## 13.4 WLAN 2.4 GHz Band Conducted Power

| Average Power (dBm) | | | | |
|---|---|---|---|---|
| Channel | Frequency (MHz) | 802.11 b | 802.11 g | 802.11n (HT20) |
| CH 01 | 2412 | **16.62** | 9.50 | 9.50 |
| CH 06 | 2437 | 16.31 | 10.47 | 10.48 |
| CH 11 | 2462 | 16.23 | 8.86 | 8.88 |

| Average Power (dBm) | | |
|---|---|---|
| Channel | Frequency (MHz) | 802.11n (HT40) |
| CH 03 | 2422 | 6.80 |
| CH 06 | 2437 | 8.86 |
| CH 09 | 2452 | 7.46 |

**Note:**

1. SAR test of WLAN 2.4GHz is performed.
2. Per KDB 248227 D01v02r02, choose the highest output power channel to test SAR and determine further SAR exclusion.
3. Per KDB 248227 D01v02r02, In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. SAR is not required for the following 2.4 GHz OFDM conditions:
   1) When KDB Publication 447498 SAR test exclusion applies to the OFDM configuration.
   2) When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.
4. The output power of all data rate were pre-scan, just the worst case (the lowest data rate) of all mode were shown in report.
5. Per KDB 248227 D01V02r02 section 2.2, when the EUT in continuously transmitting mode, the actual duty cycle is 98.43%, so the duty cycle factor is 1.016.

## 13.5 WLAN 5.2GHz Band Conducted Power

| Average Power (dBm) | | | | |
|---|---|---|---|---|
| Channel | Frequency (MHz) | 802.11 a | 802.11 ac20 | 802.11 n20 |
| CH 36 | 5180 | **13.35** | 12.62 | 13.22 |
| CH 40 | 5200 | 12.55 | 11.91 | 13.21 |
| CH 48 | 5240 | 11.97 | 11.29 | 12.27 |

| Average Power (dBm) | | | |
|---|---|---|---|
| Channel | Frequency (MHz) | 802.11 ac40 | 802.11 n40 |
| CH 38 | 5190 | 6.50 | 6.68 |
| CH 46 | 5230 | 6.89 | 6.56 |

| Average Power (dBm) | | |
|---|---|---|
| Channel | Frequency (MHz) | 802.11 ac80 |
| CH 42 | 5210 | 5.96 |

**Note:**
1. SAR test of WLAN 5.2GHz is performed.
2. Per KDB 248227 D01v02r02, choose the highest output power channel to test SAR and determine further SAR exclusion.
3. The output power of all data rate were pre-scan, just the worst case (the lowest data rate) of all mode were shown in report.
4. Per KDB 248227 D01V02r02 section 2.2, when the EUT in continuously transmitