | 18.95 | 19.02 | 18.98 | 19.80 | 0 |
| | 256-QAM | 1 | 0 | 18.97 | 19.06 | 18.98 | 18.92 | 19.80 | 0 |
| | | 1 | 12 | 19.09 | 19.04 | 18.94 | 18.99 | 19.80 | 0 |
| | | 1 | 24 | 19.07 | 18.93 | 19.08 | 19.03 | 19.80 | 0 |
| | | 12 | 0 | 19.00 | 18.96 | 18.97 | 19.00 | 19.80 | 0 |
| | | 12 | 6 | 18.92 | 19.01 | 19.01 | 18.98 | 19.80 | 0 |
| | | 12 | 13 | 19.09 | 18.96 | 18.91 | 18.99 | 19.80 | 0 |
| | | 25 | 0 | 18.97 | 19.00 | 19.02 | 18.94 | 19.80 | 0 |

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## Tx8-5G NR n2 / n7 / n41 / n66 power table:

| 5G NR n2 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1860 | 1880 | 1900 | | |
| Channel | | | | 372000 | 376000 | 380000 | | |
| 20 | Pi/2 BPSK | 1 | 1 | 19.46 | 19.78 | 19.41 | 20.80 | 0 |
| | | 1 | 53 | 19.32 | 19.70 | 19.26 | 20.80 | 0 |
| | | 1 | 104 | 19.29 | 19.63 | 19.26 | 20.80 | 0 |
| | | 50 | 0 | 19.41 | 19.68 | 19.36 | 20.80 | 0 |
| | | 50 | 28 | 19.21 | 19.58 | 19.17 | 20.80 | 0 |
| | | 50 | 56 | 19.30 | 19.63 | 19.22 | 20.80 | 0 |
| | | 100 | 0 | 19.35 | 19.27 | 19.22 | 20.80 | 0 |
| | QPSK | 1 | 1 | 19.12 | 19.43 | 19.07 | 20.80 | 0 |
| | | 1 | 53 | 19.25 | 19.60 | 19.25 | 20.80 | 0 |
| | | 1 | 104 | 19.32 | 19.65 | 19.26 | 20.80 | 0 |
| | | 50 | 0 | 19.28 | 19.66 | 19.28 | 20.80 | 0 |
| | | 50 | 28 | 19.01 | 19.36 | 18.96 | 20.80 | 0 |
| | | 50 | 56 | 19.08 | 19.44 | 19.02 | 20.80 | 0 |
| | | 100 | 0 | 19.30 | 19.39 | 19.23 | 20.80 | 0 |
| | 16-QAM | 1 | 1 | 19.32 | 19.33 | 19.38 | 20.80 | 0 |
| | 64QAM | 1 | 1 | 19.30 | 19.37 | 19.24 | 20.80 | 0 |
| | 256-QAM | 1 | 1 | 19.38 | 19.27 | 19.37 | 20.80 | 0 |
| Frequency (MHz) | | | | 1857.5 | 1880 | 1902.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 371500 | 376000 | 380500 | | |
| 15 | Pi/2 BPSK | 1 | 1 | 19.21 | 19.42 | 19.28 | 20.80 | 0 |
| Frequency (MHz) | | | | 1855 | 1880 | 1905 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 371000 | 376000 | 381000 | | |
| 10 | Pi/2 BPSK | 1 | 1 | 19.16 | 19.37 | 19.31 | 20.80 | 0 |
| Frequency (MHz) | | | | 1852.5 | 1880 | 1907.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 370500 | 376000 | 381500 | | |
| 5 | Pi/2 BPSK | 1 | 1 | 19.01 | 19.22 | 19.18 | 20.80 | 0 |

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| 5G NR n7 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 2510 | 2535 | 2560 | | |
| Channel | | | | 502000 | 507000 | 512000 | | |
| 20 | Pi/2 BPSK | 1 | 1 | 19.08 | 18.88 | 18.95 | 20.10 | 0 |
| | | 1 | 53 | 18.92 | 18.84 | 18.87 | 20.10 | 0 |
| | | 1 | 104 | 18.89 | 18.86 | 18.81 | 20.10 | 0 |
| | | 50 | 0 | 19.02 | 18.94 | 19.01 | 20.10 | 0 |
| | | 50 | 28 | 18.81 | 18.77 | 18.73 | 20.10 | 0 |
| | | 50 | 56 | 18.90 | 18.83 | 18.85 | 20.10 | 0 |
| | | 100 | 0 | 18.78 | 18.84 | 18.87 | 20.10 | 0 |
| | QPSK | 1 | 1 | 18.87 | 18.76 | 18.74 | 20.10 | 0 |
| | | 1 | 53 | 18.72 | 18.73 | 18.76 | 20.10 | 0 |
| | | 1 | 104 | 18.86 | 18.80 | 18.87 | 20.10 | 0 |
| | | 50 | 0 | 18.83 | 18.80 | 18.83 | 20.10 | 0 |
| | | 50 | 28 | 18.75 | 18.69 | 18.70 | 20.10 | 0 |
| | | 50 | 56 | 18.81 | 18.77 | 18.75 | 20.10 | 0 |
| | | 100 | 0 | 18.74 | 18.75 | 18.70 | 20.10 | 0 |
| | 16-QAM | 1 | 1 | 18.77 | 18.75 | 18.78 | 20.10 | 0 |
| | 64QAM | 1 | 1 | 18.69 | 18.71 | 18.87 | 20.10 | 0 |
| | 256-QAM | 1 | 1 | 18.70 | 18.70 | 18.73 | 20.10 | 0 |
| Frequency (MHz) | | | | 2507.5 | 2535 | 2562.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 501500 | 507000 | 512500 | | |
| 15 | Pi/2 BPSK | 1 | 1 | 18.92 | 19.03 | 18.89 | 20.10 | 0 |
| Frequency (MHz) | | | | 2505 | 2535 | 2565 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 501000 | 507000 | 513000 | | |
| 10 | Pi/2 BPSK | 1 | 1 | 18.78 | 18.92 | 18.85 | 20.10 | 0 |
| Frequency (MHz) | | | | 2502.5 | 2535 | 2567.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 500500 | 507000 | 513500 | | |
| 5 | Pi/2 BPSK | 1 | 1 | 18.80 | 18.91 | 18.93 | 20.10 | 0 |

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| 5G NR n41 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 2546.01 | 2592.99 | 2640 | | |
| Channel | | | | 509202 | 518598 | 528000 | | |
| 15 | Pi/2 BPSK | 1 | 1 | 17.04 | 17.03 | 17.28 | 18.30 | 0 |
| | | 1 | 137 | 16.90 | 16.83 | 16.91 | 18.30 | 0 |
| | | 1 | 271 | 16.87 | 16.82 | 16.88 | 18.30 | 0 |
| | | 135 | 0 | 16.99 | 16.90 | 17.02 | 18.30 | 0 |
| | | 135 | 69 | 16.79 | 16.72 | 16.81 | 18.30 | 0 |
| | | 135 | 138 | 16.88 | 16.86 | 16.91 | 18.30 | 0 |
| | | 270 | 0 | 16.93 | 16.94 | 16.91 | 18.30 | 0 |
| | QPSK | 1 | 1 | 16.84 | 16.84 | 16.98 | 18.30 | 0 |
| | | 1 | 137 | 16.89 | 16.87 | 16.93 | 18.30 | 0 |
| | | 1 | 271 | 16.99 | 16.86 | 16.93 | 18.30 | 0 |
| | | 135 | 0 | 16.82 | 16.95 | 16.94 | 18.30 | 0 |
| | | 135 | 69 | 16.98 | 16.83 | 16.86 | 18.30 | 0 |
| | | 135 | 138 | 16.92 | 16.85 | 16.86 | 18.30 | 0 |
| | | 270 | 0 | 16.83 | 16.89 | 16.84 | 18.30 | 0 |
| | 16-QAM | 1 | 1 | 16.97 | 16.90 | 16.81 | 18.30 | 0 |
| | 64QAM | 1 | 1 | 16.96 | 16.94 | 16.91 | 18.30 | 0 |
| | 256-QAM | 1 | 1 | 16.83 | 16.96 | 16.99 | 18.30 | 0 |
| Frequency (MHz) | | | | 2541 | 2592.99 | 2644.98 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 508200 | 518598 | 528996 | | |
| 90 | Pi/2 BPSK | 1 | 1 | 16.92 | 17.21 | 17.14 | 18.30 | 0 |
| Frequency (MHz) | | | | 2536.02 | 2592.99 | 2649.99 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 507204 | 518598 | 529998 | | |
| 80 | Pi/2 BPSK | 1 | 1 | 17.01 | 17.15 | 16.99 | 18.30 | 0 |
| Frequency (MHz) | | | | 2526 | 2592.99 | 2659.98 | Target Power + Max. Tolerance (dBm) | Target Power + Max. Tolerance (dBm) |
| Channel | | | | 505200 | 518598 | 531996 | | |
| 60 | Pi/2 BPSK | 1 | 1 | 16.87 | 16.92 | 16.88 | 18.30 | 0 |
| Frequency (MHz) | | | | 2521.02 | 2592.99 | 2664.99 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 504204 | 518598 | 532998 | | |
| 50 | Pi/2 BPSK | 1 | 1 | 16.90 | 16.82 | 16.86 | 18.30 | 0 |
| Frequency (MHz) | | | | 2516.01 | 2592.99 | 2670 | Target Power + Max. Tolerance (dBm) | Target Power + Max. Tolerance (dBm) |
| Channel | | | | 503202 | 518598 | 534000 | | |
| 40 | Pi/2 BPSK | 1 | 1 | 16.84 | 16.87 | 16.83 | 18.30 | 0 |
| Frequency (MHz) | | | | 2506.02 | 2592.99 | 2679.99 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 501204 | 518598 | 535998 | | |
| 20 | Pi/2 BPSK | 1 | 1 | 16.71 | 16.79 | 16.80 | 18.30 | 0 |

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| 5G NR n41(HPUE) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 2546.01 | 2592.99 | 2640 | | |
| Channel | | | | 509202 | 518598 | 528000 | | |
| 15 | Pi/2 BPSK | 1 | 1 | 19.29 | 19.35 | 19.36 | 19.40 | 0 |
| | | 1 | 137 | 19.13 | 19.17 | 19.27 | 19.40 | 0 |
| | | 1 | 271 | 19.11 | 19.27 | 19.14 | 19.40 | 0 |
| | | 135 | 0 | 19.15 | 19.08 | 19.23 | 19.40 | 0 |
| | | 135 | 69 | 19.08 | 19.21 | 19.19 | 19.40 | 0 |
| | | 135 | 138 | 19.12 | 19.15 | 19.17 | 19.40 | 0 |
| | | 270 | 0 | 19.22 | 19.27 | 19.26 | 19.40 | 0 |
| | QPSK | 1 | 1 | 19.11 | 19.24 | 19.19 | 19.40 | 0 |
| | | 1 | 137 | 19.17 | 19.15 | 19.12 | 19.40 | 0 |
| | | 1 | 271 | 19.18 | 19.22 | 19.26 | 19.40 | 0 |
| | | 135 | 0 | 19.22 | 19.21 | 19.10 | 19.40 | 0 |
| | | 135 | 69 | 19.16 | 19.22 | 19.11 | 19.40 | 0 |
| | | 135 | 138 | 19.19 | 19.20 | 19.11 | 19.40 | 0 |
| | | 270 | 0 | 19.22 | 19.09 | 19.26 | 19.40 | 0 |
| | 16-QAM | 1 | 1 | 19.15 | 19.20 | 19.17 | 19.40 | 0 |
| | 64QAM | 1 | 1 | 19.18 | 19.15 | 19.23 | 19.40 | 0 |
| | 256-QAM | 1 | 1 | 19.08 | 19.19 | 19.17 | 19.40 | 0 |
| Frequency (MHz) | | | | | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | | | | | |
| 90 | Pi/2 BPSK | 1 | 1 | 19.16 | 19.18 | 19.24 | 19.40 | 0 |
| Frequency (MHz) | | | | | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | | | | | |
| 80 | Pi/2 BPSK | 1 | 1 | 19.14 | 19.17 | 19.24 | 19.40 | 0 |
| Frequency (MHz) | | | | | | | Target Power + Max. Tolerance (dBm) | Target Power + Max. Tolerance (dBm) |
| Channel | | | | | | | | |
| 60 | Pi/2 BPSK | 1 | 1 | 19.23 | 19.16 | 19.25 | 19.40 | 0 |
| Frequency (MHz) | | | | | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | | | | | |
| 50 | Pi/2 BPSK | 1 | 1 | 19.19 | 19.18 | 19.12 | 19.40 | 0 |
| Frequency (MHz) | | | | | | | Target Power + Max. Tolerance (dBm) | Target Power + Max. Tolerance (dBm) |
| Channel | | | | | | | | |
| 40 | Pi/2 BPSK | 1 | 1 | 19.10 | 19.11 | 19.14 | 19.40 | 0 |
| Frequency (MHz) | | | | | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | | | | | |
| 20 | Pi/2 BPSK | 1 | 1 | 19.19 | 19.08 | 19.09 | 19.40 | 0 |

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| 5G NR n66 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BW(Mhz) | Modulation | RB Size | RB Offset | Conducted power (dBm) | | | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Frequency (MHz) | | | | 1720 | 1745 | 1770 | | |
| Channel | | | | 344000 | 349000 | 354000 | | |
| 20 | Pi/2 BPSK | 1 | 1 | 19.48 | 19.36 | 19.38 | 20.60 | 0 |
| | | 1 | 53 | 19.20 | 19.17 | 19.15 | 20.60 | 0 |
| | | 1 | 104 | 19.17 | 19.13 | 19.16 | 20.60 | 0 |
| | | 50 | 0 | 19.29 | 19.24 | 19.22 | 20.60 | 0 |
| | | 50 | 28 | 19.09 | 19.07 | 19.01 | 20.60 | 0 |
| | | 50 | 56 | 19.18 | 19.11 | 19.11 | 20.60 | 0 |
| | | 100 | 0 | 19.28 | 19.24 | 19.22 | 20.60 | 0 |
| | QPSK | 1 | 1 | 19.21 | 19.16 | 19.27 | 20.60 | 0 |
| | | 1 | 53 | 19.32 | 19.25 | 19.23 | 20.60 | 0 |
| | | 1 | 104 | 19.32 | 19.35 | 19.34 | 20.60 | 0 |
| | | 50 | 0 | 19.29 | 19.16 | 19.23 | 20.60 | 0 |
| | | 50 | 28 | 19.28 | 19.21 | 19.27 | 20.60 | 0 |
| | | 50 | 56 | 19.20 | 19.32 | 19.26 | 20.60 | 0 |
| | | 100 | 0 | 19.22 | 19.33 | 19.28 | 20.60 | 0 |
| | 16-QAM | 1 | 1 | 19.18 | 19.17 | 19.23 | 20.60 | 0 |
| | 64QAM | 1 | 1 | 19.16 | 19.23 | 19.20 | 20.60 | 0 |
| | 256-QAM | 1 | 1 | 19.34 | 19.31 | 19.28 | 20.60 | 0 |
| Frequency (MHz) | | | | 1717.5 | 1745 | 1772.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 343500 | 349000 | 354500 | | |
| 15 | Pi/2 BPSK | 1 | 1 | 19.21 | 19.26 | 19.32 | 20.60 | 0 |
| Frequency (MHz) | | | | 1715 | 1745 | 1775 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 343000 | 349000 | 355000 | | |
| 10 | Pi/2 BPSK | 1 | 1 | 19.18 | 19.11 | 19.17 | 20.60 | 0 |
| Frequency (MHz) | | | | 1712.5 | 1745 | 1777.5 | Target Power + Max. Tolerance (dBm) | MPR Allowed per 3GPP(dB) |
| Channel | | | | 342500 | 349000 | 355500 | | |
| 5 | Pi/2 BPSK | 1 | 1 | 19.10 | 19.03 | 19.15 | 20.60 | 0 |

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## 1.3.1 Intra-band ULCA power table

| CA_5B | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 50RB + 50RB (10MHz + 10MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 10 | QPSK | 844 | 20600 | 1 | 0 | 10 | QPSK | 834.1 | 20501 | 1 | 49 | 0 | 23.85 | 24.50 |
| 10 | QPSK | 829 | 20450 | 1 | 49 | 10 | QPSK | 838.9 | 20549 | 1 | 0 | 0 | 23.61 | 24.50 |

| CA_5B | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 50RB + 25RB (10MHz + 5MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 10 | QPSK | 844 | 20600 | 1 | 0 | 5 | QPSK | 836.8 | 20528 | 1 | 49 | 0 | 23.82 | 24.50 |

| CA_7C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 100RB + 100RB (20MHz + 20MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 20 | QPSK | 2510 | 20850 | 1 | 99 | 20 | QPSK | 2529.8 | 21048 | 1 | 0 | 0 | 23.39 | 24.00 |
| 20 | QPSK | 2560 | 21350 | 1 | 0 | 20 | QPSK | 2540.2 | 21152 | 1 | 99 | 0 | 23.31 | 24.00 |

| CA_7C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 75RB + 100RB (15MHz + 20MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 20 | QPSK | 2510 | 20850 | 1 | 99 | 15 | QPSK | 2527.1 | 21021 | 1 | 0 | 0 | 23.27 | 24.00 |
| 20 | QPSK | 2560 | 21350 | 1 | 0 | 15 | QPSK | 2542.9 | 21179 | 1 | 74 | 0 | 23.29 | 24.00 |

| CA_7C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 75RB + 75RB (15MHz + 15MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 15 | QPSK | 2507.5 | 20825 | 1 | 74 | 15 | QPSK | 2522.5 | 20975 | 1 | 0 | 0 | 23.26 | 24.00 |
| 15 | QPSK | 2562.5 | 21375 | 1 | 0 | 15 | QPSK | 2547.5 | 21225 | 1 | 74 | 0 | 23.20 | 24.00 |

| CA_7C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 75RB + 50RB (15MHz + 10MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 15 | QPSK | 2507.5 | 20825 | 1 | 74 | 10 | QPSK | 2519.5 | 20945 | 1 | 49 | 0 | 23.28 | 24.00 |

| CA_7C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 50RB + 100RB (10MHz + 20MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 20 | QPSK | 2510 | 20850 | 1 | 0 | 10 | QPSK | 2524.4 | 20994 | 1 | 49 | 0 | 23.36 | 24.00 |

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| CA_66B | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 50RB + 50RB (10MHz + 10MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 10 | QPSK | 1775 | 132622 | 1 | 49 | 10 | QPSK | 1765.1 | 132523 | 1 | 0 | 0 | 23.29 | 24.00 |
| 10 | QPSK | 1715 | 132022 | 1 | 0 | 10 | QPSK | 1724.9 | 132121 | 1 | 49 | 0 | 23.13 | 24.00 |

| CA_66B | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 25RB + 75RB (5MHz + 15MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 15 | QPSK | 1717.5 | 132047 | 1 | 0 | 5 | QPSK | 1726.8 | 132140 | 1 | 24 | 0 | 23.20 | 24.00 |
| 15 | QPSK | 1772.5 | 132597 | 1 | 36 | 5 | QPSK | 1763.2 | 132504 | 1 | 0 | 0 | 23.08 | 24.00 |

| CA_66B | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 25RB + 50RB (5MHz + 10MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 10 | QPSK | 1775 | 132622 | 1 | 49 | 5 | QPSK | 1767.8 | 132550 | 1 | 0 | 0 | 23.26 | 24.00 |
| 10 | QPSK | 1715 | 132022 | 1 | 0 | 5 | QPSK | 1722.2 | 132094 | 1 | 24 | 0 | 23.17 | 24.00 |

| CA_66B | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 25RB + 25RB (5MHz + 5MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 5 | QPSK | 1712.5 | 131997 | 1 | 12 | 5 | QPSK | 1717.3 | 132045 | 1 | 0 | 0 | 23.14 | 24.00 |
| 5 | QPSK | 1777.5 | 132647 | 1 | 0 | 5 | QPSK | 1772.7 | 132599 | 1 | 24 | 0 | 23.20 | 24.00 |

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| CA_66C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 100RB + 100RB (20MHz + 20MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 20 | QPSK | 1770 | 132572 | 1 | 0 | 20 | QPSK | 1750.2 | 132374 | 1 | 99 | 0 | 23.97 | 24.00 |
| 20 | QPSK | 1720 | 132072 | 1 | 99 | 20 | QPSK | 1739.8 | 132270 | 1 | 0 | 0 | 23.78 | 24.00 |

| CA_66C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 100RB + 25RB (20MHz + 5MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 20 | QPSK | 1770 | 132572 | 1 | 0 | 5 | QPSK | 1758.3 | 132455 | 1 | 24 | 0 | 23.85 | 24.00 |
| 20 | QPSK | 1720 | 132072 | 1 | 99 | 5 | QPSK | 1731.7 | 132189 | 1 | 0 | 0 | 23.62 | 24.00 |

| CA_66C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 75RB + 100RB (15MHz + 20MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 20 | QPSK | 1770 | 132572 | 1 | 0 | 15 | QPSK | 1752.9 | 132401 | 1 | 74 | 0 | 23.93 | 24.00 |
| 20 | QPSK | 1720 | 132072 | 1 | 99 | 15 | QPSK | 1737.1 | 132243 | 1 | 0 | 0 | 23.60 | 24.00 |

| CA_66C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 75RB + 75RB (15MHz + 15MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 15 | QPSK | 1717.5 | 132047 | 1 | 0 | 15 | QPSK | 1732.5 | 132197 | 1 | 74 | 0 | 23.22 | 24.00 |
| 15 | QPSK | 1772.5 | 132597 | 1 | 36 | 15 | QPSK | 1757.5 | 132447 | 1 | 0 | 0 | 23.14 | 24.00 |

| CA_66C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 50RB + 100RB (10MHz + 20MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 20 | QPSK | 1770 | 132572 | 1 | 0 | 10 | QPSK | 1755.6 | 132428 | 1 | 49 | 0 | 23.92 | 24.00 |
| 20 | QPSK | 1720 | 132072 | 1 | 99 | 10 | QPSK | 1734.4 | 132216 | 1 | 0 | 0 | 23.65 | 24.00 |

| CA_66C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 50RB + 75RB (10MHz + 15MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 15 | QPSK | 1717.5 | 132047 | 1 | 0 | 10 | QPSK | 1729.5 | 132167 | 1 | 49 | 0 | 23.28 | 24.00 |
| 15 | QPSK | 1772.5 | 132597 | 1 | 36 | 10 | QPSK | 1760.5 | 132477 | 1 | 0 | 0 | 23.25 | 24.00 |

| CA_38C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 100RB + 100RB (20MHz + 20MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 20 | QPSK | 2580 | 37850 | 1 | 0 | 20 | QPSK | 2599.8 | 38048 | 1 | 99 | 0 | 23.91 | 24.00 |
| 20 | QPSK | 2610 | 38150 | 1 | 99 | 20 | QPSK | 2590.2 | 37952 | 1 | 0 | 0 | 23.71 | 24.00 |

| CA_38C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 75RB + 75RB (15MHz + 15MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 15 | QPSK | 2577.5 | 37825 | 1 | 74 | 15 | QPSK | 2592.5 | 37975 | 1 | 0 | 0 | 23.29 | 24.00 |
| 15 | QPSK | 2612.5 | 38175 | 1 | 0 | 15 | QPSK | 2597.5 | 38025 | 1 | 74 | 0 | 23.26 | 24.00 |

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| CA_41C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 100RB + 100RB (20MHz + 20MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 20 | QPSK | 2506 | 39750 | 1 | 99 | 20 | QPSK | 2525.8 | 39948 | 1 | 0 | 0 | 23.94 | 24.00 |
| 20 | QPSK | 2680 | 41490 | 1 | 0 | 20 | QPSK | 2660.2 | 41292 | 1 | 99 | 0 | 23.57 | 24.00 |

| CA_41C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 75RB + 100RB (15MHz + 20MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 20 | QPSK | 2506 | 39750 | 1 | 99 | 15 | QPSK | 2523.1 | 39921 | 1 | 0 | 0 | 23.90 | 24.00 |
| 20 | QPSK | 2680 | 41490 | 1 | 0 | 15 | QPSK | 2662.9 | 41319 | 1 | 74 | 0 | 23.62 | 24.00 |

| CA_41C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 75RB + 75RB (15MHz + 15MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 15 | QPSK | 2503.5 | 39725 | 1 | 36 | 15 | QPSK | 2518.5 | 39875 | 1 | 74 | 0 | 23.40 | 24.00 |
| 15 | QPSK | 2682.5 | 41515 | 1 | 74 | 15 | QPSK | 2667.5 | 41365 | 1 | 0 | 0 | 23.41 | 24.00 |

| CA_41C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 50RB + 100RB (10MHz + 20MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 20 | QPSK | 2506 | 39750 | 1 | 99 | 10 | QPSK | 2520.4 | 39894 | 1 | 49 | 0 | 23.80 | 24.00 |
| 20 | QPSK | 2680 | 41490 | 1 | 0 | 10 | QPSK | 2665.6 | 41346 | 1 | 49 | 0 | 23.55 | 24.00 |

| CA_41C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 50RB + 75RB (10MHz + 15MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 15 | QPSK | 2503.5 | 39725 | 1 | 36 | 10 | QPSK | 2515.5 | 39845 | 1 | 74 | 0 | 23.19 | 24.00 |
| 15 | QPSK | 2682.5 | 41515 | 1 | 74 | 10 | QPSK | 2670.5 | 41395 | 1 | 49 | 0 | 23.14 | 24.00 |

| CA_41C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 25RB + 100RB (5MHz + 20MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 20 | QPSK | 2506 | 39750 | 1 | 99 | 5 | QPSK | 2517.7 | 39867 | 1 | 24 | 0 | 23.93 | 24.00 |
| 20 | QPSK | 2680 | 41490 | 1 | 0 | 5 | QPSK | 2668.3 | 41373 | 1 | 24 | 0 | 23.47 | 24.00 |
| CA_48C | | | | | | | | | | | | | | |
| Combination 100RB + 100RB (20MHz + 20MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 20 | QPSK | 3690 | 56640 | 1 | 0 | 20 | QPSK | 3670.2 | 56442 | 1 | 99 | 0 | 19.07 | 19.80 |
| 20 | QPSK | 3560 | 55340 | 1 | 0 | 20 | QPSK | 3579.8 | 55538 | 1 | 99 | 0 | 19.19 | 19.80 |

| CA_48C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 75RB + 100RB (15MHz + 20MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 20 | QPSK | 3560 | 55340 | 1 | 0 | 15 | QPSK | 3577.1 | 55511 | 1 | 74 | 0 | 19.06 | 19.80 |
| 20 | QPSK | 3690 | 56640 | 1 | 0 | 15 | QPSK | 3672.9 | 56469 | 1 | 74 | 0 | 19.10 | 19.80 |

| CA_48C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 50RB + 100RB (10MHz + 20MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 20 | QPSK | 3690 | 56640 | 1 | 0 | 10 | QPSK | 3675.6 | 56496 | 1 | 49 | 0 | 19.16 | 19.80 |
| 20 | QPSK | 3560 | 55340 | 1 | 0 | 10 | QPSK | 3574.4 | 55484 | 1 | 49 | 0 | 19.10 | 19.80 |

| CA_48C | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination 25RB + 100RB (5MHz + 20MHz) | | | | | | | | | | | | | | |
| PCC | | | | | | SCC | | | | | | MPR (dB) | UL CA power | |
| Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | Bandwidth [MHz] | Modulation | Frequency [MHz] | Channel | RB size | RB Offset | | Measured (dBm) | Tune-up limit (dBm) |
| 20 | QPSK | 3690 | 56640 | 1 | 0 | 5 | QPSK | 3678.3 | 56523 | 1 | 24 | 0 | 19.17 | 19.80 |
| 20 | QPSK | 3560 | 55340 | 1 | 0 | 5 | QPSK | 3571.7 | 55457 | 1 | 24 | 0 | 19.12 | 19.80 |

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## 1.3.2 LTE Downlink CA specification

### LTE Downlink 2CA conducted power table

| Two Component Carrier Maximum Conducted Power | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PCC | | | | | | | | | SCC | | | | Output power (dBm) | | Configurations |
| UL | | | | | | | DL | | DL | | | | DL CA active | DL CA inactive | |
| LTE Band | Bandwidth [MHz] | Modulation | RB | RB Offset | Channel | Frequency [MHz] | Channel | Frequency [MHz] | LTE Band | Bandwidth [MHz] | Channel | Frequency [MHz] | | | |
| 12 | 10 | QPSK | 1 | 49 | 23060 | 704 | 5060 | 734 | 25 | 20 | 8365 | 1962.5 | 23.55 | 23.59 | 12A-25A |
| 38 | 20 | QPSK | 1 | 0 | 37850 | 2580 | 37850 | 2580 | 38 | 20 | 38048 | 2599.8 | 23.86 | 23.96 | 38C |
| 41 | 20 | QPSK | 1 | 99 | 39750 | 2506 | 39750 | 2506 | 48 | 20 | 55990 | 3625 | 23.83 | 23.95 | 41A-48A |
| 4 | 20 | QPSK | 1 | 0 | 20175 | 1732.5 | 2175 | 2132.5 | 48 | 20 | 55990 | 3625 | 23.69 | 23.82 | 4A-48A |
| 5 | 10 | QPSK | 1 | 0 | 20600 | 844 | 2600 | 889 | 25 | 20 | 8365 | 1962.5 | 23.74 | 23.95 | 5A-25A |
| 5 | 10 | QPSK | 1 | 0 | 20600 | 844 | 2600 | 889 | 38 | 20 | 38000 | 2595 | 23.79 | 23.95 | 5A-38A |
| 5 | 10 | QPSK | 1 | 0 | 20600 | 844 | 2600 | 889 | 41 | 20 | 40620 | 2593 | 23.77 | 23.95 | 5A-41A |
| 7 | 20 | QPSK | 1 | 99 | 21100 | 2535 | 3100 | 2655 | 42 | 20 | 42590 | 3500 | 23.46 | 23.51 | 7A-42A |
| 7 | 15 | QPSK | 1 | 74 | 20825 | 2507.5 | 2825 | 2627.5 | 7 | 5 | 2918 | 2636.8 | 23.35 | 23.46 | 7B |
| 4 | 20 | QPSK | 1 | 0 | 20175 | 1732.5 | 2175 | 2132.5 | 17 | 10 | 5790 | 740 | 23.61 | 23.82 | 4A-17A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 17 | 10 | 5790 | 740 | 23.71 | 23.91 | 2A-17A |

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# LTE Downlink 3CA conducted power table

| Three Component Carrier Maximum Conducted Power | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PCC | | | | | | | | | SCC 1 | | | | SCC 2 | | | | Output power (dBm) | | |
| UL | | | | | | | DL | | DL | | | | DL | | | | | | |
| LTE Band | Bandwidth [MHz] | Modulation | RB | RB Offset | Channel | Frequency [MHz] | Channel | Frequency [MHz] | LTE Band | Bandwidth [MHz] | Channel | Frequency [MHz] | LTE Band | Bandwidth [MHz] | Channel | Frequency [MHz] | DL CA active | DL CA inactive | Configurations |
| 25 | 20 | QPSK | 1 | 0 | 26365 | 1882.5 | 8365 | 1962.5 | 25 | 20 | 8140 | 1940 | 25 | 20 | 8590 | 1985 | 23.41 | 23.57 | 25A-25A-25A |
| 25 | 20 | QPSK | 1 | 0 | 26140 | 1860 | 8140 | 1940 | 25 | 20 | 8590 | 1985 | 26 | 15 | 8865 | 876.5 | 23.09 | 23.29 | 25A-25A-26A |
| 25 | 20 | QPSK | 1 | 0 | 26140 | 1860 | 8140 | 1940 | 25 | 20 | 8590 | 1985 | 41 | 20 | 40620 | 2593 | 23.27 | 23.29 | 25A-25A-41A |
| 25 | 20 | QPSK | 1 | 0 | 26365 | 1882.5 | 8365 | 1962.5 | 26 | 15 | 8865 | 876.5 | 41 | 20 | 40620 | 2593 | 23.48 | 23.57 | 25A-26A-41A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 4 | 20 | 2175 | 2132.5 | 13 | 10 | 751 | 5230 | 23.76 | 23.91 | 2A-4A-13A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 5 | 10 | 2525 | 881.5 | 7 | 20 | 3100 | 2655 | 23.81 | 23.91 | 2A-5A-7A |
| 48 | 20 | QPSK | 1 | 0 | 55340 | 3560 | 55340 | 3560 | 48 | 20 | 56640 | 3690 | 71 | 20 | 68786 | 637 | 21.83 | 21.96 | 48A-48A-71A |
| 48 | 20 | QPSK | 1 | 0 | 55340 | 3560 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 71 | 20 | 68786 | 637 | 21.86 | 21.96 | 48C-71A |
| 4 | 20 | QPSK | 1 | 0 | 20175 | 1732.5 | 2175 | 2132.5 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 23.78 | 23.82 | 4A-48C |
| 4 | 20 | QPSK | 1 | 99 | 20050 | 1720 | 2050 | 2120 | 4 | 20 | 2300 | 2145 | 13 | 10 | 5230 | 751 | 23.72 | 23.81 | 4A-4A-13A |
| 4 | 20 | QPSK | 1 | 99 | 20050 | 1720 | 2050 | 2120 | 4 | 20 | 2300 | 2145 | 71 | 20 | 68786 | 637 | 23.64 | 23.81 | 4A-4A-71A |
| 4 | 20 | QPSK | 1 | 99 | 20050 | 1720 | 2050 | 2120 | 4 | 20 | 2300 | 2145 | 7 | 20 | 3100 | 2655 | 23.78 | 23.81 | 4A-4A-7A |
| 5 | 10 | QPSK | 1 | 0 | 20600 | 844 | 2600 | 889 | 7 | 20 | 2850 | 2630 | 7 | 20 | 3350 | 2680 | 23.78 | 23.95 | 5A-7A-7A |
| 5 | 10 | QPSK | 1 | 0 | 20600 | 844 | 2600 | 889 | 7 | 20 | 2850 | 2630 | 7 | 20 | 3048 | 2649.8 | 23.82 | 23.95 | 5A-7C |

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# LTE Downlink 4CA conducted power table

| Four Component Carrier Maximum Conducted Power | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PCC | | | | | | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | Output power (dBm) | | Configurations |
| UL | | | | | | | DL | | DL | | | | DL | | | | DL | | | | | | |
| LTE Band | Bandwidth [MHz] | Modulation | RB | RB Offset | Channel | Frequency [MHz] | Channel | Frequency [MHz] | LTE Band | Bandwidth [MHz] | Channel | Frequency [MHz] | LTE Band | Bandwidth [MHz] | Channel | Frequency [MHz] | LTE Band | Bandwidth [MHz] | Channel | Frequency [MHz] | DL CA active | DL CA inactive | |
| 13 | 10 | QPSK | 1 | 25 | 23230 | 782 | 5230 | 751 | 48 | 20 | 55990 | 3625 | 66 | 10 | 67086 | 2175 | 66 | 10 | 67185 | 2184.9 | 23.24 | 23.43 | 13A-48A-66B |
| 13 | 10 | QPSK | 1 | 25 | 23230 | 782 | 5230 | 751 | 48 | 20 | 55990 | 3625 | 66 | 20 | 67036 | 2170 | 66 | 20 | 67234 | 2189.8 | 23.27 | 23.43 | 13A-48A-66C |
| 13 | 10 | QPSK | 1 | 25 | 23230 | 782 | 5230 | 751 | 66 | 20 | 66786 | 2145 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 23.32 | 23.43 | 13A-66A-66A-66A |
| 25 | 20 | QPSK | 1 | 0 | 26140 | 1860 | 8140 | 1940 | 25 | 20 | 8590 | 1985 | 41 | 20 | 39750 | 2506 | 41 | 20 | 39948 | 2525.8 | 23.20 | 23.29 | 25A-25A-41C |
| 25 | 20 | QPSK | 1 | 0 | 26365 | 1882.5 | 8365 | 1962.5 | 26 | 15 | 8865 | 876.5 | 41 | 20 | 39750 | 2506 | 41 | 20 | 39948 | 2525.8 | 23.46 | 23.57 | 25A-26A-41C |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 12 | 10 | 5095 | 737.5 | 66 | 20 | 67036 | 2170 | 66 | 20 | 67234 | 2189.8 | 23.77 | 23.91 | 2A-12A-66C |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 12 | 5 | 5035 | 731.5 | 12 | 5 | 5155 | 743.5 | 23.66 | 23.85 | 2A-2A-12A-12A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 4 | 20 | 2175 | 2132.5 | 12 | 10 | 5095 | 737.5 | 23.67 | 23.85 | 2A-2A-4A-12A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 4 | 20 | 2050 | 2120 | 4 | 20 | 2300 | 2145 | 23.70 | 23.85 | 2A-2A-4A-4A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 4 | 20 | 2175 | 2132.5 | 5 | 10 | 2525 | 881.5 | 23.70 | 23.85 | 2A-2A-4A-5A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 4 | 20 | 2175 | 2132.5 | 71 | 20 | 68786 | 637 | 23.64 | 23.85 | 2A-2A-4A-71A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 23.78 | 23.85 | 2A-2A-66A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 66 | 20 | 66886 | 2155 | 71 | 20 | 68786 | 637 | 23.79 | 23.85 | 2A-2A-66A-71A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 4 | 20 | 2175 | 2132.5 | 12 | 5 | 5035 | 731.5 | 12 | 5 | 5155 | 743.5 | 23.75 | 23.91 | 2A-4A-12A-12A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 4 | 20 | 2175 | 2132.5 | 12 | 10 | 5095 | 737.5 | 30 | 10 | 9820 | 2355 | 23.89 | 23.91 | 2A-4A-12A-30A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 4 | 20 | 2175 | 2132.5 | 12 | 5 | 5035 | 731.5 | 12 | 5 | 5083 | 736.3 | 23.84 | 23.91 | 2A-4A-12B |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 4 | 20 | 2050 | 2120 | 4 | 20 | 2300 | 2145 | 12 | 10 | 5095 | 737.5 | 23.88 | 23.91 | 2A-4A-4A-12A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 4 | 20 | 2050 | 2120 | 4 | 20 | 2300 | 2145 | 5 | 10 | 2525 | 881.5 | 23.75 | 23.91 | 2A-4A-4A-5A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 4 | 20 | 2175 | 2132.5 | 5 | 10 | 2525 | 881.5 | 30 | 10 | 9820 | 2355 | 23.80 | 23.91 | 2A-4A-5A-30A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 4 | 20 | 2175 | 2132.5 | 7 | 20 | 3100 | 2655 | 12 | 10 | 5095 | 737.5 | 23.85 | 23.91 | 2A-4A-7A-12A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 4 | 20 | 2175 | 2132.5 | 7 | 20 | 2850 | 2630 | 7 | 20 | 3350 | 2680 | 23.89 | 23.91 | 2A-4A-7A-7A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 4 | 20 | 2175 | 2132.5 | 7 | 20 | 2850 | 2630 | 7 | 20 | 3048 | 2649.8 | 23.75 | 23.91 | 2A-4A-7C |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 71 | 20 | 68786 | 637 | 23.85 | 23.91 | 2A-66A-66A-71A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 66 | 20 | 67036 | 2170 | 66 | 20 | 67234 | 2189.8 | 71 | 20 | 68786 | 637 | 23.79 | 23.91 | 2A-66C-71A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 898 | 1959.8 | 12 | 10 | 5095 | 737.5 | 30 | 10 | 9820 | 2355 | 23.75 | 23.85 | 2C-12A-30A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 898 | 1959.8 | 5 | 10 | 2525 | 881.5 | 30 | 10 | 9820 | 2355 | 23.82 | 23.85 | 2C-5A-30A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 898 | 1959.8 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 23.81 | 23.85 | 2C-66A-66A |
| 41 | 20 | QPSK | 1 | 99 | 39750 | 2506 | 39750 | 2506 | 41 | 20 | 41490 | 2680 | 41 | 20 | 39750 | 2506 | 41 | 20 | 39948 | 2525.8 | 23.84 | 23.95 | 41A-41A-41C |
| 41 | 20 | QPSK | 1 | 99 | 39750 | 2506 | 39750 | 2506 | 41 | 20 | 39750 | 2506 | 41 | 20 | 39948 | 2525.8 | 41 | 20 | 40146 | 2545.6 | 23.84 | 23.95 | 41A-41D |
| 41 | 20 | QPSK | 1 | 99 | 39750 | 2506 | 39750 | 2506 | 42 | 20 | 42590 | 3500 | 42 | 20 | 43490 | 3590 | 42 | 20 | 43292 | 3570.2 | 23.81 | 23.95 | 41A-42A-42C |
| 41 | 20 | QPSK | 1 | 99 | 39750 | 2506 | 39750 | 2506 | 42 | 20 | 43490 | 3590 | 42 | 20 | 43094 | 3550.4 | 42 | 20 | 43292 | 3570.2 | 23.80 | 23.95 | 41A-42D |
| 41 | 20 | QPSK | 1 | 99 | 39750 | 2506 | 39750 | 2506 | 41 | 20 | 39948 | 2525.8 | 41 | 20 | 41292 | 2660.2 | 41 | 20 | 41490 | 2680 | 23.83 | 23.95 | 41C-41C |
| 41 | 20 | QPSK | 1 | 99 | 39750 | 2506 | 39750 | 2506 | 41 | 20 | 39948 | 2525.8 | 41 | 20 | 40146 | 2545.6 | 42 | 20 | 43490 | 3590 | 23.79 | 23.95 | 41D-42A |
| 42 | 20 | QPSK | 1 | 0 | 43490 | 3590 | 43490 | 3590 | 42 | 20 | 41690 | 3410 | 42 | 20 | 43094 | 3550.4 | 42 | 20 | 43292 | 3570.2 | 23.73 | 23.93 | 42A-42D |
| 42 | 20 | QPSK | 1 | 0 | 43490 | 3590 | 43490 | 3590 | 42 | 20 | 42896 | 3530.6 | 42 | 20 | 43094 | 3550.4 | 42 | 20 | 43292 | 3570.2 | 23.74 | 23.93 | 42E |
| 48 | 20 | QPSK | 1 | 0 | 55340 | 3560 | 55340 | 3560 | 48 | 20 | 56640 | 3690 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 21.77 | 21.96 | 48A-48A-66A-66A |
| 48 | 20 | QPSK | 1 | 0 | 55340 | 3560 | 55340 | 3560 | 48 | 20 | 56640 | 3690 | 66 | 10 | 67086 | 2175 | 66 | 10 | 67185 | 2184.9 | 21.76 | 21.96 | 48A-48A-66B |
| 48 | 20 | QPSK | 1 | 0 | 55340 | 3560 | 55340 | 3560 | 48 | 20 | 56640 | 3690 | 66 | 20 | 67036 | 2170 | 66 | 20 | 67234 | 2189.8 | 21.83 | 21.96 | 48A-48A-66C |
| 48 | 20 | QPSK | 1 | 0 | 55340 | 3560 | 55340 | 3560 | 66 | 20 | 66786 | 2145 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 21.78 | 21.96 | 48A-66A-66A-66A |
| 48 | 20 | QPSK | 1 | 0 | 55340 | 3560 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 21.80 | 21.96 | 48C-66A-66A |
| 4 | 20 | QPSK | 1 | 0 | 20175 | 1732.5 | 2175 | 2132.5 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 55736 | 3599.6 | 23.76 | 23.82 | 4A-48D |
| 4 | 20 | QPSK | 1 | 99 | 20050 | 1720 | 2050 | 2120 | 4 | 20 | 2300 | 2145 | 12 | 5 | 5035 | 731.5 | 12 | 5 | 5155 | 743.5 | 23.71 | 23.81 | 4A-4A-12A-12A |
| 4 | 20 | QPSK | 1 | 99 | 20050 | 1720 | 2050 | 2120 | 4 | 20 | 2300 | 2145 | 12 | 10 | 5095 | 737.5 | 30 | 10 | 9820 | 2355 | 23.74 | 23.81 | 4A-4A-12A-30A |
| 4 | 20 | QPSK | 1 | 99 | 20050 | 1720 | 2050 | 2120 | 4 | 20 | 2300 | 2145 | 12 | 5 | 5035 | 731.5 | 12 | 5 | 5083 | 736.3 | 23.70 | 23.81 | 4A-4A-12B |
| 4 | 20 | QPSK | 1 | 99 | 20050 | 1720 | 2050 | 2120 | 4 | 20 | 2300 | 2145 | 5 | 10 | 2525 | 881.5 | 30 | 10 | 9820 | 2355 | 23.71 | 23.81 | 4A-4A-5A-30A |
| 5 | 10 | QPSK | 1 | 0 | 20450 | 829 | 2450 | 874 | 5 | 10 | 2600 | 889 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 23.81 | 23.91 | 5A-5A-66A-66A |
| 5 | 10 | QPSK | 1 | 0 | 20450 | 829 | 2450 | 874 | 5 | 10 | 2600 | 889 | 66 | 10 | 67086 | 2175 | 66 | 10 | 67185 | 2184.9 | 23.80 | 23.91 | 5A-5A-66B |
| 5 | 10 | QPSK | 1 | 0 | 20450 | 829 | 2450 | 874 | 5 | 10 | 2600 | 889 | 66 | 20 | 67036 | 2170 | 66 | 20 | 67234 | 2189.8 | 23.88 | 23.91 | 5A-5A-66C |
| 5 | 10 | QPSK | 1 | 0 | 20600 | 844 | 2600 | 889 | 66 | 20 | 66536 | 2120 | 66 | 10 | 67187 | 2185.1 | 66 | 10 | 67286 | 2195 | 23.87 | 23.95 | 5A-66A-66B |
| 5 | 10 | QPSK | 1 | 0 | 20600 | 844 | 2600 | 889 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67038 | 2170.2 | 66 | 20 | 67236 | 2190 | 23.86 | 23.95 | 5A-66A-66C |
| 5 | 10 | QPSK | 1 | 0 | 20600 | 844 | 2600 | 889 | 66 | 20 | 66536 | 2120 | 66 | 20 | 66734 | 2139.8 | 66 | 20 | 66932 | 2159.6 | 23.89 | 23.95 | 5A-66D |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 48 | 20 | 56715 | 3697.5 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 23.76 | 23.91 | 2A-48A-66A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 7 | 20 | 2850 | 2630 | 7 | 20 | 3350 | 2680 | 13 | 10 | 5230 | 751 | 23.79 | 23.91 | 2A-7A-7A-13A |

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# LTE Downlink 5CA conducted power table

| Five Component Carrier Maximum Conducted Power | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PCC | | | | | | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | SCC 4 | | | | Output power (dBm) | | Configurations |
| | | | UL | | | | DL | | DL | | | | DL | | | | DL | | | | DL | | | | | | |
| LTE Band | Bandwidth [MHz] | Modulation | RB | RB Offset | Channel | Frequency [MHz] | Channel | Frequency [MHz] | LTE Band | Bandwidth [MHz] | Channel | Frequency [MHz] | LTE Band | Bandwidth [MHz] | Channel | Frequency [MHz] | LTE Band | Bandwidth [MHz] | Channel | Frequency [MHz] | LTE Band | Bandwidth [MHz] | Channel | Frequency [MHz] | DL CA active | DL CA inactive | |
| 13 | 10 | QPSK | 1 | 25 | 23230 | 782 | 5230 | 751 | 48 | 20 | 55990 | 3625 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 66 | 20 | 66786 | 2145 | 23.36 | 23.43 | 13A-48A-48C-66A |
| 13 | 10 | QPSK | 1 | 25 | 23230 | 782 | 5230 | 751 | 48 | 20 | 55990 | 3625 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 55736 | 3599.6 | 23.28 | 23.43 | 13A-48A-48D |
| 13 | 10 | QPSK | 1 | 25 | 23230 | 782 | 5230 | 751 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 56640 | 3690 | 48 | 20 | 56442 | 3670.2 | 23.34 | 23.43 | 13A-48C-48C |
| 13 | 10 | QPSK | 1 | 25 | 23230 | 782 | 5230 | 751 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 66 | 10 | 67086 | 2175 | 66 | 10 | 67185 | 2184.9 | 23.31 | 23.43 | 13A-48C-66B |
| 13 | 10 | QPSK | 1 | 25 | 23230 | 782 | 5230 | 751 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 66 | 20 | 67036 | 2170 | 66 | 20 | 67234 | 2189.8 | 23.30 | 23.43 | 13A-48C-66C |
| 13 | 10 | QPSK | 1 | 25 | 23230 | 782 | 5230 | 751 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 55736 | 3599.6 | 66 | 20 | 66786 | 2145 | 23.26 | 23.43 | 13A-48D-66A |
| 25 | 20 | QPSK | 1 | 0 | 26140 | 1860 | 8140 | 1940 | 25 | 20 | 8590 | 1985 | 41 | 20 | 40422 | 2573.2 | 41 | 20 | 40620 | 2593 | 41 | 20 | 40818 | 2612.8 | 23.10 | 23.29 | 25A-25A-41D |
| 25 | 20 | QPSK | 1 | 0 | 26365 | 1882.5 | 8365 | 1962.5 | 41 | 20 | 39750 | 2506 | 41 | 20 | 39950 | 2526 | 41 | 20 | 40150 | 2546 | 41 | 20 | 40350 | 2566 | 23.40 | 23.57 | 25A-41E |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 12 | 10 | 5095 | 737.5 | 30 | 10 | 9820 | 2355 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 23.73 | 23.91 | 2A-12A-30A-66A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 13 | 10 | 5230 | 751 | 48 | 20 | 55340 | 3560 | 48 | 20 | 56640 | 3690 | 66 | 20 | 66786 | 2145 | 23.87 | 23.91 | 2A-13A-48A-48A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 13 | 10 | 5230 | 751 | 48 | 20 | 55990 | 3625 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 23.77 | 23.91 | 2A-13A-48A-48C |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 13 | 10 | 5230 | 751 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 66 | 20 | 66786 | 2145 | 23.76 | 23.91 | 2A-13A-48C-66A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 13 | 10 | 5230 | 751 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 55736 | 3599.6 | 23.77 | 23.91 | 2A-13A-48D |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 13 | 10 | 5230 | 751 | 66 | 20 | 66536 | 2120 | 66 | 10 | 67187 | 2185.1 | 66 | 10 | 67286 | 2195 | 23.88 | 23.91 | 2A-13A-66A-66B |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 13 | 10 | 5230 | 751 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67038 | 2170.2 | 66 | 20 | 67236 | 2190 | 23.79 | 23.91 | 2A-13A-66A-66C |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 13 | 10 | 5230 | 751 | 66 | 20 | 66536 | 2120 | 66 | 20 | 66734 | 2139.8 | 66 | 20 | 66932 | 2159.6 | 23.85 | 23.91 | 2A-13A-66D |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 14 | 10 | 5330 | 763 | 30 | 10 | 9820 | 2355 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 23.74 | 23.91 | 2A-14A-30A-66A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 14 | 10 | 5330 | 763 | 66 | 20 | 66786 | 2145 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 23.81 | 23.91 | 2A-14A-66A-66A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 12 | 10 | 5095 | 737.5 | 30 | 10 | 9820 | 2355 | 66 | 20 | 66786 | 2145 | 23.70 | 23.85 | 2A-2A-12A-30A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 12 | 10 | 5095 | 737.5 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 23.73 | 23.85 | 2A-2A-12A-66A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 12 | 10 | 5130 | 741 | 12 | 5 | 5058 | 733.8 | 66 | 20 | 66786 | 2145 | 23.67 | 23.85 | 2A-2A-12B-66A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 13 | 10 | 5230 | 751 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 23.70 | 23.85 | 2A-2A-13A-66A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 13 | 10 | 5230 | 751 | 66 | 10 | 67086 | 2175 | 66 | 10 | 67185 | 2184.9 | 23.78 | 23.85 | 2A-2A-13A-66B |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 14 | 10 | 5330 | 763 | 30 | 10 | 9820 | 2355 | 66 | 20 | 66786 | 2145 | 23.64 | 23.85 | 2A-2A-14A-30A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 14 | 10 | 5330 | 763 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 23.76 | 23.85 | 2A-2A-14A-66A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 5 | 10 | 2525 | 881.5 | 30 | 10 | 9820 | 2355 | 66 | 20 | 66786 | 2145 | 23.75 | 23.85 | 2A-2A-5A-30A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 5 | 10 | 2525 | 881.5 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 23.78 | 23.85 | 2A-2A-5A-66A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 5 | 10 | 2525 | 881.5 | 66 | 10 | 67086 | 2175 | 66 | 10 | 67185 | 2184.9 | 23.68 | 23.85 | 2A-2A-5A-66B |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 5 | 10 | 2525 | 881.5 | 66 | 20 | 67036 | 2170 | 66 | 20 | 67234 | 2189.8 | 23.69 | 23.85 | 2A-2A-5A-66C |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 5 | 10 | 829 | 2450 | 5 | 10 | 2549 | 883.9 | 66 | 20 | 66786 | 2145 | 23.71 | 23.85 | 2A-2A-5B-66A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 66 | 20 | 66536 | 2120 | 66 | 10 | 67187 | 2185.1 | 66 | 10 | 67286 | 2195 | 23.68 | 23.85 | 2A-2A-66A-66B |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67038 | 2170.2 | 66 | 20 | 67236 | 2190 | 23.83 | 23.85 | 2A-2A-66A-66C |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 1100 | 1980 | 7 | 20 | 3100 | 2655 | 12 | 10 | 5095 | 737.5 | 66 | 20 | 66786 | 2145 | 23.64 | 23.85 | 2A-2A-7A-12A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 48 | 20 | 55990 | 3625 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 66 | 20 | 66786 | 2145 | 23.83 | 23.91 | 2A-48A-48C-66A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 48 | 20 | 55990 | 3625 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 55736 | 3599.6 | 23.71 | 23.91 | 2A-48A-48D |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 56640 | 3690 | 48 | 20 | 56442 | 3670.2 | 23.78 | 23.91 | 2A-48C-48C |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 55736 | 3599.6 | 66 | 20 | 66786 | 2145 | 23.71 | 23.91 | 2A-48D-66A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 4 | 20 | 2175 | 2132.5 | 5 | 10 | 829 | 2450 | 5 | 10 | 2549 | 883.9 | 30 | 10 | 9820 | 2355 | 23.86 | 23.91 | 2A-4A-5B-30A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 5 | 10 | 2525 | 881.5 | 30 | 10 | 9820 | 2355 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 23.87 | 23.91 | 2A-5A-30A-66A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 5 | 10 | 2525 | 881.5 | 48 | 20 | 55340 | 3560 | 48 | 20 | 56640 | 3690 | 66 | 20 | 66786 | 2145 | 23.73 | 23.91 | 2A-5A-48A-48A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 5 | 10 | 2525 | 881.5 | 48 | 20 | 55990 | 3625 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 23.76 | 23.91 | 2A-5A-48A-48C |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 5 | 10 | 2525 | 881.5 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 66 | 20 | 66786 | 2145 | 23.86 | 23.91 | 2A-5A-48C-66A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 5 | 10 | 2525 | 881.5 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 55736 | 3599.6 | 23.73 | 23.91 | 2A-5A-48D |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 5 | 10 | 829 | 2450 | 5 | 10 | 2549 | 883.9 | 30 | 10 | 9820 | 2355 | 66 | 20 | 66786 | 2145 | 23.79 | 23.91 | 2A-5B-30A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 5 | 10 | 829 | 2450 | 5 | 10 | 2549 | 883.9 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 23.85 | 23.91 | 2A-5B-66A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 5 | 10 | 829 | 2450 | 5 | 10 | 2549 | 883.9 | 66 | 10 | 67086 | 2175 | 66 | 10 | 67185 | 2184.9 | 23.81 | 23.91 | 2A-5B-66B |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 5 | 10 | 829 | 2450 | 5 | 10 | 2549 | 883.9 | 66 | 20 | 67036 | 2170 | 66 | 20 | 67234 | 2189.8 | 23.84 | 23.91 | 2A-5B-66C |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 7 | 20 | 3100 | 2655 | 12 | 10 | 5130 | 741 | 12 | 5 | 5058 | 733.8 | 66 | 20 | 66786 | 2145 | 23.80 | 23.91 | 2A-7A-12B-66A |
| 2 | 20 | QPSK | 1 | 0 | 18700 | 1860 | 700 | 1940 | 2 | 20 | 898 | 1959.8 | 5 | 10 | 829 | 2450 | 5 | 10 | 2549 | 883.9 | 30 | 10 | 9820 | 2355 | 23.65 | 23.85 | 2C-5B-30A |
| 41 | 20 | QPSK | 1 | 99 | 39750 | 2506 | 39750 | 2506 | 42 | 20 | 41690 | 3410 | 42 | 20 | 41888 | 3429.8 | 42 | 20 | 43292 | 3570.2 | 42 | 20 | 43490 | 3590 | 23.77 | 23.95 | 41A-42C-42C |
| 41 | 20 | QPSK | 1 | 99 | 39750 | 2506 | 39750 | 2506 | 41 | 20 | 39948 | 2525.8 | 41 | 20 | 39750 | 2506 | 41 | 20 | 39948 | 2525.8 | 41 | 20 | 40146 | 2545.6 | 23.76 | 23.95 | 41C-41D |
| 41 | 20 | QPSK | 1 | 99 | 39750 | 2506 | 39750 | 2506 | 41 | 20 | 39948 | 2525.8 | 42 | 20 | 41690 | 3410 | 42 | 20 | 43292 | 3570.2 | 42 | 20 | 43490 | 3590 | 23.77 | 23.95 | 41C-42A-42C |
| 41 | 20 | QPSK | 1 | 99 | 39750 | 2506 | 39750 | 2506 | 41 | 20 | 39948 | 2525.8 | 41 | 20 | 40146 | 2545.6 | 42 | 20 | 41690 | 3410 | 42 | 20 | 41888 | 3429.8 | 23.87 | 23.95 | 41D-42C |
| 48 | 20 | QPSK | 1 | 0 | 55340 | 3560 | 55340 | 3560 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 66 | 10 | 67086 | 2175 | 66 | 10 | 67185 | 2184.9 | 21.87 | 21.96 | 48A-48C-66B |
| 48 | 20 | QPSK | 1 | 0 | 55340 | 3560 | 55340 | 3560 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 66 | 20 | 67036 | 2170 | 66 | 20 | 67234 | 2189.8 | 21.82 | 21.96 | 48A-48C-66C |
| 48 | 20 | QPSK | 1 | 0 | 55340 | 3560 | 55340 | 3560 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 55736 | 3599.6 | 66 | 20 | 66786 | 2145 | 21.87 | 21.96 | 48A-48D-66A |
| 48 | 20 | QPSK | 1 | 0 | 55340 | 3560 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 56640 | 3690 | 48 | 20 | 56442 | 3670.2 | 66 | 20 | 66786 | 2145 | 21.83 | 21.96 | 48C-48C-66A |
| 48 | 20 | QPSK | 1 | 0 | 55340 | 3560 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 55736 | 3599.6 | 21.90 | 21.96 | 48C-48D |
| 48 | 20 | QPSK | 1 | 0 | 55340 | 3560 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 66 | 20 | 66786 | 2145 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 21.87 | 21.96 | 48C-66A-66A |
| 48 | 20 | QPSK | 1 | 0 | 55340 | 3560 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 55736 | 3599.6 | 48 | 20 | 56640 | 3690 | 66 | 20 | 66786 | 2145 | 21.75 | 21.96 | 48E-66A |
| 48 | 20 | QPSK | 1 | 0 | 55340 | 3560 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 55736 | 3599.6 | 48 | 20 | 56640 | 3690 | 48 | 20 | 56244 | 3650.4 | 21.91 | 21.96 | 48F |
| 4 | 20 | QPSK | 1 | 0 | 20175 | 1732.5 | 2175 | 2132.5 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 55736 | 3599.6 | 48 | 20 | 56640 | 3690 | 23.71 | 23.82 | 4A-48E |
| 4 | 20 | QPSK | 1 | 99 | 20050 | 1720 | 2050 | 2120 | 4 | 20 | 2300 | 2145 | 5 | 10 | 829 | 2450 | 5 | 10 | 2549 | 883.9 | 30 | 10 | 9820 | 2355 | 23.76 | 23.81 | 4A-4A-5B-30A |
| 5 | 10 | QPSK | 1 | 0 | 20600 | 844 | 2600 | 889 | 48 | 20 | 55990 | 3625 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 66 | 20 | 66786 | 2145 | 23.82 | 23.95 | 5A-48A-48C-66A |
| 5 | 10 | QPSK | 1 | 0 | 20600 | 844 | 2600 | 889 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 56640 | 3690 | 48 | 20 | 56442 | 3670.2 | 23.75 | 23.95 | 5A-48C-48C |
| 5 | 10 | QPSK | 1 | 0 | 20600 | 844 | 2600 | 889 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 55736 | 3599.6 | 48 | 20 | 56640 | 3690 | 23.79 | 23.95 | 5A-48E |
| 5 | 10 | QPSK | 1 | 0 | 20450 | 829 | 829 | 2450 | 5 | 10 | 2549 | 883.9 | 30 | 10 | 9820 | 2355 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 23.70 | 23.91 | 5B-30A-66A-66A |
| 5 | 10 | QPSK | 1 | 0 | 20450 | 829 | 829 | 2450 | 5 | 10 | 2549 | 883.9 | 66 | 20 | 66536 | 2120 | 66 | 10 | 67187 | 2185.1 | 66 | 10 | 67286 | 2195 | 23.75 | 23.91 | 5B-66A-66B |
| 5 | 10 | QPSK | 1 | 0 | 20450 | 829 | 829 | 2450 | 5 | 10 | 2549 | 883.9 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67038 | 2170.2 | 66 | 20 | 67236 | 2190 | 23.75 | 23.91 | 5B-66A-66C |
| 5 | 10 | QPSK | 1 | 0 | 20600 | 844 | 2600 | 889 | 48 | 20 | 55990 | 3625 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 55736 | 3599.6 | 23.80 | 23.95 | 5A-48A-48D |
| 5 | 10 | QPSK | 1 | 0 | 20600 | 844 | 2600 | 889 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 55736 | 3599.6 | 66 | 20 | 66786 | 2145 | 23.86 | 23.95 | 5A-48D-66A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 12 | 10 | 5130 | 741 | 12 | 5 | 5058 | 733.8 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 23.87 | 23.91 | 2A-12B-66A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 7 | 20 | 2850 | 2630 | 7 | 20 | 3048 | 2649.8 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 23.77 | 23.91 | 2A-7C-66A-66A |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 7 | 20 | 2850 | 2630 | 7 | 20 | 3350 | 2680 | 66 | 20 | 66536 | 2120 | 66 | 20 | 67236 | 2190 | 23.83 | 23.91 | 2A-7A-7A-66A-66A |

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
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# LTE Downlink 6CA conducted power table

| Five Component Carrier Maximum Conducted Power | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PCC | | | | | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | SCC 4 | | | | SCC 5 | | | | Output power (dBm) | | Configurations |
| UL | | | | | | | DL | DL | | | | DL | | | | DL | | | | DL | | | | DL | | | | | | | | | | |
| LTE Band | Bandwidth [MHz] | Modulation | RB | RB Offset | Channel | Frequency [MHz] | Channel | Frequency [MHz] | LTE Band | Bandwidth [MHz] | Channel | Frequency [MHz] | LTE Band | Bandwidth [MHz] | Channel | Frequency [MHz] | LTE Band | Bandwidth [MHz] | Channel | Frequency [MHz] | LTE Band | Bandwidth [MHz] | Channel | Frequency [MHz] | LTE Band | Bandwidth [MHz] | Channel | Frequency [MHz] | DL CA active | DL CA inactive | | | | |
| 2 | 20 | QPSK | 1 | 0 | 18900 | 1880 | 900 | 1960 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 55736 | 3598.6 | 48 | 20 | 56640 | 3690 | 66 | 20 | 66786 | 2145 | 23.83 | 23.91 | 2A-48E-66A | | | | |
| 41 | 20 | QPSK | 1 | 99 | 39750 | 2506 | 39750 | 2506 | 41 | 20 | 39948 | 2525.8 | 42 | 20 | 41690 | 3410 | 42 | 20 | 41888 | 3429.8 | 42 | 20 | 43292 | 3570.2 | 42 | 20 | 43490 | 3590 | 23.93 | 23.95 | 41C-42C-42C | | | | |
| 13 | 10 | QPSK | 1 | 25 | 23230 | 782 | 5230 | 751 | 48 | 20 | 55340 | 3560 | 48 | 20 | 55538 | 3579.8 | 48 | 20 | 55736 | 3599.6 | 48 | 20 | 56640 | 3690 | 66 | 20 | 66786 | 2145 | 23.25 | 23.43 | 13A-48E-66A | | | | |

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

### A)

The device supports downlink LTE Carrier Aggregation (CA) only. It supports a maximum of 6 carriers in the downlink. Other Release 10 features or higher features are not supported, including Enhanced SC-FDMA, Uplink MIMO or other antenna diversity configurations etc. All uplink communications are identical to the Release 8 Specifications.

The possible downlink LTE CA combinations supported by this device are as below tables per 3GPP TS 36.521-1 V16.6.0. The conducted power measurement results of downlink LTE CA are provided as above per 3GPP TS 36.521-1 V16.6.0. According to KDB 941225 D05A and RF exposure procedures in TCB workshop April 2018, the downlink LTE CA SAR test is not required.

### B)

CA combination table

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
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| Index | 2CC | Restriction | Completely Covered by Measurement Superset | Index | 3CC | Restriction | Completely Covered by Measurement Superset | Index | 4CC | Restriction | Completely Covered by Measurement Superset | Index | 5CC | Restriction | Completely Covered by Measurement Superset | Index | 6CC | Restriction | Completely Covered by Measurement Superset |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2CC #1 | 12A-12A | | 3CC #87 | 3CC #69 | 12A-30A-66A | | 4CC #190 | 4CC #191 | 12A-30A-66A-66A | | 5CC #338 | 5CC #329 | 13A-48A-48C-66A | | No | 6CC #405 | 2A-48E-66A | | No |
| 2CC #2 | 12A-25A | | No | 3CC #70 | 12A-66A-66A | | 4CC #192 | 4CC #192 | 12B-66A-66A | | 5CC #402 | 5CC #330 | 13A-48A-48D | | No | 6CC #406 | 41C-42C-42C | | No |
| 2CC #3 | 12A-30A | | 3CC #89 | 3CC #71 | 12A-66C | | 4CC #210 | 4CC #193 | 13A-48A-48A-66A | | 5CC #339 | 5CC #331 | 13A-48C-48C | | No | 6CC #407 | 13A-48E-66A | | No |
| 2CC #4 | 12A-66A | | 3CC #70 | 3CC #72 | 12B-66A | | 4CC #192 | 4CC #195 | 13-48A-48C | | 5CC #329 | 5CC #332 | 13A-48C-66B | | No | | | | |
| 2CC #5 | 12B | | 3CC #72 | 3CC #73 | 13A-48A-48A | | 4CC #194 | 4CC #195 | 13A-48A-66B | | No | 5CC #333 | 13A-48C-66C | | No | | | | |
| 2CC #6 | 13A-48A | | 3CC #73 | 3CC #74 | 13A-48A-66A | | 4CC #196 | 4CC #196 | 13A-48A-66C | | No | 5CC #334 | 13A-48D-66A | | No | | | | |
| 2CC #7 | 13A-66A | | 3CC #76 | 3CC #75 | 13A-48C | | 4CC #197 | 4CC #197 | 13A-48C-66A | | 5CC #341 | 5CC #335 | 13A-48E | | 6CC #407 | | | | |
| 2CC #8 | 14A-30A | | 3CC #79 | 3CC #76 | 13A-66A-66A | | 4CC #199 | 4CC #198 | 13A-48D | | 5CC #334 | 5CC #336 | 25A-25A-41D | | No | | | | |
| 2CC #9 | 14A-66A | | 3CC #80 | 3CC #77 | 13A-66B | | 4CC #195 | 4CC #199 | 13A-48A-66A-66A | | No | 5CC #337 | 25A-41E | | No | | | | |
| 2CC #10 | 25A-25A | | 3CC #81 | 3CC #78 | 13A-66C | | 4CC #196 | 4CC #200 | 13A-66A-66B | | 5CC #343 | 5CC #338 | 2A-12A-30A-66A-66A | | No | | | | |
| 2CC #11 | 25A-26A | | 3CC #82 | 3CC #79 | 14A-30A-66A | | 4CC #203 | 4CC #201 | 13A-66A-66C | | 5CC #344 | 5CC #339 | 2A-13A-48A-48A-66A | | No | | | | |
| 2CC #12 | 25A-41A | | 3CC #83 | 3CC #80 | 14A-66A-66A | | 4CC #204 | 4CC #202 | 13A-66D | | 5CC #345 | 5CC #340 | 2A-13A-48A-48C | | No | | | | |
| 2CC #13 | 26A-41A | | 3CC #86 | 3CC #81 | 25A-25A-25A | | No | 4CC #203 | 14A-30A-66A-66A | | 5CC #346 | 5CC #341 | 2A-13A-48C-66A | | No | | | | |
| 2CC #14 | 2A-12A | | 3CC #87 | 3CC #82 | 25A-25A-26A | | No | 4CC #204 | 14A-66A-66A-66A | | 5CC #347 | 5CC #342 | 2A-13A-48D | | No | | | | |
| 2CC #15 | 2A-13A | | 3CC #91 | 3CC #83 | 25A-25A-41A | | No | 4CC #205 | 25A-25A-41C | | No | 5CC #343 | 2A-13A-66A-66B | | No | | | | |
| 2CC #16 | 2A-14A | | 3CC #93 | 3CC #84 | 25A-26A-41A | | No | 4CC #206 | 25A-26A-41C | | No | 5CC #344 | 2A-13A-66A-66C | | No | | | | |
| 2CC #17 | 2A-2A | | 3CC #95 | 3CC #85 | 25A-41C | | 4CC #205 | 4CC #207 | 25A-41D | | 5CC #336 | 5CC #345 | 2A-13A-66D | | No | | | | |
| 2CC #18 | 2A-30A | | 3CC #98 | 3CC #86 | 26A-41C | | 4CC #206 | 4CC #208 | 2A-12A-30A-66A | | 5CC #338 | 5CC #346 | 2A-14A-30A-66A-66A | | No | | | | |
| 2CC #19 | 2A-48A | | 3CC #105 | 3CC #87 | 2A-12A-12A | | 4CC #219 | 4CC #209 | 2A-12A-66A-66A | | 5CC #349 | 5CC #347 | 2A-14A-66A-66A-66A | | No | | | | |
| 2CC #20 | 2A-4A | | 3CC #108 | 3CC #88 | 2A-12A-30A | | 4CC #220 | 4CC #210 | 2A-12A-66C | | No | 5CC #348 | 2A-2A-12A-30A-66A | | No | | | | |
| 2CC #21 | 2A-5A | | 3CC #115 | 3CC #89 | 2A-12A-66A | | 4CC #210 | 4CC #211 | 2A-13A-48A-48A | | 5CC #339 | 5CC #349 | 2A-2A-12A-66A-66A | | No | | | | |
| 2CC #22 | 2A-66A | | 3CC #120 | 3CC #90 | 2A-12B | | 4CC #222 | 4CC #212 | 2A-13A-48A-66A | | 5CC #339 | 5CC #350 | 2A-2A-12B-66A | | No | | | | |
| 2CC #23 | 2A-71A | | 3CC #102 | 3CC #91 | 2A-13A-48A | | 4CC #211 | 4CC #213 | 2A-13A-48C | | 5CC #341 | 5CC #351 | 2A-2A-13A-66A-66A | | No | | | | |
| 2CC #24 | 2A-7A | | 3CC #126 | 3CC #92 | 2A-13A-66A | | 4CC #214 | 4CC #214 | 2A-13A-66A-66A | | 5CC #351 | 5CC #352 | 2A-2A-13A-66B | | No | | | | |
| 2CC #25 | 2C | | 3CC #128 | 3CC #93 | 2A-14A-30A | | 4CC #217 | 4CC #215 | 2A-13A-66B | | 5CC #352 | 5CC #353 | 2A-2A-14A-30A-66A | | No | | | | |
| 2CC #26 | 30A-66A | | 3CC #132 | 3CC #94 | 2A-14A-66A | | 4CC #218 | 4CC #216 | 2A-13A-66C | | 5CC #344 | 5CC #354 | 2A-2A-14A-66A-66A | | No | | | | |
| 2CC #27 | 39A-40A | | 3CC #133 | 3CC #95 | 2A-2A-12A | | 4CC #219 | 4CC #217 | 2A-14A-30A-66A | | 5CC #346 | 5CC #355 | 2A-2A-5A-30A-66A | | No | | | | |
| 2CC #28 | 3BC | | No | 3CC #96 | 2A-2A-13A | | 4CC #223 | 4CC #218 | 2A-14A-66A-66A | | 5CC #347 | 5CC #356 | 2A-2A-5A-66A-66A | | No | | | | |
| 2CC #29 | 41A-41A | | 3CC #134 | 3CC #97 | 2A-2A-14A | | 4CC #224 | 4CC #219 | 2A-2A-12A-12A | | No | 5CC #357 | 2A-2A-5A-66B | | No | | | | |
| 2CC #30 | 41A-42A | | 3CC #137 | 3CC #98 | 2A-2A-30A | | 4CC #226 | 4CC #220 | 2A-2A-12A-30A | | 5CC #348 | 5CC #358 | 2A-2A-5A-66C | | No | | | | |
| 2CC #31 | 41A-48A | | No | 3CC #99 | 2A-2A-4A | | 4CC #228 | 4CC #221 | 2A-2A-12A-66A | | 5CC #349 | 5CC #359 | 2A-2A-5B-66A | | No | | | | |
| 2CC #32 | 41C | | 5CC #380 | 3CC #100 | 2A-2A-5A | | 4CC #231 | 4CC #222 | 2A-2A-12B | | 5CC #350 | 5CC #360 | 2A-2A-66A-66B | | No | | | | |
| 2CC #33 | 42A-42A | | 3CC #136 | 3CC #101 | 2A-2A-66A | | 4CC #234 | 4CC #223 | 2A-2A-13A-66A | | 5CC #351 | 5CC #361 | 2A-2A-66A-66C | | No | | | | |
| 2CC #34 | 42C | | 5CC #379 | 3CC #102 | 2A-2A-71A | | 4CC #235 | 4CC #224 | 2A-2A-14A-30A | | 5CC #353 | 5CC #362 | 2A-2A-7A-12A-66A | | No | | | | |
| 2CC #35 | 48A-48A | | 3CC #142 | 3CC #103 | 2A-2A-7A | | 4CC #238 | 4CC #225 | 2A-2A-14A-66A | | 5CC #354 | 5CC #363 | 2A-48A-48C-66A | | No | | | | |
| 2CC #36 | 48A-66A | | 3CC #142 | 3CC #104 | 2A-30A-66A | | 4CC #226 | 4CC #226 | 2A-2A-30A-66A | | 5CC #355 | 5CC #364 | 2A-48A-48D | | No | | | | |
| 2CC #37 | 48A-71A | | 3CC #149 | 3CC #105 | 2A-48A-48A | | 4CC #240 | 4CC #227 | 2A-2A-4A-12A | | No | 5CC #365 | 2A-48C-48C | | No | | | | |
| 2CC #38 | 48C | | 3CC #107 | 3CC #106 | 2A-48A-66A | | 4CC #240 | 4CC #228 | 2A-2A-4A-4A | | No | 5CC #366 | 2A-48D-66A | | No | | | | |
| 2CC #39 | 4A-12A | | 3CC #108 | 3CC #107 | 2A-48C | | 4CC #242 | 4CC #229 | 2A-2A-4A-71A | | No | 5CC #367 | 2A-48E | | 6CC #405 | | | | |
| 2CC #40 | 4A-13A | | 3CC #109 | 3CC #108 | 2A-4A-12A | | 4CC #244 | 4CC #230 | 2A-2A-4A-71A | | No | 5CC #368 | 2A-4A-5B-30A | | No | | | | |
| 2CC #41 | 4A-30A | | 3CC #110 | 3CC #109 | 2A-4A-13A | | No | 4CC #231 | 2A-2A-5A-30A | | 5CC #355 | 5CC #369 | 2A-5A-30A-66A-66A | | No | | | | |
| 2CC #42 | 4A-48A | | No | 3CC #110 | 2A-4A-30A | | 4CC #240 | 4CC #232 | 2A-2A-5A-66A | | 5CC #355 | 5CC #370 | 2A-5A-48A-66A-66A | | No | | | | |
| 2CC #43 | 4A-4A | | 3CC #111 | 3CC #111 | 2A-4A-4A | | 4CC #247 | 4CC #233 | 2A-2A-5B | | 5CC #359 | 5CC #371 | 2A-5A-48A-48C | | No | | | | |
| 2CC #44 | 4A-5A | | 3CC #112 | 3CC #112 | 2A-4A-5A | | 4CC #249 | 4CC #234 | 2A-2A-66A-66A | | No | 5CC #372 | 2A-5A-48C-66A | | No | | | | |
| 2CC #45 | 4A-71A | | 3CC #113 | 3CC #113 | 2A-4A-71A | | 4CC #250 | 4CC #235 | 2A-2A-66A-71A | | No | 5CC #373 | 2A-5A-48D | | No | | | | |
| 2CC #46 | 4A-7A | | 3CC #114 | 3CC #114 | 2A-4A-7A | | 4CC #251 | 4CC #236 | 2A-2A-66B | | 5CC #360 | 5CC #374 | 2A-5B-30A-66A | | No | | | | |
| 2CC #47 | 5A-25A | | No | 3CC #115 | 2A-5A-30A | | 4CC #254 | 4CC #237 | 2A-2A-66C | | 5CC #361 | 5CC #375 | 2A-5B-66A-66A | | No | | | | |
| 2CC #48 | 5A-30A | | 3CC #115 | 3CC #116 | 2A-5A-48A | | 4CC #255 | 4CC #238 | 2A-2A-71A-66A | | 5CC #362 | 5CC #376 | 2A-5B-66B | | No | | | | |
| 2CC #49 | 5A-38A | | No | 3CC #117 | 2A-5A-66A | | 4CC #256 | 4CC #239 | 2A-30A-66A-66A | | 5CC #338 | 5CC #377 | 2A-5B-66C | | No | | | | |
| 2CC #50 | 5A-40A | | 3CC #166 | 3CC #118 | 2A-5A-7A | | No | 4CC #240 | 2A-48A-48A-66A | | 5CC #370 | 5CC #378 | 2A-7A-12B-66A | | No | | | | |
| 2CC #51 | 5A-41A | | No | 3CC #119 | 2A-5B | | 4CC #243 | 4CC #241 | 2A-48A-48C | | 5CC #363 | 5CC #379 | 2C-5B-30A | | No | | | | |
| 2CC #52 | 5A-48A | | 3CC #116 | 3CC #120 | 2A-66A-66A | | 4CC #234 | 4CC #242 | 2A-48C-66A | | 5CC #363 | 5CC #380 | 41A-42C-42C | | No | | | | |
| 2CC #53 | 5A-5A | | 3CC #169 | 3CC #121 | 2A-66A-71A | | 4CC #235 | 4CC #243 | 2A-48D | | 5CC #366 | 5CC #381 | 41C-41D | | No | | | | |
| 2CC #54 | 5A-66A | | 3CC #170 | 3CC #122 | 2A-66B | | 4CC #236 | 4CC #244 | 2A-4A-12A-12A | | No | 5CC #382 | 41C-42A-42C | | No | | | | |
| 2CC #55 | 5A-7A | | 3CC #173 | 3CC #123 | 2A-66C | | 4CC #237 | 4CC #245 | 2A-4A-12A-30A | | No | 5CC #383 | 41D-42C | | No | | | | |
| 2CC #56 | 5B | | 3CC #119 | 3CC #124 | 2A-7A-12A | | 4CC #251 | 4CC #246 | 2A-4A-12B | | No | 5CC #384 | 48A-48C-66B | | No | | | | |
| 2CC #57 | 65A-66A | | 3CC #132 | 3CC #125 | 2A-7A-66A | | 4CC #238 | 4CC #247 | 2A-4A-48A-12A | | No | 5CC #385 | 48A-48C-66C | | No | | | | |
| 2CC #58 | 66A-71A | | 3CC #121 | 3CC #126 | 2A-7A-7A | | 4CC #252 | 4CC #248 | 2A-4A-4A-5A | | No | 5CC #386 | 48A-48D-66A | | No | | | | |
| 2CC #59 | 66B | | 3CC #145 | 3CC #127 | 2A-7C | | 4CC #253 | 4CC #249 | 2A-4A-5A-30A | | No | 5CC #387 | 48C-48C-66A | | No | | | | |
| 2CC #60 | 66C | | 3CC #146 | 3CC #128 | 2C-12A | | 4CC #272 | 4CC #250 | 2A-4A-5B | | 5CC #368 | 5CC #388 | 48C-48D | | No | | | | |
| 2CC #61 | 7A-12A | | 3CC #124 | 3CC #129 | 2C-30A | | 4CC #261 | 4CC #251 | 2A-4A-7A-12A | | No | 5CC #389 | 48C-66A-66A-66A | | No | | | | |
| 2CC #62 | 7A-42A | | No | 3CC #130 | 2C-5A | | 4CC #273 | 4CC #252 | 2A-4A-7A-7A | | No | 5CC #390 | 48E-66A | | No | | | | |
| 2CC #63 | 7A-66A | | 3CC #125 | 3CC #131 | 2C-66A | | 4CC #274 | 4CC #253 | 2A-4A-7C | | No | 5CC #391 | 48F | | No | | | | |
| 2CC #64 | 7A-7A | | 3CC #126 | 3CC #132 | 30A-66A-66A | | 4CC #239 | 4CC #254 | 2A-5A-30A-66A | | 5CC #369 | 5CC #392 | 4A-48E | | No | | | | |
| 2CC #65 | 7B | | No | 3CC #133 | 41A-41A-41A | | 4CC #275 | 4CC #255 | 2A-5A-48A-48A | | 5CC #370 | 5CC #393 | 4A-4A-5B-30A | | No | | | | |
| 2CC #66 | 7C | | 3CC #127 | 3CC #134 | 41A-41C | | 4CC #275 | 4CC #256 | 2A-5A-48A-66A | | 5CC #370 | 5CC #394 | 5A-48A-48C-66A | | No | | | | |
| 2CC #67 | 4A-17A | | No | 3CC #135 | 41A-42A-42A | | 4CC #277 | 4CC #257 | 2A-5A-48C | | 5CC #372 | 5CC #395 | 5A-48C-48C | | No | | | | |
| 2CC #68 | 2A-17A | | No | 3CC #136 | 41A-42C | | 4CC #277 | 4CC #258 | 2A-5A-66A-66A | | 5CC #336 | 5CC #396 | 5A-48E | | No | | | | |
| | | | | 3CC #137 | 41C-42A | | 4CC #260 | 4CC #259 | 2A-5A-66B | | 5CC #357 | 5CC #397 | 5B-30A-66A-66A | | No | | | | |
| | | | | 3CC #138 | 41D | | 4CC #276 | 4CC #260 | 2A-5A-66C | | 5CC #358 | 5CC #398 | 5B-66A-66B | | No | | | | |
| | | | | 3CC #139 | 42A-42C | | 4CC #277 | 4CC #261 | 2A-5B-30A | | 5CC #374 | 5CC #399 | 5B-66A-66C | | No | | | | |
| | | | | 3CC #140 | 42D | | 4CC #262 | 4CC #262 | 2A-5B-66A | | 5CC #375 | 5CC #400 | 5A-48A-48D | | No | | | | |
| | | | | 3CC #141 | 48A-48A-66A | | 4CC #286 | 4CC #263 | 2A-66A-66A-66A | | 5CC #347 | 5CC #401 | 5A-48D-66A | | No | | | | |
| | | | | 3CC #142 | 48A-48A-71A | | No | 4CC #264 | 2A-66A-66A-71A | | No | 5CC #402 | 2A-12B-66A-66A | | No | | | | |
| | | | | 3CC #143 | 48A-48C | | 4CC #263 | 4CC #265 | 2A-66A-66B | | 5CC #360 | 5CC #403 | 2A-7C-66A-66A | | No | | | | |
| | | | | 3CC #144 | 48A-66A-66A | | 4CC #286 | 4CC #266 | 2A-66A-66C | | 5CC #361 | 5CC #404 | 2A-7A-7A-66A-66A | | No | | | | |
| | | | | 3CC #145 | 48A-66B | | 4CC #287 | 4CC #267 | 2A-66C-71A | | No | | | | | | | | |
| | | | | 3CC #146 | 48A-66C | | 4CC #288 | 4CC #268 | 2A-66D | | 5CC #345 | | | | | | | | |
| | | | | 3CC #147 | 48C-66A | | 4CC #289 | 4CC #269 | 2A-7A-12A-66A | | 5CC #362 | | | | | | | | |
| | | | | 3CC #148 | 48C-71A | | No | 4CC #270 | 2A-7A-12B | | 5CC #378 | | | | | | | | |
| | | | | 3CC #149 | 48D | | 4CC #290 | 4CC #271 | 2A-7A-66A-66A | | 5CC #404 | | | | | | | | |
| | | | | 3CC #150 | 4A-12A-12A | | 4CC #299 | 4CC #272 | 2C-12A-30A | | No | | | | | | | | |
| | | | | 3CC #151 | 4A-12A-30A | | 4CC #300 | 4CC #273 | 2C-5A-30A | | No | | | | | | | | |
| | | | | 3CC #152 | 4A-12B | | 4CC #301 | 4CC #274 | 2C-66A-66A | | No | | | | | | | | |
| | | | | 3CC #153 | 4A-48C | | No | 4CC #275 | 41A-41A-41C | | No | | | | | | | | |
| | | | | 3CC #154 | 4A-4A-12A | | 4CC #299 | 4CC #276 | 41B-41D | | No | | | | | | | | |
| | | | | 3CC #155 | 4A-4A-13A | | No | 4CC #277 | 41A-42A-42C | | No | | | | | | | | |
| | | | | 3CC #156 | 4A-4A-30A | | 4CC #300 | 4CC #278 | 41A-42D | | No | | | | | | | | |
| | | | | 3CC #157 | 4A-4A-5A | | 4CC #303 | 4CC #279 | 41D-41C | | No | | | | | | | | |
| | | | | 3CC #158 | 4A-4A-71A | | No | 4CC #280 | 41D-42C | | 5CC #382 | | | | | | | | |
| | | | | 3CC #159 | 4A-4A-7A | | No | 4CC #281 | 41D-42A | | No | | | | | | | | |
| | | | | 3CC #160 | 4A-5A-30A | | 4CC #302 | 4CC #282 | 41E | | 5CC #337 | | | | | | | | |
| | | | | 3CC #161 | 4A-5B | | 4CC #303 | 4CC #283 | 42B-42D | | No | | | | | | | | |
| | | | | 3CC #162 | 4A-7A-12A | | 4CC #251 | 4CC #284 | 42C-42C | | 5CC #380 | | | | | | | | |
| | | | | 3CC #163 | 4A-7A-7A | | 4CC #252 | 4CC #285 | 42E | | No | | | | | | | | |
| | | | | 3CC #164 | 4A-7C | | 4CC #253 | 4CC #286 | 48A-48A-66A-66A | | No | | | | | | | | |
| | | | | 3CC #165 | 5A-30A-66A | | 4CC #305 | 4CC #287 | 48A-48A-66B | | No | | | | | | | | |
| | | | | 3CC #166 | 5A-48A-66A | | 4CC #306 | 4CC #288 | 48A-48A-66C | | No | | | | | | | | |
| | | | | 3CC #167 | 5A-48A-66A | | 4CC #308 | 4CC #289 | 48A-48C-66A | | 5CC #394 | | | | | | | | |
| | | | | 3CC #168 | 5A-48C | | 4CC #308 | 4CC #290 | 48A-48D | | 5CC #400 | | | | | | | | |
| | | | | 3CC #169 | 5A-5A-66A | | 4CC #310 | 4CC #291 | 48A-66A-66A-66A | | No | | | | | | | | |
| | | | | 3CC #170 | 5A-66A-66A | | 4CC #310 | 4CC #292 | 48C-48C | | 5CC #395 | | | | | | | | |
| | | | | 3CC #171 | 5A-66B | | 4CC #311 | 4CC #293 | 48C-66A-66A | | No | | | | | | | | |
| | | | | 3CC #172 | 5A-66C | | 4CC #312 | 4CC #294 | 48C-66B | | 5CC #394 | | | | | | | | |
| | | | | 3CC #173 | 5A-7A-7A | | No | 4CC #295 | 48C-66C | | 5CC #385 | | | | | | | | |
| | | | | 3CC #174 | 5A-7C | | No | 4CC #296 | 48D-66A | | 5CC #401 | | | | | | | | |
| | | | | 3CC #175 | 5B-30A | | 4CC #316 | 4CC #297 | 48E | | 5CC #396 | | | | | | | | |
| | | | | 3CC #176 | 5B-66A | | 4CC #317 | 4CC #298 | 4A-48D | | No | | | | | | | | |
| | | | | 3CC #177 | 66A-66A-66A | | 4CC #283 | 4CC #299 | 4A-4A-12A-12A | | No | | | | | | | | |
| | | | | 3CC #178 | 66A-66A-71A | | 4CC #264 | 4CC #300 | 4A-4A-12A-30A | | No | | | | | | | | |
| | | | | 3CC #179 | 66A-66B | | 4CC #313 | 4CC #301 | 4A-4A-12B | | No | | | | | | | | |
| | | | | 3CC #180 | 66A-66C | | 4CC #314 | 4CC #302 | 4A-4A-5A-30A | | No | | | | | | | | |
| | | | | 3CC #181 | 66C-71A | | 4CC #267 | 4CC #303 | 4A-4A-5B | | 5CC #393 | | | | | | | | |
| | | | | 3CC #182 | 66D | | 4CC #268 | 4CC #304 | 4A-5B-30A | | 5CC #393 | | | | | | | | |
| | | | | 3CC #183 | 7A-12A-66A | | 4CC #269 | 4CC #305 | 5A-30A-66A-66A | | 5CC #369 | | | | | | | | |
| | | | | 3CC #184 | 7A-12B | | 4CC #270 | 4CC #306 | 5A-48A-66A-66A | | 5CC #370 | | | | | | | | |
| | | | | 3CC #185 | 7A-66A-66A | | 4CC #326 | 4CC #307 | 5A-48A-48C | | 5CC #371 | | | | | | | | |
| | | | | 3CC #186 | 7C-66A | | 4CC #321 | 4CC #308 | 5A-48C-66A | | 5CC #372 | | | | | | | | |
| | | | | 3CC #187 | 2A-48A-66A | | 4CC #325 | 4CC #309 | 5A-48D | | 5CC #373 | | | | | | | | |
| | | | | 3CC #188 | 48A-66B | | 4CC #195 | 4CC #310 | 5A-5A-66A-66A | | No | | | | | | | | |
| | | | | 3CC #189 | 7A-7A-66A | | 4CC #326 | 4CC #311 | 5A-5A-66B | | No | | | | | | | | |
| | | | | 3CC #190 | 7A-7A-13A | | 4CC #328 | 4CC #312 | 5A-5A-66C | | No | | | | | | | | |
| | | | | | | | | 4CC #313 | 5A-66A-66B | | No | | | | | | | | |
| | | | | | | | | 4CC #314 | 5A-66A-66C | | No | | | | | | | | |
| | | | | | | | | 4CC #315 | 5A-66D | | No | | | | | | | | |
| | | | | | | | | 4CC #316 | 5B-30A-66A | | 5CC #397 | | | | | | | | |
| | | | | | | | | 4CC #317 | 5B-66A-66A | | 5CC #397 | | | | | | | | |
| | | | | | | | | 4CC #318 | 5B-66B | | 5CC #376 | | | | | | | | |
| | | | | | | | | 4CC #319 | 5B-66C | | 5CC #377 | | | | | | | | |
| | | | | | | | | 4CC #320 | 7A-12B-66A | | 5CC #378 | | | | | | | | |
| | | | | | | | | 4CC #321 | 7C-66A-66A | | 5CC #403 | | | | | | | | |
| | | | | | | | | 4CC #322 | 2A-12B-66A | | 5CC #350 | | | | | | | | |
| | | | | | | | | 4CC #323 | 2A-7A-7A-66A | | 5CC #404 | | | | | | | | |
| | | | | | | | | 4CC #324 | 2A-7C-66A | | 5CC #403 | | | | | | | | |
| | | | | | | | | 4CC #325 | 2A-48A-66A-66A | | No | | | | | | | | |
| | | | | | | | | 4CC #328 | 7A-7A-66A-66A | | 5CC #404 | | | | | | | | |
| | | | | | | | | 4CC #327 | 2A-2A-7A-12A | | 5CC #362 | | | | | | | | |
| | | | | | | | | 4CC #328 | 2A-7A-7A-13A | | No | | | | | | | | |

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Note:

1) The channel spacing and aggregated channel bandwidth for CA are identical to the associated specification in 3GPP TS 36.521-1 V16.6.0.

2) The reference test frequencies for CA refers to 3GPP TS 36.508 V16.6.0

3) Testing is not required in bands or modes not intended/allowed for US operation

4) Based on TCB workshop April 2018, only indicate “No” in CA combination table need power measurement

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### 1.3.3 SAR test exclusion for LTE DL MIMO

SAR test exclusion for LTE DL MIMO was determined by UL power measurements with and without DL MIMO. SAR for DL MIMO was not needed since the maximum output power with DL MIMO active was not > 0.25dB higher than the maximum output power with DL MIMO inactive.

| DL MIMO maximum power verification | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PCC | | | | | | | Output power (dBm) | |
| UL | | | | | | | DL MIMO active | DL MIMO inactive |
| Band | Bandwidth [MHz] | Modulation | RB | RB Offset | Frequency [MHz] | Channel | | |
| LTE B2 | 20 | QPSK | 1 | 0 | 1880 | 18900 | 23.73 | 23.91 |
| LTE B4 | 20 | QPSK | 1 | 0 | 1732.5 | 20175 | 23.61 | 23.82 |
| LTE B5 | 10 | QPSK | 1 | 0 | 844 | 20600 | 23.78 | 23.95 |
| LTE B7 | 20 | QPSK | 1 | 99 | 2535 | 21100 | 23.39 | 23.51 |
| LTE B12 | 10 | QPSK | 1 | 49 | 704 | 23060 | 23.47 | 23.59 |
| LTE B13 | 10 | QPSK | 1 | 25 | 782 | 23230 | 23.36 | 23.43 |
| LTE B14 | 10 | QPSK | 1 | 25 | 793 | 23330 | 23.48 | 23.69 |
| LTE B17 | 10 | QPSK | 1 | 25 | 709 | 23780 | 23.29 | 23.46 |
| LTE B25 | 20 | QPSK | 1 | 0 | 1882.5 | 26365 | 23.54 | 23.57 |
| LTE B26 | 15 | QPSK | 1 | 0 | 831.5 | 26865 | 24.19 | 24.25 |
| LTE B30 | 10 | QPSK | 1 | 0 | 2310 | 27710 | 22.95 | 22.97 |
| LTE B38 | 20 | QPSK | 1 | 0 | 2580 | 37850 | 23.93 | 23.96 |
| LTE B41 | 20 | QPSK | 1 | 99 | 2506 | 39750 | 23.82 | 23.95 |
| LTE B66 | 20 | QPSK | 1 | 0 | 1770 | 132572 | 23.85 | 24.00 |
| LTE B42 | 20 | QPSK | 1 | 0 | 3590 | 43490 | 18.99 | 19.16 |
| LTE B48 | 20 | QPSK | 1 | 0 | 3690 | 56640 | 19.19 | 19.25 |

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## 1.4 Test Environment

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

## 1.5 Operation Description

For WWAN, the EUT is controlled by using a Radio Communication Tester, and the communication between the EUT and the tester is established by air link. Also, the device is a laptop computer with notebook mode only, so SAR measurement for notebook mode is required.

**Notebook mode**

SAR is measured with display screen open at 90 degree and bottom side of keyboard touch against the flat phantom.

**Note:**

1. During the SAR testing, the DASY 5 system checks power drift by comparing the e-field strength of one specific location measured at the beginning with that measured at the end of the SAR testing.

2. **UMTS:** The 3G SAR test reduction procedure is applied to HSDPA with 12.2 kbps RMC as the primary mode. Since the maximum output power in a secondary mode (HSDPA) is ≤ ¼ dB higher than the primary mode (WCDMA), SAR measurement is not required for the secondary mode (HSDPA). The following 4 sub-tests were completed according to Release 5 procedures in section 5.2 of 3GPP TS 34.121. A summary of these setting are illustrated below:

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| Sub-test | $\beta_c$ | $\beta_d$ | $\beta_d$ (SF) | $\beta_c/\beta_d$ | $\beta_{hs}$ (1) | CM (dB) (2) |
|---|---|---|---|---|---|---|
| 1 | 2/15 | 15/15 | 64 | 2/15 | 4/15 | 0.0 |
| 2 | 12/15 (3) | 15/15 (3) | 64 | 12/15 (3) | 24/15 | 1.0 |
| 3 | 15/15 | 8/15 | 64 | 15/8 | 30/15 | 1.5 |
| 4 | 15/15 | 4/15 | 64 | 15/4 | 30/15 | 1.5 |

Note 1: $\Delta_{ACK}$, $\Delta_{NACK}$ and $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$
Note 2: CM = 1 for $\beta_c/\beta_d$ =12/15, $\beta_{hs}/\beta_c$=24/15.
Note 3: For subtest 2 the $\beta_c/\beta_d$ ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to $\beta_c$ = 11/15 and $\beta_d$ = 15/15.

3. **UMTS:** The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) with 12.2 kbps RMC as the primary mode. Since the maximum output power in a secondary mode (HSPA) is ≤ ¼ dB higher than the primary mode (WCDMA), SAR measurement is not required for the secondary mode (HSPA). The following 5 sub-tests were completed according to Release 6 procedures in section 5.2 of 3GPP TS 34.121. A summary of these setting are illustrated below:

| Sub-test | $\beta_c$ | $\beta_d$ | $\beta_d$ (SF) | $\beta_c/\beta_d$ | $\beta_{hs}$ (1) | $\beta_{ec}$ | $\beta_{ed}$ | $\beta_{ed}$ (SF) | $\beta_{ed}$ (codes) | CM (2) (dB) | MPR (dB) | AG (4) Index | E-TFCI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11/15 (3) | 15/15 (3) | 64 | 11/15 (3) | 22/15 | 209/225 | 1039/225 | 4 | 1 | 1.0 | 0.0 | 20 | 75 |
| 2 | 6/15 | 15/15 | 64 | 6/15 | 12/15 | 12/15 | 94/75 | 4 | 1 | 3.0 | 2.0 | 12 | 67 |
| 3 | 15/15 | 9/15 | 64 | 15/9 | 30/15 | 30/15 | $\beta_{ed1}$: 47/15 $\beta_{ed2}$: 47/15 | 4 | 2 | 2.0 | 1.0 | 15 | 92 |
| 4 | 2/15 | 15/15 | 64 | 2/15 | 4/15 | 2/15 | 56/75 | 4 | 1 | 3.0 | 2.0 | 17 | 71 |
| 5 | 15/15 (4) | 15/15 (4) | 64 | 15/15 (4) | 30/15 | 24/15 | 134/15 | 4 | 1 | 1.0 | 0.0 | 21 | 81 |

Note 1: $\Delta_{ACK}$, $\Delta_{NACK}$ and $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$.
Note 2: CM = 1 for $\beta_c/\beta_d$ =12/15, $\beta_{hs}/\beta_c$=24/15. For all other combinations of DPDCH, DPCCH, HS- DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.
Note 3: For subtest 1 the $\beta_c/\beta_d$ ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to $\beta_c$ = 10/15 and $\beta_d$ = 15/15.
Note 4: For subtest 5 the $\beta_c/\beta_d$ ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to $\beta_c$ = 14/15 and $\beta_d$ = 15/15.
Note 5: Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g.
Note 6: $\beta_{ed}$ cannot be set directly; it is set by Absolute Grant Value.

4. **UMTS:** The 3G SAR test reduction procedure is applied to HSPA+ with 12.2 kbps RMC as the primary mode. Since the maximum output power in a secondary mode (HSPA+) is ≤ ¼ dB higher than the primary mode (WCDMA), SAR measurement is not required for the secondary mode (HSPA+). The following 1 sub-test was completed according to Release 7 procedures in section 5.2 of 3GPP TS34.121. A summary of these settings are illustrated below:

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**Table C.11.1.4: β values for transmitter characteristics tests with HS-DPCCH and E-DCH with 16QAM**

| Sub-test | $\beta_c$ (Note3) | $\beta_d$ | $\beta_{HS}$ (Note1) | $\beta_{ec}$ | $\beta_{ed}$ (2xSF2) (Note 4) | $\beta_{ed}$ (2xSF4) (Note 4) | CM (dB) (Note 2) | MPR (dB) (Note 2) | AG Index (Note 4) | E-TFCI (Note 5) | E-TFCI (boost) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 0 | 30/15 | 30/15 | $\beta_{ed}$1: 30/15<br>$\beta_{ed}$2: 30/15 | $\beta_{ed}$3: 24/15<br>$\beta_{ed}$4: 24/15 | 3.5 | 2.5 | 14 | 105 | 105 |

Note 1: $\Delta_{ACK}$, $\Delta_{NACK}$ and $\Delta_{CQI}$ = 30/15 with $\beta_{hs} = 30/15 * \beta_c$.
Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0).
Note 3: DPDCH is not configured, therefore the $\beta_c$ is set to 1 and $\beta_d$ = 0 by default.
Note 4: $\beta_{ed}$ can not be set directly; it is set by Absolute Grant Value.
Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signalled to use the extrapolation algorithm.

5. **UMTS:** The 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable. Since the maximum output power in a secondary mode (DC-HSDPA) is ≤ ¼ dB higher than the primary mode (WCDMA), SAR measurement is not required for the secondary mode (DC-HSDPA). The following tests were completed according to procedures in section 7.3.13 of 3GPP TS 34.108 v9.5.0. A summary of these setting are illustrated below:

   The configurations of the fixed reference channels for HSDPA RF tests are described in 3GPP TS 34.121, annex C for FDD and 3GPP TS 34.122

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**Table C.8.1.12: Fixed Reference Channel H-Set 12**

| Parameter | Unit | Value |
|---|---|---|
| Nominal Avg. Inf. Bit Rate | kbps | 60 |
| Inter-TTI Distance | TTI's | 1 |
| Number of HARQ Processes | Processes | 6 |
| Information Bit Payload ( $N_{INF}$ ) | Bits | 120 |
| Number Code Blocks | Blocks | 1 |
| Binary Channel Bits Per TTI | Bits | 960 |
| Total Available SML's in UE | SML's | 19200 |
| Number of SML's per HARQ Proc. | SML's | 3200 |
| Coding Rate | | 0.15 |
| Number of Physical Channel Codes | Codes | 1 |
| Modulation | | QPSK |
| Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table. | | |
| Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used. | | |

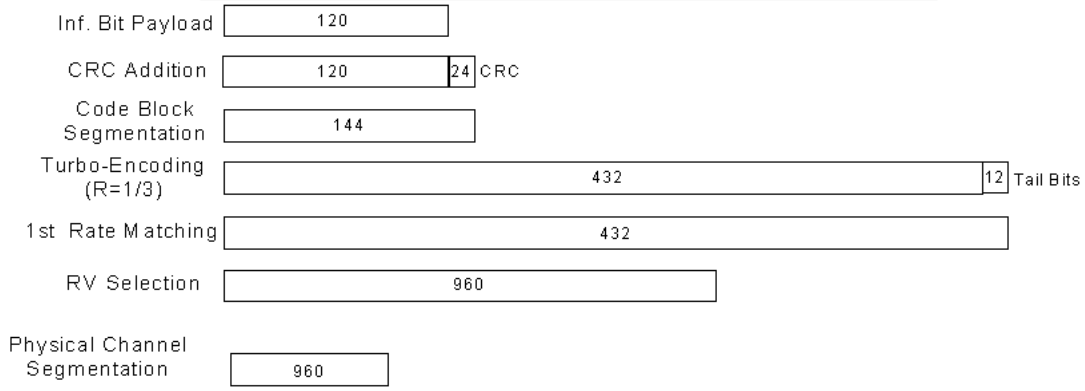


**Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)**

The following 4 sub-tests for HSDPA were completed according to Release 8 procedures in section 5.2 of 3GPP TS34.121. A summary of subtest settings are illustrated below:

| Sub-test | $\beta_c$ | $\beta_d$ | $\beta_d$ (SF) | $\beta_c/\beta_d$ | $\beta_{hs}$ (1) | CM (dB) (2) |
|---|---|---|---|---|---|---|
| 1 | 2/15 | 15/15 | 64 | 2/15 | 4/15 | 0.0 |
| 2 | 12/15 (3) | 15/15 (3) | 64 | 12/15 (3) | 24/15 | 1.0 |
| 3 | 15/15 | 8/15 | 64 | 15/8 | 30/15 | 1.5 |
| 4 | 15/15 | 4/15 | 64 | 15/4 | 30/15 | 1.5 |

Note 1: $\Delta_{ACK}$, $\Delta_{NACK}$ and $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$
Note 2: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$.
Note 3: For subtest 2 the $\beta_c/\beta_d$ ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$.

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6. **LTE:** LTE modes test according to **KDB 941225D05v02r05.**

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

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- 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.
- TDD LTE was tested at highest duty factor using UL-DL configuration 0 with 6 UL subframes and 2 special 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 4.2, the duty factor for UL-DL configuration 0/special subframe configuration 6 using extended cyclic prefix is 0.633.

According to KDB 941225 D05, SAR testing for TDD LTE must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP TDD LTE configurations. The TDD-LTE of this device supports frame structure type 2 defined in 3GPP TS 36.211 section 4.2, and the frame structure configuration can be tabulated as below.

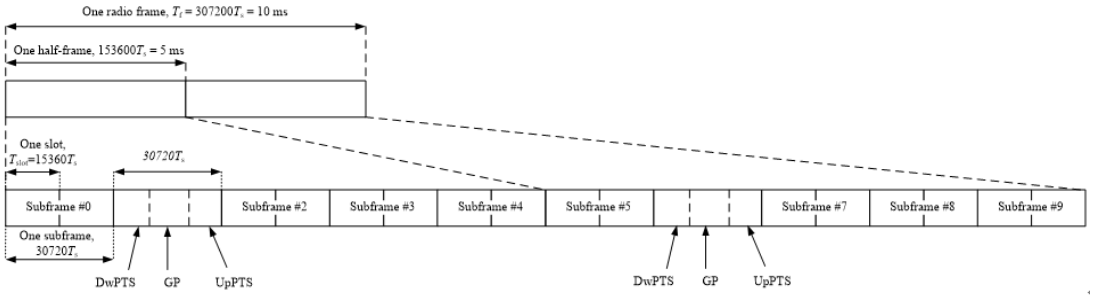


**Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity)**

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**Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)**

| Special subframe configuration | Normal cyclic prefix in downlink | | | Extended cyclic prefix in downlink | | |
|---|---|---|---|---|---|---|
| | DwPTS | UpPTS | | DwPTS | UpPTS | |
| | | Normal cyclic prefix in uplink | Extended cyclic prefix in uplink | | Normal cyclic prefix in uplink | Extended cyclic prefix in uplink |
| 0 | $6592 \cdot T_s$ | $(1+X) \cdot 2192 \cdot T_s$ | $(1+X) \cdot 2560 \cdot T_s$ | $7680 \cdot T_s$ | $(1+X) \cdot 2192 \cdot T_s$ | $(1+X) \cdot 2560 \cdot T_s$ |
| 1 | $19760 \cdot T_s$ | | | $20480 \cdot T_s$ | | |
| 2 | $21952 \cdot T_s$ | | | $23040 \cdot T_s$ | | |
| 3 | $24144 \cdot T_s$ | | | $25600 \cdot T_s$ | | |
| 4 | $26336 \cdot T_s$ | | | $7680 \cdot T_s$ | $(2+X) \cdot 2192 \cdot T_s$ | $(2+X) \cdot 2560 \cdot T_s$ |
| 5 | $6592 \cdot T_s$ | $(2+X) \cdot 2192 \cdot T_s$ | $(2+X) \cdot 2560 \cdot T_s$ | $20480 \cdot T_s$ | | |
| 6 | $19760 \cdot T_s$ | | | $23040 \cdot T_s$ | | |
| 7 | $21952 \cdot T_s$ | | | $12800 \cdot T_s$ | | |
| 8 | $24144 \cdot T_s$ | | | - | - | - |
| 9 | $13168 \cdot T_s$ | | | - | - | - |

**Table 4.2-2: Uplink-downlink configurations**

| Uplink-downlink configuration | Downlink-to-Uplink Switch-point periodicity | Subframe number | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 0 | 5 ms | D | S | U | U | U | D | S | U | U | U |
| 1 | 5 ms | D | S | U | U | D | D | S | U | U | D |
| 2 | 5 ms | D | S | U | D | D | D | S | U | D | D |
| 3 | 10 ms | D | S | U | U | U | D | D | D | D | D |
| 4 | 10 ms | D | S | U | U | D | D | D | D | D | D |
| 5 | 10 ms | D | S | U | D | D | D | D | D | D | D |
| 6 | 5 ms | D | S | U | U | U | D | S | U | U | D |

Considering the highest transmission duty cycle, TDD LTE power class 3 was tested using Uplink-Downlink configuration 0 with 6 uplink subframe and 2 special subframe. The special subframe was set to special subframe configuration 6 using extended cyclic prefix uplink. Therefore, SAR testing for TDD LTE was measured at the maximum output power with highest transmission duty cycle of 63.33%. Also, TDD LTE power class 2 was tested using Uplink-Downlink configuration 1 with 4 uplink subframe and 2 special subframe. The special subframe was set to special subframe configuration 6 using extended cyclic prefix uplink. Therefore, SAR testing for TDD LTE was measured at the maximum output power with highest transmission duty cycle of 43.33%

7. **LTE downlink CA:** The device supports a maximum of 6 carriers in the downlink.

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All uplink communications are identical to the Release 8 specifications. Uplink maximum output power is measured with downlink carrier aggregation active, only for the channel with highest measured maximum output power when downlink carrier aggregation is inactive, to confirm that when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output power measured when downlink carrier aggregation inactive. The downlink channels selected to perform the uplink power measurement must satisfy 3GPP channel spacing (5.4.1A of 3GPP TS 36.521 or equivalent) and channel bandwidth (5.4.2A) requirements. The nominal channel spacing is determined by [BW1 + BW2 – 0.1*|BW1 – BW2|]/2 MHz, where BW1 and BW2 are the channel bandwidths of the CC in a 2-CC aggregation configuration. The downlink PCC channel should be paired with the uplink channel according to normal configurations, as if there is no carrier aggregation. The downlink SCC should be adjacent to the PCC and remain within the downlink transmission band for contiguous intra-band CA. For non-contiguous intra-band CA, the SCC should be selected to provide maximum separation from the PCC and must remain fully within the downlink transmission band. For inter-band CA, the SCC should be near the middle of its transmission band. When downlink carrier aggregation is active uplink maximum output power remain within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output power measured when downlink carrier aggregation inactive, so SAR evaluation is not required for downlink carrier aggregation.

8. **LTE intra-band UL CA (contiguous):** The device supports LTE intra-band contiguous 2 UL CA for CA_5B, CA_7C, CA_66B, CA_66C, CA_38C, CA_41C and CA_48C. The maximum output power is measured for each UL CA configuration for the required test channels. UL PCC configuration is determined by the required test channel. SCC and subsequent CCs are added alternatively to either side of the PCC or within the transmission band for channels at the ends of a frequency band. SAR for UL CA is required in highest standalone test position and frequency band combination. Since the maximum output for UL CA is ≦ standalone LTE mode (without CA), PCC is configured according to the highest standalone SAR configuration tested, SCC and subsequent CCs are configured

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according to procedures used for power measurement and parameters (BW, RB etc.) similar to that used for the PCC.

9. **5G NR:** NR implementation of n2, n5, n7, n12, n41 and n66 is limited to EN-DC only, with LTE bands 2/5/7/12/13/25/26/30/41/48/66 acting as anchor bands, SAR tests for NR bands and LTE anchor bands were performed separately due to limitations in SAR probe calibration factor. Due to test setup limitation, SAR testing for NR was performed using factory test mode software to establish the connection.

10. **5G NR:** The device supports NSA only (EN-DC only), SA is not supported, so NR can only be transmitted in EN-DC mode. For WWAN Tx8, only LTE B42 can transmit standalone, other bands only can transmit in EN-DC mode

11. **5G NR:** 5G NR Power/SAR procedure is similar with KDB 941225 D05. **a.** For power measurement reduction of DFT-s-OFDM and CP-OFDM, CP-OFDM will not higher than DFT-s-OFDM based on 3GPP MPR table, so CP-OFDM power measurement is unnecessary **b.** For power measurement reduction of DFT-s-OFDM, 16QAM/64QAM/256QAM will not higher than Pi/2 BPSK and QPSK based on 3GPP MPR table, so Pi/2 BPSK and QPSK are measured fully, and 16QAM/64QAM/256QAM is spot check 1RB allocation/1 RB offset configuration to ensure the output power will not ½ dB higher than Pi/2 BPSK and QPSK. Smaller bandwidth output power will spot check Pi/2 BPSK/1RB allocation/1 RB offset configuration to ensure output power will not ½ dB higher than largest supported bandwidth. **c.** SAR testing start with the largest channel bandwidth and measure SAR for Pi/2 BPSK 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. **d.** 50% RB allocation for Pi/2 BPSK SAR testing follows 1RB Pi/2 BPSK allocation procedure. **e.** Pi/2 BPSK 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 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. **f.**

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QPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not ½ dB higher than the same configuration in Pi/2 BPSK, also reported SAR for the Pi/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not required. **g.** Smaller bandwidth output power for each RB allocation configuration for this device will not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device.

12. **General:** According to KDB447498D01v06, 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. According to KDB865664D01v01r04, 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).

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## 1.6 Smart Transmit feature for RF Exposure compliance

The FCC RF exposure limit is defined based on time-averaged RF exposure. The product implements Qualcomm Smart Transmit feature which controls the instantaneous transmit power for WWAN transmitter to ensure the product in compliance with FCC RF exposure limit over a defined time window, for SAR (transmit frequency ≤ 6GHz).

The parameters obtained from SAR characterization (referred to as SAR char, respectively) will be used as input for Smart Transmit. SAR char will be entered via the Embedded File System (EFS) to enable the Smart Transmit Feature.

<Terminologies in this report>

| | |
|---|---|
| Plimit | The time-averaged RF power which corresponds to SAR_design_target |
| Pmax | Maximum tune-up power level |
| SAR_design _target | The design target for SAR compliance. It should be less than SAR limit to account for all device design related uncertainties. |
| SAR char | $P_{limit}$ for all the technologies/bands |

<SAR Characterization>

SAR char must be generated to cover all radio configurations and usage scenarios that the wireless device supports for operating at 6 GHz or below. It will then be used as input for Smart Transmit to control and manage RF exposure for f < 6 GHz.

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**SAR_design_target and Uncertainty**

SAR_design_target is determined by ensuring that it is less than FCC SAR limit after accounting for total device designed related uncertainties specified by the manufacturer

$$SAR_design_target < SAR_limit \times 10^{(-total\ uncertainty/10)}$$

| | Uncertainty dB (k=2) |
|---|---|
| Total uncertainty | 1.0 |

| Exposure | Antenna | Frequency band | SAR_design_target |
|---|---|---|---|
| Laptop mode | Tx5 | All | 0.445 W/Kg |
| | Tx8 | All | 0.445 W/Kg |

The Smart Transmit algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of SAR_design_target, below the predefined time-averaged power limit, for each characterized technology and band.

Smart Transmit allows the device to transmit at higher power instantaneously, as high as Pmax, when needed, but enforces power limiting to maintain time-averaged transmit power to Plimit. Below table shows Plimit EFS settings and maximum tune up output power Pmax configured for this EUT for laptop mode.

<Plimit for supported technologies and bands (Plimit in EFS file)>

| Antenna | Band | Plimit** (dBm) | Pmax* (dBm) |
|---|---|---|---|
| Tx5 | WCDMA B II | 36.7 | 23.5 |
| Tx5 | WCDMA B IV | 34.4 | 23.5 |
| Tx5 | WCDMA B V | 40.1 | 23.5 |
| Tx5 | LTE B2 | 36.4 | 23 |
| Tx5 | LTE B4 | 36.0 | 23 |
| Tx5 | LTE B5 | 38.0 | 23.5 |
| Tx5 | LTE B7 | 38.2 | 23 |
| Tx5 | LTE B12 | 40.7 | 23.5 |
| Tx5 | LTE B13 | 36.1 | 23.5 |
| Tx5 | LTE B14 | 37.6 | 23.5 |
| Tx5 | LTE B17 | 39.8 | 23.5 |

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| | | | |
|---|---|---|---|
| Tx5 | LTE B25 | 36.1 | 23 |
| Tx5 | LTE B26 | 37.9 | 23.5 |
| Tx5 | LTE B30 | 37.5 | 22 |
| Tx5 | LTE B38 | 34.8 | 21 |
| Tx5 | LTE B41 PC3 | 34.3 | 21 |
| Tx5 | LTE B41 PC2 | 33.9 | 22.4 |
| Tx5 | LTE B66 | 35.2 | 23 |
| Tx5 | 5G n2 | 36.5 | 23 |
| Tx5 | 5G n5 | 39.8 | 23 |
| Tx5 | 5G n12 | 38.0 | 23 |
| Tx5 | 5G n66 | 34.8 | 23 |
| Tx8 | LTE B2 | 20.9 | 23 |
| Tx8 | LTE B7 | 19.5 | 23 |
| Tx8 | LTE B42 | 17.5 | 21 |
| Tx8 | LTE B48 | 16.8 | 19 |
| Tx8 | LTE B66 | 20.6 | 23 |
| Tx8 | 5G n2 | 19.8 | 23 |
| Tx8 | 5G n7 | 19.1 | 23 |
| Tx8 | 5G n41 PC2 | 18.4 | 26 |
| Tx8 | 5G n41 PC3 | 17.3 | 23 |
| Tx8 | 5G n66 | 19.6 | 23 |

*Pmax is used for RF tune up procedure. The maximum allowed output power is equal to Pmax + 1dB uncertainty.

**All Plimit power levels entered in the Table correspond to average power levels after accounting for duty cycle in the case TDD modulation schemes (for e.g., LTE TDD). The max allowed output power is the Plimit + 1dB device uncertainty, and if Plimit is higher than Pmax, the device output power will be Pmax instead.

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## 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:

1. 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).
2. 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.
3. 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.

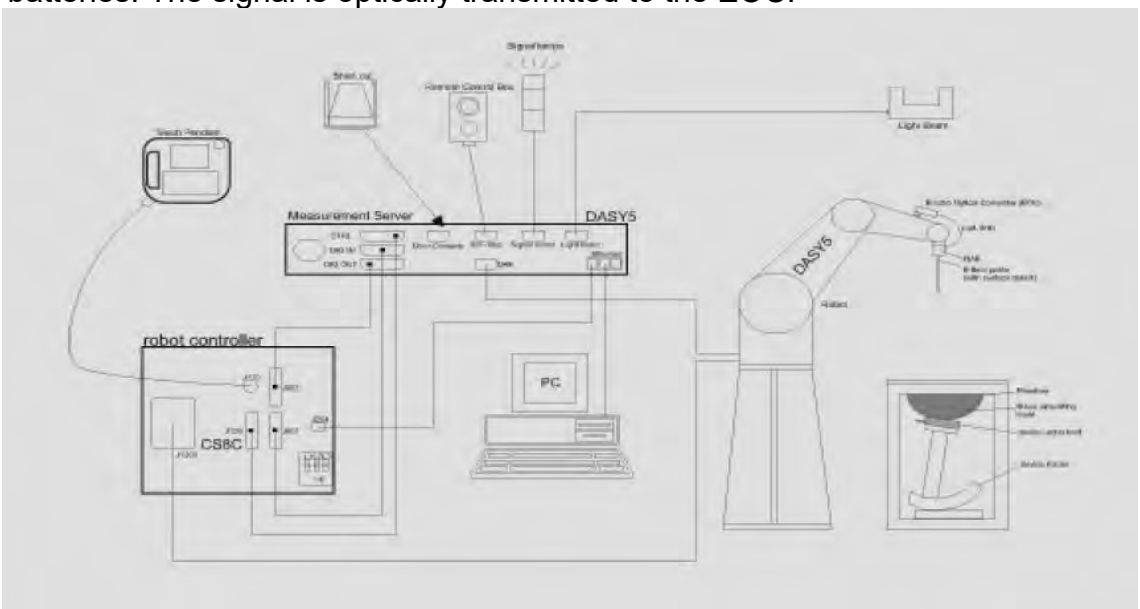


Fig. a The block diagram of SAR system

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4. 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.
5. 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.
6. A probe alignment unit which improves the (absolute) accuracy of the probe positioning.
7. A computer operating Windows 7.
8. DASY 5 software.
9. Remote control with teach pendant and additional circuitry for robot safety such as warning lamps, etc.
10. Tissue simulating liquid mixed according to the given recipes.
11. Validation dipole kits allowing to validate the proper functioning of the system.

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## 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 Conversion Factors (CF) for HSL 750/835/1750/1900/2300/2600/3500/3700MHz<br>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%. | |

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## PHANTOM

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

## DEVICE HOLDER

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

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## 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 750/835/1750/1900/2300/2600/3500/3700MHz. 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 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.

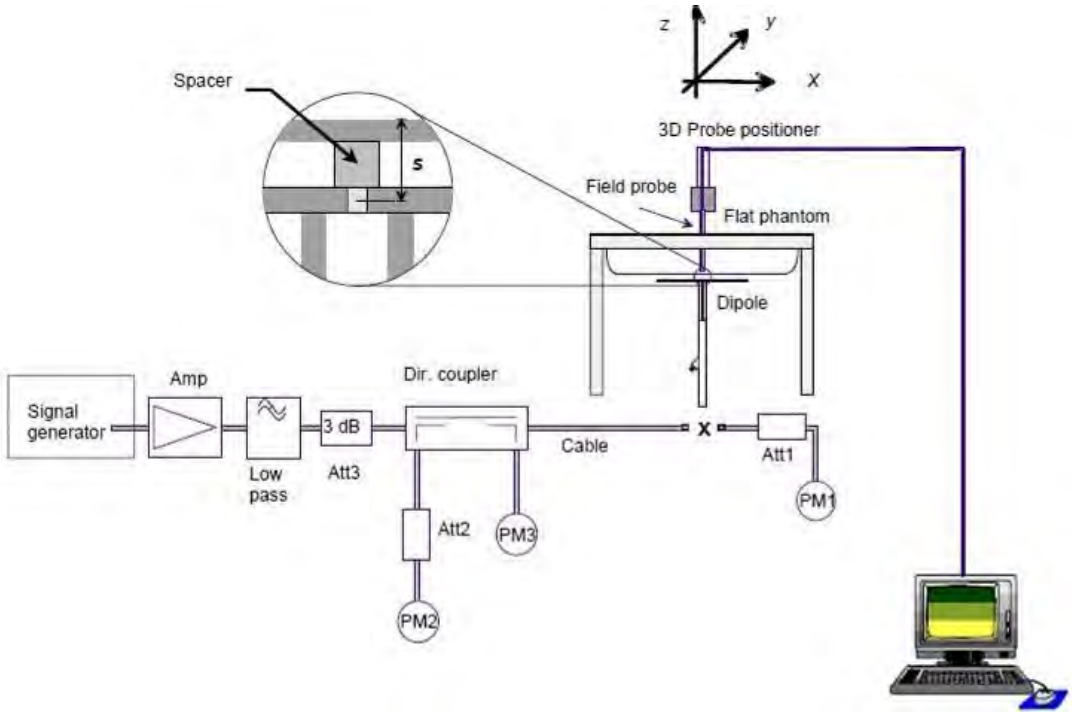


Fig. b The block diagram of system verification

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## Tx5 antenna

**WNC**

| Validation Kit | S/N | Frequency (MHz) | | 1W Target SAR-1g (mW/g) | pin=250mW Measured SAR-1g (mW/g) | Measured SAR-1g normalized to 1W (mW/g) | Deviation (%) | Measured Date |
|---|---|---|---|---|---|---|---|---|
| D750V3 | 1015 | 750 | Head | 8.48 | 2.09 | 8.36 | -1.42% | Sep. 01, 2020 |
| D835V2 | 4d063 | 835 | Head | 9.52 | 2.37 | 9.48 | -0.42% | Sep. 02, 2020 |
| D1750V2 | 1008 | 1750 | Head | 36.00 | 8.67 | 34.68 | -3.67% | Sep. 03, 2020 |
| D1900V2 | 5d173 | 1900 | Head | 39.40 | 9.67 | 38.68 | -1.83% | Sep. 04, 2020 |
| D2300V2 | 1023 | 2300 | Head | 49.00 | 11.40 | 45.60 | -6.94% | Sep. 05, 2020 |
| D2600V2 | 1005 | 2600 | Head | 57.30 | 14.20 | 56.80 | -0.87% | Sep. 06, 2020 |

**HB**

| Validation Kit | S/N | Frequency (MHz) | | 1W Target SAR-1g (mW/g) | pin=250mW Measured SAR-1g (mW/g) | Measured SAR-1g normalized to 1W (mW/g) | Deviation (%) | Measured Date |
|---|---|---|---|---|---|---|---|---|
| D750V3 | 1015 | 750 | Head | 8.48 | 2.11 | 8.44 | -0.47% | Sep. 07, 2020 |
| D835V2 | 4d063 | 835 | Head | 9.52 | 2.37 | 9.48 | -0.42% | Sep. 08, 2020 |
| D1750V2 | 1008 | 1750 | Head | 36.00 | 8.81 | 35.24 | -2.11% | Sep. 09, 2020 |
| D1900V2 | 5d173 | 1900 | Head | 39.40 | 9.88 | 39.52 | 0.30% | Sep. 10, 2020 |
| D2300V2 | 1023 | 2300 | Head | 49.00 | 11.50 | 46.00 | -6.12% | Sep. 11, 2020 |
| D2600V2 | 1005 | 2600 | Head | 57.30 | 14.00 | 56.00 | -2.27% | Sep. 12, 2020 |

**AWAN**

| Validation Kit | S/N | Frequency (MHz) | | 1W Target SAR-1g (mW/g) | pin=250mW Measured SAR-1g (mW/g) | Measured SAR-1g normalized to 1W (mW/g) | Deviation (%) | Measured Date |
|---|---|---|---|---|---|---|---|---|
| D750V3 | 1015 | 750 | Head | 8.48 | 2.25 | 9.00 | 6.13% | Sep. 13, 2020 |
| D835V2 | 4d063 | 835 | Head | 9.52 | 2.24 | 8.96 | -5.88% | Sep. 14, 2020 |
| D1750V2 | 1008 | 1750 | Head | 36.00 | 8.94 | 35.76 | -0.67% | Sep. 15, 2020 |
| D1900V2 | 5d173 | 1900 | Head | 39.40 | 10.40 | 41.60 | 5.58% | Sep. 16, 2020 |
| D2300V2 | 1023 | 2300 | Head | 49.00 | 11.10 | 44.40 | -9.39% | Sep. 17, 2020 |
| D2600V2 | 1005 | 2600 | Head | 57.30 | 14.40 | 57.60 | 0.52% | Sep. 18, 2020 |

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## Tx8 antenna

**WNC**

| Validation Kit | S/N | Frequency (MHz) | | 1W Target SAR-1g (mW/g) | pin=250mW Measured SAR-1g (mW/g) | Measured SAR-1g normalized to 1W (mW/g) | Deviation (%) | Measured Date |
|---|---|---|---|---|---|---|---|---|
| D1750V2 | 1008 | 1750 | Head | 36.00 | 9.02 | 36.08 | 0.22% | Sep. 19, 2020 |
| D1900V2 | 5d173 | 1900 | Head | 39.40 | 9.48 | 37.92 | -3.76% | Sep. 20, 2020 |
| D2600V2 | 1005 | 2600 | Head | 57.30 | 14.10 | 56.40 | -1.57% | Sep. 21, 2020 |
| Validation Kit | S/N | Frequency (MHz) | | 1W Target SAR-1g (mW/g) | pin=100mW Measured SAR-1g (mW/g) | Measured SAR-1g normalized to 1W (mW/g) | Deviation (%) | Measured Date |
| D3500V2 | 1009 | 3500 | Head | 67.60 | 6.97 | 69.70 | 3.11% | Sep. 22, 2020 |
| D3700V2 | 1057 | 3700 | Head | 68.00 | 6.79 | 67.90 | -0.15% | Sep. 23, 2020 |

**HB**

| Validation Kit | S/N | Frequency (MHz) | | 1W Target SAR-1g (mW/g) | pin=250mW Measured SAR-1g (mW/g) | Measured SAR-1g normalized to 1W (mW/g) | Deviation (%) | Measured Date |
|---|---|---|---|---|---|---|---|---|
| D1750V2 | 1008 | 1750 | Head | 36.00 | 9.41 | 37.64 | 4.56% | Sep. 24, 2020 |
| D1900V2 | 5d173 | 1900 | Head | 39.40 | 10.10 | 40.40 | 2.54% | Sep. 25, 2020 |
| D2600V2 | 1005 | 2600 | Head | 57.30 | 14.80 | 59.20 | 3.32% | Sep. 26, 2020 |
| Validation Kit | S/N | Frequency (MHz) | | 1W Target SAR-1g (mW/g) | pin=100mW Measured SAR-1g (mW/g) | Measured SAR-1g normalized to 1W (mW/g) | Deviation (%) | Measured Date |
| D3500V2 | 1009 | 3500 | Head | 67.60 | 6.62 | 66.20 | -2.07% | Sep. 27, 2020 |
| D3700V2 | 1057 | 3700 | Head | 68.00 | 6.95 | 69.50 | 2.21% | Sep. 28, 2020 |

**AWAN**

| Validation Kit | S/N | Frequency (MHz) | | 1W Target SAR-1g (mW/g) | pin=250mW Measured SAR-1g (mW/g) | Measured SAR-1g normalized to 1W (mW/g) | Deviation (%) | Measured Date |
|---|---|---|---|---|---|---|---|---|
| D1750V2 | 1008 | 1750 | Head | 36.00 | 9.26 | 37.04 | 2.89% | Sep. 29, 2020 |
| D1900V2 | 5d173 | 1900 | Head | 39.40 | 10.10 | 40.40 | 2.54% | Sep. 30, 2020 |
| D2600V2 | 1005 | 2600 | Head | 57.30 | 14.50 | 58.00 | 1.22% | Oct. 01, 2020 |
| Validation Kit | S/N | Frequency (MHz) | | 1W Target SAR-1g (mW/g) | pin=100mW Measured SAR-1g (mW/g) | Measured SAR-1g normalized to 1W (mW/g) | Deviation (%) | Measured Date |
| D3500V2 | 1009 | 3500 | Head | 67.60 | 6.49 | 64.90 | -3.99% | Oct. 02, 2020 |
| D3700V2 | 1057 | 3700 | Head | 68.00 | 6.88 | 68.80 | 1.18% | Oct. 03, 2020 |

Table 1. Results of system verification

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## 1.10 Tissue Simulant Fluid for the Frequency Band

The dielectric properties for this Head-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.

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

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)

**Tx5 antenna**

| 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 |
|---|---|---|---|---|---|---|---|---|
| Head | Sep, 01. 2020 | 704.00 | 42.181 | 0.890 | 42.950 | 0.858 | 1.82% | -3.57% |
| | | 706.50 | 42.168 | 0.890 | 42.906 | 0.859 | 1.75% | -3.48% |
| | | 707.50 | 42.162 | 0.890 | 42.812 | 0.866 | 1.54% | -2.70% |
| | | 708.50 | 42.157 | 0.890 | 42.800 | 0.870 | 1.52% | -2.26% |
| | | 709.00 | 42.155 | 0.890 | 42.720 | 0.871 | 1.34% | -2.15% |
| | | 710.00 | 42.149 | 0.890 | 42.712 | 0.874 | 1.33% | -1.83% |
| | | 711.00 | 42.144 | 0.890 | 42.656 | 0.875 | 1.21% | -1.72% |
| | | 750.00 | 41.942 | 0.893 | 42.565 | 0.885 | 1.49% | -0.94% |
| | | 782.00 | 41.775 | 0.896 | 42.315 | 0.895 | 1.29% | -0.10% |
| | | 793.00 | 41.718 | 0.897 | 42.287 | 0.898 | 1.36% | 0.14% |
| | Sep, 02. 2020 | 822.50 | 41.565 | 0.899 | 42.270 | 0.886 | 1.70% | -1.45% |
| | | 826.40 | 41.545 | 0.899 | 42.267 | 0.893 | 1.74% | -0.70% |
| | | 829.00 | 41.531 | 0.900 | 42.114 | 0.903 | 1.40% | 0.39% |
| | | 831.50 | 41.518 | 0.900 | 42.101 | 0.905 | 1.40% | 0.59% |
| | | 834.00 | 41.505 | 0.900 | 42.053 | 0.910 | 1.32% | 1.12% |
| | | 835.00 | 41.500 | 0.900 | 41.963 | 0.915 | 1.12% | 1.67% |
| | | 836.50 | 41.492 | 0.900 | 41.858 | 0.916 | 0.88% | 1.76% |
| | | 836.60 | 41.500 | 0.902 | 41.744 | 0.919 | 0.59% | 1.92% |
| | | 839.00 | 41.500 | 0.904 | 41.737 | 0.926 | 0.57% | 2.40% |
| | | 841.50 | 41.500 | 0.907 | 41.654 | 0.933 | 0.37% | 2.87% |
| | | 844.00 | 41.500 | 0.910 | 41.614 | 0.938 | 0.27% | 3.11% |
| | | 846.60 | 41.500 | 0.912 | 41.563 | 0.940 | 0.15% | 3.01% |
| | Sep, 03. 2020 | 1712.40 | 40.138 | 1.349 | 41.103 | 1.303 | 2.40% | -3.43% |
| | | 1720.00 | 40.126 | 1.354 | 40.988 | 1.311 | 2.15% | -3.15% |
| | | 1732.40 | 40.107 | 1.361 | 40.869 | 1.328 | 1.90% | -2.41% |
| | | 1732.50 | 40.107 | 1.361 | 40.833 | 1.335 | 1.81% | -1.90% |
| | | 1745.00 | 40.087 | 1.368 | 40.828 | 1.342 | 1.85% | -1.91% |
| | | 1750.00 | 40.079 | 1.371 | 40.070 | 1.368 | -0.02% | -0.22% |
| | | 1752.60 | 40.075 | 1.373 | 39.973 | 1.370 | -0.25% | -0.19% |
| | | 1770.00 | 40.047 | 1.383 | 39.778 | 1.380 | -0.67% | -0.19% |

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| 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 |
|---|---|---|---|---|---|---|---|---|
| Head | Sep, 04. 2020 | 1852.40 | 40.000 | 1.400 | 39.748 | 1.383 | -0.63% | -1.21% |
| | | 1860.00 | 40.000 | 1.400 | 39.689 | 1.384 | -0.78% | -1.14% |
| | | 1880.00 | 40.000 | 1.400 | 39.538 | 1.393 | -1.16% | -0.50% |
| | | 1882.50 | 40.000 | 1.400 | 39.523 | 1.396 | -1.19% | -0.29% |
| | | 1900.00 | 40.000 | 1.400 | 39.403 | 1.399 | -1.49% | -0.07% |
| | | 1905.00 | 40.000 | 1.400 | 39.165 | 1.418 | -2.09% | 1.29% |
| | | 1907.60 | 40.000 | 1.400 | 39.123 | 1.427 | -2.19% | 1.93% |
| | Sep, 05. 2020 | 2300.00 | 39.467 | 1.667 | 38.925 | 1.655 | -1.37% | -0.72% |
| | | 2310.00 | 39.449 | 1.676 | 38.842 | 1.677 | -1.54% | 0.06% |
| | Sep, 06. 2020 | 2506.00 | 39.129 | 1.861 | 38.569 | 1.804 | -1.43% | -3.07% |
| | | 2510.00 | 39.124 | 1.865 | 38.566 | 1.810 | -1.43% | -2.97% |
| | | 2535.00 | 39.092 | 1.893 | 38.467 | 1.841 | -1.60% | -2.73% |
| | | 2549.50 | 39.073 | 1.909 | 38.441 | 1.867 | -1.62% | -2.18% |
| | | 2560.00 | 39.060 | 1.920 | 38.305 | 1.875 | -1.93% | -2.34% |
| | | 2580.00 | 39.035 | 1.942 | 38.209 | 1.882 | -2.11% | -3.08% |
| | | 2593.00 | 39.018 | 1.956 | 38.111 | 1.899 | -2.32% | -2.91% |
| | | 2595.00 | 39.015 | 1.958 | 38.105 | 1.907 | -2.33% | -2.61% |
| | | 2600.00 | 39.009 | 1.964 | 38.080 | 1.908 | -2.38% | -2.83% |
| | | 2610.00 | 38.996 | 1.975 | 38.020 | 1.922 | -2.50% | -2.66% |
| | | 2636.50 | 38.963 | 2.003 | 38.000 | 1.979 | -2.47% | -1.22% |
| | | 2680.00 | 38.907 | 2.051 | 37.969 | 2.050 | -2.41% | -0.04% |

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| 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 |
|---|---|---|---|---|---|---|---|---|
| Head | Sep, 07. 2020 | 704.00 | 42.181 | 0.890 | 42.980 | 0.863 | 1.90% | -3.01% |
| | | 706.50 | 42.168 | 0.890 | 42.916 | 0.867 | 1.77% | -2.58% |
| | | 707.50 | 42.162 | 0.890 | 42.812 | 0.869 | 1.54% | -2.37% |
| | | 708.50 | 42.157 | 0.890 | 42.802 | 0.873 | 1.53% | -1.93% |
| | | 709.00 | 42.155 | 0.890 | 42.800 | 0.877 | 1.53% | -1.48% |
| | | 710.00 | 42.149 | 0.890 | 42.720 | 0.882 | 1.35% | -0.93% |
| | | 711.00 | 42.144 | 0.890 | 42.666 | 0.889 | 1.24% | -0.15% |
| | | 750.00 | 41.942 | 0.893 | 42.575 | 0.895 | 1.51% | 0.18% |
| | | 782.00 | 41.775 | 0.896 | 42.385 | 0.907 | 1.46% | 1.24% |
| | | 793.00 | 41.718 | 0.897 | 42.340 | 0.919 | 1.49% | 2.48% |
| | Sep, 08. 2020 | 822.50 | 41.565 | 0.899 | 42.337 | 0.881 | 1.86% | -2.01% |
| | | 826.40 | 41.545 | 0.899 | 42.297 | 0.885 | 1.81% | -1.59% |
| | | 829.00 | 41.531 | 0.900 | 42.184 | 0.892 | 1.57% | -0.84% |
| | | 831.50 | 41.518 | 0.900 | 42.131 | 0.898 | 1.48% | -0.19% |
| | | 834.00 | 41.505 | 0.900 | 42.123 | 0.907 | 1.49% | 0.79% |
| | | 835.00 | 41.500 | 0.900 | 42.003 | 0.914 | 1.21% | 1.56% |
| | | 836.50 | 41.492 | 0.900 | 41.948 | 0.918 | 1.10% | 1.99% |
| | | 836.60 | 41.500 | 0.902 | 41.807 | 0.923 | 0.74% | 2.36% |
| | | 839.00 | 41.500 | 0.904 | 41.744 | 0.928 | 0.59% | 2.62% |
| | | 841.50 | 41.500 | 0.907 | 41.724 | 0.933 | 0.54% | 2.87% |
| | | 844.00 | 41.500 | 0.910 | 41.694 | 0.941 | 0.47% | 3.44% |
| | | 846.60 | 41.500 | 0.912 | 41.633 | 0.947 | 0.32% | 3.78% |
| | Sep, 09. 2020 | 1712.40 | 40.138 | 1.349 | 41.103 | 1.305 | 2.40% | -3.28% |
| | | 1720.00 | 40.126 | 1.354 | 40.988 | 1.318 | 2.15% | -2.64% |
| | | 1732.40 | 40.107 | 1.361 | 40.939 | 1.329 | 2.08% | -2.34% |
| | | 1732.50 | 40.107 | 1.361 | 40.903 | 1.343 | 1.99% | -1.32% |
| | | 1745.00 | 40.087 | 1.368 | 40.848 | 1.349 | 1.90% | -1.40% |
| | | 1750.00 | 40.079 | 1.371 | 40.090 | 1.371 | 0.03% | 0.00% |
| | | 1752.60 | 40.075 | 1.373 | 39.993 | 1.379 | -0.20% | 0.47% |
| | | 1770.00 | 40.047 | 1.383 | 39.838 | 1.382 | -0.52% | -0.05% |
| | Sep, 10. 2020 | 1852.40 | 40.000 | 1.400 | 39.838 | 1.388 | -0.40% | -0.86% |
| | | 1860.00 | 40.000 | 1.400 | 39.779 | 1.392 | -0.55% | -0.57% |
| | | 1880.00 | 40.000 | 1.400 | 39.583 | 1.395 | -1.04% | -0.36% |
| | | 1882.50 | 40.000 | 1.400 | 39.568 | 1.397 | -1.08% | -0.21% |
| | | 1900.00 | 40.000 | 1.400 | 39.433 | 1.399 | -1.42% | -0.07% |
| | | 1905.00 | 40.000 | 1.400 | 39.183 | 1.423 | -2.04% | 1.64% |
| | | 1907.60 | 40.000 | 1.400 | 39.175 | 1.428 | -2.06% | 2.00% |
| | Sep, 11. 2020 | 2300.00 | 39.467 | 1.667 | 38.975 | 1.663 | -1.25% | -0.24% |
| | | 2310.00 | 39.449 | 1.676 | 38.912 | 1.678 | -1.36% | 0.12% |
| | Sep, 12. 2020 | 2506.00 | 39.129 | 1.861 | 38.646 | 1.808 | -1.23% | -2.85% |
| | | 2510.00 | 39.124 | 1.865 | 38.569 | 1.816 | -1.42% | -2.65% |
| | | 2535.00 | 39.092 | 1.893 | 38.507 | 1.841 | -1.50% | -2.73% |
| | | 2549.50 | 39.073 | 1.909 | 38.481 | 1.869 | -1.52% | -2.07% |
| | | 2560.00 | 39.060 | 1.920 | 38.325 | 1.879 | -1.88% | -2.14% |
| | | 2580.00 | 39.035 | 1.942 | 38.239 | 1.882 | -2.04% | -3.08% |
| | | 2593.00 | 39.018 | 1.956 | 38.185 | 1.905 | -2.13% | -2.61% |
| | | 2595.00 | 39.015 | 1.958 | 38.160 | 1.909 | -2.19% | -2.51% |
| | | 2600.00 | 39.009 | 1.964 | 38.141 | 1.914 | -2.23% | -2.53% |
| | | 2610.00 | 38.996 | 1.975 | 38.060 | 1.928 | -2.40% | -2.36% |
| | | 2636.50 | 38.963 | 2.003 | 38.030 | 1.988 | -2.39% | -0.77% |
| | | 2680.00 | 38.907 | 2.051 | 38.029 | 2.058 | -2.26% | 0.35% |

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| 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 |
|---|---|---|---|---|---|---|---|---|
| Head | Sep, 13. 2020 | 704.00 | 42.181 | 0.890 | 42.910 | 0.855 | 1.73% | -3.91% |
| | | 706.50 | 42.168 | 0.890 | 42.846 | 0.862 | 1.61% | -3.14% |
| | | 707.50 | 42.162 | 0.890 | 42.782 | 0.866 | 1.47% | -2.70% |
| | | 708.50 | 42.157 | 0.890 | 42.780 | 0.867 | 1.48% | -2.60% |
| | | 709.00 | 42.155 | 0.890 | 42.762 | 0.871 | 1.44% | -2.15% |
| | | 710.00 | 42.149 | 0.890 | 42.720 | 0.876 | 1.35% | -1.60% |
| | | 711.00 | 42.144 | 0.890 | 42.646 | 0.880 | 1.19% | -1.16% |
| | | 750.00 | 41.942 | 0.893 | 42.525 | 0.883 | 1.39% | -1.16% |
| | | 782.00 | 41.775 | 0.896 | 42.325 | 0.885 | 1.32% | -1.21% |
| | | 793.00 | 41.718 | 0.897 | 42.277 | 0.895 | 1.34% | -0.19% |
| | Sep, 14. 2020 | 822.50 | 41.565 | 0.899 | 42.267 | 0.890 | 1.69% | -1.00% |
| | | 826.40 | 41.545 | 0.899 | 42.260 | 0.897 | 1.72% | -0.26% |
| | | 829.00 | 41.531 | 0.900 | 42.134 | 0.899 | 1.45% | -0.06% |
| | | 831.50 | 41.518 | 0.900 | 42.093 | 0.903 | 1.38% | 0.36% |
| | | 834.00 | 41.505 | 0.900 | 42.091 | 0.908 | 1.41% | 0.90% |
| | | 835.00 | 41.500 | 0.900 | 41.993 | 0.912 | 1.19% | 1.33% |
| | | 836.50 | 41.492 | 0.900 | 41.928 | 0.915 | 1.05% | 1.65% |
| | | 836.60 | 41.500 | 0.902 | 41.717 | 0.918 | 0.52% | 1.81% |
| | | 839.00 | 41.500 | 0.904 | 41.704 | 0.924 | 0.49% | 2.18% |
| | | 841.50 | 41.500 | 0.907 | 41.644 | 0.933 | 0.35% | 2.87% |
| | | 844.00 | 41.500 | 0.910 | 41.604 | 0.936 | 0.25% | 2.89% |
| | | 846.60 | 41.500 | 0.912 | 41.603 | 0.939 | 0.25% | 2.90% |
| | Sep, 15. 2020 | 1712.40 | 40.138 | 1.349 | 41.083 | 1.301 | 2.35% | -3.58% |
| | | 1720.00 | 40.126 | 1.354 | 40.929 | 1.314 | 2.00% | -2.93% |
| | | 1732.40 | 40.107 | 1.361 | 40.898 | 1.329 | 1.97% | -2.34% |
| | | 1732.50 | 40.107 | 1.361 | 40.863 | 1.338 | 1.89% | -1.68% |
| | | 1745.00 | 40.087 | 1.368 | 40.778 | 1.348 | 1.72% | -1.47% |
| | | 1750.00 | 40.079 | 1.371 | 40.030 | 1.369 | -0.12% | -0.15% |
| | | 1752.60 | 40.075 | 1.373 | 39.913 | 1.371 | -0.40% | -0.11% |
| | | 1770.00 | 40.047 | 1.383 | 39.808 | 1.375 | -0.60% | -0.55% |
| | Sep, 16. 2020 | 1852.40 | 40.000 | 1.400 | 39.788 | 1.386 | -0.53% | -1.00% |
| | | 1860.00 | 40.000 | 1.400 | 39.759 | 1.387 | -0.60% | -0.93% |
| | | 1880.00 | 40.000 | 1.400 | 39.558 | 1.388 | -1.11% | -0.86% |
| | | 1882.50 | 40.000 | 1.400 | 39.543 | 1.392 | -1.14% | -0.57% |
| | | 1900.00 | 40.000 | 1.400 | 39.403 | 1.397 | -1.49% | -0.21% |
| | | 1905.00 | 40.000 | 1.400 | 39.135 | 1.419 | -2.16% | 1.36% |
| | | 1907.60 | 40.000 | 1.400 | 39.123 | 1.422 | -2.19% | 1.57% |
| | Sep, 17. 2020 | 2300.00 | 39.467 | 1.667 | 38.895 | 1.659 | -1.45% | -0.48% |
| | | 2310.00 | 39.449 | 1.676 | 38.832 | 1.671 | -1.56% | -0.30% |
| | Sep, 18. 2020 | 2506.00 | 39.129 | 1.861 | 38.626 | 1.801 | -1.28% | -3.23% |
| | | 2510.00 | 39.124 | 1.865 | 38.519 | 1.812 | -1.55% | -2.87% |
| | | 2535.00 | 39.092 | 1.893 | 38.497 | 1.835 | -1.52% | -3.05% |
| | | 2549.50 | 39.073 | 1.909 | 38.461 | 1.865 | -1.57% | -2.28% |
| | | 2560.00 | 39.060 | 1.920 | 38.239 | 1.873 | -2.10% | -2.45% |
| | | 2580.00 | 39.035 | 1.942 | 38.235 | 1.877 | -2.05% | -3.34% |
| | | 2593.00 | 39.018 | 1.956 | 38.141 | 1.899 | -2.25% | -2.91% |
| | | 2595.00 | 39.015 | 1.958 | 38.140 | 1.907 | -2.24% | -2.61% |
| | | 2600.00 | 39.009 | 1.964 | 38.095 | 1.908 | -2.34% | -2.83% |
| | | 2610.00 | 38.996 | 1.975 | 38.060 | 1.923 | -2.40% | -2.61% |
| | | 2636.50 | 38.963 | 2.003 | 38.029 | 1.979 | -2.40% | -1.22% |
| | | 2680.00 | 38.907 | 2.051 | 37.960 | 2.051 | -2.43% | 0.00% |

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## Tx8 antenna

| 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 |
|---|---|---|---|---|---|---|---|---|
| Head | Sep, 19. 2020 | 1720.00 | 40.126 | 1.354 | 41.148 | 1.316 | 2.55% | -2.78% |
| | | 1745.00 | 40.087 | 1.368 | 40.913 | 1.349 | 2.06% | -1.40% |
| | | 1750.00 | 40.079 | 1.371 | 40.240 | 1.372 | 0.40% | 0.07% |
| | | 1770.00 | 40.047 | 1.383 | 39.968 | 1.383 | -0.20% | 0.03% |
| | Sep, 20. 2020 | 1860.00 | 40.000 | 1.400 | 39.739 | 1.386 | -0.65% | -1.00% |
| | | 1880.00 | 40.000 | 1.400 | 39.683 | 1.396 | -0.79% | -0.29% |
| | | 1900.00 | 40.000 | 1.400 | 39.543 | 1.407 | -1.14% | 0.50% |
| | Sep, 21. 2020 | 2510.00 | 39.124 | 1.865 | 38.626 | 1.821 | -1.27% | -2.38% |
| | | 2535.00 | 39.092 | 1.893 | 38.607 | 1.845 | -1.24% | -2.52% |
| | | 2546.01 | 39.078 | 1.905 | 38.471 | 1.867 | -1.55% | -1.98% |
| | | 2593.00 | 39.018 | 1.956 | 38.261 | 1.902 | -1.94% | -2.76% |
| | | 2600.00 | 39.009 | 1.964 | 38.230 | 1.915 | -2.00% | -2.48% |
| | | 2640.00 | 38.958 | 2.007 | 38.200 | 1.973 | -1.95% | -1.71% |
| | Sep, 22. 2020 | 3500.00 | 37.929 | 2.913 | 37.786 | 2.866 | -0.38% | -1.60% |
| | | 3560.00 | 37.860 | 2.974 | 37.751 | 2.965 | -0.29% | -0.30% |
| | | 3575.00 | 37.843 | 2.989 | 37.718 | 2.971 | -0.33% | -0.61% |
| | | 3590.00 | 37.826 | 3.005 | 37.662 | 2.977 | -0.43% | -0.92% |
| | Sep, 23. 2020 | 3603.30 | 37.811 | 3.018 | 37.590 | 2.985 | -0.58% | -1.11% |
| | | 3646.70 | 37.761 | 3.063 | 37.543 | 3.021 | -0.58% | -1.37% |
| | | 3690.00 | 37.711 | 3.107 | 37.542 | 3.025 | -0.45% | -2.65% |
| | | 3700.00 | 37.700 | 3.118 | 37.450 | 3.081 | -0.66% | -1.17% |

| 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 |
|---|---|---|---|---|---|---|---|---|
| Head | Sep, 24. 2020 | 1720.00 | 40.126 | 1.354 | 41.119 | 1.329 | 2.47% | -1.82% |
| | | 1745.00 | 40.087 | 1.368 | 40.918 | 1.363 | 2.07% | -0.38% |
| | | 1750.00 | 40.079 | 1.371 | 40.103 | 1.371 | 0.06% | 0.00% |
| | | 1770.00 | 40.047 | 1.383 | 39.918 | 1.393 | -0.32% | 0.75% |
| | Sep, 25. 2020 | 1860.00 | 40.000 | 1.400 | 39.898 | 1.399 | -0.25% | -0.07% |
| | | 1880.00 | 40.000 | 1.400 | 39.678 | 1.404 | -0.81% | 0.29% |
| | | 1900.00 | 40.000 | 1.400 | 39.593 | 1.410 | -1.02% | 0.71% |
| | Sep, 26. 2020 | 2510.00 | 39.124 | 1.865 | 38.709 | 1.823 | -1.06% | -2.28% |
| | | 2535.00 | 39.092 | 1.893 | 38.527 | 1.841 | -1.44% | -2.73% |
| | | 2546.01 | 39.078 | 1.905 | 38.472 | 1.879 | -1.55% | -1.35% |
| | | 2593.00 | 39.018 | 1.956 | 38.269 | 1.913 | -1.92% | -2.20% |
| | | 2600.00 | 39.009 | 1.964 | 38.189 | 1.923 | -2.10% | -2.07% |
| | | 2640.00 | 38.958 | 2.007 | 38.161 | 1.994 | -2.05% | -0.66% |
| | Sep, 27. 2020 | 3500.00 | 37.929 | 2.913 | 37.966 | 2.880 | 0.10% | -1.12% |
| | | 3560.00 | 37.860 | 2.974 | 37.871 | 2.965 | 0.03% | -0.30% |
| | | 3575.00 | 37.843 | 2.989 | 37.838 | 2.973 | -0.01% | -0.55% |
| | | 3590.00 | 37.826 | 3.005 | 37.832 | 2.989 | 0.02% | -0.52% |
| | Sep, 28. 2020 | 3603.30 | 37.811 | 3.018 | 37.680 | 2.999 | -0.35% | -0.64% |
| | | 3646.70 | 37.761 | 3.063 | 37.580 | 3.026 | -0.48% | -1.20% |
| | | 3690.00 | 37.711 | 3.107 | 37.563 | 3.027 | -0.39% | -2.58% |
| | | 3700.00 | 37.700 | 3.118 | 37.562 | 3.087 | -0.37% | -0.98% |

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| 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 |
|---|---|---|---|---|---|---|---|---|
| Head | Sep, 29. 2020 | 1720.00 | 40.126 | 1.354 | 41.059 | 1.321 | 2.32% | -2.41% |
| | | 1745.00 | 40.087 | 1.368 | 40.913 | 1.360 | 2.06% | -0.60% |
| | | 1750.00 | 40.079 | 1.371 | 40.060 | 1.373 | -0.05% | 0.14% |
| | | 1770.00 | 40.047 | 1.383 | 39.809 | 1.378 | -0.60% | -0.33% |
| | Sep, 30. 2020 | 1860.00 | 40.000 | 1.400 | 39.798 | 1.396 | -0.50% | -0.29% |
| | | 1880.00 | 40.000 | 1.400 | 39.748 | 1.399 | -0.63% | -0.07% |
| | | 1900.00 | 40.000 | 1.400 | 39.493 | 1.402 | -1.27% | 0.14% |
| | Oct, 01. 2020 | 2510.00 | 39.124 | 1.865 | 38.597 | 1.816 | -1.35% | -2.65% |
| | | 2535.00 | 39.092 | 1.893 | 38.539 | 1.840 | -1.41% | -2.79% |
| | | 2546.01 | 39.078 | 1.905 | 38.521 | 1.873 | -1.42% | -1.67% |
| | | 2593.00 | 39.018 | 1.956 | 38.245 | 1.912 | -1.98% | -2.25% |
| | | 2600.00 | 39.009 | 1.964 | 38.205 | 1.922 | -2.06% | -2.12% |
| | | 2640.00 | 38.958 | 2.007 | 38.080 | 1.990 | -2.25% | -0.86% |
| | Oct, 02. 2020 | 3500.00 | 37.929 | 2.913 | 37.966 | 2.866 | 0.10% | -1.60% |
| | | 3560.00 | 37.860 | 2.974 | 37.848 | 2.970 | -0.03% | -0.13% |
| | | 3575.00 | 37.843 | 2.989 | 37.801 | 2.972 | -0.11% | -0.58% |
| | | 3590.00 | 37.826 | 3.005 | 37.780 | 2.984 | -0.12% | -0.69% |
| | Oct, 03. 2020 | 3603.30 | 37.811 | 3.018 | 37.742 | 2.998 | -0.18% | -0.68% |
| | | 3646.70 | 37.761 | 3.063 | 37.723 | 3.027 | -0.10% | -1.17% |
| | | 3690.00 | 37.711 | 3.107 | 37.592 | 3.035 | -0.32% | -2.33% |
| | | 3700.00 | 37.700 | 3.118 | 37.550 | 3.095 | -0.40% | -0.72% |

Table 2. Dielectric Parameters of Tissue Simulant Fluid

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The composition of the body tissue simulating liquid:

| Frequency (MHz) | Mode | Ingredient | | | | | | Total amount |
|---|---|---|---|---|---|---|---|---|
| | | DGMBE | Water | Salt | Preventol D-7 | Cellulose | Sugar | |
| 750 | Head | — | 532.98 g | 18.3 g | 2.4 g | 3.2 g | 766 g | 1.3L(Kg) |
| 850 | Head | — | 532.98 g | 18.3 g | 2.4 g | 3.2 g | 766 g | 1.3L(Kg) |
| 1750 | Head | 444.52 g | 552.42 g | 3.06 g | — | — | — | 1.0L(Kg) |
| 1900 | Head | 444.52 g | 552.42 g | 3.06 g | — | — | — | 1.0L(Kg) |
| 2300 | Head | 550ml | 450ml | — | — | — | — | 1.0L(Kg) |
| 2600 | Head | 550ml | 450ml | — | — | — | — | 1.0L(Kg) |
| 3500 | Head | 550ml | 450ml | — | — | — | — | 1.0L(Kg) |
| 3700 | Head | 550ml | 450ml | — | — | — | — | 1.0L(Kg) |

Table 3. Recipes for Tissue Simulating Liquid

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## 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

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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:

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1. The temperature gradient is not directly measurable but must be evaluated from temperature measurements at different time steps. Special precaution is necessary to avoid measurement errors caused by temperature gradients due to energy equalizing effects or convection currents in the liquid. Such effects cannot be completely avoided, as the measured field itself destroys the thermal equilibrium in the liquid. With a careful setup these errors can be kept small.
2. The measured volume around the temperature probe is not well defined. It is difficult to calculate the energy transfer from a surrounding gradient temperature field into the probe. These effects must be considered, since temperature probes are calibrated in liquid with homogeneous temperatures. There is no traceable standard for temperature rise measurements.
3. The calibration depends on the assessment of the specific density, the heat capacity and the conductivity of the medium. While the specific density and heat capacity can be measured accurately with standardized procedures (~ 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%.
4. Temperature rise measurements are not very sensitive and therefore are often performed at a higher power level than the E-field measurements. The nonlinearities in the system (e.g., power measurements, different components, etc.) must be considered.

Considering these problems, the possible accuracy of the calibration of E-field probes with temperature gradient measurements in a carefully designed setup is about ±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:

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

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3. Due to the small wavelength in liquids with high permittivity, even small setups might be above the resonant cutoff frequencies. The field distribution in the setup must be carefully checked for conformity with the theoretical field distribution.

## References

1. N. Kuster, Q. Balzano, and J.C. Lin, Eds., *Mobile Communications Safety*, Chapman & Hall, London, 1997.
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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.

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## 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

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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 W/Kg | 8.00 W/Kg |
| Spatial Average SAR (Whole Body) | 0.08 W/Kg | 0.40 W/Kg |
| Spatial Peak SAR (Hands/Feet/Ankle/Wrist) | 4.00 W/Kg | 20.00 W/Kg |

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.

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# 2. Summary of Results

## 2.1 Decision rules

Reported measurement data comply with IEEE 1528-2013:

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

## 2.2 Summary of Results

### Notebook mode

### Tx5-WCDMA Band II / Band IV / Band V

| Antenna | | | | | | | | | WNC | | HB | | AWAN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plot page | Band | Position | Distance (mm) | CH | Freq. (MHz) | Max. Rated Avg. Power + Max. Tolerance (dBm) | Measured Avg. Power (dBm) | Scaling | Averaged SAR over 1g (W/kg) | | Averaged SAR over 1g (W/kg) | | Averaged SAR over 1g (W/kg) | |
| | | | | | | | | | Measured | Reported | Measured | Reported | Measured | Reported |
| - | WCDMA Band II | Bottom side | 0 | 9262 | 1852.4 | 24.5 | 23.80 | 117.49% | 0.020 | 0.023 | 0.021 | 0.024 | 0.019 | 0.022 |
| - | | Bottom side | 0 | 9400 | 1880 | 24.5 | 23.79 | 117.76% | 0.021 | 0.025 | 0.020 | 0.024 | 0.017 | 0.020 |
| 121 | | Bottom side | 0 | 9538 | 1907.6 | 24.5 | 23.86 | 115.88% | 0.023 | 0.027 | 0.022 | 0.025 | 0.016 | 0.018 |
| - | WCDMA Band IV | Bottom side | 0 | 1312 | 1712.4 | 24.5 | 23.72 | 119.67% | 0.029 | 0.035 | 0.026 | 0.031 | 0.025 | 0.030 |
| - | | Bottom side | 0 | 1412 | 1732.4 | 24.5 | 23.81 | 117.22% | 0.034 | 0.040 | 0.032 | 0.037 | 0.024 | 0.028 |
| 122 | | Bottom side | 0 | 1513 | 1752.6 | 24.5 | 23.84 | 116.41% | 0.039 | 0.045 | 0.033 | 0.039 | 0.029 | 0.034 |
| - | WCDMA Band V | Bottom side | 0 | 4132 | 826.4 | 24.5 | 23.93 | 114.02% | 0.009 | 0.010 | 0.006 | 0.007 | 0.007 | 0.008 |
| 123 | | Bottom side | 0 | 4183 | 836.6 | 24.5 | 24.08 | 110.15% | 0.011 | 0.012 | 0.007 | 0.008 | 0.008 | 0.009 |
| - | | Bottom side | 0 | 4233 | 846.6 | 24.5 | 23.95 | 113.50% | 0.008 | 0.009 | 0.006 | 0.007 | 0.004 | 0.005 |

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# Tx5-LTE FDD Band 2 / Band 4 / Band 5 / Band 7 / Band 12 / Band 13 / Band 14 / Band 17 / Band 25 / Band 26 / Band 30

| Antenna | | | | | | | | | | | | | WNC | | HB | | AWAN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plot page | Band | 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) | | Averaged SAR over 1g (W/kg) | | Averaged SAR over 1g (W/kg) | |
| | | | | | | | | | | | | | Measured | Reported | Measured | Reported | Measured | Reported |
| - | LTE Band 2 | 20MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 18700 | 1860 | 24 | 23.85 | 103.51% | 0.023 | 0.024 | 0.022 | 0.023 | 0.019 | 0.020 |
| 124 | | | | | | Bottom side | 0 | 18900 | 1880 | 24 | 23.91 | 102.09% | 0.025 | 0.025 | 0.023 | 0.024 | 0.017 | 0.018 |
| - | | | | | | Bottom side | 0 | 19100 | 1900 | 24 | 23.61 | 109.40% | 0.021 | 0.023 | 0.021 | 0.023 | 0.018 | 0.020 |
| - | | | | 50 RB | 50 | Bottom side | 0 | 18900 | 1880 | 23 | 23.00 | 100.00% | 0.015 | 0.015 | 0.012 | 0.012 | 0.008 | 0.008 |
| - | | | | 100 RB | | Bottom side | 0 | 19100 | 1900 | 23 | 22.91 | 102.09% | 0.011 | 0.011 | 0.008 | 0.008 | 0.006 | 0.006 |
| 125 | LTE Band 4 | 20MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 20175 | 1732.5 | 24 | 23.82 | 104.23% | 0.027 | 0.028 | 0.023 | 0.024 | 0.019 | 0.020 |
| - | | | | | 50 | Bottom side | 0 | 20300 | 1745 | 24 | 23.67 | 107.89% | 0.024 | 0.026 | 0.020 | 0.021 | 0.015 | 0.016 |
| - | | | | | 99 | Bottom side | 0 | 20050 | 1720 | 24 | 23.81 | 104.47% | 0.025 | 0.026 | 0.021 | 0.022 | 0.017 | 0.017 |
| - | | | | 50 RB | 50 | Bottom side | 0 | 20050 | 1720 | 23 | 22.39 | 115.08% | 0.016 | 0.018 | 0.012 | 0.014 | 0.007 | 0.008 |
| - | | | | 100 RB | | Bottom side | 0 | 20050 | 1720 | 23 | 22.42 | 114.29% | 0.014 | 0.016 | 0.010 | 0.012 | 0.005 | 0.006 |
| - | LTE Band 5 | 10MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 20450 | 829 | 24.5 | 23.91 | 114.55% | 0.015 | 0.017 | 0.010 | 0.012 | 0.007 | 0.008 |
| 126 | | | | | | Bottom side | 0 | 20600 | 844 | 24.5 | 23.95 | 113.50% | 0.017 | 0.020 | 0.014 | 0.016 | 0.009 | 0.011 |
| - | | | | | 49 | Bottom side | 0 | 20525 | 836.5 | 24.5 | 23.87 | 115.61% | 0.014 | 0.016 | 0.012 | 0.014 | 0.008 | 0.009 |
| - | | | | 25 RB | 0 | Bottom side | 0 | 20600 | 844 | 23.5 | 22.71 | 119.95% | 0.011 | 0.013 | 0.007 | 0.009 | 0.004 | 0.005 |
| - | | | | 50 RB | | Bottom side | 0 | 20525 | 836.5 | 23.5 | 22.68 | 120.78% | 0.008 | 0.010 | 0.004 | 0.005 | 0.001 | 0.002 |
| - | ULCA 5B | 10MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 20600 | 844 | 24.5 | 23.85 | 116.14% | 0.014 | 0.017 | 0.012 | 0.014 | 0.008 | 0.009 |
| - | LTE Band 7 | 20MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 21350 | 2560 | 24 | 23.36 | 115.88% | 0.009 | 0.010 | 0.005 | 0.006 | 0.004 | 0.005 |
| - | | | | | 99 | Bottom side | 0 | 20850 | 2510 | 24 | 23.42 | 114.29% | 0.012 | 0.014 | 0.007 | 0.008 | 0.007 | 0.008 |
| 127 | | | | | | Bottom side | 0 | 21100 | 2535 | 24 | 23.51 | 111.94% | 0.015 | 0.017 | 0.012 | 0.013 | 0.010 | 0.011 |
| - | | | | 50 RB | 50 | Bottom side | 0 | 21350 | 2560 | 23 | 22.48 | 112.72% | 0.005 | 0.006 | 0.002 | 0.002 | 0.002 | 0.002 |
| - | | | | 100 RB | | Bottom side | 0 | 21350 | 2560 | 23 | 22.43 | 114.02% | 0.003 | 0.003 | 0.002 | 0.002 | 0.001 | 0.001 |
| - | ULCA 7C | 20MHz | QPSK | 1 RB | 99 | Bottom side | 0 | 20850 | 2510 | 24 | 23.39 | 115.08% | 0.010 | 0.011 | 0.005 | 0.006 | 0.006 | 0.007 |
| - | LTE Band 12 | 10MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 23095 | 707.5 | 24.5 | 23.56 | 124.17% | 0.005 | 0.006 | 0.004 | 0.006 | 0.002 | 0.003 |
| - | | | | | | Bottom side | 0 | 23130 | 711 | 24.5 | 23.54 | 124.74% | 0.004 | 0.005 | 0.003 | 0.004 | 0.003 | 0.004 |
| 128 | | | | | 49 | Bottom side | 0 | 23060 | 704 | 24.5 | 23.59 | 123.31% | 0.009 | 0.011 | 0.006 | 0.008 | 0.005 | 0.006 |
| - | | | | 25 RB | 12 | Bottom side | 0 | 23130 | 711 | 23.5 | 22.33 | 130.92% | 0.004 | 0.005 | 0.003 | 0.004 | 0.002 | 0.003 |
| - | | | | 50 RB | | Bottom side | 0 | 23060 | 704 | 23.5 | 22.21 | 134.59% | 0.003 | 0.004 | 0.003 | 0.003 | 0.001 | 0.002 |
| - | LTE Band 13 | 10MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 23230 | 782 | 24.5 | 23.30 | 131.83% | 0.020 | 0.026 | 0.019 | 0.025 | 0.018 | 0.024 |
| 129 | | | | | 25 | Bottom side | 0 | 23230 | 782 | 24.5 | 23.43 | 127.94% | 0.024 | 0.030 | 0.021 | 0.027 | 0.022 | 0.028 |
| - | | | | | 49 | Bottom side | 0 | 23230 | 782 | 24.5 | 23.36 | 130.02% | 0.021 | 0.027 | 0.020 | 0.026 | 0.020 | 0.027 |
| - | | | | 25 RB | 25 | Bottom side | 0 | 23230 | 782 | 23.5 | 22.29 | 132.13% | 0.017 | 0.022 | 0.016 | 0.021 | 0.015 | 0.020 |
| - | | | | 50 RB | | Bottom side | 0 | 23230 | 782 | 23.5 | 22.13 | 137.09% | 0.013 | 0.018 | 0.012 | 0.017 | 0.012 | 0.016 |
| - | LTE Band 14 | 10MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 23330 | 793 | 24.5 | 23.62 | 122.46% | 0.015 | 0.018 | 0.013 | 0.016 | 0.012 | 0.014 |
| 130 | | | | | 25 | Bottom side | 0 | 23330 | 793 | 24.5 | 23.69 | 120.50% | 0.018 | 0.021 | 0.016 | 0.020 | 0.015 | 0.019 |
| - | | | | | 49 | Bottom side | 0 | 23330 | 793 | 24.5 | 23.63 | 122.18% | 0.016 | 0.020 | 0.015 | 0.019 | 0.014 | 0.017 |
| - | | | | 25 RB | 0 | Bottom side | 0 | 23330 | 793 | 23.5 | 22.46 | 127.06% | 0.011 | 0.014 | 0.010 | 0.012 | 0.009 | 0.011 |
| - | | | | 50 RB | | Bottom side | 0 | 23330 | 793 | 23.5 | 22.50 | 125.89% | 0.006 | 0.008 | 0.005 | 0.007 | 0.005 | 0.006 |
| - | LTE Band 17 | 10MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 23790 | 710 | 24.5 | 23.45 | 127.35% | 0.007 | 0.009 | 0.005 | 0.006 | 0.006 | 0.007 |
| - | | | | | | Bottom side | 0 | 23800 | 711 | 24.5 | 23.32 | 131.22% | 0.005 | 0.007 | 0.004 | 0.005 | 0.004 | 0.005 |
| 131 | | | | | 25 | Bottom side | 0 | 23780 | 709 | 24.5 | 23.46 | 127.06% | 0.010 | 0.013 | 0.008 | 0.010 | 0.007 | 0.009 |
| - | | | | 25 RB | 0 | Bottom side | 0 | 23800 | 711 | 23.5 | 22.28 | 132.43% | 0.006 | 0.008 | 0.005 | 0.006 | 0.004 | 0.005 |
| - | | | | 50 RB | | Bottom side | 0 | 23800 | 711 | 23.5 | 22.24 | 133.66% | 0.004 | 0.005 | 0.003 | 0.004 | 0.002 | 0.003 |
| - | LTE Band 25 | 20MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 26140 | 1860 | 24 | 23.29 | 117.76% | 0.022 | 0.026 | 0.017 | 0.020 | 0.013 | 0.015 |
| 132 | | | | | | Bottom side | 0 | 26365 | 1882.5 | 24 | 23.57 | 110.41% | 0.024 | 0.027 | 0.022 | 0.024 | 0.017 | 0.019 |
| - | | | | | | Bottom side | 0 | 26590 | 1905 | 24 | 22.65 | 136.46% | 0.018 | 0.025 | 0.013 | 0.018 | 0.009 | 0.013 |
| - | | | | 50 RB | 0 | Bottom side | 0 | 26365 | 1882.5 | 23 | 21.35 | 146.22% | 0.015 | 0.022 | 0.010 | 0.015 | 0.007 | 0.010 |
| - | | | | 100 RB | | Bottom side | 0 | 26365 | 1882.5 | 23 | 21.34 | 146.55% | 0.011 | 0.016 | 0.007 | 0.011 | 0.004 | 0.006 |
| - | LTE Band 26 | 15MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 26865 | 831.5 | 24.5 | 24.25 | 105.93% | 0.017 | 0.018 | 0.016 | 0.017 | 0.014 | 0.015 |
| - | | | | | | Bottom side | 0 | 26965 | 841.5 | 24.5 | 24.08 | 110.15% | 0.015 | 0.017 | 0.014 | 0.015 | 0.013 | 0.014 |
| 133 | | | | | 74 | Bottom side | 0 | 26825 | 822.5 | 24.5 | 24.09 | 109.90% | 0.018 | 0.020 | 0.017 | 0.018 | 0.015 | 0.016 |
| - | | | | 36 RB | 37 | Bottom side | 0 | 26825 | 822.5 | 23.5 | 22.25 | 133.35% | 0.011 | 0.015 | 0.010 | 0.014 | 0.009 | 0.012 |
| - | | | | 75 RB | | Bottom side | 0 | 26965 | 841.5 | 23.5 | 22.17 | 135.83% | 0.007 | 0.010 | 0.006 | 0.008 | 0.005 | 0.007 |
| - | LTE Band 30 | 10MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 27710 | 2310 | 23 | 22.97 | 100.69% | 0.013 | 0.013 | 0.012 | 0.012 | 0.009 | 0.010 |
| 134 | | | | | 25 | Bottom side | 0 | 27710 | 2310 | 23 | 22.96 | 100.93% | 0.015 | 0.016 | 0.014 | 0.014 | 0.008 | 0.008 |
| - | | | | | 49 | Bottom side | 0 | 27710 | 2310 | 23 | 22.85 | 103.51% | 0.010 | 0.010 | 0.011 | 0.011 | 0.005 | 0.005 |
| - | | | | 25 RB | 12 | Bottom side | 0 | 27710 | 2310 | 22 | 21.59 | 109.90% | 0.006 | 0.007 | 0.006 | 0.006 | 0.003 | 0.003 |
| - | | | | 50 RB | | Bottom side | 0 | 27710 | 2310 | 22 | 21.60 | 109.65% | 0.003 | 0.003 | 0.002 | 0.002 | 0.001 | 0.001 |

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
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## Tx5-LTE TDD Band 38 / Band 41 / LTE FDD Band 66

| Antenna | | | | | | | | | | | | | WNC | | HB | | AWAN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plot page | Band | 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) | | Averaged SAR over 1g (W/kg) | | Averaged SAR over 1g (W/kg) | |
| | | | | | | | | | | | | | Measured | Reported | Measured | Reported | Measured | Reported |
| 135 | LTE Band 38 | 20MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 37850 | 2580 | 24 | 23.96 | 100.93% | 0.023 | 0.023 | 0.021 | 0.021 | 0.021 | 0.021 |
| - | | | | | | Bottom side | 0 | 38000 | 2595 | 24 | 23.83 | 103.99% | 0.018 | 0.019 | 0.018 | 0.019 | 0.016 | 0.016 |
| - | | | | | 99 | Bottom side | 0 | 38150 | 2610 | 24 | 23.88 | 102.80% | 0.020 | 0.021 | 0.019 | 0.019 | 0.018 | 0.018 |
| - | | | | 50 RB | 50 | Bottom side | 0 | 38000 | 2595 | 23 | 22.41 | 114.55% | 0.016 | 0.019 | 0.015 | 0.018 | 0.014 | 0.016 |
| - | | | | 100 RB | | Bottom side | 0 | 38150 | 2610 | 23 | 22.41 | 114.55% | 0.015 | 0.017 | 0.014 | 0.016 | 0.013 | 0.015 |
| - | ULCA 38C | 20MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 37850 | 2580 | 24 | 23.91 | 102.09% | 0.018 | 0.019 | 0.016 | 0.017 | 0.014 | 0.014 |
| - | LTE Band 41 | 20MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 40185 | 2549.5 | 24 | 23.73 | 106.41% | 0.022 | 0.023 | 0.020 | 0.022 | 0.018 | 0.019 |
| - | | | | | | Bottom side | 0 | 40620 | 2593 | 24 | 23.72 | 106.66% | 0.018 | 0.019 | 0.018 | 0.020 | 0.016 | 0.017 |
| - | | | | | | Bottom side | 0 | 41490 | 2680 | 24 | 23.68 | 107.65% | 0.017 | 0.018 | 0.011 | 0.012 | 0.015 | 0.016 |
| 136 | | | | | 99 | Bottom side | 0 | 39750 | 2506 | 24 | 23.95 | 101.16% | 0.026 | 0.026 | 0.024 | 0.024 | 0.022 | 0.022 |
| - | | | | | | Bottom side | 0 | 41055 | 2636.5 | 24 | 23.58 | 110.15% | 0.016 | 0.018 | 0.009 | 0.010 | 0.012 | 0.013 |
| - | | | | 50 RB | 0 | Bottom side | 0 | 39750 | 2506 | 23 | 22.44 | 113.76% | 0.012 | 0.014 | 0.007 | 0.008 | 0.005 | 0.006 |
| - | | | | 100 RB | | Bottom side | 0 | 39750 | 2506 | 23 | 22.39 | 115.08% | 0.010 | 0.012 | 0.005 | 0.006 | 0.002 | 0.002 |
| - | ULCA 41C | 20MHz | QPSK | 1 RB | 99 | Bottom side | 0 | 39750 | 2506 | 24 | 23.94 | 101.39% | 0.023 | 0.024 | 0.022 | 0.023 | 0.020 | 0.020 |
| - | LTE Band 41 (HPUE) | 20MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 40185 | 2549.5 | 27 | 26.04 | 124.74% | 0.022 | 0.027 | 0.016 | 0.020 | 0.014 | 0.017 |
| 137 | | | | | | Bottom side | 0 | 40620 | 2593 | 27 | 26.12 | 122.46% | 0.032 | 0.039 | 0.025 | 0.031 | 0.021 | 0.025 |
| - | | | | | | Bottom side | 0 | 41055 | 2636.5 | 27 | 26.10 | 123.03% | 0.028 | 0.034 | 0.022 | 0.027 | 0.017 | 0.021 |
| - | | | | | | Bottom side | 0 | 41490 | 2680 | 27 | 26.08 | 123.59% | 0.024 | 0.030 | 0.019 | 0.024 | 0.016 | 0.020 |
| - | | | | | 50 | Bottom side | 0 | 39750 | 2506 | 27 | 25.97 | 126.77% | 0.018 | 0.023 | 0.013 | 0.016 | 0.011 | 0.014 |
| - | | | | 50 RB | 0 | Bottom side | 0 | 41055 | 2636.5 | 27 | 25.36 | 145.88% | 0.024 | 0.035 | 0.017 | 0.025 | 0.015 | 0.022 |
| - | | | | 100 RB | | Bottom side | 0 | 40620 | 2593 | 26 | 25.18 | 120.78% | 0.021 | 0.025 | 0.014 | 0.017 | 0.012 | 0.015 |
| 138 | LTE Band 66 | 20MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 132572 | 1770 | 24 | 24.00 | 100.00% | 0.034 | 0.034 | 0.031 | 0.031 | 0.027 | 0.027 |
| - | | | | | 99 | Bottom side | 0 | 132072 | 1720 | 24 | 23.81 | 104.47% | 0.029 | 0.030 | 0.028 | 0.029 | 0.022 | 0.022 |
| - | | | | | | Bottom side | 0 | 132322 | 1745 | 24 | 23.92 | 101.86% | 0.032 | 0.033 | 0.029 | 0.029 | 0.023 | 0.023 |
| - | | | | 50 RB | 50 | Bottom side | 0 | 132572 | 1770 | 23 | 22.35 | 116.14% | 0.025 | 0.029 | 0.021 | 0.025 | 0.016 | 0.019 |
| - | | | | 100 RB | | Bottom side | 0 | 132072 | 1720 | 23 | 22.34 | 116.41% | 0.021 | 0.024 | 0.017 | 0.020 | 0.010 | 0.012 |
| - | ULCA 66B | 10MHz | QPSK | 1 RB | 49 | Bottom side | 0 | 132622 | 1775 | 24 | 23.29 | 117.76% | 0.024 | 0.028 | 0.025 | 0.029 | 0.022 | 0.026 |
| - | ULCA 66C | 20MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 132572 | 1770 | 24 | 23.97 | 100.69% | 0.030 | 0.031 | 0.027 | 0.027 | 0.025 | 0.025 |

## Tx5-5G NR n2 / n5 / n12 / n66

| Antenna | | | | | | | | | | | | | WNC | | HB | | AWAN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plot page | Band | 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) | | Averaged SAR over 1g (W/kg) | | Averaged SAR over 1g (W/kg) | |
| | | | | | | | | | | | | | Measured | Reported | Measured | Reported | Measured | Reported |
| - | NR n2 | 20MHz | Pi/2 BPSK | 1 RB | 1 | Bottom side | 0 | 372000 | 1860 | 24 | 23.83 | 103.99% | 0.021 | 0.022 | 0.020 | 0.020 | 0.017 | 0.018 |
| - | | | | | | Bottom side | 0 | 376000 | 1880 | 24 | 23.32 | 116.95% | 0.015 | 0.018 | 0.014 | 0.016 | 0.011 | 0.012 |
| 139 | | | | | | Bottom side | 0 | 380000 | 1900 | 24 | 23.91 | 102.09% | 0.025 | 0.025 | 0.023 | 0.024 | 0.020 | 0.020 |
| - | | | | 50 RB | 0 | Bottom side | 0 | 376000 | 1880 | 24 | 23.20 | 120.23% | 0.018 | 0.022 | 0.016 | 0.019 | 0.012 | 0.015 |
| - | | | | 100 RB | | Bottom side | 0 | 372000 | 1860 | 23.5 | 22.73 | 119.40% | 0.015 | 0.018 | 0.013 | 0.015 | 0.009 | 0.011 |
| - | NR n5 | 20MHz | Pi/2 BPSK | 1 RB | 1 | Bottom side | 0 | 166800 | 834 | 24 | 23.91 | 102.09% | 0.008 | 0.008 | 0.006 | 0.007 | 0.003 | 0.003 |
| 140 | | | | | | Bottom side | 0 | 167300 | 836.5 | 24 | 23.98 | 100.46% | 0.012 | 0.012 | 0.010 | 0.010 | 0.010 | 0.010 |
| - | | | | | | Bottom side | 0 | 167800 | 839 | 24 | 23.93 | 101.62% | 0.011 | 0.011 | 0.008 | 0.008 | 0.005 | 0.005 |
| - | | | | 50 RB | 0 | Bottom side | 0 | 167300 | 836.5 | 24 | 23.65 | 108.39% | 0.010 | 0.011 | 0.007 | 0.008 | 0.004 | 0.005 |
| - | | | | 100 RB | | Bottom side | 0 | 167800 | 839 | 23.5 | 23.15 | 108.39% | 0.006 | 0.007 | 0.003 | 0.004 | 0.001 | 0.001 |
| 141 | NR n12 | 15MHz | Pi/2 BPSK | 1 RB | 1 | Bottom side | 0 | 141300 | 706.5 | 24 | 23.91 | 102.09% | 0.017 | 0.017 | 0.014 | 0.015 | 0.013 | 0.013 |
| - | | | | | | Bottom side | 0 | 141500 | 707.5 | 24 | 23.89 | 102.57% | 0.014 | 0.014 | 0.011 | 0.011 | 0.011 | 0.011 |
| - | | | | | | Bottom side | 0 | 141700 | 708.5 | 24 | 23.84 | 103.75% | 0.012 | 0.012 | 0.009 | 0.010 | 0.009 | 0.010 |
| - | | | | 36 RB | 0 | Bottom side | 0 | 141500 | 707.5 | 24 | 23.80 | 104.71% | 0.010 | 0.010 | 0.007 | 0.008 | 0.007 | 0.007 |
| - | | | | 75 RB | | Bottom side | 0 | 141700 | 708.5 | 23.5 | 23.30 | 104.71% | 0.007 | 0.007 | 0.005 | 0.005 | 0.004 | 0.004 |
| - | NR n66 | 20MHz | Pi/2 BPSK | 1 RB | 1 | Bottom side | 0 | 344000 | 1720 | 24 | 23.78 | 105.20% | 0.031 | 0.033 | 0.029 | 0.031 | 0.025 | 0.026 |
| - | | | | | | Bottom side | 0 | 349000 | 1745 | 24 | 23.84 | 103.75% | 0.034 | 0.035 | 0.031 | 0.032 | 0.026 | 0.027 |
| 142 | | | | | | Bottom side | 0 | 354000 | 1770 | 24 | 23.98 | 100.46% | 0.036 | 0.036 | 0.034 | 0.034 | 0.030 | 0.030 |
| - | | | | 50 RB | 0 | Bottom side | 0 | 349000 | 1745 | 24 | 23.70 | 107.15% | 0.028 | 0.030 | 0.026 | 0.028 | 0.022 | 0.024 |
| - | | | | 100 RB | | Bottom side | 0 | 354000 | 1770 | 23.5 | 23.20 | 107.15% | 0.022 | 0.024 | 0.020 | 0.021 | 0.016 | 0.017 |

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
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## Tx8-LTE FDD Band 2 / Band 7 / Band 42 / Band 48 / Band 66

| Antenna | | | | | | | | | | | | | WNC | | HB | | AWAN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plot page | Band | 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) | | Averaged SAR over 1g (W/kg) | | Averaged SAR over 1g (W/kg) | |
| | | | | | | | | | | | | | Measured | Reported | Measured | Reported | Measured | Reported |
| - | LTE Band 2 | 20MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 18700 | 1860 | 21.9 | 20.49 | 138.36% | 0.342 | 0.473 | 0.332 | 0.459 | 0.323 | 0.447 |
| 143 | | | | | | Bottom side | 0 | 18900 | 1880 | 21.9 | 20.59 | 135.21% | 0.366 | 0.495 | 0.351 | 0.475 | 0.348 | 0.471 |
| - | | | | | | Bottom side | 0 | 19100 | 1900 | 21.9 | 20.43 | 140.28% | 0.333 | 0.467 | 0.322 | 0.452 | 0.317 | 0.445 |
| - | | | | 50 RB | 49 | Bottom side | 0 | 18900 | 1880 | 21.9 | 20.37 | 142.23% | 0.312 | 0.444 | 0.308 | 0.438 | 0.302 | 0.430 |
| - | | | | 100 RB | | Bottom side | 0 | 18700 | 1860 | 21.9 | 20.33 | 143.55% | 0.297 | 0.426 | 0.287 | 0.412 | 0.274 | 0.393 |
| - | LTE Band 7 | 20MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 20850 | 2510 | 20.5 | 19.25 | 133.35% | 0.342 | 0.456 | 0.318 | 0.424 | 0.312 | 0.416 |
| 144 | | | | | | Bottom side | 0 | 21100 | 2535 | 20.5 | 19.42 | 128.23% | 0.390 | 0.500 | 0.361 | 0.463 | 0.349 | 0.448 |
| - | | | | | | Bottom side | 0 | 21350 | 2560 | 20.5 | 19.33 | 130.92% | 0.361 | 0.473 | 0.345 | 0.452 | 0.328 | 0.429 |
| - | | | | 50 RB | 0 | Bottom side | 0 | 21100 | 2535 | 20.5 | 19.23 | 133.97% | 0.298 | 0.399 | 0.278 | 0.372 | 0.271 | 0.363 |
| - | | | | 100 RB | | Bottom side | 0 | 21350 | 2560 | 20.5 | 19.15 | 136.46% | 0.275 | 0.375 | 0.253 | 0.345 | 0.241 | 0.329 |
| - | LTE Band 42 | 20MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 43340 | 3575 | 20.5 | 19.09 | 138.36% | 0.309 | 0.428 | 0.289 | 0.400 | 0.281 | 0.389 |
| 145 | | | | | | Bottom side | 0 | 43490 | 3590 | 20.5 | 19.16 | 136.14% | 0.320 | 0.436 | 0.314 | 0.427 | 0.310 | 0.422 |
| - | | | | | 50 | Bottom side | 0 | 43190 | 3560 | 20.5 | 18.95 | 142.89% | 0.289 | 0.413 | 0.271 | 0.387 | 0.267 | 0.382 |
| - | | | | 50 RB | 0 | Bottom side | 0 | 43340 | 3575 | 20.5 | 18.90 | 144.54% | 0.274 | 0.396 | 0.261 | 0.377 | 0.256 | 0.370 |
| - | | | | 100 RB | | Bottom side | 0 | 43490 | 3590 | 20.5 | 18.90 | 144.54% | 0.251 | 0.363 | 0.234 | 0.338 | 0.220 | 0.318 |
| - | LTE Band 48 | 20MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 55340 | 3560 | 19.8 | 19.23 | 114.02% | 0.387 | 0.441 | 0.372 | 0.424 | 0.366 | 0.417 |
| - | | | | | | Bottom side | 0 | 55773 | 3603.3 | 19.8 | 19.13 | 116.68% | 0.361 | 0.421 | 0.354 | 0.413 | 0.347 | 0.405 |
| 146 | | | | | | Bottom side | 0 | 56640 | 3690 | 19.8 | 19.25 | 113.50% | 0.417 | 0.473 | 0.405 | 0.460 | 0.387 | 0.439 |
| - | | | | | 99 | Bottom side | 0 | 56207 | 3646.7 | 19.8 | 19.22 | 114.29% | 0.342 | 0.391 | 0.333 | 0.381 | 0.320 | 0.366 |
| - | | | | 50 RB | 49 | Bottom side | 0 | 55340 | 3560 | 19.8 | 19.08 | 118.03% | 0.325 | 0.384 | 0.320 | 0.378 | 0.316 | 0.373 |
| - | | | | 100 RB | | Bottom side | 0 | 55773 | 3603.3 | 19.8 | 19.06 | 118.58% | 0.316 | 0.375 | 0.311 | 0.369 | 0.301 | 0.357 |
| - | ULCA 48C | 20MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 55340 | 3560 | 19.8 | 19.19 | 115.08% | 0.374 | 0.430 | 0.346 | 0.398 | 0.322 | 0.371 |
| - | LTE Band 66 | 20MHz | QPSK | 1 RB | 0 | Bottom side | 0 | 132072 | 1720 | 21.6 | 20.37 | 132.74% | 0.342 | 0.454 | 0.330 | 0.438 | 0.324 | 0.430 |
| 147 | | | | | | Bottom side | 0 | 132572 | 1770 | 21.6 | 20.44 | 130.62% | 0.359 | 0.469 | 0.342 | 0.447 | 0.336 | 0.439 |
| - | | | | | 50 | Bottom side | 0 | 132322 | 1745 | 21.6 | 20.26 | 136.14% | 0.321 | 0.437 | 0.318 | 0.433 | 0.311 | 0.423 |
| - | | | | 50 RB | 0 | Bottom side | 0 | 132572 | 1770 | 21.6 | 20.20 | 138.04% | 0.309 | 0.427 | 0.305 | 0.421 | 0.301 | 0.415 |
| - | | | | 100 RB | | Bottom side | 0 | 132322 | 1745 | 21.6 | 20.20 | 138.04% | 0.303 | 0.418 | 0.294 | 0.406 | 0.287 | 0.396 |

## Tx8-5G NR n2 / n7 / n41 / n66

| Antenna | | | | | | | | | | | | | WNC | | HB | | AWAN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plot page | Band | 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) | | Averaged SAR over 1g (W/kg) | | Averaged SAR over 1g (W/kg) | |
| | | | | | | | | | | | | | Measured | Reported | Measured | Reported | Measured | Reported |
| - | NR n2 | 20MHz | Pi/2 BPSK | 1 RB | 1 | Bottom side | 0 | 372000 | 1860 | 20.8 | 19.46 | 136.14% | 0.341 | 0.464 | 0.335 | 0.456 | 0.326 | 0.444 |
| 148 | | | | | | Bottom side | 0 | 376000 | 1880 | 20.8 | 19.78 | 126.47% | 0.381 | 0.482 | 0.374 | 0.473 | 0.363 | 0.459 |
| - | | | | | | Bottom side | 0 | 380000 | 1900 | 20.8 | 19.41 | 137.72% | 0.324 | 0.446 | 0.310 | 0.427 | 0.303 | 0.417 |
| - | | | | 50 RB | 0 | Bottom side | 0 | 376000 | 1880 | 20.8 | 19.68 | 129.42% | 0.346 | 0.448 | 0.329 | 0.426 | 0.319 | 0.413 |
| - | | | | 100 RB | | Bottom side | 0 | 372000 | 1860 | 20.8 | 19.35 | 139.64% | 0.342 | 0.478 | 0.332 | 0.464 | 0.321 | 0.448 |
| 149 | NR n7 | 20MHz | Pi/2 BPSK | 1 RB | 1 | Bottom side | 0 | 502000 | 2510 | 20.1 | 19.08 | 126.47% | 0.390 | 0.493 | 0.376 | 0.476 | 0.365 | 0.462 |
| - | | | | | | Bottom side | 0 | 507000 | 2535 | 20.1 | 18.88 | 132.43% | 0.331 | 0.438 | 0.323 | 0.428 | 0.314 | 0.416 |
| - | | | | | | Bottom side | 0 | 512000 | 2560 | 20.1 | 18.95 | 130.32% | 0.358 | 0.467 | 0.340 | 0.443 | 0.335 | 0.437 |
| - | | | | 50 RB | 0 | Bottom side | 0 | 502000 | 2510 | 20.1 | 19.02 | 128.23% | 0.378 | 0.485 | 0.366 | 0.469 | 0.359 | 0.460 |
| - | | | | 100 RB | | Bottom side | 0 | 512000 | 2560 | 20.1 | 18.87 | 132.74% | 0.314 | 0.417 | 0.311 | 0.413 | 0.306 | 0.406 |
| - | NR n41 | 100MHz | Pi/2 BPSK | 1 RB | 1 | Bottom side | 0 | 509202 | 2546 | 18.3 | 17.04 | 133.66% | 0.195 | 0.261 | 0.187 | 0.250 | 0.173 | 0.231 |
| - | | | | | | Bottom side | 0 | 518598 | 2593 | 18.3 | 17.03 | 133.97% | 0.173 | 0.232 | 0.179 | 0.240 | 0.162 | 0.217 |
| 150 | | | | | | Bottom side | 0 | 528000 | 2640 | 18.3 | 17.28 | 126.47% | 0.216 | 0.273 | 0.200 | 0.253 | 0.192 | 0.243 |
| - | | | | 135 RB | 0 | Bottom side | 0 | 528000 | 2640 | 18.3 | 17.02 | 134.28% | 0.201 | 0.270 | 0.185 | 0.248 | 0.174 | 0.234 |
| - | | | | 270 RB | | Bottom side | 0 | 518598 | 2593 | 18.3 | 16.94 | 136.77% | 0.161 | 0.220 | 0.156 | 0.213 | 0.144 | 0.197 |
| - | NR n41 (HPUE) | 100MHz | Pi/2 BPSK | 1 RB | 1 | Bottom side | 0 | 509202 | 2546 | 19.4 | 19.29 | 102.57% | 0.182 | 0.187 | 0.165 | 0.169 | 0.152 | 0.156 |
| - | | | | | | Bottom side | 0 | 518598 | 2593 | 19.4 | 19.35 | 101.16% | 0.166 | 0.168 | 0.133 | 0.135 | 0.127 | 0.128 |
| 151 | | | | | | Bottom side | 0 | 528000 | 2640 | 19.4 | 19.36 | 100.93% | 0.214 | 0.216 | 0.189 | 0.191 | 0.172 | 0.174 |
| - | | | | 135 RB | 0 | Bottom side | 0 | 528000 | 2640 | 19.4 | 19.23 | 103.99% | 0.204 | 0.212 | 0.167 | 0.174 | 0.144 | 0.150 |
| - | | | | 270 RB | | Bottom side | 0 | 518598 | 2593 | 19.4 | 19.27 | 103.04% | 0.208 | 0.214 | 0.159 | 0.164 | 0.137 | 0.141 |
| 152 | NR n66 | 20MHz | Pi/2 BPSK | 1 RB | 1 | Bottom side | 0 | 344000 | 1720 | 20.6 | 19.48 | 129.42% | 0.268 | 0.347 | 0.251 | 0.325 | 0.232 | 0.300 |
| - | | | | | | Bottom side | 0 | 349000 | 1745 | 20.6 | 19.36 | 133.05% | 0.227 | 0.302 | 0.221 | 0.294 | 0.203 | 0.270 |
| - | | | | | | Bottom side | 0 | 354000 | 1770 | 20.6 | 19.38 | 132.43% | 0.248 | 0.328 | 0.213 | 0.282 | 0.193 | 0.256 |
| - | | | | 50 RB | 0 | Bottom side | 0 | 344000 | 1720 | 20.6 | 19.29 | 135.21% | 0.211 | 0.285 | 0.206 | 0.279 | 0.197 | 0.266 |
| - | | | | 100 RB | | Bottom side | 0 | 344000 | 1720 | 20.6 | 19.28 | 135.52% | 0.209 | 0.283 | 0.202 | 0.274 | 0.195 | 0.264 |

Note:

$$\text{Scaling} = \frac{\text{reported SAR}}{\text{measured SAR}} = \frac{P2(mW)}{P1(mW)} = 10^{\left(\frac{P_2 - P_1}{10}\right)}(dBm)$$

Reported SAR = measured SAR * (scaling)

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

### 2.3 Reporting statements of conformity

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

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# 3. Simultaneous Transmission Analysis

## Simultaneous Transmission Scenarios:

| NO. | Simultaneous Transmit Configurations | Body |
|---|---|---|
| 1 | WWAN + 2.4GHz MIMO | YES |
| 2 | WWAN + 5GHz MIMO | YES |
| 3 | WWAN + BT + 5GHz MIMO | YES |
| 4 | WWAN + 2.4GHz WLAN Tx1 | YES |
| 5 | WWAN + 2.4GHz WLAN Tx2 + BT Tx1 | YES |
| 6 | WWAN + 5GHz WLAN Tx2 + BT Tx1 | YES |
| 7 | WWAN + 5GHz WLAN Tx1 + BT Tx1 | YES |

Note :
1. The Intel AX201NGW WLAN/BT module is also integrated into this host, WLAN/BT power and WLAN SAR testing data, which can be referred to Intel SAR test report, Report No.:200525-02.TR01(FCC ID:PD9AX201NG) and these results are used for simultaneous transmission analysis.
2. According to Intel SAR report, the test positions and 1g SAR result used for the testing below are based on the SISO standalone WLAN SAR result. When the MIMO operation active will be reduced by 3dB within each SISO operation, therefore the MIMO SAR was estimated based on SISO standalone results to perform the simultaneous transmission analysis with WWAN operation.

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### 3.1 Estimated SAR calculation

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

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

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

### 3.2 SPLSR evaluation and analysis

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

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

The ratio is determined by **(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.

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## Tx5 antenna

| WWAN | Exposure position 1g(W/kg) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 | Scenario 5 | Scenario 6 | Scenario 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WWAN Ant 5 | WLAN 2.4GHz Main(Tx2) | WLAN 2.4GHz Aux(Tx1) | WLAN 5GHz Main(Tx2) | WLAN 5GHz Aux(Tx1) | BT Aux (Tx1) | WLAN 2.4GHz MIMO(Tx2) | WLAN 2.4GHz MIMO(Tx1) | WLAN 5GHz MIMO(Tx2) | WLAN 5GHz MIMO(Tx1) | 1+7+8 Sum | 1+9+10 Sum | 1+6+9+10 Sum | 1+3 Sum | 1+2+6 Sum | 1+4+6 Sum | 1+5+6 Sum |
| WCDMA II | Laptop_Bottom | 0.027 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.867 | 0.882 | 0.992 | 0.837 | 1.007 | 0.917 | 1.067 |
| WCDMA IV | Laptop_Bottom | 0.045 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.885 | 0.900 | 1.010 | 0.855 | 1.025 | 0.935 | 1.085 |
| WCDMA V | Laptop_Bottom | 0.012 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.852 | 0.867 | 0.977 | 0.822 | 0.992 | 0.902 | 1.052 |
| LTE B2 | Laptop_Bottom | 0.025 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.865 | 0.880 | 0.990 | 0.835 | 1.005 | 0.915 | 1.065 |
| LTE B4 | Laptop_Bottom | 0.028 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.868 | 0.883 | 0.993 | 0.838 | 1.008 | 0.918 | 1.068 |
| LTE B5 | Laptop_Bottom | 0.020 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.860 | 0.875 | 0.985 | 0.830 | 1.000 | 0.910 | 1.060 |
| LTE B7 | Laptop_Bottom | 0.017 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.857 | 0.872 | 0.982 | 0.827 | 0.997 | 0.907 | 1.057 |
| LTE B12 | Laptop_Bottom | 0.011 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.851 | 0.866 | 0.976 | 0.821 | 0.991 | 0.901 | 1.051 |
| LTE B13 | Laptop_Bottom | 0.030 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.870 | 0.885 | 0.995 | 0.840 | 1.010 | 0.920 | 1.070 |
| LTE B14 | Laptop_Bottom | 0.021 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.861 | 0.876 | 0.986 | 0.831 | 1.001 | 0.911 | 1.061 |
| LTE B17 | Laptop_Bottom | 0.013 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.853 | 0.868 | 0.978 | 0.823 | 0.993 | 0.903 | 1.053 |
| LTE B25 | Laptop_Bottom | 0.027 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.867 | 0.882 | 0.992 | 0.837 | 1.007 | 0.917 | 1.067 |
| LTE B26 | Laptop_Bottom | 0.020 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.860 | 0.875 | 0.985 | 0.830 | 1.000 | 0.910 | 1.060 |
| LTE B30 | Laptop_Bottom | 0.016 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.856 | 0.871 | 0.981 | 0.826 | 0.996 | 0.906 | 1.056 |
| LTE B38 | Laptop_Bottom | 0.023 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.863 | 0.878 | 0.988 | 0.833 | 1.003 | 0.913 | 1.063 |
| LTE B41 | Laptop_Bottom | 0.026 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.866 | 0.881 | 0.991 | 0.836 | 1.006 | 0.916 | 1.066 |
| LTE B41(HPUE) | Laptop_Bottom | 0.039 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.879 | 0.894 | 1.004 | 0.849 | 1.019 | 0.929 | 1.079 |
| LTE B66 | Laptop_Bottom | 0.034 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.874 | 0.889 | 0.999 | 0.844 | 1.014 | 0.924 | 1.074 |
| 5G n2 | Laptop_Bottom | 0.025 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.865 | 0.880 | 0.990 | 0.835 | 1.005 | 0.915 | 1.065 |
| 5G n5 | Laptop_Bottom | 0.012 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.852 | 0.867 | 0.977 | 0.822 | 0.992 | 0.902 | 1.052 |
| 5G n12 | Laptop_Bottom | 0.017 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.857 | 0.872 | 0.982 | 0.827 | 0.997 | 0.907 | 1.057 |
| 5G n66 | Laptop_Bottom | 0.036 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 0.876 | 0.891 | 1.001 | 0.846 | 1.016 | 0.926 | 1.076 |

## Tx8 antenna

| WWAN | Exposure position 1g(W/kg) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 | Scenario 5 | Scenario 6 | Scenario 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WWAN Ant 8 | WLAN 2.4GHz Main(Tx2) | WLAN 2.4GHz Aux(Tx1) | WLAN 5GHz Main(Tx2) | WLAN 5GHz Aux(Tx1) | BT Aux (Tx1) | WLAN 2.4GHz MIMO(Tx2) | WLAN 2.4GHz MIMO(Tx1) | WLAN 5GHz MIMO(Tx2) | WLAN 5GHz MIMO(Tx1) | 1+7+8 Sum | 1+9+10 Sum | 1+6+9+10 Sum | 1+3 Sum | 1+2+6 Sum | 1+4+6 Sum | 1+5+6 Sum |
| LTE B2 | Laptop_Bottom | 0.495 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 1.335 | 1.350 | 1.460 | 1.305 | 1.475 | 1.385 | 1.535 |
| LTE B7 | Laptop_Bottom | 0.500 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 1.340 | 1.355 | 1.465 | 1.310 | 1.480 | 1.390 | 1.540 |
| LTE B42 | Laptop_Bottom | 0.436 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 1.276 | 1.291 | 1.401 | 1.246 | 1.416 | 1.326 | 1.476 |
| LTE B48 | Laptop_Bottom | 0.473 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 1.313 | 1.328 | 1.438 | 1.283 | 1.453 | 1.363 | 1.513 |
| LTE B66 | Laptop_Bottom | 0.469 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 1.309 | 1.324 | 1.434 | 1.279 | 1.449 | 1.359 | 1.509 |
| 5G n2 | Laptop_Bottom | 0.482 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 1.322 | 1.337 | 1.447 | 1.292 | 1.462 | 1.372 | 1.522 |
| 5G n7 | Laptop_Bottom | 0.493 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 1.333 | 1.348 | 1.458 | 1.303 | 1.473 | 1.383 | 1.533 |
| 5G n41 | Laptop_Bottom | 0.273 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 1.113 | 1.128 | 1.238 | 1.083 | 1.253 | 1.163 | 1.313 |
| 5G n41(HPUE) | Laptop_Bottom | 0.216 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 1.056 | 1.071 | 1.181 | 1.026 | 1.196 | 1.106 | 1.256 |
| 5G n66 | Laptop_Bottom | 0.347 | 0.870 | 0.810 | 0.780 | 0.930 | 0.110 | 0.435 | 0.405 | 0.390 | 0.465 | 1.187 | 1.202 | 1.312 | 1.157 | 1.327 | 1.237 | 1.387 |

## Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because either the sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is ≦ 0.04 for all circumstances that require SPLSR calculation.

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# 4. Instruments List

| Manufacturer | Device | Type | Serial number | Date of last calibration | Date of next calibration |
|---|---|---|---|---|---|
| SPEAG | Dosimetric E-Field Probe | EX3DV4 | 7509 | Mar.25,2020 | Mar.24,2021 |
| SPEAG | System Validation Dipole | D750V3 | 1015 | Aug.13,2020 | Aug.12,2021 |
| | | D835V2 | 4d063 | Aug.13,2020 | Aug.12,2021 |
| | | D1750V2 | 1008 | Aug.14,2020 | Aug.13,2021 |
| | | D1900V2 | 5d173 | Apr.22,2020 | Apr.21,2021 |
| | | D2300V2 | 1023 | Aug.13,2020 | Aug.12,2021 |
| | | D2600V2 | 1005 | Jan.29,2020 | Jan.28,2021 |
| | | D3500V2 | 1009 | Aug.12,2020 | Aug.11,2021 |
| | | D3700V2 | 1057 | Nov.04,2019 | Nov.03,2020 |
| SPEAG | Data acquisition Electronics | DAE4 | 877 | Mar.17,2020 | Mar.16,2021 |
| SPEAG | Software | DASY 52 V52.10.4 | N/A | Calibration not required | Calibration not required |
| SPEAG | Phantom | ELI | N/A | Calibration not required | Calibration not required |
| Agilent | Network Analyzer | E5071C | MY46100433 | Dec.13,2019 | Dec.12,2020 |
| Agilent | Dielectric Probe Kit | 85070E | MY44300677 | Calibration not required | Calibration not required |
| Agilent | Dual-directional coupler | 772D | MY46151242 | Aug.17,2020 | Aug.16,2021 |
| | | 778D | MY48220468 | Aug.17,2020 | Aug.16,2021 |
| Agilent | RF Signal Generator | N5181A | MY50141235 | May.04,2020 | May.03,2021 |
| Agilent | Power Meter | E4417A | MY51410006 | Mar.09,2020 | Mar.08,2021 |
| Agilent | Power Sensor | E9301H | MY51470001 | Mar.09,2020 | Mar.08,2021 |
| | | | MY51470002 | Mar.09,2020 | Mar.08,2021 |

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| Manufacturer | Device | Type | Serial number | Date of last calibration | Date of next calibration |
|---|---|---|---|---|---|
| TECPEL | Digital thermometer | DTM-303A | TP130074 | Apr.10,2020 | Apr.09,2021 |
| Anritsu | Radio Communication Test | MT8820C | 6201061049 | Dec.08,2019 | Dec.07,2020 |
| R&S | Radio Communication Test | CMW 500 | 125470 | Dec.11,2019 | Dec.10,2020 |

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# 5. Measurements

Date: 2020/9/4

**Report No. :ES/2020/80024**

## WCDMA Band II_Body_Bottom_side_CH 9538_0mm

Communication System: WCDMA; Frequency: 1907.6 MHz; Duty cycle= 1:1

Medium parameters used: f = 1908 MHz; $\sigma$ = 1.427 S/m; $\varepsilon r$ = 39.123; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.5°C; Liquid temperature: 21.9℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.07, 8.07, 8.07) @ 1907.6 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x101x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.0304 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.447 V/m; Power Drift = 0.15 dB

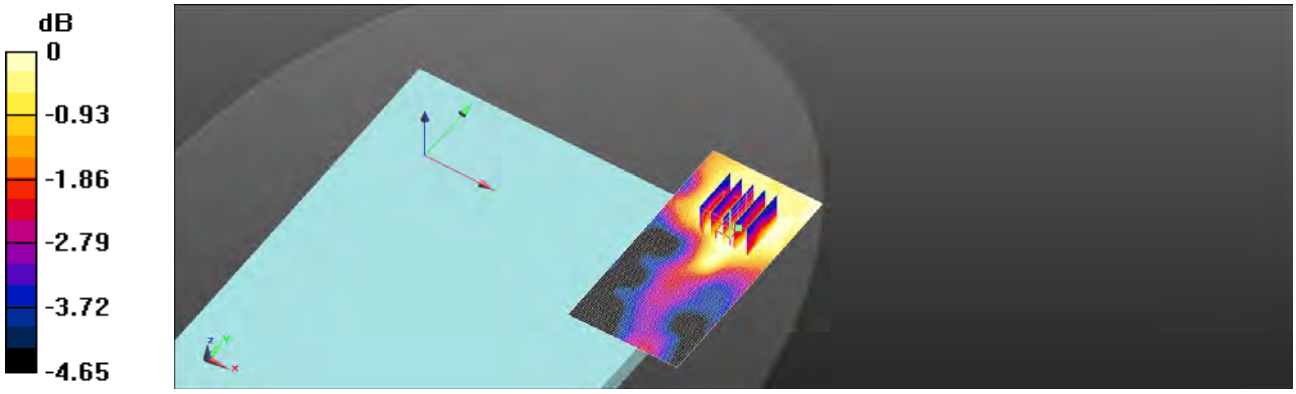
Peak SAR (extrapolated) = 0.0260 W/kg

**SAR(1 g) = 0.023 W/kg; SAR(10 g) = 0.019 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 89.7%

Maximum value of SAR (measured) = 0.0247 W/kg




0 dB = 0.0247 W/kg = -16.07 dBW/kg

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Date: 2020/9/3

**Report No. :ES/2020/80024**

## WCDMA Band IV_Body_Bottom_side_CH 1513_0mm

Communication System: WCDMA; Frequency: 1752.6 MHz; Duty cycle= 1:1

Medium parameters used: f = 1753 MHz; $\sigma$ = 1.37 S/m; $\varepsilon r$ = 39.973; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.3°C; Liquid temperature: 22.7℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.34, 8.34, 8.34) @ 1752.6 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x81x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.0414 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.953 V/m; Power Drift = 0.17 dB

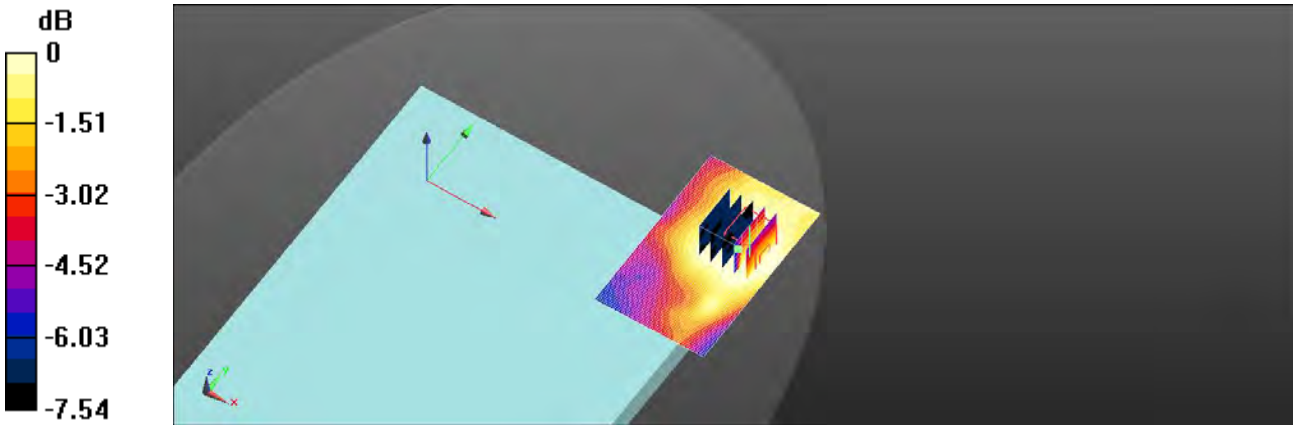
Peak SAR (extrapolated) = 0.0600 W/kg

**SAR(1 g) = 0.039 W/kg; SAR(10 g) = 0.020 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 83.5%

Maximum value of SAR (measured) = 0.0369 W/kg




0 dB = 0.0369 W/kg = -14.33 dBW/kg

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Date: 2020/9/2

**Report No. :ES/2020/80024**

## WCDMA Band V_ Bottom_side CH 4183_0mm

Communication System: WCDMA; Frequency: 836.6 MHz; Duty cycle= 1:1

Medium parameters used: f = 837 MHz; $\sigma$ = 0.919 S/m; $\varepsilon_r$ = 41.744; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.5°C; Liquid temperature: 22.1℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(9.73, 9.73, 9.73) @ 836.6 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x81x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.0194 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.777 V/m; Power Drift = 0.18 dB

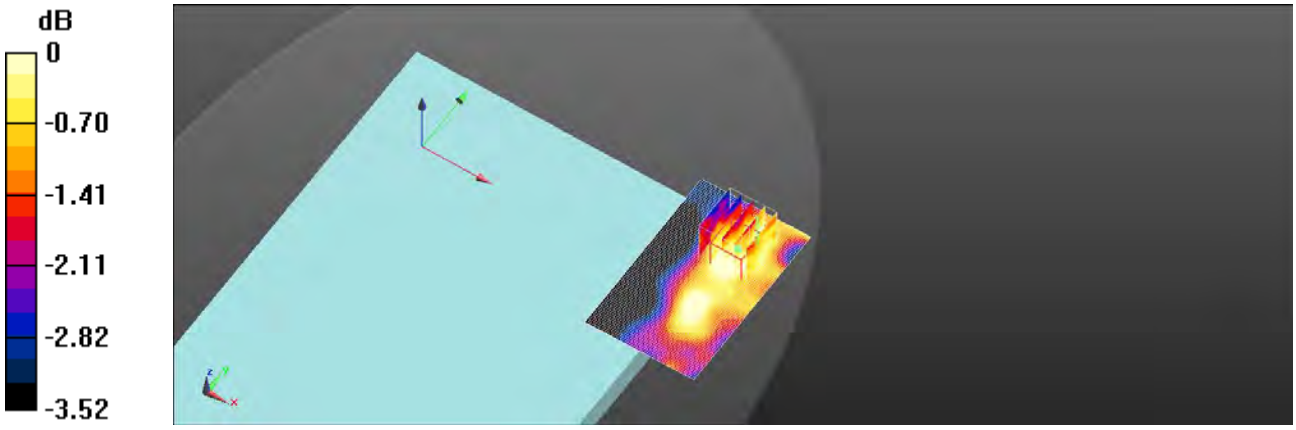
Peak SAR (extrapolated) = 0.0120 W/kg

**SAR(1 g) = 0.011 W/kg; SAR(10 g) = 0.010 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 98.3%

Maximum value of SAR (measured) = 0.0113 W/kg




0 dB = 0.0113 W/kg = -19.47 dBW/kg

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Date: 2020/9/4

**Report No. :ES/2020/80024**

## LTE Band 2 (20MHz)_Body_Bottom side_CH 18900_QPSK_1-0_0mm

Communication System: LTE; Frequency: 1880 MHz; Duty cycle= 1:1

Medium parameters used: f = 1880 MHz; $\sigma$ = 1.393 S/m; $\varepsilon_r$ = 39.538; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.5°C; Liquid temperature: 21.9℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.07, 8.07, 8.07) @ 1880 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x101x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.0313 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.224 V/m; Power Drift = -0.12 dB

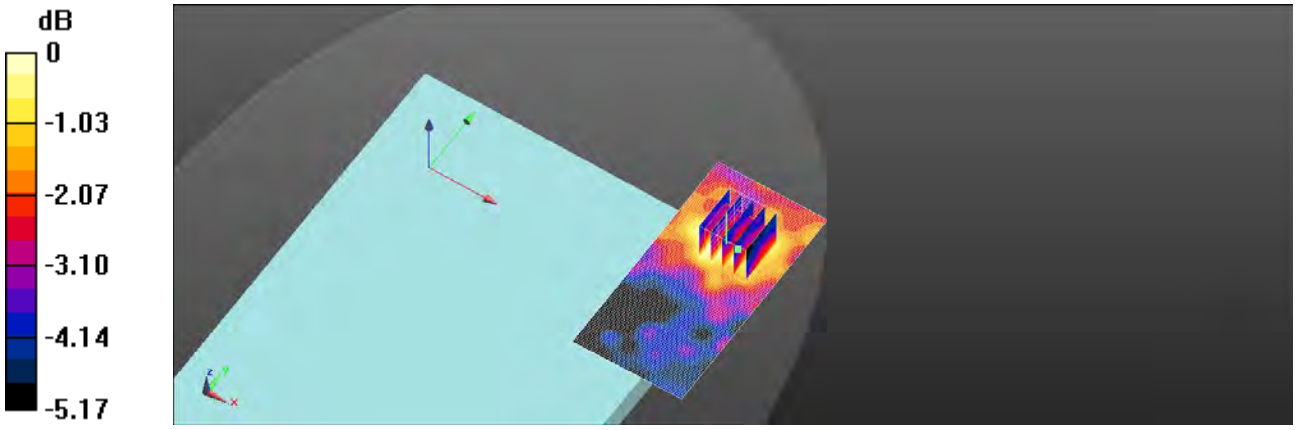
Peak SAR (extrapolated) = 0.0310 W/kg

**SAR(1 g) = 0.025 W/kg; SAR(10 g) = 0.019 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 80.7%

Maximum value of SAR (measured) = 0.0291 W/kg




0 dB = 0.0291 W/kg = -15.36 dBW/kg

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Date: 2020/9/3

**Report No. :ES/2020/80024**

## LTE Band 4 (20MHz)_Body_Bottom side_CH 20175_QPSK_1-0_0mm

Communication System: LTE; Frequency: 1732.5 MHz; Duty cycle= 1:1

Medium parameters used: f = 1732.5 MHz; $\sigma$ = 1.335 S/m; $\varepsilon_r$ = 40.833; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.3°C; Liquid temperature: 22.7℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.34, 8.34, 8.34) @ 1732.5 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x101x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.0353 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.006 V/m; Power Drift = 0.19 dB

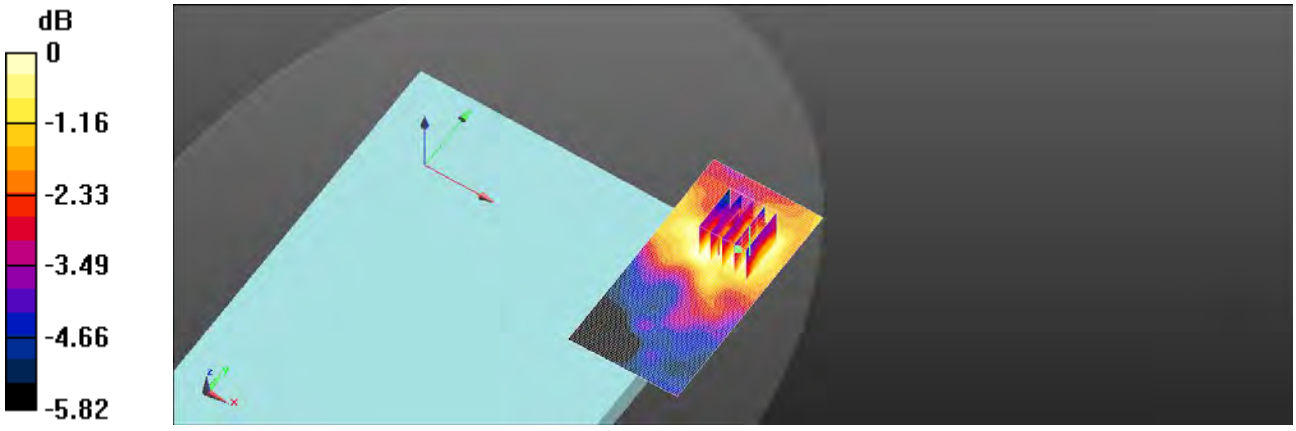
Peak SAR (extrapolated) = 0.0320 W/kg

**SAR(1 g) = 0.027 W/kg; SAR(10 g) = 0.021 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 84.2%

Maximum value of SAR (measured) = 0.0290 W/kg




0 dB = 0.0290 W/kg = -15.38 dBW/kg

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Date: 2020/9/2

**Report No. :ES/2020/80024**

## LTE Band 5 (10MHz)_Body_Bottom side_CH 20600_QPSK_1-0_0mm

Communication System: LTE; Frequency: 844 MHz; Duty cycle= 1:1

Medium parameters used: f = 844 MHz; $\sigma$ = 0.938 S/m; $\varepsilon_r$ = 41.614; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.5°C; Liquid temperature: 22.1℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(9.73, 9.73, 9.73) @ 844 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x101x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.0196 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.279 V/m; Power Drift = -0.16 dB

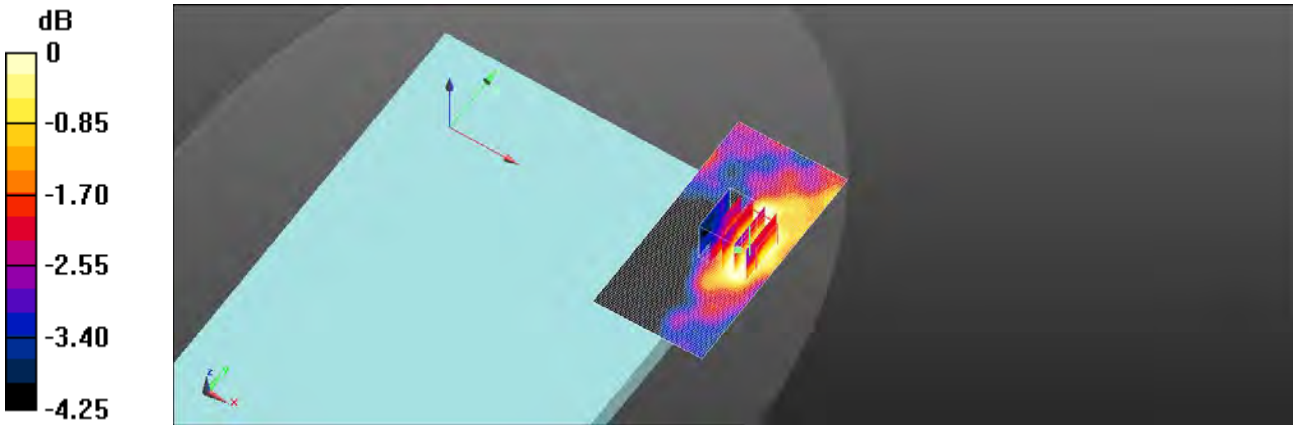
Peak SAR (extrapolated) = 0.0180 W/kg

**SAR(1 g) = 0.017 W/kg; SAR(10 g) = 0.015 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 96.6%

Maximum value of SAR (measured) = 0.0179 W/kg




0 dB = 0.0179 W/kg = -17.47 dBW/kg

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Date: 2020/9/6

**Report No. :ES/2020/80024**

## LTE Band 7 (20MHz)_Body_Bottom side_CH 21100_QPSK_1-99_0mm

Communication System: LTE; Frequency: 2535 MHz; Duty cycle= 1:1

Medium parameters used: f = 2535 MHz; $\sigma$ = 1.841 S/m; $\varepsilon_r$ = 38.467; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.3°C; Liquid temperature: 21.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(7.23, 7.23, 7.23) @ 2535 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (71x121x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.0253 W/kg

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

Reference Value = 2.477 V/m; Power Drift = 0.15 dB

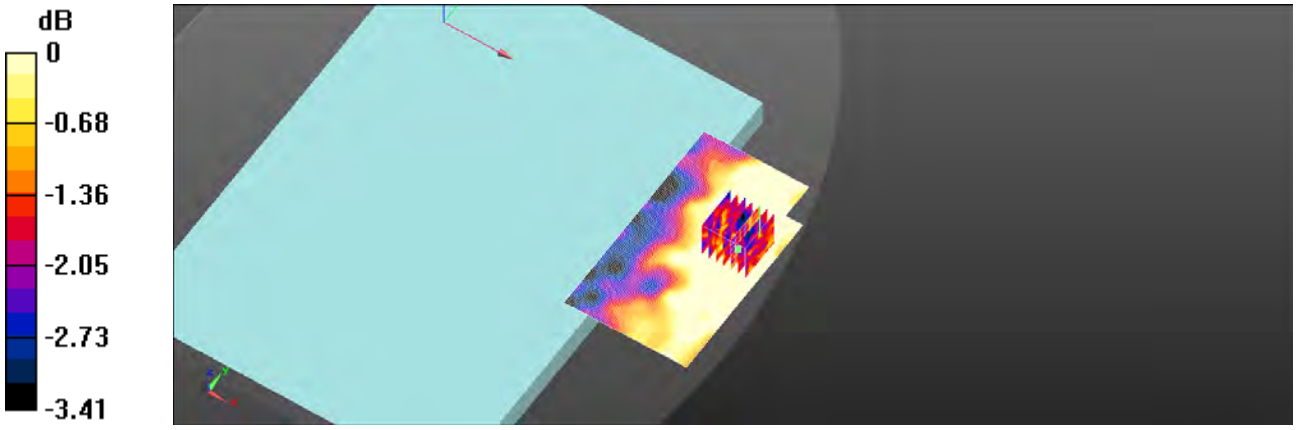
Peak SAR (extrapolated) = 0.0220 W/kg

**SAR(1 g) = 0.015 W/kg; SAR(10 g) = 0.013 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 77.4%

Maximum value of SAR (measured) = 0.0178 W/kg




0 dB = 0.0178 W/kg = -17.50 dBW/kg

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Date: 2020/9/1

**Report No. :ES/2020/80024**

## LTE Band 12 (10MHz)_Body_Bottom side_CH 23060_QPSK_1-49_0mm

Communication System: LTE; Frequency: 704 MHz; Duty cycle= 1:1

Medium parameters used: f = 704 MHz; $\sigma$ = 0.858 S/m; $\varepsilon_r$ = 42.95; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.1°C; Liquid temperature: 22.6℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(9.94, 9.94, 9.94) @ 704 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x101x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.0470 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.698 V/m; Power Drift = 0.18 dB

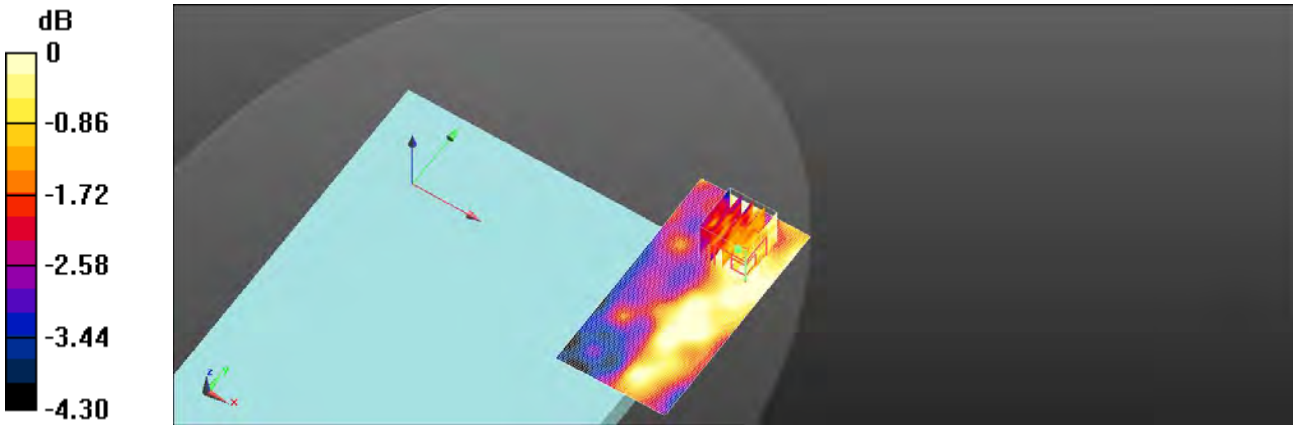
Peak SAR (extrapolated) = 0.00999 W/kg

**SAR(1 g) = 0.00855 W/kg; SAR(10 g) = 0.00763 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 94.6%

Maximum value of SAR (measured) = 0.00976 W/kg




0 dB = 0.00976 W/kg = -20.11 dBW/kg

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Date: 2020/9/1

**Report No. :ES/2020/80024**

## LTE Band 13 (10MHz)_Body_Bottom side_CH 23230_QPSK_1-25_0mm

Communication System: LTE; Frequency: 782 MHz; Duty cycle= 1:1

Medium parameters used: f = 782 MHz; $\sigma$ = 0.895 S/m; $\varepsilon_r$ = 42.315; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.1°C; Liquid temperature: 22.6℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(9.94, 9.94, 9.94) @ 782 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x101x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.0294 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.149 V/m; Power Drift = 0.16 dB

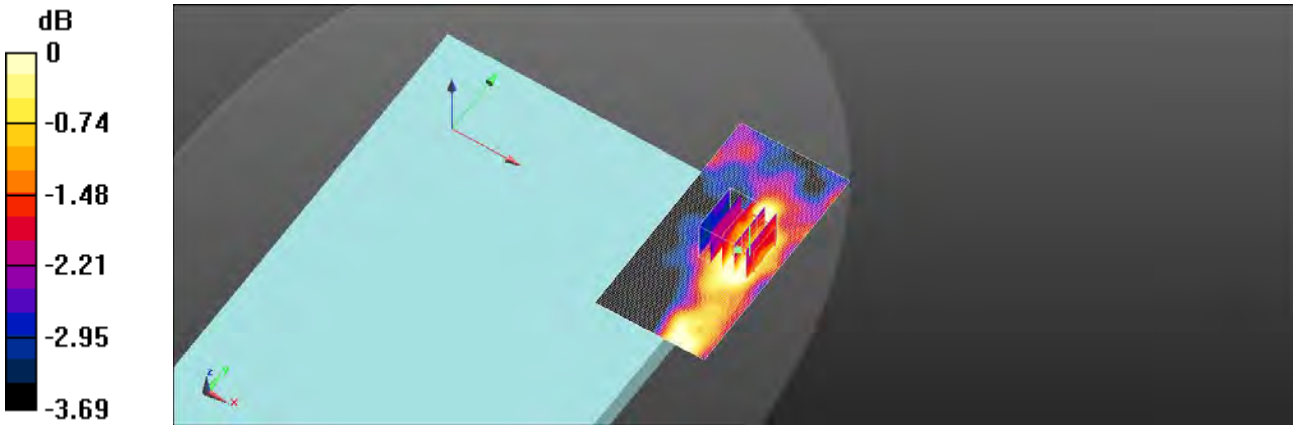
Peak SAR (extrapolated) = 0.0260 W/kg

**SAR(1 g) = 0.024 W/kg; SAR(10 g) = 0.020 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 93.3%

Maximum value of SAR (measured) = 0.0246 W/kg




0 dB = 0.0246 W/kg = -16.09 dBW/kg

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Date: 2020/9/1

**Report No. :ES/2020/80024**

## LTE Band 14 (10MHz)_Body_Bottom side_CH 23330_QPSK_1-25_0mm

Communication System: LTE; Frequency: 793 MHz; Duty cycle= 1:1

Medium parameters used: f = 793 MHz; $\sigma$ = 0.898 S/m; $\varepsilon_r$ = 42.287; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.1°C; Liquid temperature: 22.6℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(9.94, 9.94, 9.94) @ 793 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x101x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.0222 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.337 V/m; Power Drift = -0.19 dB

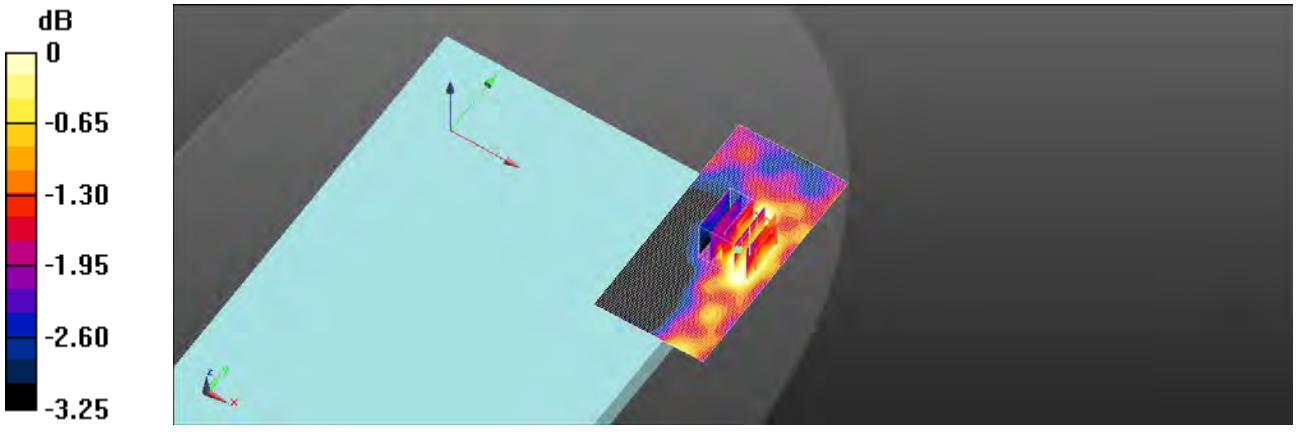
Peak SAR (extrapolated) = 0.0190 W/kg

**SAR(1 g) = 0.018 W/kg; SAR(10 g) = 0.015 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 91.9%

Maximum value of SAR (measured) = 0.0184 W/kg




0 dB = 0.0184 W/kg = -17.35 dBW/kg

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Date: 2020/9/1

**Report No. :ES/2020/80024**

## LTE Band 17 (10MHz)_Body_Bottom side_CH 23780_QPSK_1-25_0mm

Communication System: LTE; Frequency: 709 MHz; Duty cycle= 1:1

Medium parameters used: f = 709 MHz; $\sigma$ = 0.871 S/m; $\varepsilon_r$ = 42.72; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.1°C; Liquid temperature: 22.6℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(9.94, 9.94, 9.94) @ 709 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x101x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.0127 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.277 V/m; Power Drift = -0.12 dB

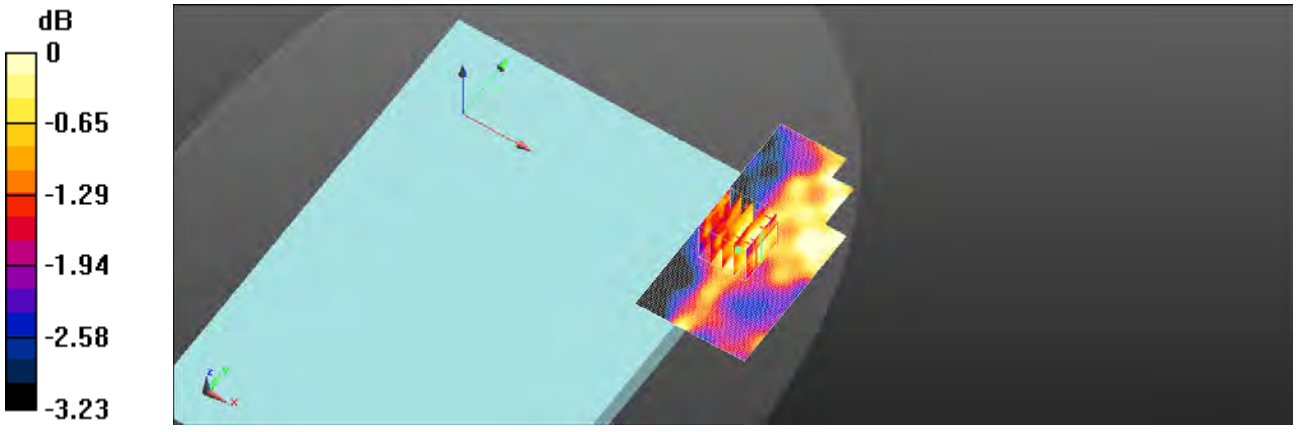
Peak SAR (extrapolated) = 0.0110 W/kg

**SAR(1 g) = 0.010 W/kg; SAR(10 g) = 0.00953 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 99.7%

Maximum value of SAR (measured) = 0.0106 W/kg




0 dB = 0.0106 W/kg = -19.75 dBW/kg

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Date: 2020/9/4

**Report No. :ES/2020/80024**

## LTE Band 25 (20MHz)_Body_Bottom side_CH 26365_QPSK_1-0_0mm

Communication System: LTE; Frequency: 1882.5 MHz; Duty cycle= 1:1

Medium parameters used: f = 1882.5 MHz; $\sigma$ = 1.396 S/m; $\varepsilon_r$ = 39.523; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.5°C; Liquid temperature: 21.9℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.07, 8.07, 8.07) @ 1882.5 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x101x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.0274 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.276 V/m; Power Drift = 0.11 dB

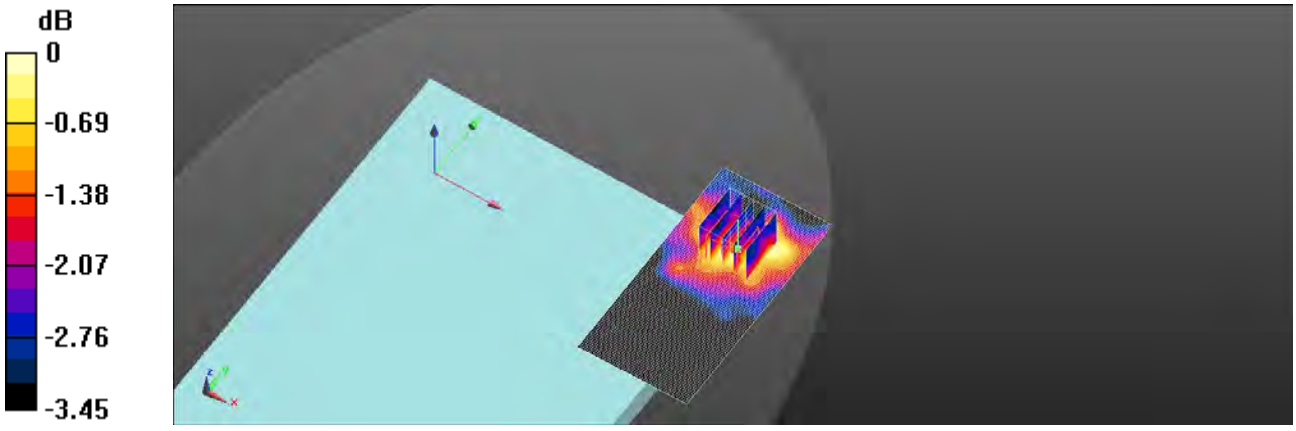
Peak SAR (extrapolated) = 0.0320 W/kg

**SAR(1 g) = 0.024 W/kg; SAR(10 g) = 0.021 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 75.3%

Maximum value of SAR (measured) = 0.0275 W/kg




0 dB = 0.0275 W/kg = -15.61 dBW/kg

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Date: 2020/9/2

**Report No. :ES/2020/80024**

## LTE Band 26 (15MHz)_Body_Bottom side_CH 26825_QPSK_1-74_0mm

Communication System: LTE; Frequency: 822.5 MHz; Duty cycle= 1:1

Medium parameters used: f = 822.5 MHz; $\sigma$ = 0.886 S/m; $\varepsilon_r$ = 42.27; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.5°C; Liquid temperature: 22.1℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(9.73, 9.73, 9.73) @ 822.5 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x101x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.0229 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.131 V/m; Power Drift = 0.16 dB

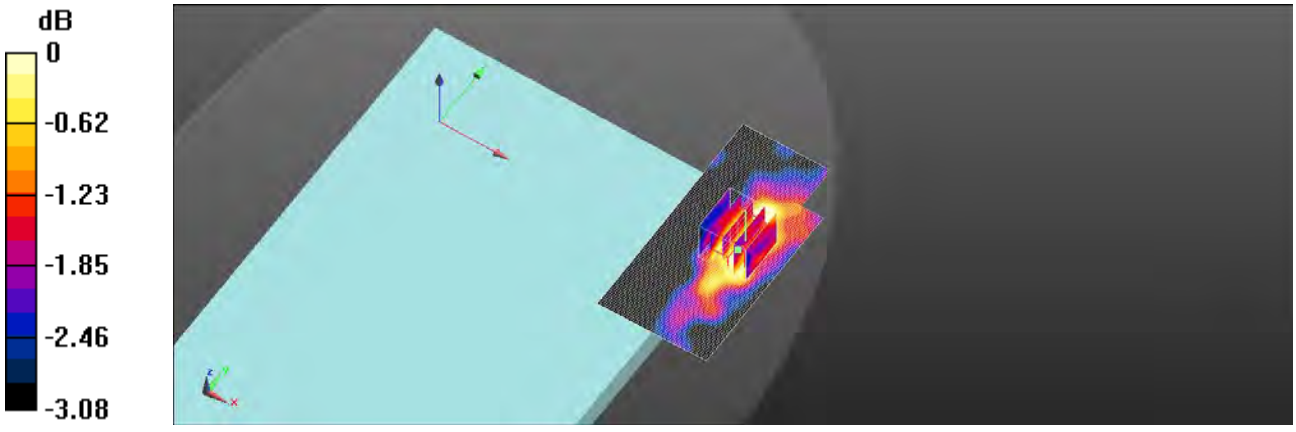
Peak SAR (extrapolated) = 0.0200 W/kg

**SAR(1 g) = 0.018 W/kg; SAR(10 g) = 0.016 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 90%

Maximum value of SAR (measured) = 0.0192 W/kg




0 dB = 0.0192 W/kg = -17.17 dBW/kg

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Date: 2020/9/5

**Report No. :ES/2020/80024**

## LTE Band 30 (10MHz)_Body_Bottom side_CH 27710_QPSK_1-25_0mm

Communication System: LTE; Frequency: 2310 MHz; Duty cycle= 1:1

Medium parameters used: f = 2310 MHz; $\sigma$ = 1.677 S/m; $\varepsilon_r$ = 38.842; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.2°C; Liquid temperature: 21.7℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(7.76, 7.76, 7.76) @ 2310 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (61x121x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.0190 W/kg

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

Reference Value = 2.157 V/m; Power Drift = 0.19 dB

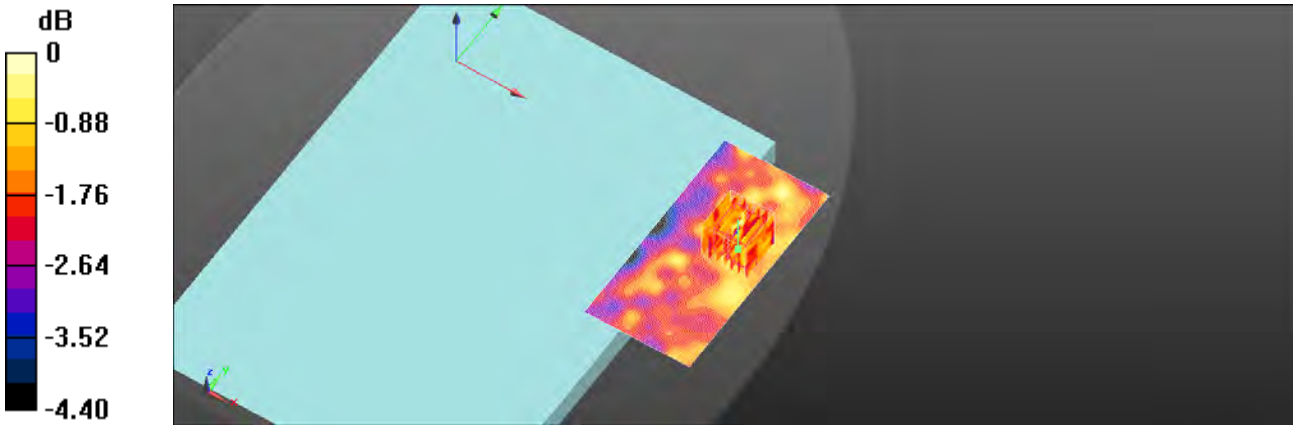
Peak SAR (extrapolated) = 0.0200 W/kg

**SAR(1 g) = 0.015 W/kg; SAR(10 g) = 0.014 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 53.5%

Maximum value of SAR (measured) = 0.0201 W/kg




0 dB = 0.0201 W/kg = -16.97 dBW/kg

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Date: 2020/9/6

**Report No. :ES/2020/80024**

## LTE Band 38 (20MHz)_Body_Bottom side_CH 37850_QPSK_1-0_0mm

Communication System: LTE; Frequency: 2580 MHz; Duty cycle= 1:1.59956

Medium parameters used: f = 2580 MHz; $\sigma$ = 1.882 S/m; $\varepsilon_r$ = 38.209; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.3°C; Liquid temperature: 21.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(7.23, 7.23, 7.23) @ 2580 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (71x121x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.0411 W/kg

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

Reference Value = 2.781 V/m; Power Drift = -0.18 dB

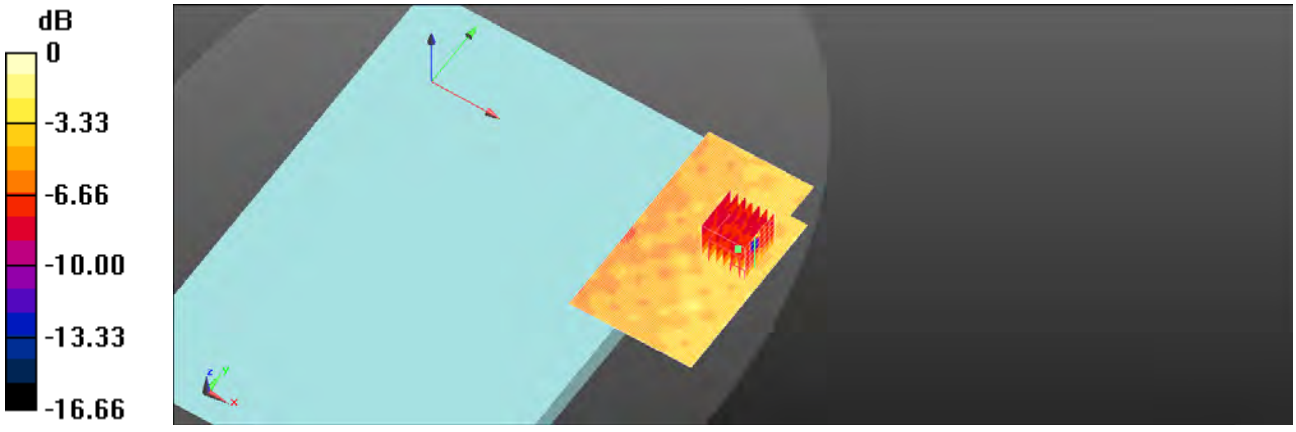
Peak SAR (extrapolated) = 0.0750 W/kg

**SAR(1 g) = 0.023 W/kg; SAR(10 g) = 0.017 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 64.2%

Maximum value of SAR (measured) = 0.0752 W/kg




0 dB = 0.0752 W/kg = -11.24 dBW/kg

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Date: 2020/9/6

**Report No. :ES/2020/80024**

## LTE Band 41 (20MHz)_Body_Bottom side_CH 39750_QPSK_1-99_0mm

Communication System: LTE; Frequency: 2506 MHz; Duty cycle= 1:1.59956

Medium parameters used: f = 2506 MHz; $\sigma$ = 1.804 S/m; $\varepsilon_r$ = 38.569; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.3°C; Liquid temperature: 21.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(7.23, 7.23, 7.23) @ 2506 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (71x121x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.107 W/kg

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

Reference Value = 2.966 V/m; Power Drift = 0.18 dB

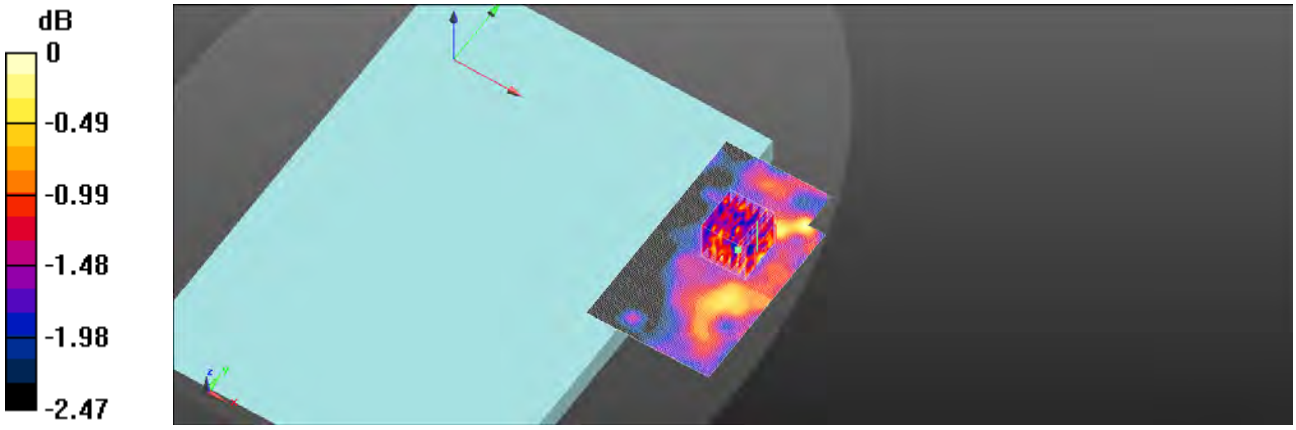
Peak SAR (extrapolated) = 0.0340 W/kg

**SAR(1 g) = 0.026 W/kg; SAR(10 g) = 0.023 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 77%

Maximum value of SAR (measured) = 0.0302 W/kg




0 dB = 0.0302 W/kg = -15.20 dBW/kg

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Date: 2020/9/6

**Report No. :ES/2020/80024**

## LTE Band 41 (20MHz)_Body_Bottom side_CH 40620_QPSK_1-0_0mm-HPUE

Communication System: LTE; Frequency: 2593 MHz; Duty cycle= 1:1.59956

Medium parameters used: f = 2593 MHz; $\sigma$ = 1.899 S/m; $\varepsilon_r$ = 38.111; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.3°C; Liquid temperature: 21.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(7.23, 7.23, 7.23) @ 2593 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (71x121x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.0916 W/kg

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

Reference Value = 2.348 V/m; Power Drift = 0.16 dB

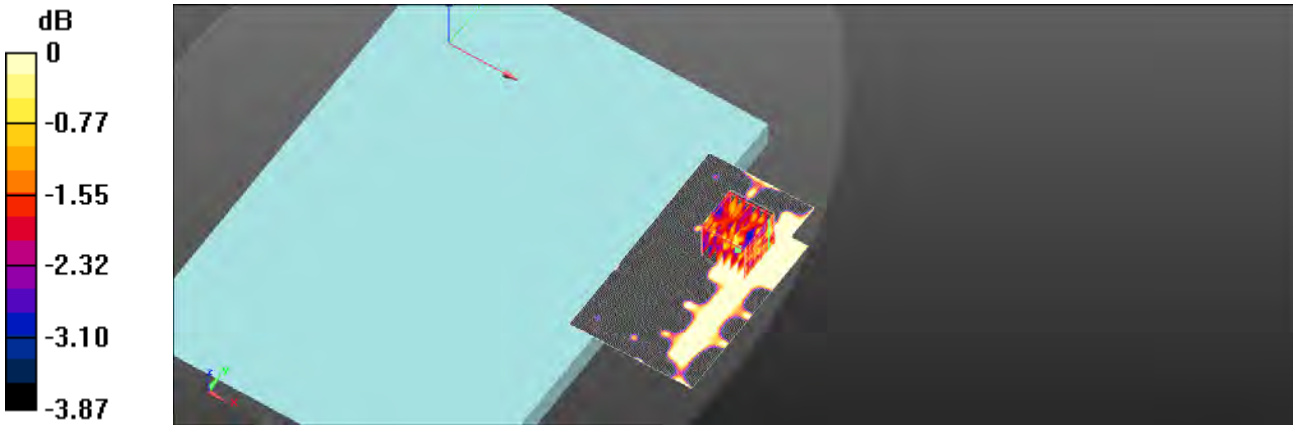
Peak SAR (extrapolated) = 0.0550 W/kg

**SAR(1 g) = 0.032 W/kg; SAR(10 g) = 0.029 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 94.8%

Maximum value of SAR (measured) = 0.0436 W/kg




0 dB = 0.0436 W/kg = -13.61 dBW/kg

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Date: 2020/9/3

**Report No. :ES/2020/80024**

## LTE Band 66 (20MHz)_Body_Bottom side_CH 132572_QPSK_1-0_0mm

Communication System: LTE; Frequency: 1770 MHz; Duty cycle= 1:1

Medium parameters used: f = 1770 MHz; $\sigma$ = 1.38 S/m; $\varepsilon_r$ = 39.778; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.3°C; Liquid temperature: 22.7℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.34, 8.34, 8.34) @ 1770 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x101x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.0354 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.662 V/m; Power Drift = 0.17 dB

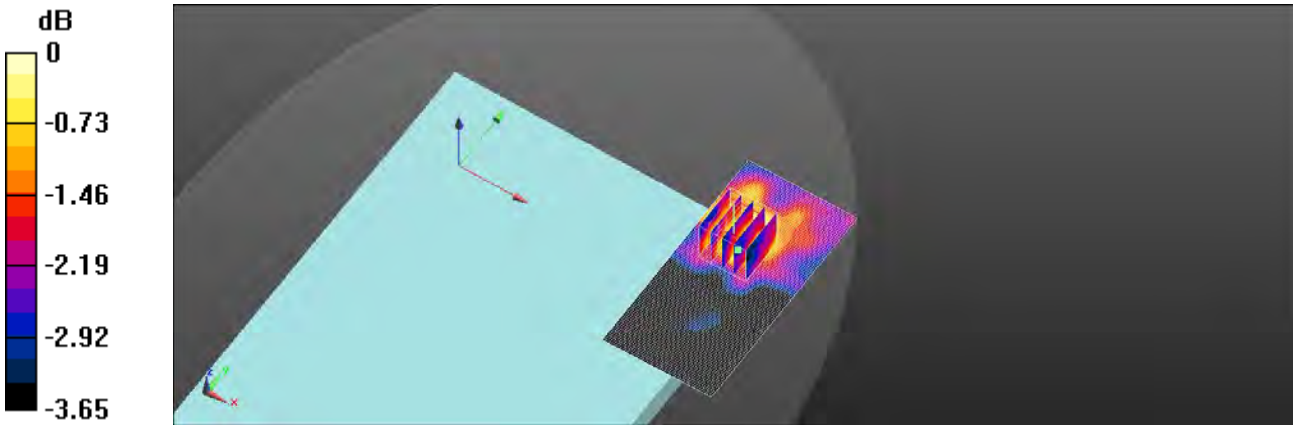
Peak SAR (extrapolated) = 0.0360 W/kg

**SAR(1 g) = 0.034 W/kg; SAR(10 g) = 0.029 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 95.6%

Maximum value of SAR (measured) = 0.0353 W/kg




0 dB = 0.0353 W/kg = -14.52 dBW/kg

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Date: 2020/9/4

**Report No. :ES/2020/80024**

## 5G N2 (20MHz)_Body_Bottom side_CH 380000_BPSK_1-1_0mm

Communication System: 5G NR(20MHz,Pi/2 BPSK,15kHz); Frequency: 1900 MHz; Duty cycle= 1:1

Medium parameters used: f = 1900 MHz; $\sigma$ = 1.399 S/m; $\varepsilon_r$ = 39.403; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.5°C; Liquid temperature: 21.9℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.07, 8.07, 8.07) @ 1900 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x101x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.0367 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.329 V/m; Power Drift = -0.14 dB

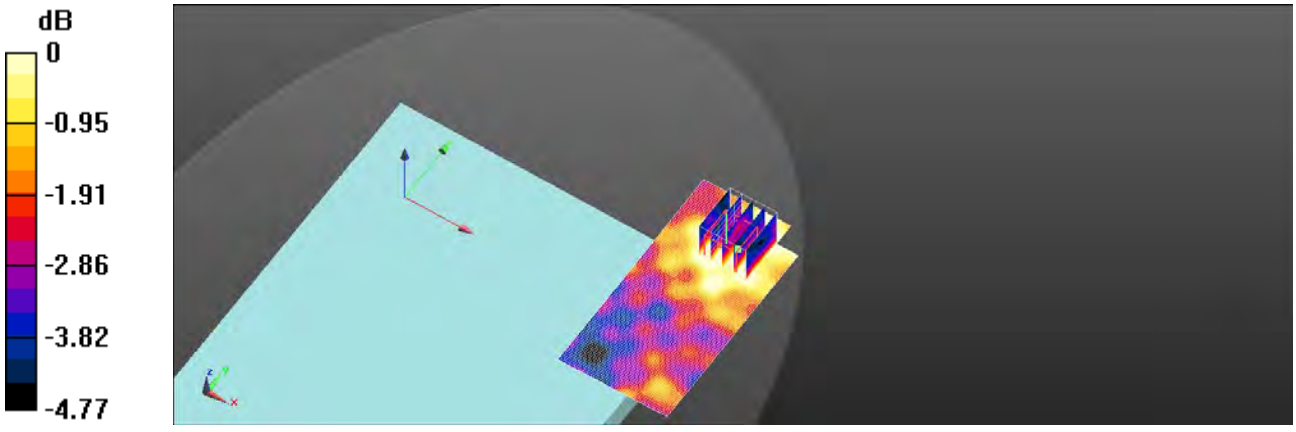
Peak SAR (extrapolated) = 0.0340 W/kg

**SAR(1 g) = 0.025 W/kg; SAR(10 g) = 0.019 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 75.1%

Maximum value of SAR (measured) = 0.0291 W/kg




0 dB = 0.0291 W/kg = -15.36 dBW/kg

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Date: 2020/9/2

**Report No. :ES/2020/80024**

## 5G N5 (20MHz)_Body_Bottom side_CH 167300_BPSK_1-1_0mm

Communication System: 5G NR(20MHz,Pi/2 BPSK,15kHz); Frequency: 836.5 MHz; Duty cycle= 1:1

Medium parameters used: f = 836.5 MHz; $\sigma$ = 0.916 S/m; $\varepsilon_r$ = 41.858; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.5°C; Liquid temperature: 22.1℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(9.73, 9.73, 9.73) @ 836.5 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x101x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.0179 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.241 V/m; Power Drift = -0.12 dB

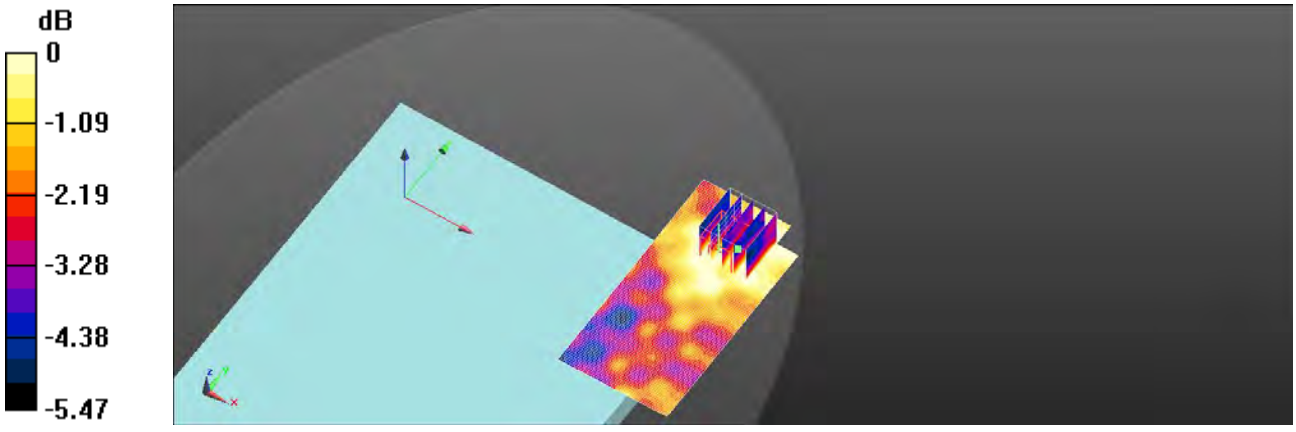
Peak SAR (extrapolated) = 0.0160 W/kg

**SAR(1 g) = 0.012 W/kg; SAR(10 g) = 0.00872 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 76.8%

Maximum value of SAR (measured) = 0.0138 W/kg




0 dB = 0.0138 W/kg = -18.60 dBW/kg

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Date: 2020/9/1

**Report No. :ES/2020/80024**

## 5G N12 (15MHz)_Body_Bottom side_CH 141300_BPSK_1-1_0mm

Communication System: 5G NR(15MHz,Pi/2 BPSK,15kHz); Frequency: 706.5 MHz; Duty Cycle: 1:1

Medium parameters used: f = 706.5 MHz; $\sigma$ = 0.859 S/m; $\varepsilon_r$ = 42.906; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.1°C; Liquid temperature: 22.6℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(9.94, 9.94, 9.94) @ 706.5 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x101x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.0286 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.558 V/m; Power Drift = 0.10 dB

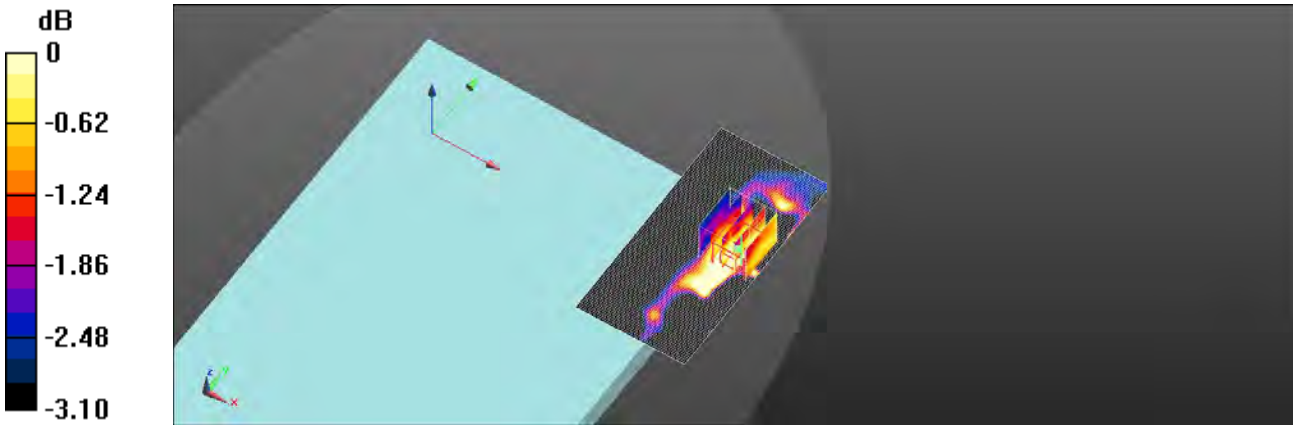
Peak SAR (extrapolated) = 0.0180 W/kg

**SAR(1 g) = 0.017 W/kg; SAR(10 g) = 0.015 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 93.3%

Maximum value of SAR (measured) = 0.0176 W/kg




0 dB = 0.0176 W/kg = -17.54 dBW/kg

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Date: 2020/9/3

**Report No. :ES/2020/80024**

## 5G N66 (20MHz)_Body_Bottom side_CH 354000_BPSK_1-1_0mm

Communication System: 5G NR(20MHz,Pi/2 BPSK,15kHz); Frequency: 1770 MHz; Duty cycle= 1:1

Medium parameters used: f = 1770 MHz; $\sigma$ = 1.38 S/m; $\varepsilon_r$ = 39.778; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.3°C; Liquid temperature: 22.7℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.34, 8.34, 8.34) @ 1770 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x101x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.0417 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.813 V/m; Power Drift = 0.15 dB

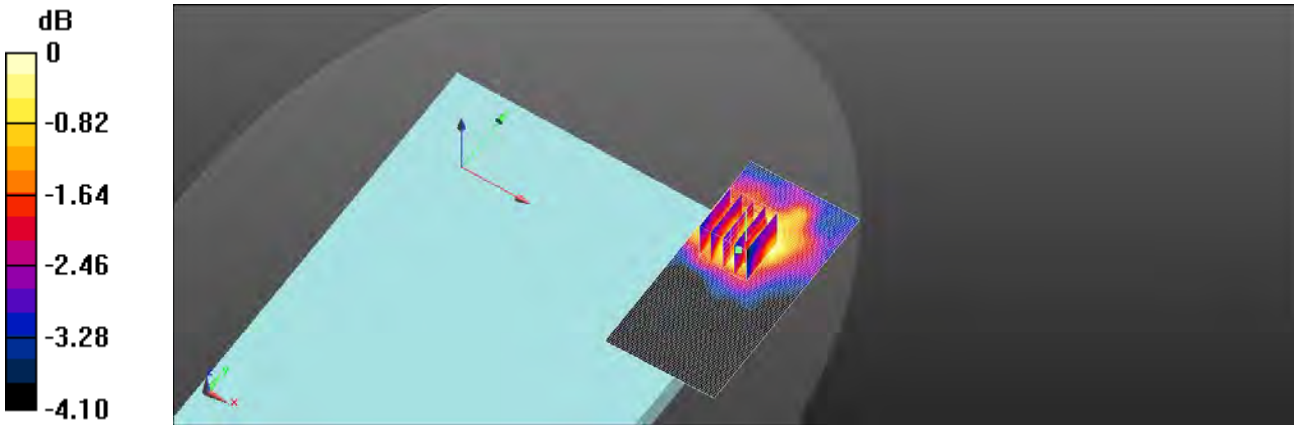
Peak SAR (extrapolated) = 0.0400 W/kg

**SAR(1 g) = 0.036 W/kg; SAR(10 g) = 0.031 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 91.3%

Maximum value of SAR (measured) = 0.0385 W/kg




0 dB = 0.0385 W/kg = -14.15 dBW/kg

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Date: 2020/9/20

**Report No. :ES/2020/80024**

## LTE Band 2 (20MHz)_Body_Bottom side_CH 18900_QPSK_1-0_0mm

Communication System: LTE; Frequency: 1880 MHz; Duty cycle= 1:1

Medium parameters used: f = 1880 MHz; $\sigma$ = 1.396 S/m; $\varepsilon_r$ = 39.683; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.2°C; Liquid temperature: 21.7℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.07, 8.07, 8.07) @ 1880 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Configuration/Body/Area Scan (51x101x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.454 W/kg

**Configuration/Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.785 V/m; Power Drift = 0.13 dB

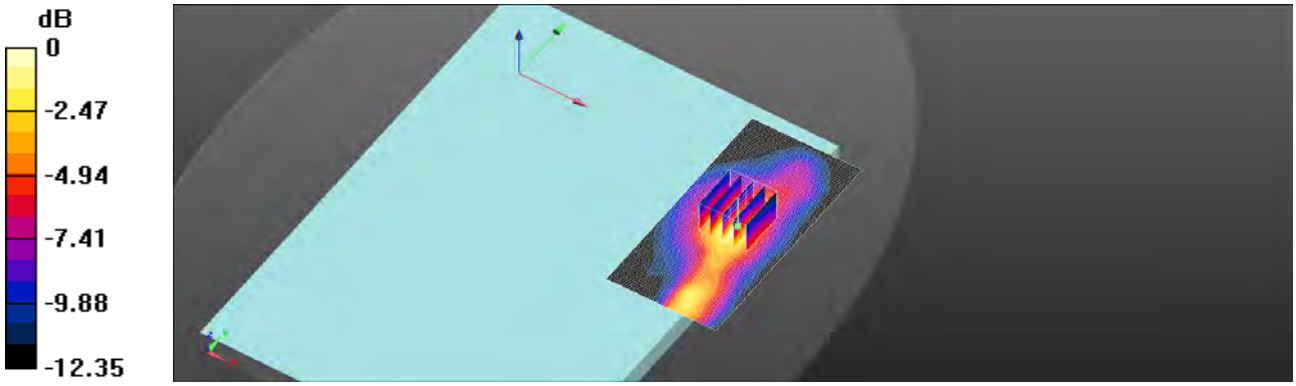
Peak SAR (extrapolated) = 0.539 W/kg

**SAR(1 g) = 0.366 W/kg; SAR(10 g) = 0.236 W/kg**

Smallest distance from peaks to all points 3 dB below = 11.6 mm

Ratio of SAR at M2 to SAR at M1 = 62.8%

Maximum value of SAR (measured) = 0.446 W/kg




0 dB = 0.446 W/kg = -3.51 dBW/kg

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Date: 2020/9/21

**Report No. :ES/2020/80024**

## LTE Band 7 (20MHz)_Body_Bottom side_CH 21100_QPSK_1-0_0mm

Communication System: LTE; Frequency: 2535 MHz; Duty cycle= 1:1

Medium parameters used: f = 2535 MHz; $\sigma$ = 1.845 S/m; $\varepsilon_r$ = 38.607; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.4°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(7.23, 7.23, 7.23) @ 2535 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (61x121x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.544 W/kg

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

Reference Value = 2.652 V/m; Power Drift = 0.12 dB

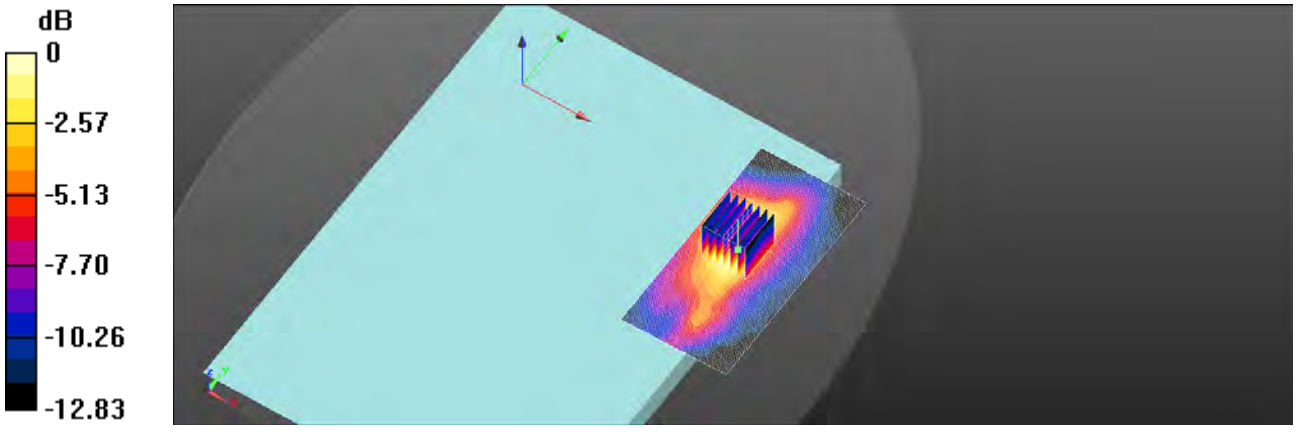
Peak SAR (extrapolated) = 0.686 W/kg

**SAR(1 g) = 0.390 W/kg; SAR(10 g) = 0.227 W/kg**

Smallest distance from peaks to all points 3 dB below = 11.2 mm

Ratio of SAR at M2 to SAR at M1 = 58.8%

Maximum value of SAR (measured) = 0.536 W/kg




0 dB = 0.536 W/kg = -2.71 dBW/kg

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Date: 2020/9/22

**Report No. :ES/2020/80024**

## LTE Band 42 (20MHz)_Body_Bottom side_CH 43490_QPSK_1-0_0mm

Communication System: LTE; Frequency: 3590 MHz; Duty cycle= 1:1.59956

Medium parameters used: f = 3590 MHz; $\sigma$ = 2.977 S/m; $\varepsilon_r$ = 37.662; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.8°C; Liquid temperature: 21.5℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(6.73, 6.73, 6.73) @ 3590 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mecha=nical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x131x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.475 W/kg

**Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=4mm

Reference Value = 2.583 V/m; Power Drift = 0.04 dB

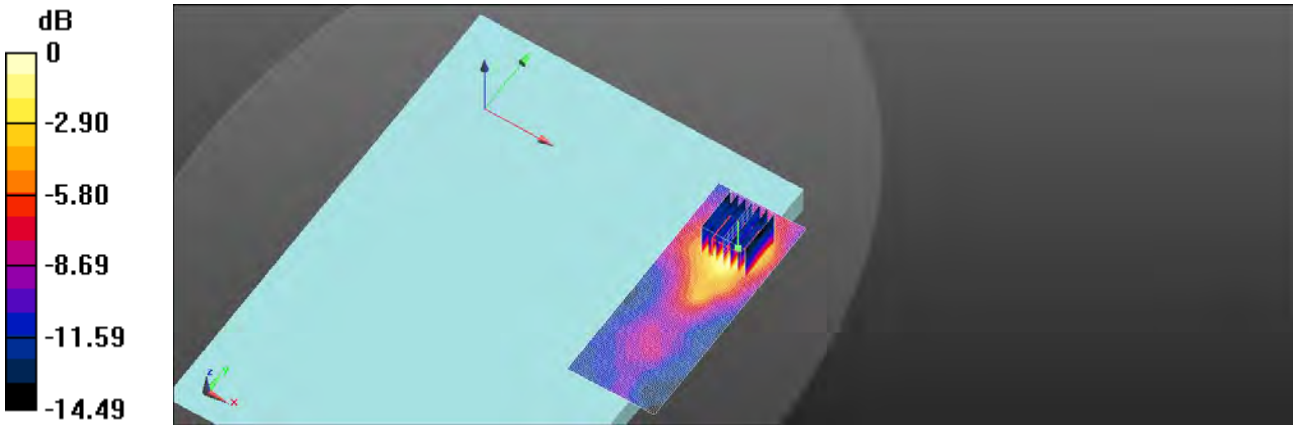
Peak SAR (extrapolated) = 0.689 W/kg

**SAR(1 g) = 0.320 W/kg; SAR(10 g) = 0.161 W/kg**

Smallest distance from peaks to all points 3 dB below = 11.4 mm

Ratio of SAR at M2 to SAR at M1 = 49.4%

Maximum value of SAR (measured) = 0.461 W/kg




0 dB = 0.461 W/kg = -3.36 dBW/kg

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Date: 2020/9/23

**Report No. :ES/2020/80024**

## LTE Band 48 (20MHz)_Body_Bottom side_CH 56640_QPSK_1-0_0mm

Communication System: LTE; Frequency: 3690 MHz; Duty cycle= 1:1.59956

Medium parameters used: f = 3690 MHz; $\sigma$ = 3.025 S/m; $\varepsilon_r$ = 37.542; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.5°C; Liquid temperature: 21.9℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(6.67, 6.67, 6.67) @ 3690 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x131x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.667 W/kg

**Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=4mm

Reference Value = 2.892 V/m; Power Drift = -0.12 dB

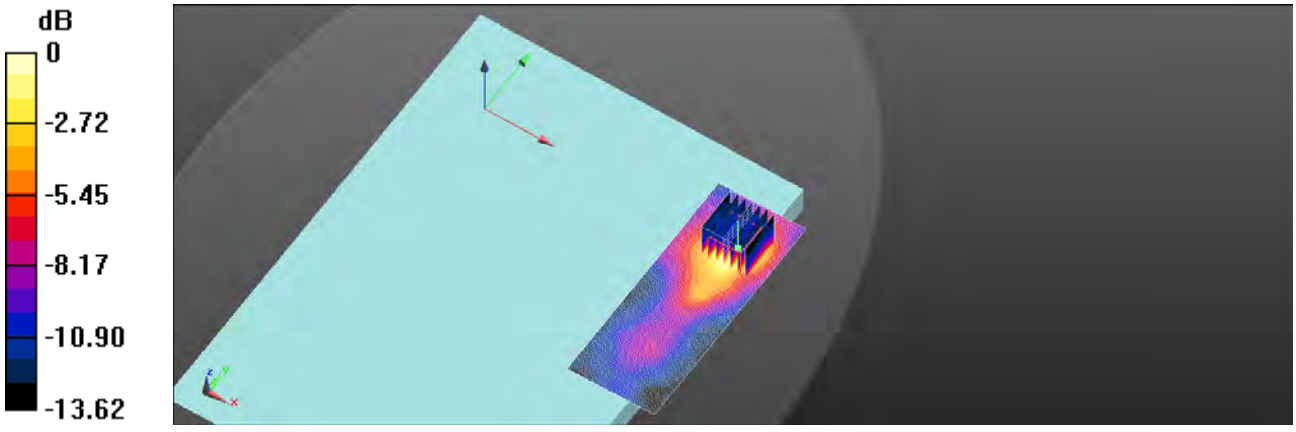
Peak SAR (extrapolated) = 0.965 W/kg

**SAR(1 g) = 0.417 W/kg; SAR(10 g) = 0.201 W/kg**

Smallest distance from peaks to all points 3 dB below = 11.2 mm

Ratio of SAR at M2 to SAR at M1 = 49.6%

Maximum value of SAR (measured) = 0.648 W/kg




0 dB = 0.648 W/kg = -1.88 dBW/kg

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Date: 2020/9/19

**Report No. :ES/2020/80024**

## LTE Band 66 (20MHz)_Body_Bottom side_CH 132572_QPSK_1-0_0mm

Communication System: LTE; Frequency: 1770 MHz; Duty cycle= 1:1

Medium parameters used: f = 1770 MHz; $\sigma$ = 1.383 S/m; $\varepsilon_r$ = 39.968; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.4°C; Liquid temperature: 21.9℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.34, 8.34, 8.34) @ 1770 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x121x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.433 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.033 V/m; Power Drift = 0.11 dB

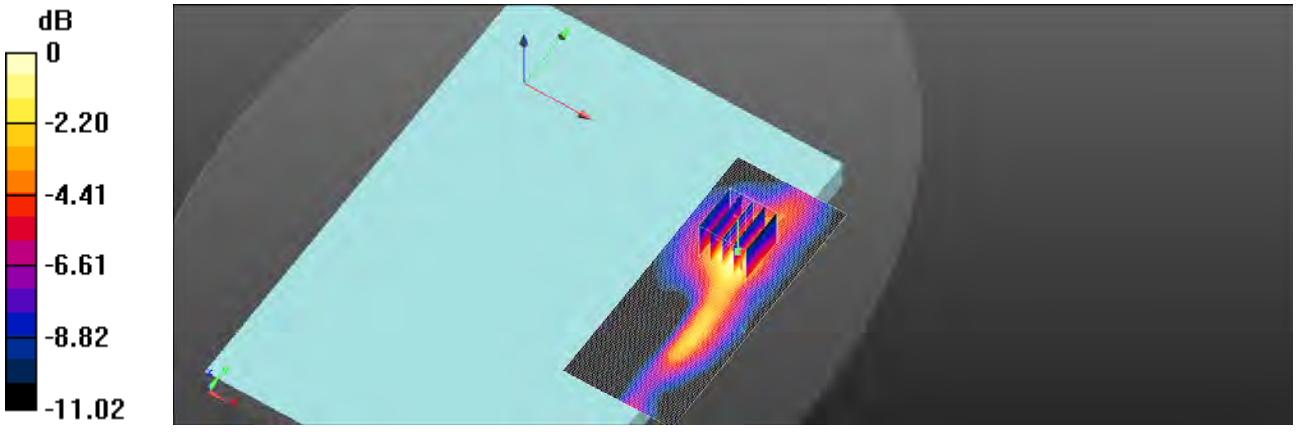
Peak SAR (extrapolated) = 0.554 W/kg

**SAR(1 g) = 0.359 W/kg; SAR(10 g) = 0.225 W/kg**

Smallest distance from peaks to all points 3 dB below = 12.9 mm

Ratio of SAR at M2 to SAR at M1 = 63.1%

Maximum value of SAR (measured) = 0.459 W/kg




0 dB = 0.459 W/kg = -3.38 dBW/kg

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Date: 2020/9/20

**Report No. :ES/2020/80024**

## 5G N2 (20MHz)_Body_Bottom side_CH 376000_BPSK_1-1_0mm

Communication System: 5G NR(20MHz,Pi/2 BPSK,15kHz); Frequency: 1880 MHz; Duty cycle= 1:1

Medium parameters used: f = 1880 MHz; $\sigma$ = 1.396 S/m; $\varepsilon_r$ = 39.683; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.2°C; Liquid temperature: 21.7℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.07, 8.07, 8.07) @ 1880 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x91x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.466 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.601 V/m; Power Drift = 0.01 dB

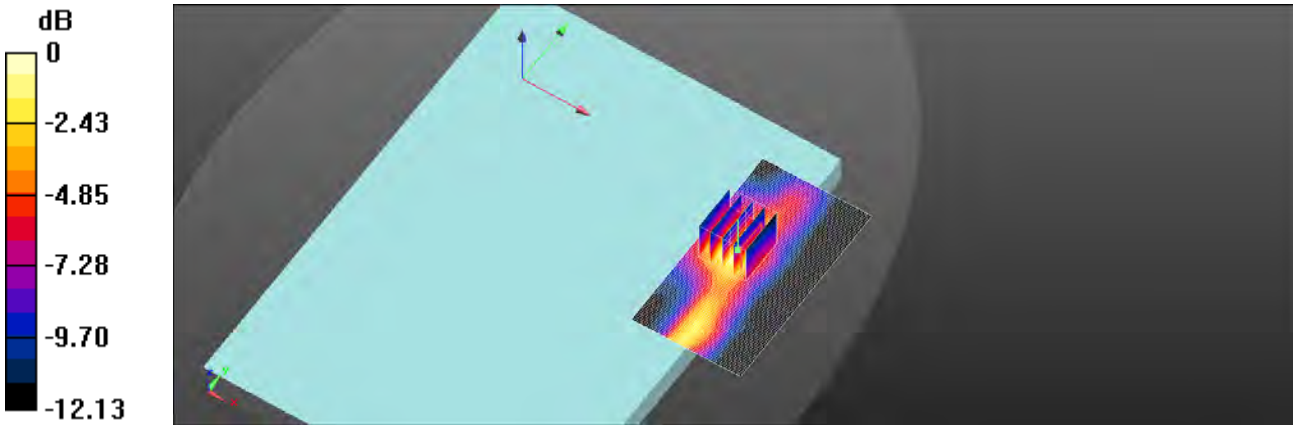
Peak SAR (extrapolated) = 0.635 W/kg

**SAR(1 g) = 0.381 W/kg; SAR(10 g) = 0.225 W/kg**

Smallest distance from peaks to all points 3 dB below = 12.2 mm

Ratio of SAR at M2 to SAR at M1 = 61.4%

Maximum value of SAR (measured) = 0.514 W/kg




0 dB = 0.514 W/kg = -2.89 dBW/kg

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Date: 2020/9/21

**Report No. :ES/2020/80024**

## 5G N7 (20MHz)_Body_Bottom side_CH 502000_BPSK_1-1_0mm

Communication System: 5G NR(20MHz,Pi/2 BPSK,15kHz); Frequency: 2510 MHz; Duty cycle= 1:1

Medium parameters used: f = 2510 MHz; $\sigma$ = 1.821 S/m; $\varepsilon_r$ = 38.626; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.4°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(7.23, 7.23, 7.23) @ 2510 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (61x111x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.567 W/kg

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

Reference Value = 2.756 V/m; Power Drift = 0.12 dB

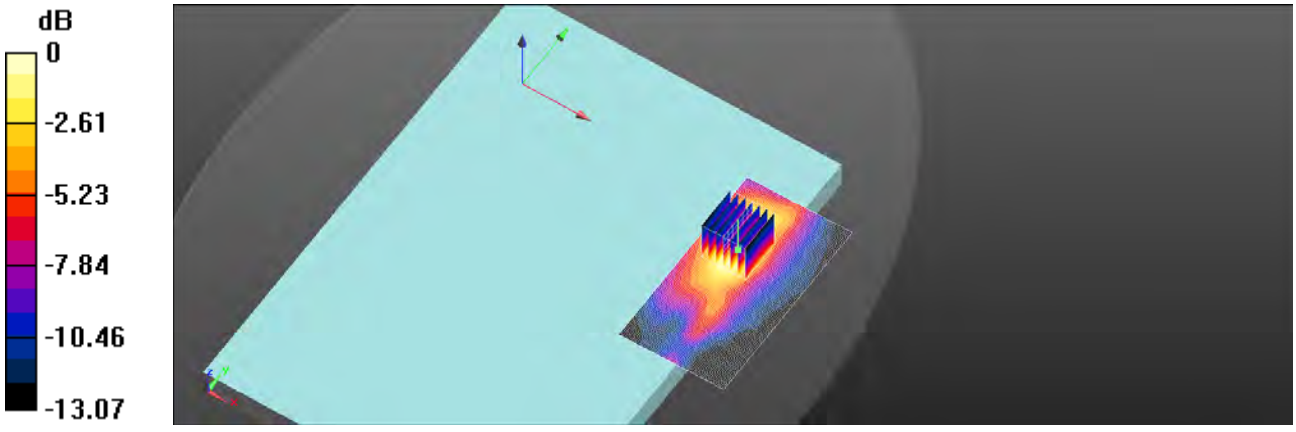
Peak SAR (extrapolated) = 0.682 W/kg

**SAR(1 g) = 0.390 W/kg; SAR(10 g) = 0.229 W/kg**

Smallest distance from peaks to all points 3 dB below = 11.7 mm

Ratio of SAR at M2 to SAR at M1 = 56.8%

Maximum value of SAR (measured) = 0.525 W/kg




0 dB = 0.525 W/kg = -2.80 dBW/kg

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Date: 2020/9/21

**Report No. :ES/2020/80024**

## 5G N41 (100MHz)_Body_Bottom side_CH 528000_BPSK_1-1_0mm

Communication System: 5G NR(20MHz,Pi/2 BPSK,15kHz); Frequency: 2640 MHz; Duty cycle= 1:1

Medium parameters used: f = 2640 MHz; $\sigma$ = 1.973 S/m; $\varepsilon_r$ = 38.2; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.4°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(7.23, 7.23, 7.23) @ 2640 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (61x111x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.309 W/kg

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

Reference Value = 2.987 V/m; Power Drift = -0.10 dB

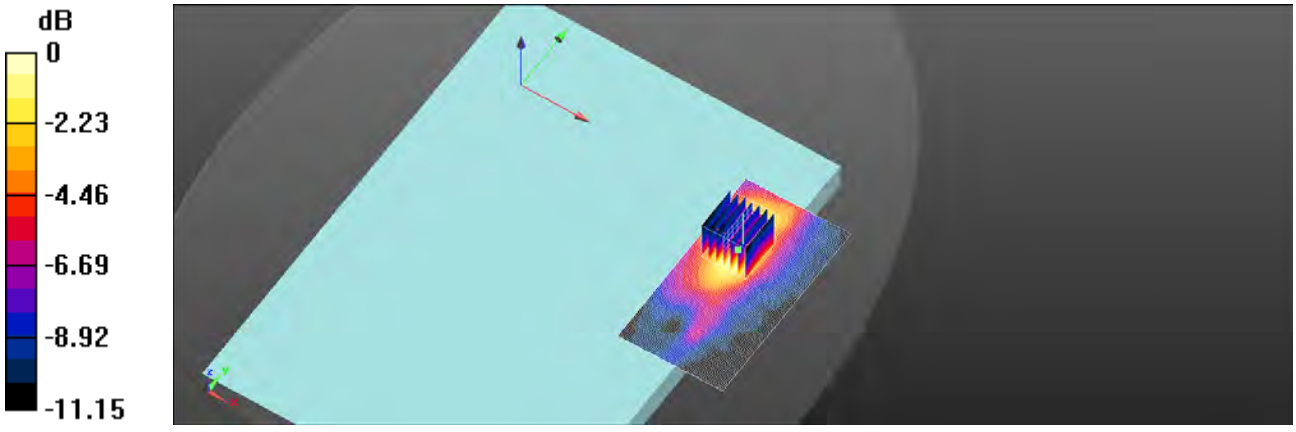
Peak SAR (extrapolated) = 0.366 W/kg

**SAR(1 g) = 0.216 W/kg; SAR(10 g) = 0.129 W/kg**

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

Ratio of SAR at M2 to SAR at M1 = 60.9%

Maximum value of SAR (measured) = 0.288 W/kg




0 dB = 0.288 W/kg = -5.41 dBW/kg

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Date: 2020/9/21

**Report No. :ES/2020/80024**

## 5G N41 (100MHz)_Body_Bottom side_CH 528000_BPSK_1-1_0mm_HPUE

Communication System: 5G NR(20MHz, Pi/2 BPSK,15kHz); Frequency: 2640 MHz; Duty cycle= 1:1

Medium parameters used: f = 2640 MHz; $\sigma$ = 1.973 S/m; $\varepsilon_r$ = 38.2; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.4°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(7.23, 7.23, 7.23) @ 2640 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (61x111x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.306 W/kg

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

Reference Value = 3.382 V/m; Power Drift = -0.02 dB

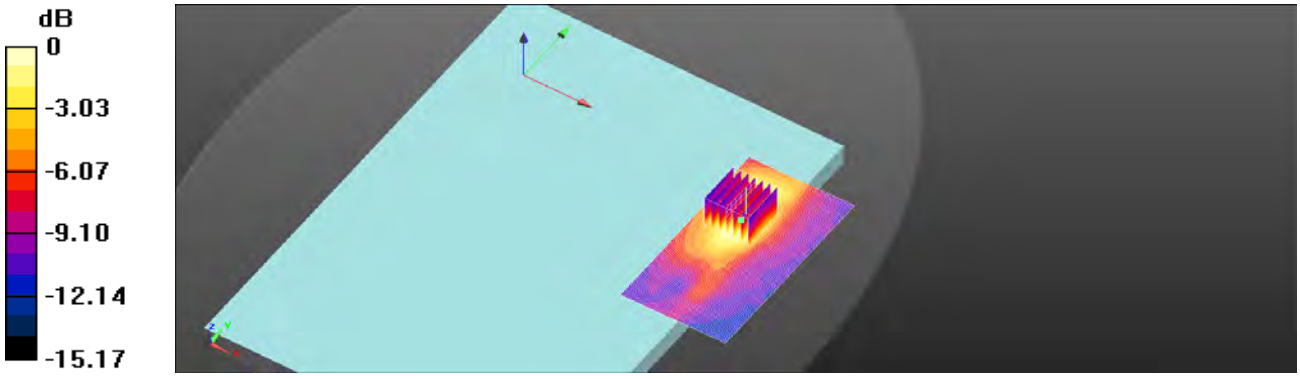
Peak SAR (extrapolated) = 0.363 W/kg

**SAR(1 g) = 0.214 W/kg; SAR(10 g) = 0.128 W/kg**

Smallest distance from peaks to all points 3 dB below = 12.3 mm

Ratio of SAR at M2 to SAR at M1 = 61.2%

Maximum value of SAR (measured) = 0.286 W/kg




0 dB = 0.286 W/kg = -5.44 dBW/kg

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Date: 2020/9/19

**Report No. :ES/2020/80024**

## 5G N66 (20MHz)_Body_Bottom side_CH 34400_BPSK_1-1_0mm

Communication System: 5G NR(20MHz,Pi/2 BPSK,15kHz); Frequency: 1720 MHz; Duty cycle= 1:1

Medium parameters used: f = 1720 MHz; $\sigma$ = 1.316 S/m; $\varepsilon_r$ = 41.148; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.4°C; Liquid temperature: 21.9℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.34, 8.34, 8.34) @ 1720 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Area Scan (51x101x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.341 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.715 V/m; Power Drift = 0.18 dB

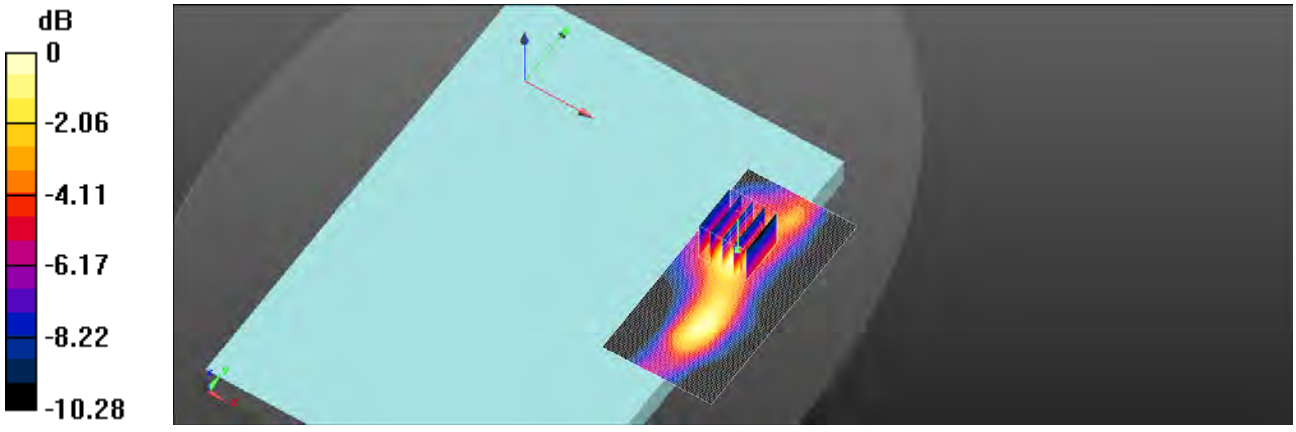
Peak SAR (extrapolated) = 0.436 W/kg

**SAR(1 g) = 0.268 W/kg; SAR(10 g) = 0.165 W/kg**

Smallest distance from peaks to all points 3 dB below = 12.8 mm

Ratio of SAR at M2 to SAR at M1 = 62.9%

Maximum value of SAR (measured) = 0.361 W/kg




0 dB = 0.361 W/kg = -4.42 dBW/kg

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# 6. SAR System Performance Verification

Date: 2020/9/1

**Report No. :ES/2020/80024**

## Dipole 750 MHz_SN:1015

Communication System: CW; Frequency: 750 MHz; Duty cycle= 1:1

Medium parameters used: f = 750 MHz; $\sigma$ = 0.885 S/m; $\varepsilon_r$ = 42.565; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.1°C; Liquid temperature: 22.6℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(9.94, 9.94, 9.94) @ 750 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x141x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 2.58 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

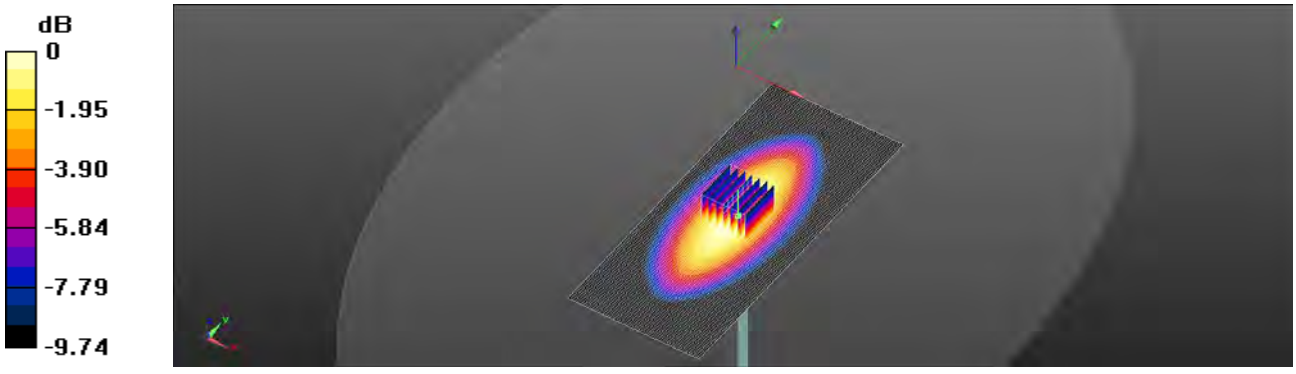
Reference Value = 54.43 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 2.99 W/kg

**SAR(1 g) = 2.09 W/kg; SAR(10 g) = 1.41 W/kg**

Smallest distance from peaks to all points 3 dB below = 16 mm

Maximum value of SAR (measured) = 2.60 W/kg




0 dB = 2.60 W/kg = 4.15 dBW/kg

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Date: 2020/9/2

**Report No. :ES/2020/80024**

## Dipole 835 MHz_SN:4d063

Communication System: CW; Frequency: 835 MHz; Duty cycle= 1:1

Medium parameters used: f = 835 MHz; $\sigma$ = 0.915 S/m; $\varepsilon_r$ = 41.963; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.5°C; Liquid temperature: 22.1℃

DASY5 Configuration:

- Probe: EX3DV4 – SN7509; ConvF(9.73, 9.73, 9.73) @ 835 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (41x121x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 3.03 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 56.89 V/m; Power Drift = -0.01 dB

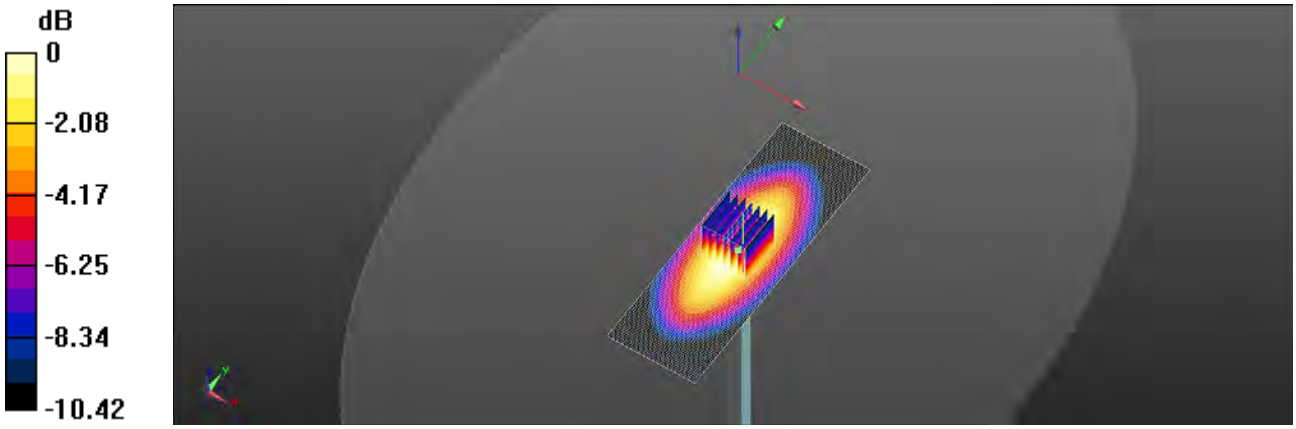
Peak SAR (extrapolated) = 3.56 W/kg

**SAR(1 g) = 2.37 W/kg; SAR(10 g) = 1.53 W/kg**

Smallest distance from peaks to all points 3 dB below = 16 mm

Ratio of SAR at M2 to SAR at M1 = 66.4%

Maximum value of SAR (measured) = 3.03 W/kg




0 dB = 3.03 W/kg = 4.81 dBW/kg

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Date: 2020/9/3

**Report No. :ES/2020/80024**

## Dipole 1750 MHz_SN:1008

Communication System: CW; Frequency: 1750 MHz; Duty cycle= 1:1

Medium parameters used: f = 1750 MHz; $\sigma$ = 1.368 S/m; $\varepsilon_r$ = 40.07; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.3°C; Liquid temperature: 22.7℃

DASY5 Configuration:

- Probe: EX3DV4 – SN7509; ConvF(8.34, 8.34, 8.34) @ 1750 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 12.4 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 94.64 V/m; Power Drift = 0.01 dB

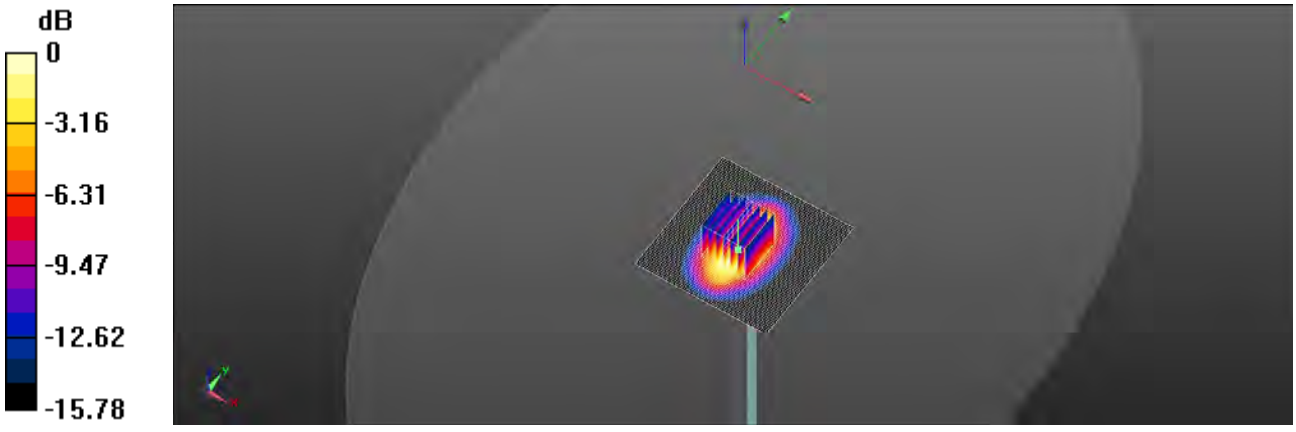
Peak SAR (extrapolated) = 15.3 W/kg

**SAR(1 g) = 8.67 W/kg; SAR(10 g) = 4.72 W/kg**

Smallest distance from peaks to all points 3 dB below = 10 mm

Ratio of SAR at M2 to SAR at M1 = 57.7%

Maximum value of SAR (measured) = 12.1 W/kg




0 dB = 12.1 W/kg = 10.83 dBW/kg

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Date: 2020/9/4

**Report No. :ES/2020/80024**

## Dipole 1900 MHz_SN:5d173

Communication System: CW; Frequency: 1900 MHz; Duty cycle= 1:1

Medium parameters used: f = 1900 MHz; $\sigma$ = 1.399 S/m; $\varepsilon_r$ = 39.403; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.5°C; Liquid temperature: 21.9℃

DASY5 Configuration:

- Probe: EX3DV4 – SN7509; ConvF(8.07, 8.07, 8.07) @ 1900 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 13.2 W/kg

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 98.26 V/m; Power Drift = 0.01 dB

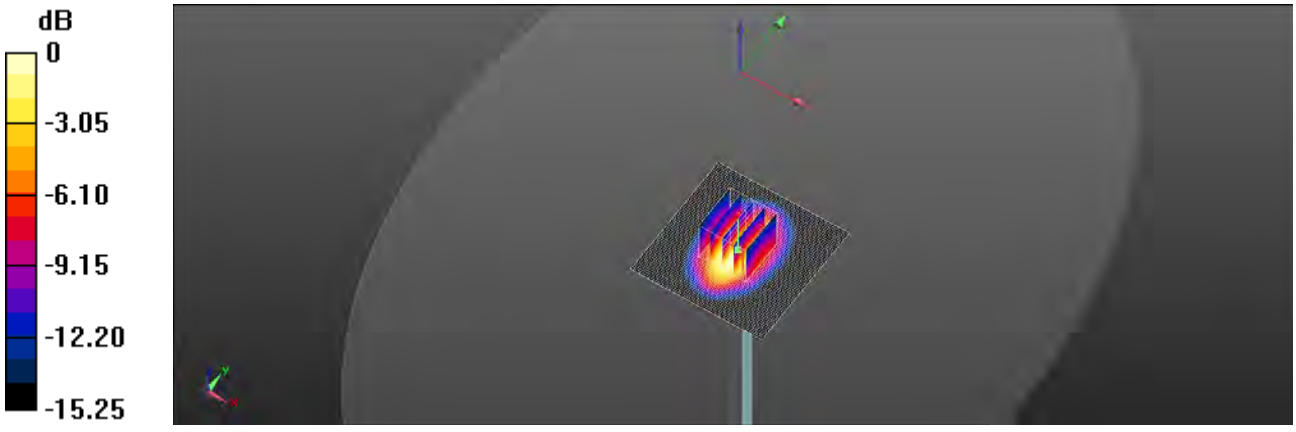
Peak SAR (extrapolated) = 16.2 W/kg

**SAR(1 g) = 9.67 W/kg; SAR(10 g) = 5.43 W/kg**

Smallest distance from peaks to all points 3 dB below = 10.1 mm

Ratio of SAR at M2 to SAR at M1 = 59.4%

Maximum value of SAR (measured) = 13.2 W/kg




0 dB = 13.2 W/kg = 11.21 dBW/kg

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Date: 2020/9/5

**Report No. :ES/2020/80024**

## Dipole 2300 MHz_SN:1023

Communication System: CW; Frequency: 2300 MHz; Duty cycle= 1:1

Medium parameters used: f = 2300 MHz; $\sigma$ = 1.655 S/m; $\varepsilon_r$ = 38.925; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.2°C; Liquid temperature: 21.7℃

DASY5 Configuration:

- Probe: EX3DV4 – SN7509; ConvF(7.76, 7.76, 7.76) @ 2300 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (51x51x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 17.8 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 94.12 V/m; Power Drift = 0.08 dB

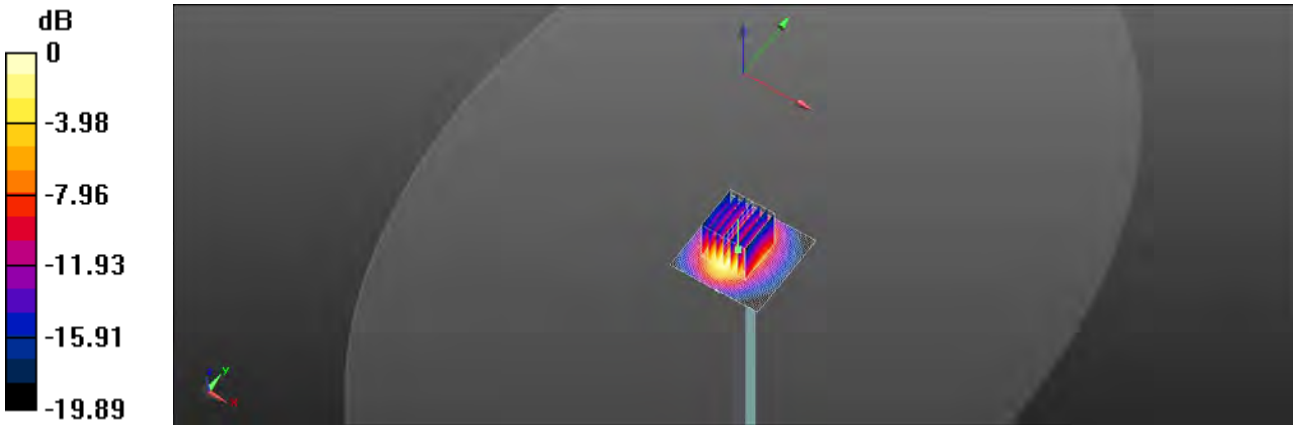
Peak SAR (extrapolated) = 22.2 W/kg

**SAR(1 g) = 11.4 W/kg; SAR(10 g) = 5.57 W/kg**

Smallest distance from peaks to all points 3 dB below = 9.2 mm

Ratio of SAR at M2 to SAR at M1 = 52.5%

Maximum value of SAR (measured) = 17.0 W/kg




0 dB = 17.0 W/kg = 12.30 dBW/kg

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Date: 2020/9/6

**Report No. :ES/2020/80024**

## Dipole 2600 MHz_SN:1005

Communication System: CW; Frequency: 2600 MHz; Duty cycle= 1:1

Medium parameters used: f = 2600 MHz; $\sigma$ = 1.908 S/m; $\varepsilon_r$ = 38.08; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.3°C; Liquid temperature: 21.4℃

DASY5 Configuration:

- Probe: EX3DV4 – SN7509; ConvF(7.23, 7.23, 7.23) @ 2600 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 22.7 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 103.8 V/m; Power Drift = 0.08 dB

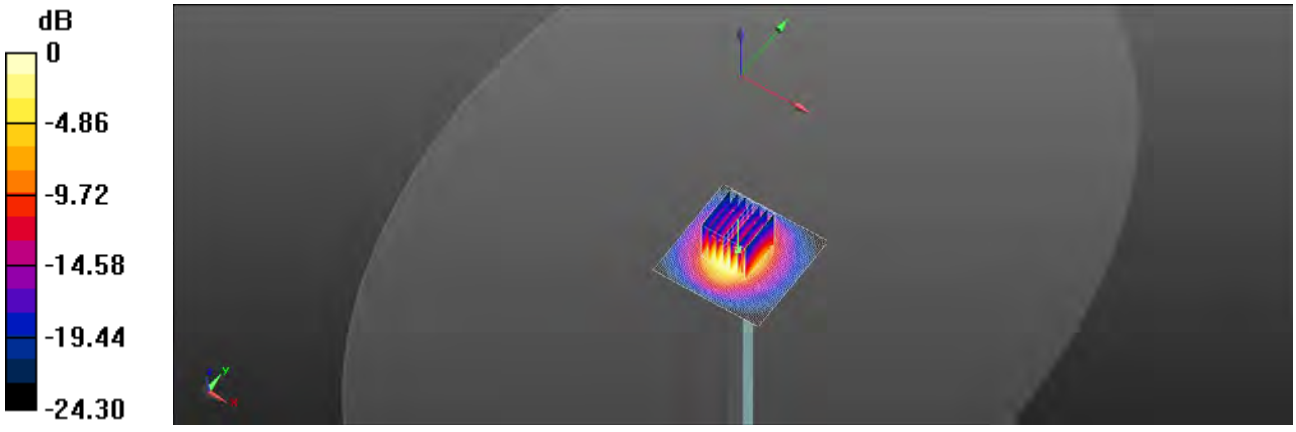
Peak SAR (extrapolated) = 30.9 W/kg

**SAR(1 g) = 14.2 W/kg; SAR(10 g) = 6.29 W/kg**

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 46%

Maximum value of SAR (measured) = 22.4 W/kg




0 dB = 22.4 W/kg = 13.50 dBW/kg

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Date: 2020/9/7

**Report No. :ES/2020/80024**

## Dipole 750 MHz_SN:1015

Communication System: CW; Frequency: 750 MHz; Duty cycle= 1:1

Medium parameters used: f = 750 MHz; $\sigma$ = 0.895 S/m; $\varepsilon_r$ = 42.575; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.3°C; Liquid temperature: 21.6℃

DASY5 Configuration:

- Probe: EX3DV4 - 7509; ConvF(9.94, 9.94, 9.94) @ 750 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x141x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 2.61 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.86 V/m; Power Drift = -0.01 dB

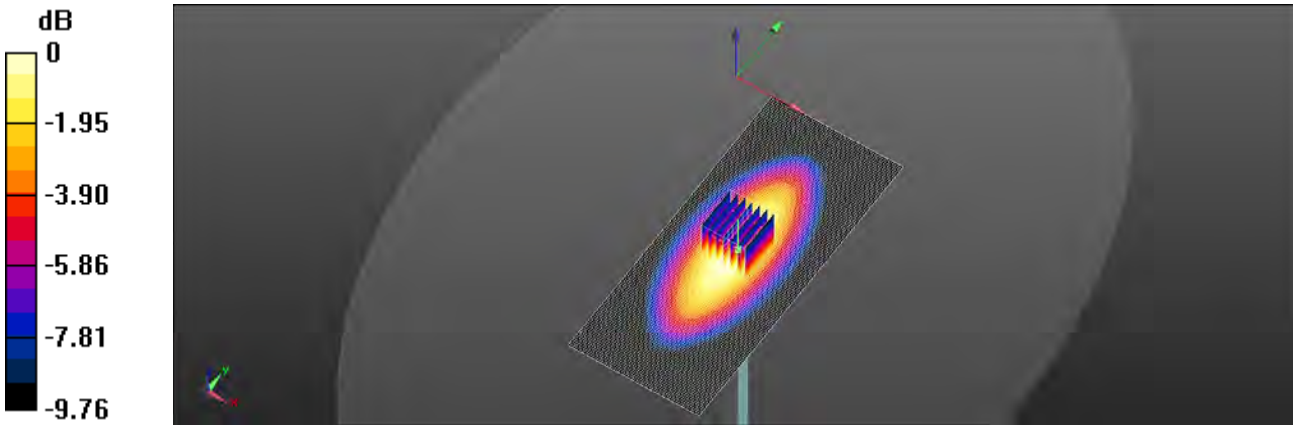
Peak SAR (extrapolated) = 3.02 W/kg

**SAR(1 g) = 2.11 W/kg; SAR(10 g) = 1.42 W/kg**

Smallest distance from peaks to all points 3 dB below = 18 mm

Ratio of SAR at M2 to SAR at M1 = 69.7%

Maximum value of SAR (measured) = 2.63 W/kg




0 dB = 2.63 W/kg = 4.20 dBW/kg

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Date: 2020/9/8

**Report No. :ES/2020/80024**

## Dipole 835 MHz_SN:4d063

Communication System: CW; Frequency: 835 MHz; Duty cycle= 1:1

Medium parameters used: f = 835 MHz; $\sigma$ = 0.914 S/m; $\varepsilon_r$ = 42.003; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.9°C; Liquid temperature: 22.6℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(9.73, 9.73, 9.73) @ 835 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (41x121x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 3.02 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 57.09 V/m; Power Drift = -0.01 dB

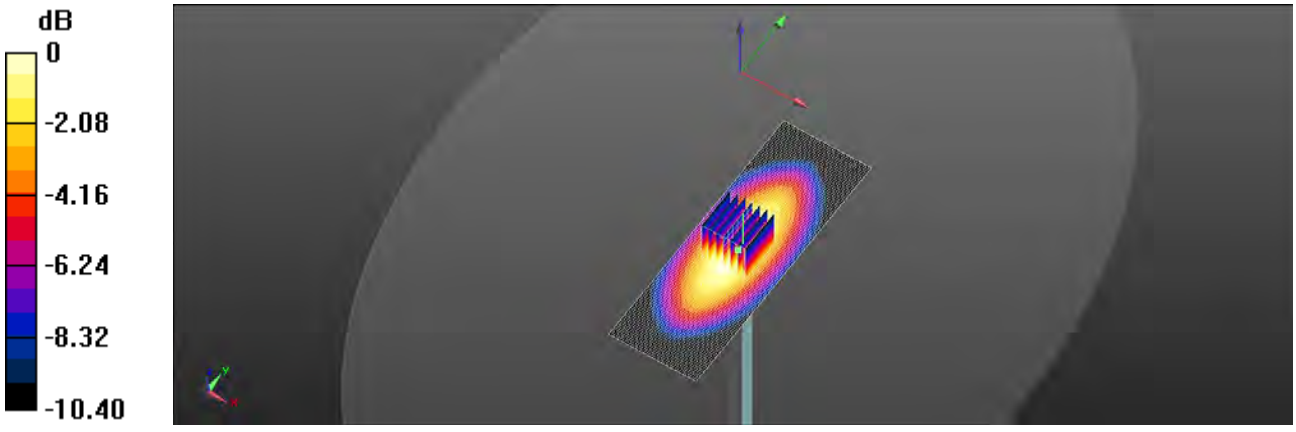
Peak SAR (extrapolated) = 3.55 W/kg

**SAR(1 g) = 2.37 W/kg; SAR(10 g) = 1.54 W/kg**

Smallest distance from peaks to all points 3 dB below = 19 mm

Ratio of SAR at M2 to SAR at M1 = 67.2%

Maximum value of SAR (measured) = 3.04 W/kg




0 dB = 3.04 W/kg = 4.83 dBW/kg

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Date: 2020/9/9

**Report No. :ES/2020/80024**

## Dipole 1750 MHz_SN:1008

Communication System: CW; Frequency: 1750 MHz; Duty cycle= 1:1

Medium parameters used: f = 1750 MHz; $\sigma$ = 1.371 S/m; $\varepsilon_r$ = 40.09; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.1°C; Liquid temperature: 22.5℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.34, 8.34, 8.34) @ 1750 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 12.6 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 95.21 V/m; Power Drift = 0.01 dB

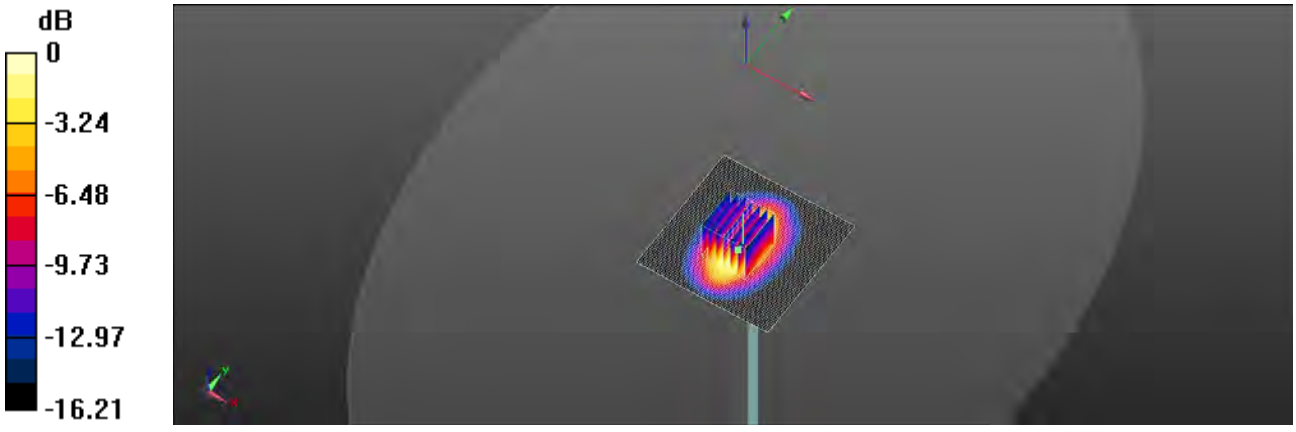
Peak SAR (extrapolated) = 15.5 W/kg

**SAR(1 g) = 8.81 W/kg; SAR(10 g) = 4.79 W/kg**

Smallest distance from peaks to all points 3 dB below = 10 mm

Ratio of SAR at M2 to SAR at M1 = 57.6%

Maximum value of SAR (measured) = 12.4 W/kg




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

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Date: 2020/9/10

**Report No. :ES/2020/80024**

## Dipole 1900 MHz_SN:5d173

Communication System: CW; Frequency: 1900 MHz; Duty cycle= 1:1

Medium parameters used: f = 1900 MHz; $\sigma$ = 1.399 S/m; $\varepsilon_r$ = 39.433; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.4°C; Liquid temperature: 21.8℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.07, 8.07, 8.07) @ 1900 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 13.6 W/kg

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 93.82 V/m; Power Drift = 0.04 dB

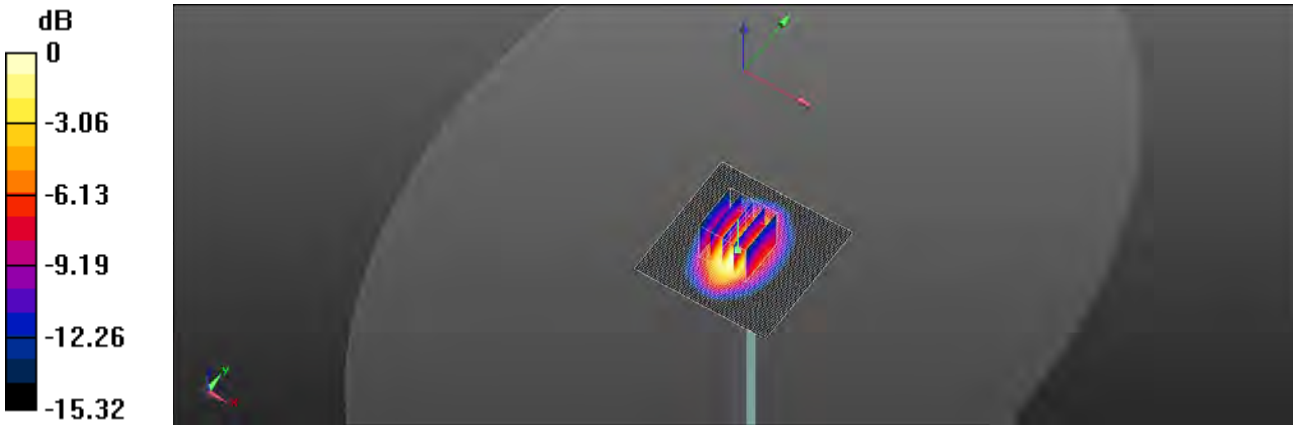
Peak SAR (extrapolated) = 16.8 W/kg

**SAR(1 g) = 9.88 W/kg; SAR(10 g) = 5.46 W/kg**

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 59.6%

Maximum value of SAR (measured) = 13.6 W/kg




0 dB = 13.6 W/kg = 11.34 dBW/kg

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Date: 2020/9/11

**Report No. :ES/2020/80024**

## Dipole 2300 MHz_SN:1023

Communication System: CW; Frequency: 2300 MHz; Duty cycle= 1:1

Medium parameters used: f = 2300 MHz; $\sigma$ = 1.663 S/m; $\varepsilon_r$ = 38.975; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.3°C; Liquid temperature: 21.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(7.76, 7.76, 7.76) @ 2300 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (51x51x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 18.1 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 94.42 V/m; Power Drift = 0.10 dB

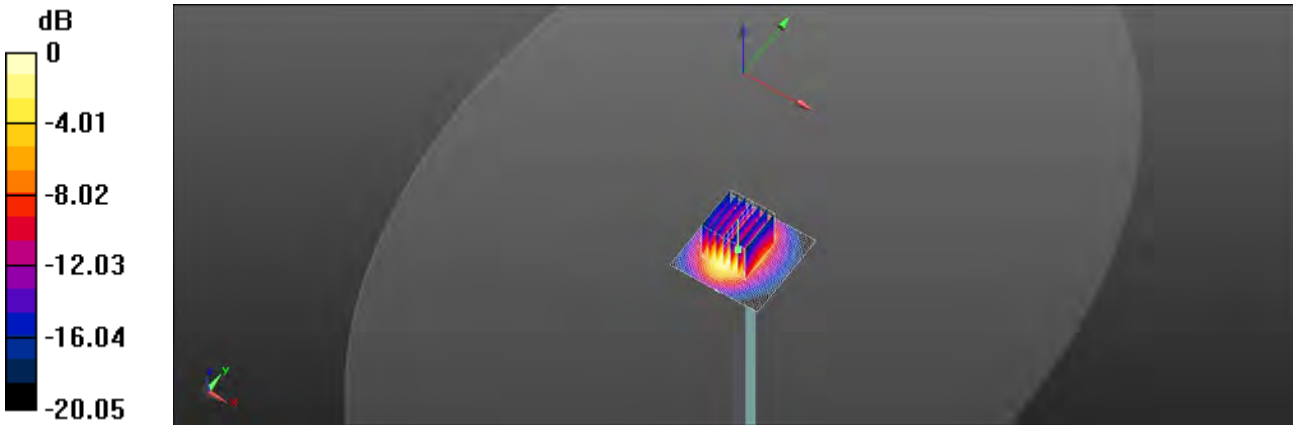
Peak SAR (extrapolated) = 22.4 W/kg

**SAR(1 g) = 11.5 W/kg; SAR(10 g) = 5.6 W/kg**

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 52.4%

Maximum value of SAR (measured) = 17.2 W/kg




0 dB = 17.2 W/kg = 12.36 dBW/kg

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Date: 2020/9/12

**Report No. :ES/2020/80024**

## Dipole 2600 MHz_SN:1005

Communication System: CW; Frequency: 2600 MHz; Duty cycle= 1:1

Medium parameters used: f = 2600 MHz; $\sigma$ = 1.914 S/m; $\varepsilon_r$ = 38.141; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.7°C; Liquid temperature: 22.3℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(7.23, 7.23, 7.23) @ 2600 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 22.3 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 98.73 V/m; Power Drift = 0.11 dB

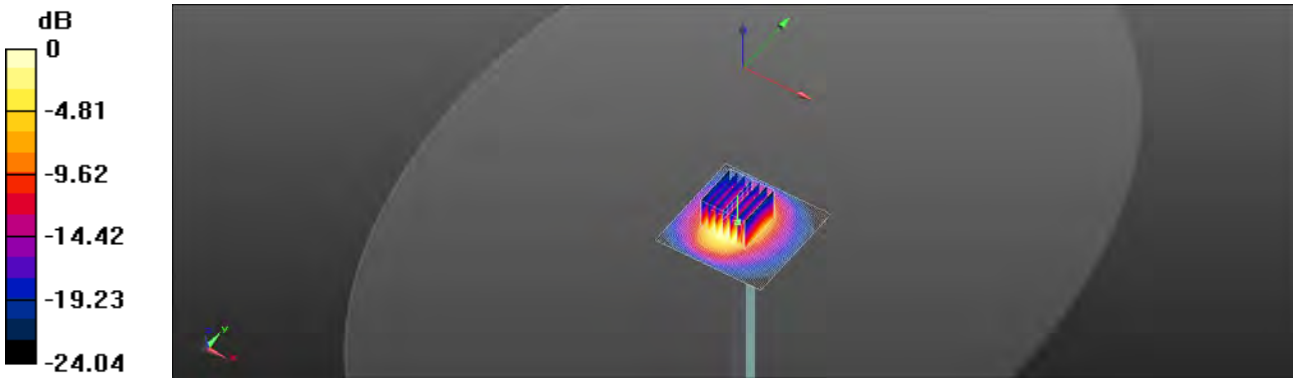
Peak SAR (extrapolated) = 30.8 W/kg

**SAR(1 g) = 14 W/kg; SAR(10 g) = 6.27 W/kg**

Smallest distance from peaks to all points 3 dB below = 9.1 mm

Ratio of SAR at M2 to SAR at M1 = 45.1%

Maximum value of SAR (measured) = 22.1 W/kg




0 dB = 22.1 W/kg = 13.44 dBW/kg

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Date: 2020/9/13

**Report No. :ES/2020/80024**

## Dipole 750 MHz_SN:1015

Communication System: CW; Frequency: 750 MHz; Duty cycle= 1:1

Medium parameters used: f = 750 MHz; $\sigma$ = 0.883 S/m; $\varepsilon_r$ = 42.525; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.8°C; Liquid temperature: 22.1℃

DASY5 Configuration:

- Probe: EX3DV4 - 7509; ConvF(9.94, 9.94, 9.94) @ 750 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (41x141x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 2.80 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 53.86 V/m; Power Drift = 0.02 dB

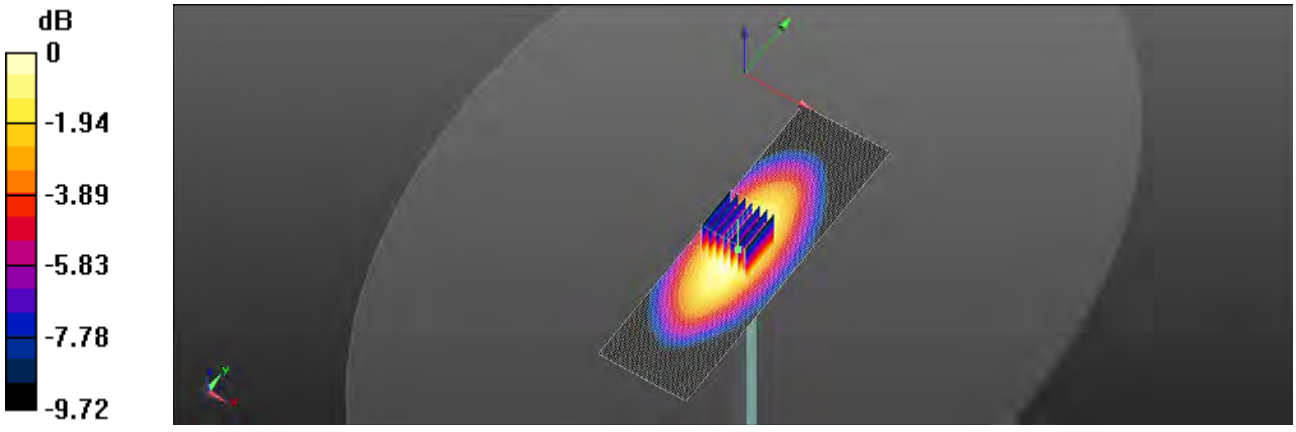
Peak SAR (extrapolated) = 3.32 W/kg

**SAR(1 g) = 2.25 W/kg; SAR(10 g) = 1.51 W/kg**

Smallest distance from peaks to all points 3 dB below = 17 mm

Ratio of SAR at M2 to SAR at M1 = 68.4%

Maximum value of SAR (measured) = 2.84 W/kg




0 dB = 2.84 W/kg = 4.53 dBW/kg

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Date: 2020/9/14

**Report No. :ES/2020/80024**

## Dipole 835 MHz_SN:4d063

Communication System: CW; Frequency: 835 MHz; Duty cycle= 1:1

Medium parameters used: f = 835 MHz; $\sigma$ = 0.912 S/m; $\varepsilon_r$ = 41.993; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.0°C; Liquid temperature: 22.6℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(9.73, 9.73, 9.73) @ 835 MHz; Calibrated: 2020/3/25
  Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (41x121x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 2.83 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 58.26 V/m; Power Drift = 0.03 dB

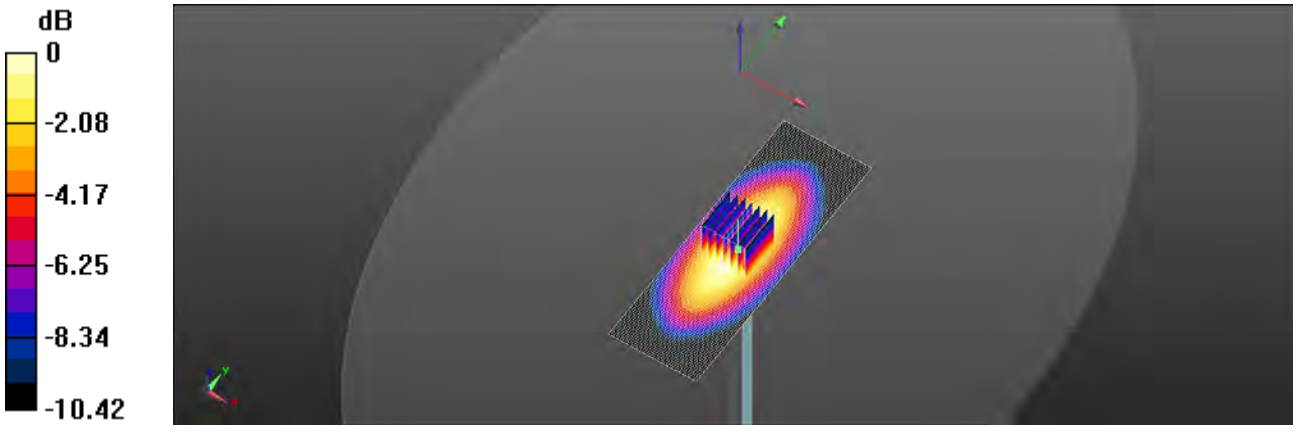
Peak SAR (extrapolated) = 3.31 W/kg

**SAR(1 g) = 2.24 W/kg; SAR(10 g) = 1.48 W/kg**

Smallest distance from peaks to all points 3 dB below = 21.9 mm

Ratio of SAR at M2 to SAR at M1 = 67.7%

Maximum value of SAR (measured) = 2.84 W/kg




0 dB = 2.84 W/kg = 4.53 dBW/kg

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Date: 2020/9/15

**Report No. :ES/2020/80024**

## Dipole 1750 MHz_SN:1008

Communication System: CW; Frequency: 1750 MHz; Duty cycle= 1:1

Medium parameters used: f = 1750 MHz; $\sigma$ = 1.369 S/m; $\varepsilon_r$ = 40.03; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.8°C; Liquid temperature: 22.3℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.34, 8.34, 8.34) @ 1750 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 12.8 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 96.04 V/m; Power Drift = 0.03 dB

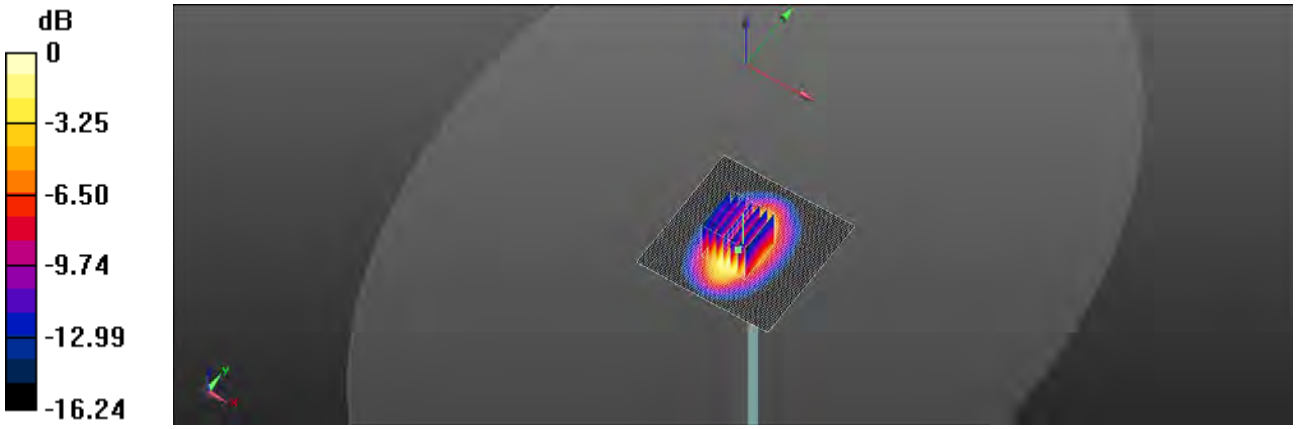
Peak SAR (extrapolated) = 15.8 W/kg

**SAR(1 g) = 8.94 W/kg; SAR(10 g) = 4.85 W/kg**

Smallest distance from peaks to all points 3 dB below = 10 mm

Ratio of SAR at M2 to SAR at M1 = 57.4%

Maximum value of SAR (measured) = 12.5 W/kg




0 dB = 12.5 W/kg = 10.97 dBW/kg

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Date: 2020/9/16

**Report No. :ES/2020/80024**

## Dipole 1900 MHz_SN:5d173

Communication System: CW; Frequency: 1900 MHz; Duty cycle= 1:1

Medium parameters used: f = 1900 MHz; $\sigma$ = 1.397 S/m; $\varepsilon_r$ = 39.403; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.7°C; Liquid temperature: 22.1℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.07, 8.07, 8.07) @ 1900 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 14.5 W/kg

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 97.81 V/m; Power Drift = 0.03 dB

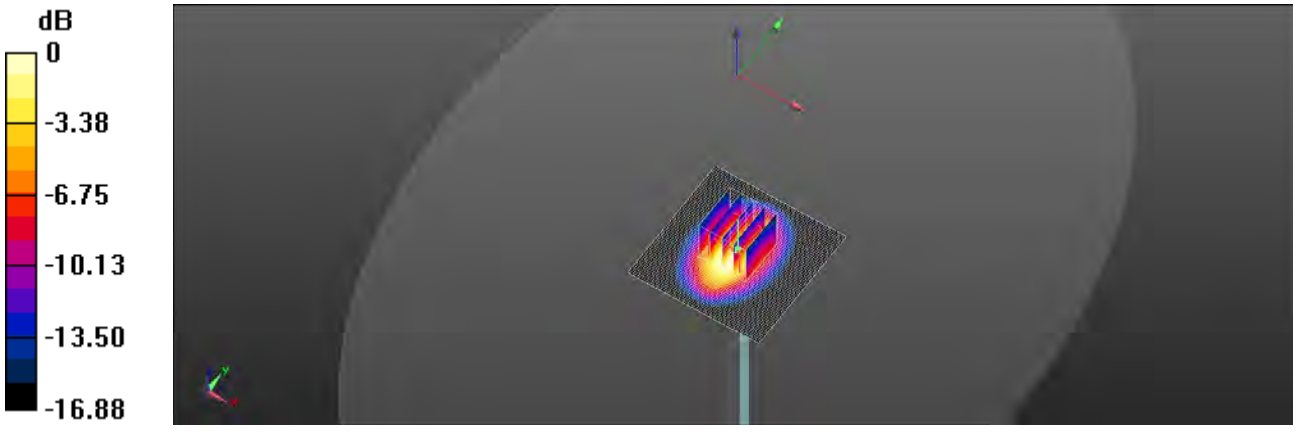
Peak SAR (extrapolated) = 18.1 W/kg

**SAR(1 g) = 10.4 W/kg; SAR(10 g) = 5.57 W/kg**

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 57.7%

Maximum value of SAR (measured) = 14.5 W/kg




0 dB = 14.5 W/kg = 11.61 dBW/kg

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Date: 2020/9/17

**Report No. :ES/2020/80024**

## Dipole 2300 MHz_SN:1023

Communication System: CW; Frequency: 2300 MHz; Duty cycle= 1:1

Medium parameters used: f = 2300 MHz; $\sigma$ = 1.659 S/m; $\varepsilon_r$ = 38.895; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.2°C; Liquid temperature: 21.5℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(7.76, 7.76, 7.76) @ 2300 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (51x51x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 17.4 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 94.02 V/m; Power Drift = 0.13 dB

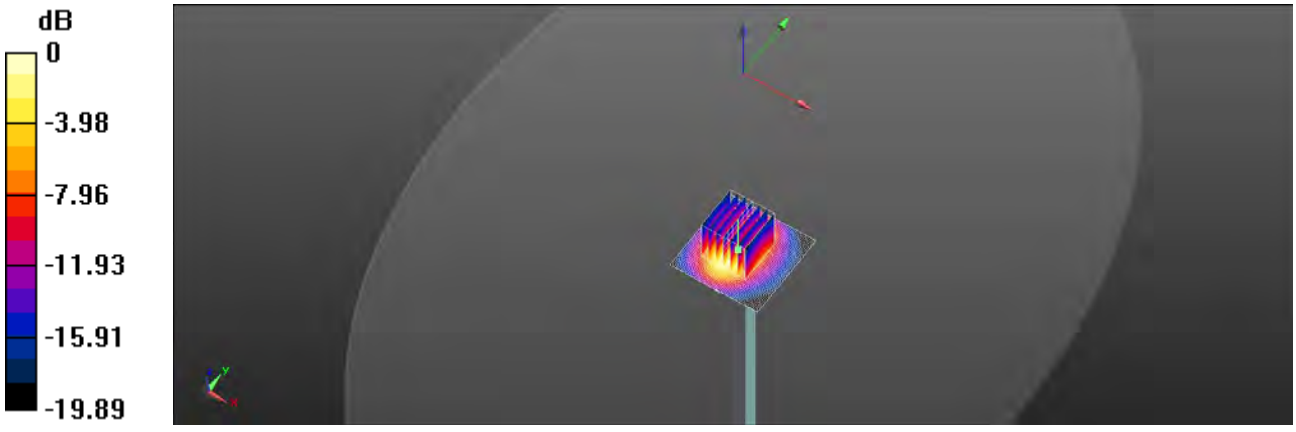
Peak SAR (extrapolated) = 21.4 W/kg

**SAR(1 g) = 11.1 W/kg; SAR(10 g) = 5.41 W/kg**

Smallest distance from peaks to all points 3 dB below = 9.5 mm

Ratio of SAR at M2 to SAR at M1 = 52.8%

Maximum value of SAR (measured) = 16.5 W/kg




0 dB = 16.5 W/kg = 12.17 dBW/kg

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Date: 2020/9/18

**Report No. :ES/2020/80024**

## Dipole 2600 MHz_SN:1005

Communication System: CW; Frequency: 2600 MHz; Duty cycle= 1:1

Medium parameters used: f = 2600 MHz; $\sigma$ = 1.908 S/m; $\varepsilon_r$ = 38.095; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.9°C; Liquid temperature: 22.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(7.23, 7.23, 7.23) @ 2600 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 22.8 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 99.98 V/m; Power Drift = 0.11 dB

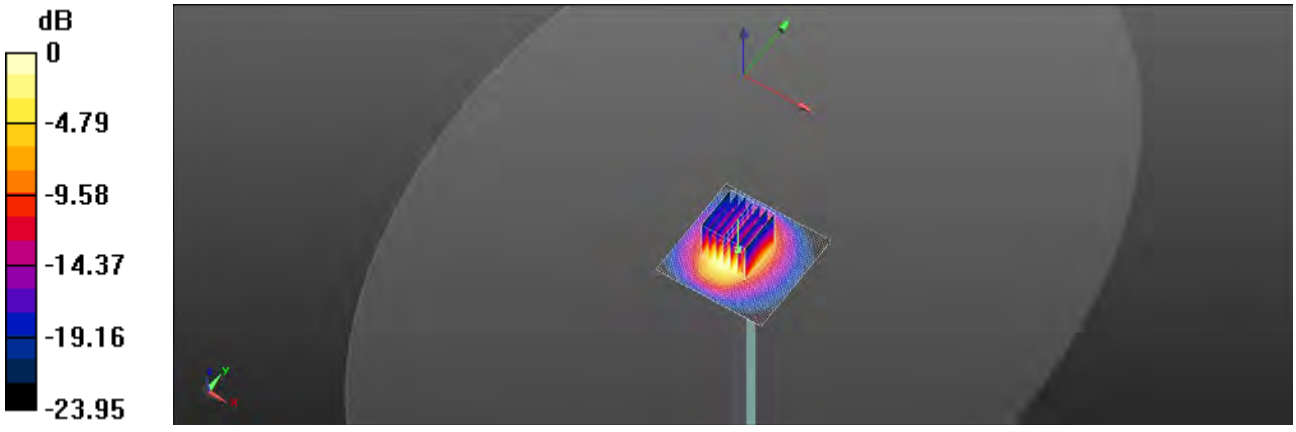
Peak SAR (extrapolated) = 31.4 W/kg

**SAR(1 g) = 14.4 W/kg; SAR(10 g) = 6.43 W/kg**

Smallest distance from peaks to all points 3 dB below = 9.1 mm

Ratio of SAR at M2 to SAR at M1 = 45.2%

Maximum value of SAR (measured) = 22.5 W/kg




0 dB = 22.5 W/kg = 13.52 dBW/kg

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Date: 2020/9/19

**Report No. :ES/2020/80024**

## Dipole 1750 MHz_SN:1008

Communication System: CW; Frequency: 1750 MHz; Duty cycle= 1:1

Medium parameters used: f = 1750 MHz; $\sigma$ = 1.372 S/m; $\varepsilon_r$ = 40.24; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.4°C; Liquid temperature: 21.9℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.34, 8.34, 8.34) @ 1750 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 12.6 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 92.64 V/m; Power Drift = 0.05 dB

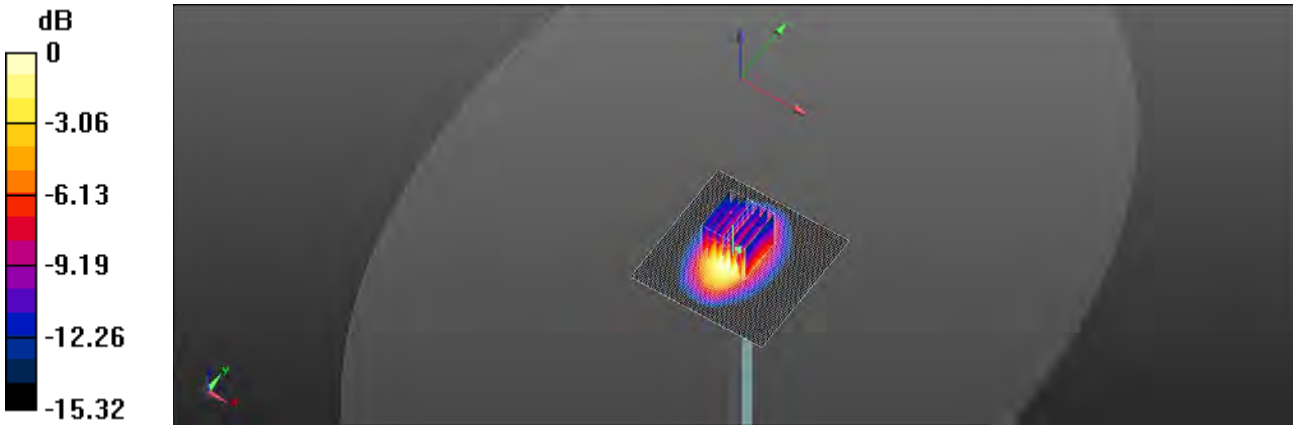
Peak SAR (extrapolated) = 15.2 W/kg

**SAR(1 g) = 9.02 W/kg; SAR(10 g) = 5.03 W/kg**

Smallest distance from peaks to all points 3 dB below = 10.8 mm

Ratio of SAR at M2 to SAR at M1 = 60.4%

Maximum value of SAR (measured) = 12.4 W/kg




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

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Date: 2020/9/20

**Report No. :ES/2020/80024**

## Dipole 1900 MHz_SN:5d173

Communication System: CW; Frequency: 1900 MHz; Duty cycle= 1:1

Medium parameters used: f = 1900 MHz; $\sigma$ = 1.407 S/m; $\varepsilon_r$ = 39.543; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.2°C; Liquid temperature: 21.7℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.07, 8.07, 8.07) @ 1900 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 13.0 W/kg

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 93.82 V/m; Power Drift = 0.04 dB

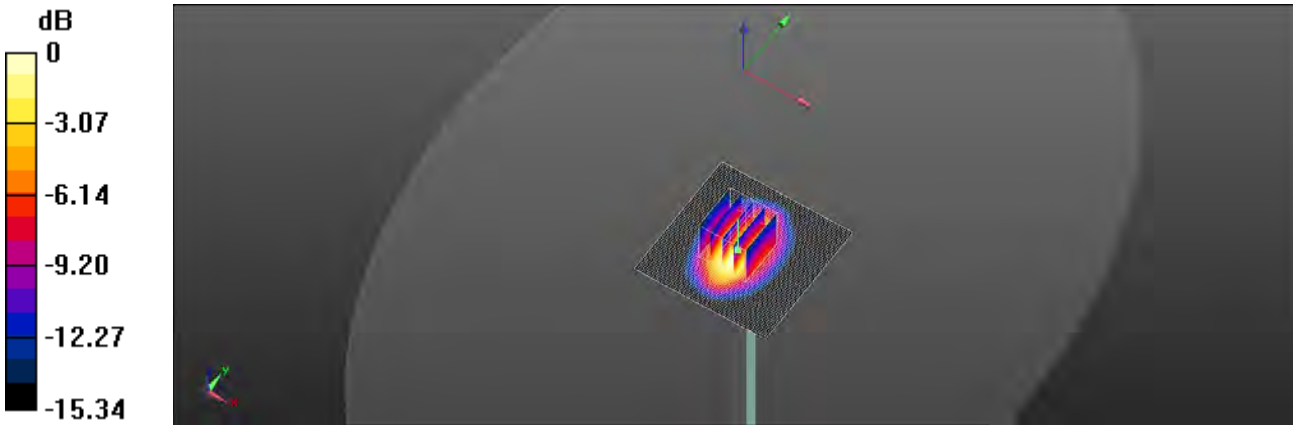
Peak SAR (extrapolated) = 16.1 W/kg

**SAR(1 g) = 9.48 W/kg; SAR(10 g) = 5.24 W/kg**

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 59.6%

Maximum value of SAR (measured) = 13.1 W/kg




0 dB = 13.1 W/kg = 11.17 dBW/kg

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Date: 2020/9/21

**Report No. :ES/2020/80024**

## Dipole 2600 MHz_SN:1005

Communication System: CW; Frequency: 2600 MHz; Duty cycle= 1:1

Medium parameters used: f = 2600 MHz; $\sigma$ = 1.915 S/m; $\varepsilon_r$ = 38.23; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.4°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(7.23, 7.23, 7.23) @ 2600 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 22.5 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 99.08 V/m; Power Drift = 0.11 dB

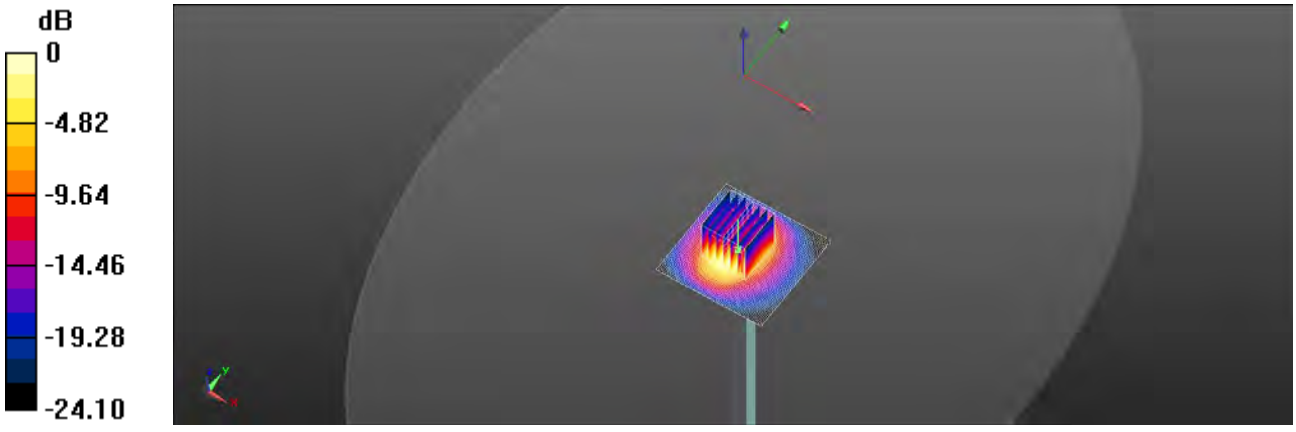
Peak SAR (extrapolated) = 31.0 W/kg

**SAR(1 g) = 14.1 W/kg; SAR(10 g) = 6.31 W/kg**

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 45.3%

Maximum value of SAR (measured) = 22.3 W/kg




0 dB = 22.3 W/kg = 13.48 dBW/kg

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Date: 2020/9/22

**Report No. :ES/2020/80024**

## Dipole 3500 MHz_SN:1009

Communication System: CW; Frequency: 3500 MHz; Duty cycle= 1:1

Medium parameters used: f = 3500 MHz; $\sigma$ = 2.866 S/m; $\varepsilon_r$ = 37.786; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.8°C; Liquid temperature: 21.5℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(6.73, 6.73, 6.73) @ 3500 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=100mW/Area Scan (61x81x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 13.0 W/kg

**Pin=100mW/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=4mm

Reference Value = 60.64 V/m; Power Drift = -0.05 dB

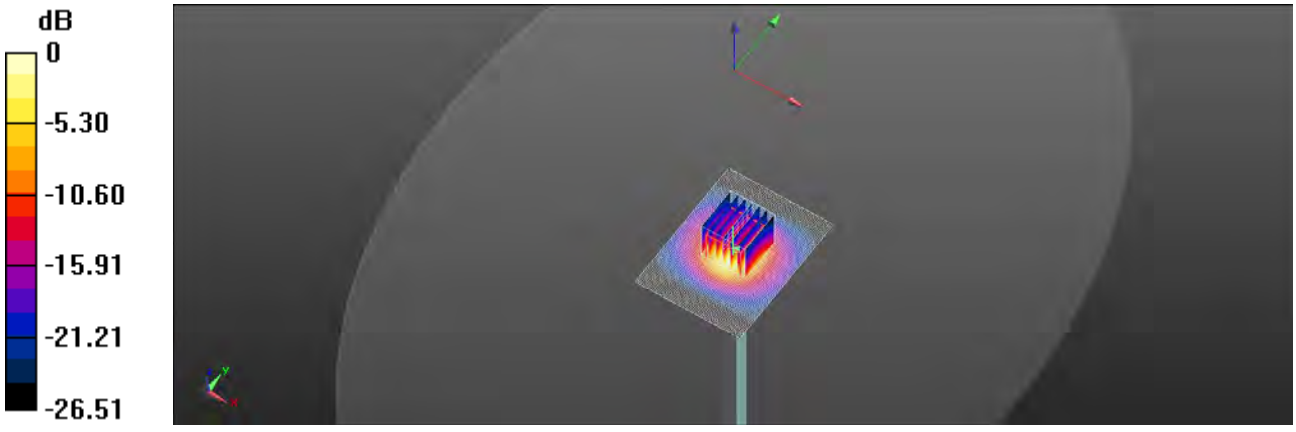
Peak SAR (extrapolated) = 18.2 W/kg

**SAR(1 g) = 6.97 W/kg; SAR(10 g) = 2.48 W/kg**

Smallest distance from peaks to all points 3 dB below = 8.2 mm

Ratio of SAR at M2 to SAR at M1 = 49.3%

Maximum value of SAR (measured) = 12.5 W/kg




0 dB = 12.5 W/kg = 10.97 dBW/kg

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Date: 2020/9/23

**Report No. :ES/2020/80024**

## Dipole 3700 MHz_SN:1057

Communication System: CW; Frequency: 3700 MHz; Duty cycle= 1:1

Medium parameters used: f = 3700 MHz; $\sigma$ = 3.081 S/m; $\varepsilon_r$ = 37.45; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.5°C; Liquid temperature: 21.9℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(6.67, 6.67, 6.67) @ 3700 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=100mW/Area Scan (61x71x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 13.6 W/kg

**Pin=100mW/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=4mm

Reference Value = 65.44 V/m; Power Drift = -0.03 dB

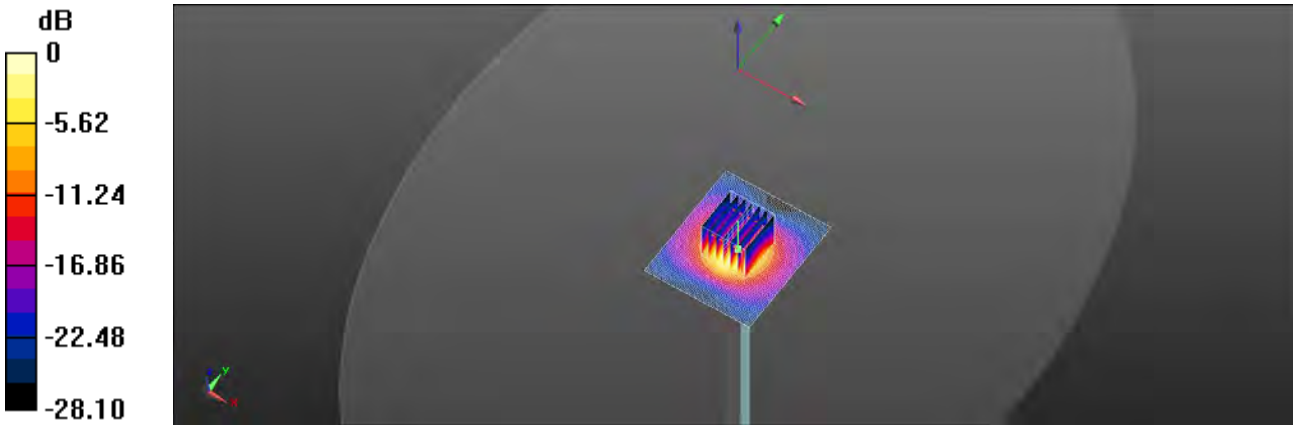
Peak SAR (extrapolated) = 18.6 W/kg

**SAR(1 g) = 6.79 W/kg; SAR(10 g) = 2.5 W/kg**

Smallest distance from peaks to all points 3 dB below = 8.9 mm

Ratio of SAR at M2 to SAR at M1 = 43%

Maximum value of SAR (measured) = 12.0 W/kg




0 dB = 12.0 W/kg = 10.79 dBW/kg

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Date: 2020/9/24

**Report No. :ES/2020/80024**

## Dipole 1750 MHz_SN:1008

Communication System: CW; Frequency: 1750 MHz; Duty cycle= 1:1

Medium parameters used: f = 1750 MHz; $\sigma$ = 1.371 S/m; $\varepsilon_r$ = 40.103; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.3°C; Liquid temperature: 21.8℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.34, 8.34, 8.34) @ 1750 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 12.9 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 97.99 V/m; Power Drift = 0.03 dB

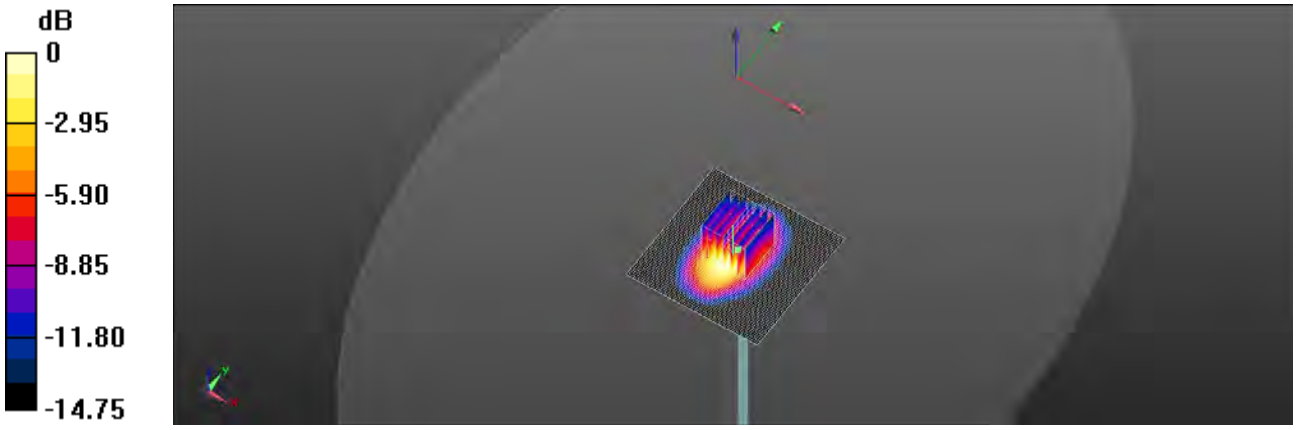
Peak SAR (extrapolated) = 15.7 W/kg

**SAR(1 g) = 9.41 W/kg; SAR(10 g) = 5.01 W/kg**

Smallest distance from peaks to all points 3 dB below = 10.2 mm

Ratio of SAR at M2 to SAR at M1 = 61.5%

Maximum value of SAR (measured) = 12.7 W/kg




0 dB = 12.7 W/kg = 11.04 dBW/kg

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Date: 2020/9/25

**Report No. :ES/2020/80024**

## Dipole 1900 MHz_SN:5d173

Communication System: CW; Frequency: 1900 MHz; Duty cycle= 1:1

Medium parameters used: f = 1900 MHz; $\sigma$ = 1.41 S/m; $\varepsilon_r$ = 39.593; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.4°C; Liquid temperature: 21.6℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.07, 8.07, 8.07) @ 1900 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 14.0 W/kg

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 98.72 V/m; Power Drift = 0.03 dB

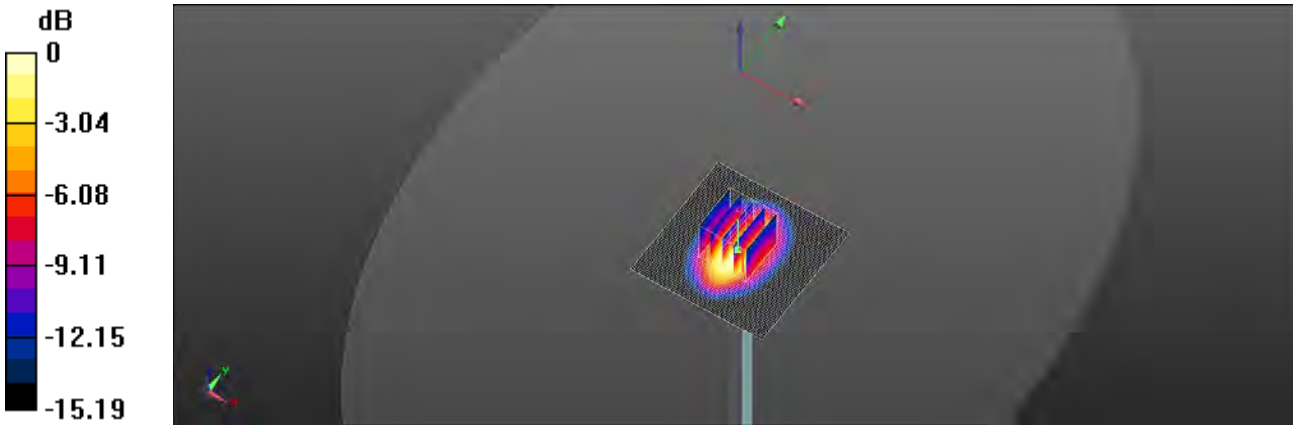
Peak SAR (extrapolated) = 17.3 W/kg

**SAR(1 g) = 10.1 W/kg; SAR(10 g) = 5.36 W/kg**

Smallest distance from peaks to all points 3 dB below = 10.1 mm

Ratio of SAR at M2 to SAR at M1 = 59.5%

Maximum value of SAR (measured) = 14.0 W/kg




0 dB = 14.0 W/kg = 11.46 dBW/kg

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Date: 2020/9/26

**Report No. :ES/2020/80024**

## Dipole 2600 MHz_SN:1005

Communication System: CW; Frequency: 2600 MHz; Duty cycle= 1:1

Medium parameters used: f = 2600 MHz; $\sigma$ = 1.923 S/m; $\varepsilon_r$ = 38.189; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.2°C; Liquid temperature: 21.8℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(7.23, 7.23, 7.23) @ 2600 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 23.5 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 101.2 V/m; Power Drift = 0.11 dB

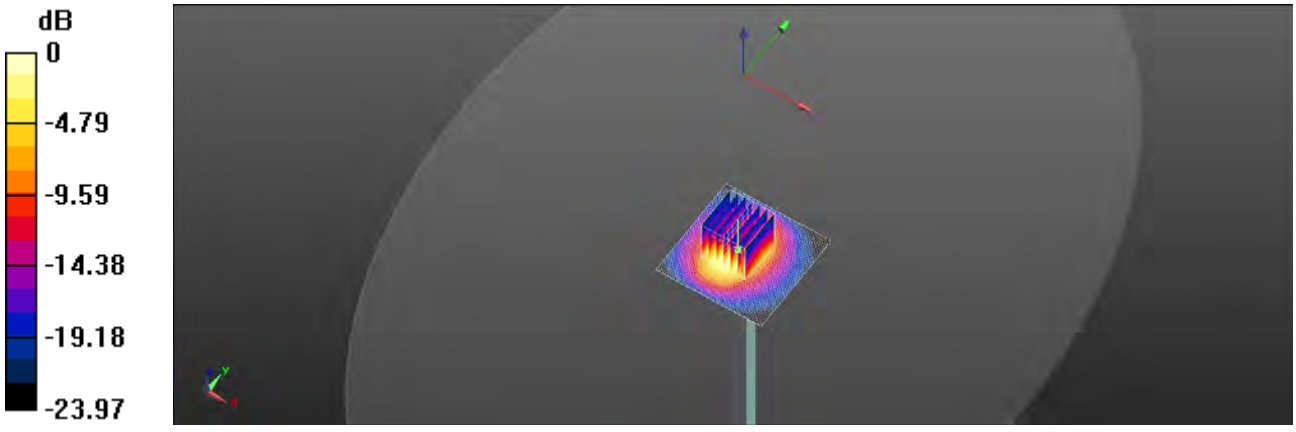
Peak SAR (extrapolated) = 32.3 W/kg

**SAR(1 g) = 14.8 W/kg; SAR(10 g) = 6.62 W/kg**

Smallest distance from peaks to all points 3 dB below = 9.1 mm

Ratio of SAR at M2 to SAR at M1 = 45.3%

Maximum value of SAR (measured) = 23.2 W/kg




0 dB = 23.2 W/kg = 13.65 dBW/kg

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Date: 2020/9/27

**Report No. :ES/2020/80024**

## Dipole 3500 MHz_SN:1009

Communication System: CW; Frequency: 3500 MHz; Duty cycle= 1:1

Medium parameters used: f = 3500 MHz; $\sigma$ = 2.88 S/m; $\varepsilon_r$ = 37.966; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.5°C; Liquid temperature: 21.9℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(6.73, 6.73, 6.73) @ 3500 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=100mW/Area Scan (61x71x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 12.0 W/kg

**Pin=100mW/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=4mm

Reference Value = 60.85 V/m; Power Drift = 0.09 dB

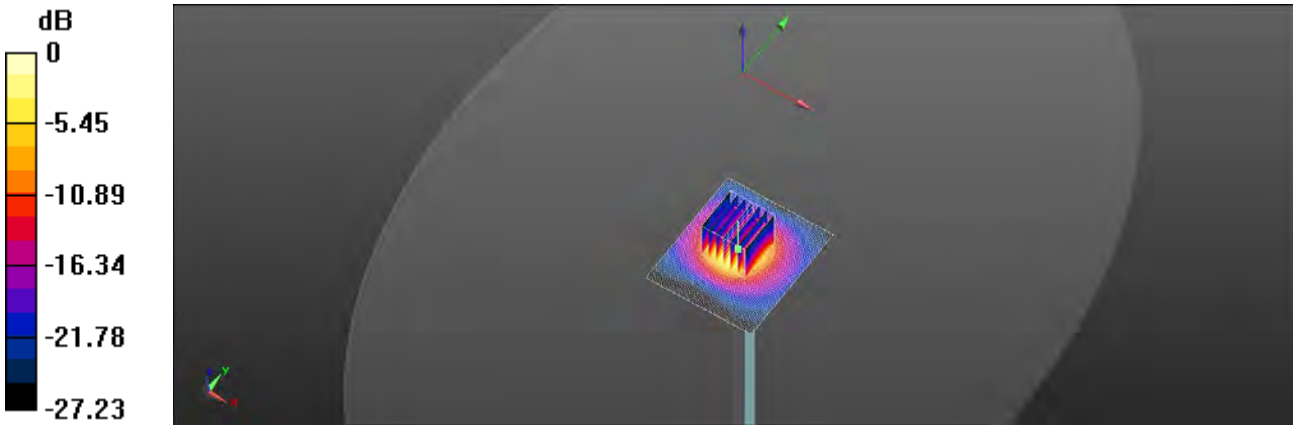
Peak SAR (extrapolated) = 17.3 W/kg

**SAR(1 g) = 6.62 W/kg; SAR(10 g) = 2.52 W/kg**

Smallest distance from peaks to all points 3 dB below = 8.9 mm

Ratio of SAR at M2 to SAR at M1 = 45.1%

Maximum value of SAR (measured) = 11.4 W/kg




0 dB = 11.4 W/kg = 10.57 dBW/kg

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Date: 2020/9/28

**Report No. :ES/2020/80024**

## Dipole 3700 MHz_SN:1057

Communication System: CW; Frequency: 3700 MHz; Duty cycle= 1:1

Medium parameters used: f = 3700 MHz; $\sigma$ = 3.087 S/m; $\varepsilon_r$ = 37.562; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.6°C; Liquid temperature: 22.1℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(6.67, 6.67, 6.67) @ 3700 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=100mW/Area Scan (61x71x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 13.8 W/kg

**Pin=100mW/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=4mm

Reference Value = 65.65 V/m; Power Drift = -0.01 dB

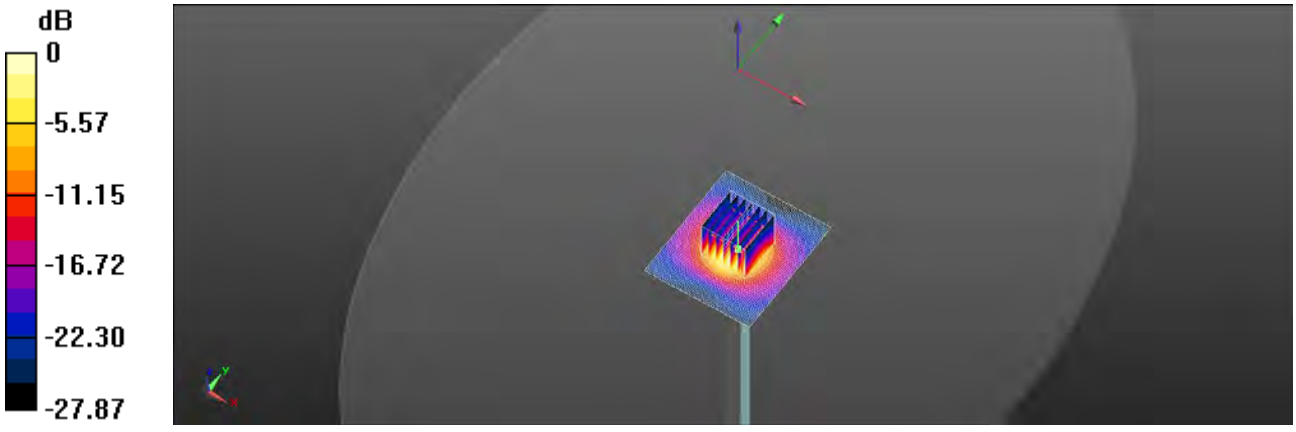
Peak SAR (extrapolated) = 18.7 W/kg

**SAR(1 g) = 6.95 W/kg; SAR(10 g) = 2.57 W/kg**

Smallest distance from peaks to all points 3 dB below = 8.9 mm

Ratio of SAR at M2 to SAR at M1 = 43.4%

Maximum value of SAR (measured) = 12.2 W/kg




0 dB = 12.2 W/kg = 10.86 dBW/kg

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Date: 2020/9/29

**Report No. :ES/2020/80024**

## Dipole 1750 MHz_SN:1008

Communication System: CW; Frequency: 1750 MHz; Duty cycle= 1:1

Medium parameters used: f = 1750 MHz; $\sigma$ = 1.373 S/m; $\varepsilon_r$ = 40.06; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.5°C; Liquid temperature: 21.9℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.34, 8.34, 8.34) @ 1750 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 12.8 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 93.62 V/m; Power Drift = 0.09 dB

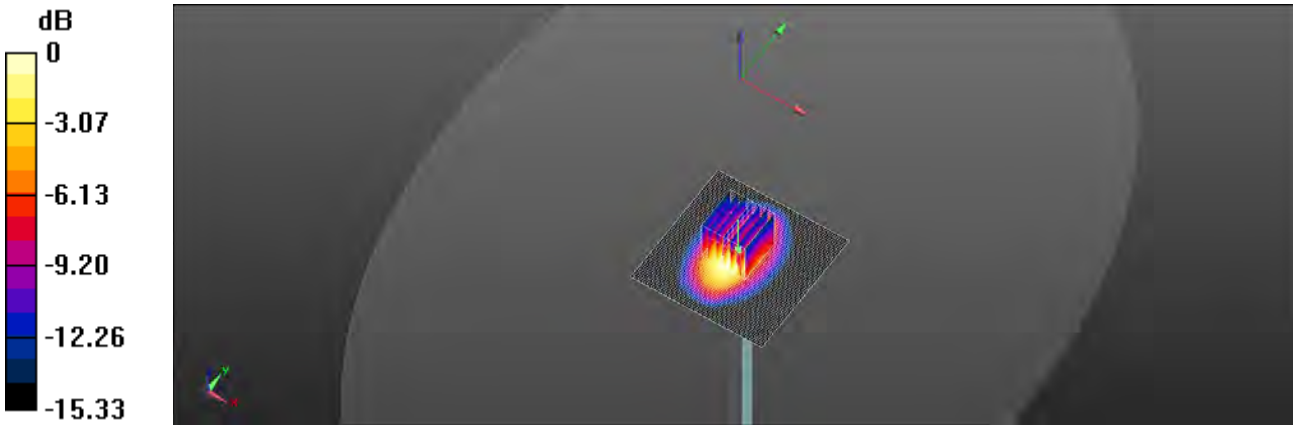
Peak SAR (extrapolated) = 15.6 W/kg

**SAR(1 g) = 9.26 W/kg; SAR(10 g) = 5.03 W/kg**

Smallest distance from peaks to all points 3 dB below = 10.2 mm

Ratio of SAR at M2 to SAR at M1 = 60.5%

Maximum value of SAR (measured) = 12.7 W/kg




0 dB = 12.7 W/kg = 11.04 dBW/kg

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Date: 2020/9/30

**Report No. :ES/2020/80024**

## Dipole 1900 MHz_SN:5d173

Communication System: CW; Frequency: 1900 MHz; Duty cycle= 1:1

Medium parameters used: f = 1900 MHz; $\sigma$ = 1.402 S/m; $\varepsilon_r$ = 39.493; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.8°C; Liquid temperature: 21.5℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(8.07, 8.07, 8.07) @ 1900 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 14.0 W/kg

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 98.72 V/m; Power Drift = 0.03 dB

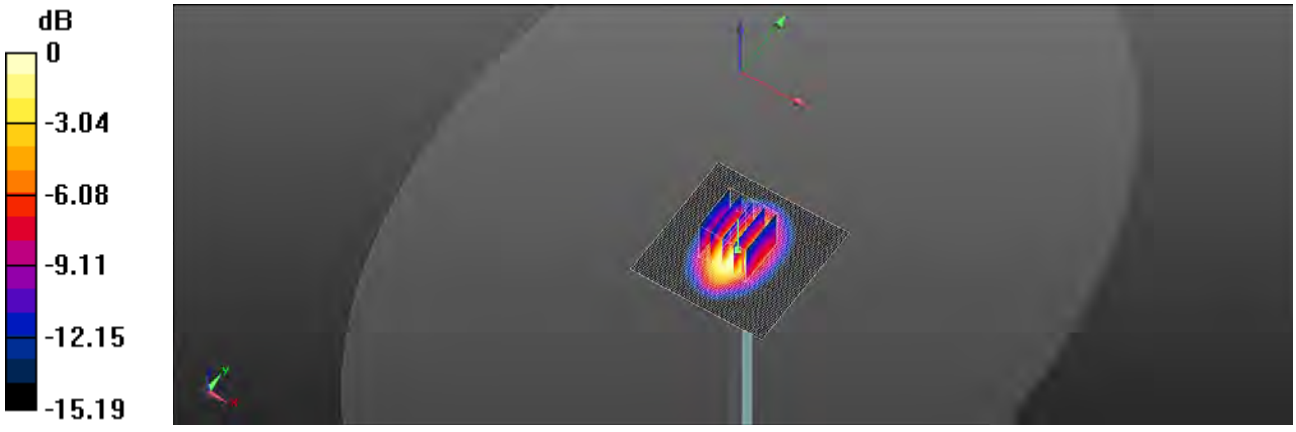
Peak SAR (extrapolated) = 17.3 W/kg

**SAR(1 g) = 10.1 W/kg; SAR(10 g) = 5.26 W/kg**

Smallest distance from peaks to all points 3 dB below = 10.1 mm

Ratio of SAR at M2 to SAR at M1 = 59.5%

Maximum value of SAR (measured) = 14.0 W/kg




0 dB = 14.0 W/kg = 11.46 dBW/kg

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Date: 2020/10/1

**Report No. :ES/2020/80024**

## Dipole 2600 MHz_SN:1005

Communication System: CW; Frequency: 2600 MHz; Duty cycle= 1:1

Medium parameters used: f = 2600 MHz; $\sigma$ = 1.922 S/m; $\varepsilon_r$ = 38.205; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.7°C; Liquid temperature: 22.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(7.23, 7.23, 7.23) @ 2600 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 23.2 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 100.5 V/m; Power Drift = 0.11 dB

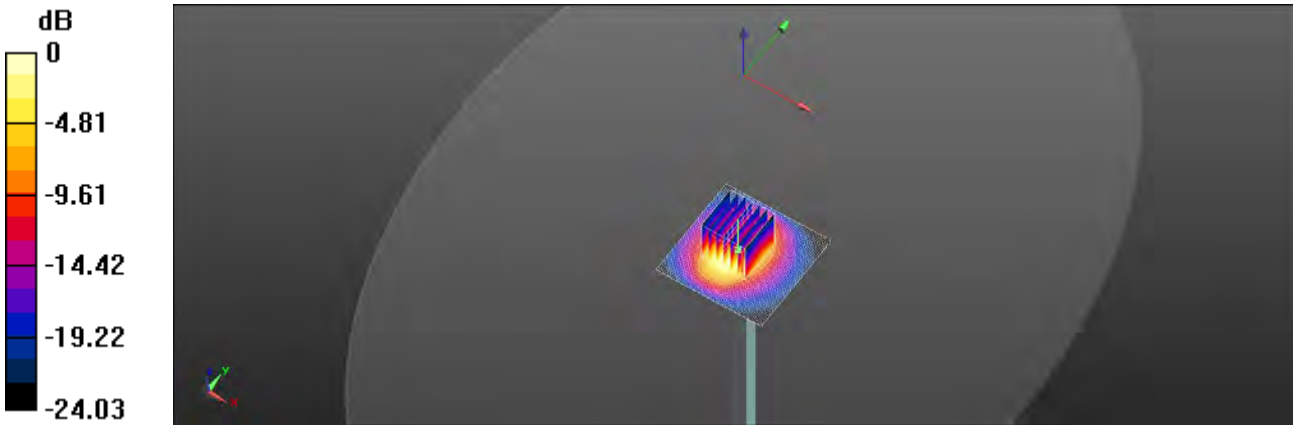
Peak SAR (extrapolated) = 31.9 W/kg

**SAR(1 g) = 14.5 W/kg; SAR(10 g) = 6.51 W/kg**

Smallest distance from peaks to all points 3 dB below = 9.1 mm

Ratio of SAR at M2 to SAR at M1 = 45.2%

Maximum value of SAR (measured) = 22.9 W/kg




0 dB = 22.9 W/kg = 13.60 dBW/kg

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Date: 2020/10/2

**Report No. :ES/2020/80024**

## Dipole 3500 MHz_SN:1009

Communication System: CW; Frequency: 3500 MHz; Duty cycle= 1:1

Medium parameters used: f = 3500 MHz; $\sigma$ = 2.866 S/m; $\varepsilon_r$ = 37.966; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 22.3°C; Liquid temperature: 22.6℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(6.73, 6.73, 6.73) @ 3500 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=100mW/Area Scan (61x71x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 11.7 W/kg

**Pin=100mW/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=4m

Reference Value = 60.21 V/m; Power Drift = 0.06 dB

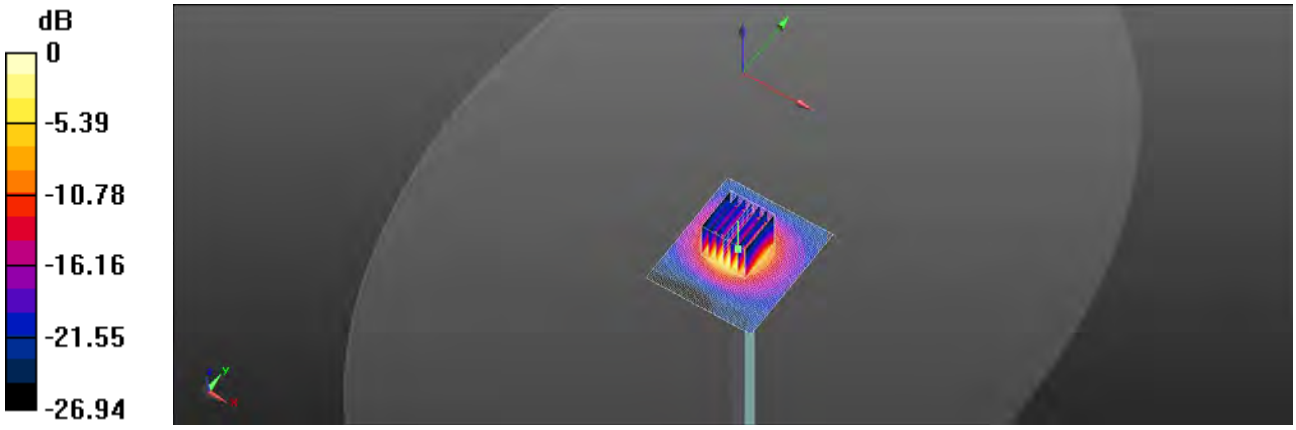
Peak SAR (extrapolated) = 17.4 W/kg

**SAR(1 g) = 6.49 W/kg; SAR(10 g) = 2.45 W/kg**

Smallest distance from peaks to all points 3 dB below = 8.9 mm

Ratio of SAR at M2 to SAR at M1 = 44.2%

Maximum value of SAR (measured) = 11.1 W/kg




0 dB = 11.1 W/kg = 10.45 dBW/kg

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Date: 2020/10/3

**Report No. :ES/2020/80024**

## Dipole 3700 MHz_SN:1057

Communication System: CW; Frequency: 3700 MHz; Duty cycle= 1:1

Medium parameters used: f = 3700 MHz; $\sigma$ = 3.095 S/m; $\varepsilon_r$ = 37.55; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

Ambient temperature: 21.4°C; Liquid temperature: 22.3℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7509; ConvF(6.67, 6.67, 6.67) @ 3700 MHz; Calibrated: 2020/3/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2020/3/17
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Pin=100mW/Area Scan (61x71x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 13.7 W/kg

**Pin=100mW/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=4mm

Reference Value = 65.47 V/m; Power Drift = 0.02 dB

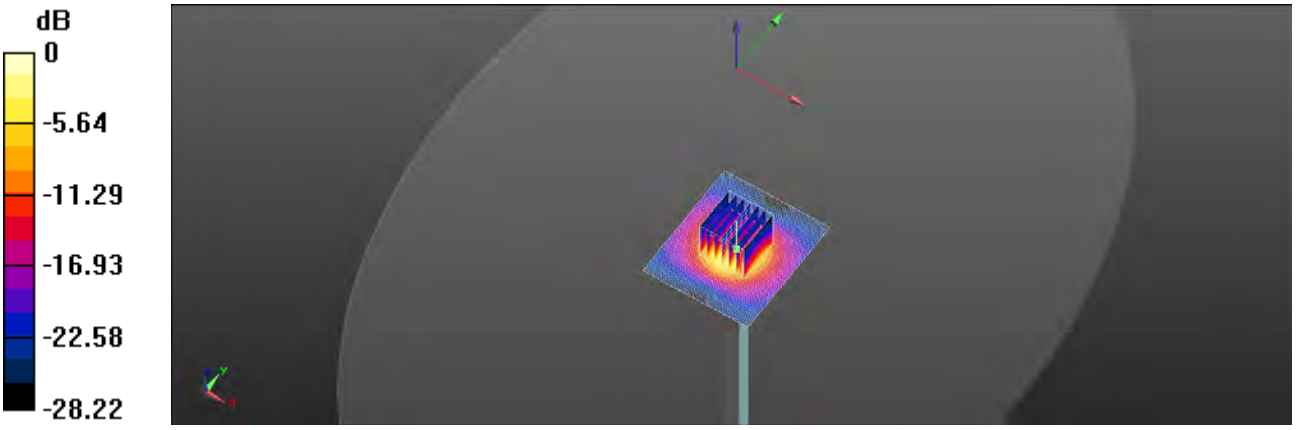
Peak SAR (extrapolated) = 18.7 W/kg

**SAR(1 g) = 6.88 W/kg; SAR(10 g) = 2.54 W/kg**

Smallest distance from peaks to all points 3 dB below = 8.9 mm

Ratio of SAR at M2 to SAR at M1 = 43.1%

Maximum value of SAR (measured) = 12.1 W/kg




0 dB = 12.1 W/kg = 10.83 dBW/kg

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# 7. Uncertainty Budget

Measurement Uncertainty evaluation template for DUT SAR test (3-6G)

| A | c | D | e | | f | g | h=c * f / e | i=c * g / e | k |
|---|---|---|---|---|---|---|---|---|---|
| Source of Uncertainty | Tolerance/ Uncertainty | Probability Distributio | Div | Div Value | ci (1g) | ci (10g) | Standard uncertainty | Standard uncertainty | vi, or Veff |
| | | | | | | | | | |
| **Measurement system** | | | | | | | | | |
| Probe calibration | 6.55% | N | 1 | 1 | 1 | 1 | 6.55% | 6.55% | ∞ |
| ***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% | ∞ |
| Modulation Response | 2.40% | R | √3 | 1.732 | 1 | 1 | 1.40% | 1.40% | ∞ |
| Boundary Effect | 1.00% | R | √3 | 1.732 | 1 | 1 | 0.58% | 0.58% | ∞ |
| Linearity | 4.70% | R | √3 | 1.732 | 1 | 1 | 2.71% | 2.71% | ∞ |
| Detection Limits | 1.00% | R | √3 | 1.732 | 1 | 1 | 0.58% | 0.58% | ∞ |
| Readout Electronics | 0.30% | N | 1 | 1 | 1 | 1 | 0.30% | 0.30% | ∞ |
| Response time | 0.80% | R | √3 | 1.732 | 1 | 1 | 0.46% | 0.46% | ∞ |
| Integration Time | 2.60% | R | √3 | 1.732 | 1 | 1 | 1.50% | 1.50% | ∞ |
| ***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 shell | 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% | ∞ |
| Liquid permittivity (mea.) | 0.66% | N | 1 | 1 | 0.64 | 0.43 | 0.42% | 0.28% | M |
| Liquid Conductivity (mea.) | 2.65% | N | 1 | 1 | 0.6 | 0.49 | 1.59% | 1.30% | M |
| Combined standard uncertainty | | RSS | | | | | 11.83% | 11.78% | |
| Expant uncertainty (95% confidence interval), K=2 | | | | | | | 23.66% | 23.56% | |

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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 Distributio | 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% | ∞ |
| Modulation Response | 2.40% | R | √3 | 1.732 | 1 | 1 | 1.40% | 1.40% | ∞ |
| Boundary Effect | 1.00% | R | √3 | 1.732 | 1 | 1 | 0.58% | 0.58% | ∞ |
| Linearity | 4.70% | R | √3 | 1.732 | 1 | 1 | 2.71% | 2.71% | ∞ |
| Detection Limits | 1.00% | R | √3 | 1.732 | 1 | 1 | 0.58% | 0.58% | ∞ |
| Readout Electronics | 0.30% | N | 1 | 1 | 1 | 1 | 0.30% | 0.30% | ∞ |
| Response time | 0.80% | R | √3 | 1.732 | 1 | 1 | 0.46% | 0.46% | ∞ |
| Integration Time | 2.60% | R | √3 | 1.732 | 1 | 1 | 1.50% | 1.50% | ∞ |
| ***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 shell | 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% | ∞ |
| Liquid permittivity (mea.) | 2.55% | N | 1 | 1 | 0.64 | 0.43 | 1.63% | 1.10% | M |
| Liquid Conductivity (mea.) | 3.91% | N | 1 | 1 | 0.6 | 0.49 | 2.35% | 1.92% | M |
| Combined standard uncertainty | | RSS | | | | | 11.77% | 11.62% | |
| Expant uncertainty (95% confidence interval), K=2 | | | | | | | 23.54% | 23.24% | |

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# Appendixes

**Refer to separated files for the following appendixes.**

**ES202080024 SAR_Appendix A Photographs**

**ES202080024 SAR_Appendix B DAE & Probe Cal. Certificate**

**ES202080024 SAR_Appendix C Phantom Description & Dipole Cal. Certificate**

**- End of report -**

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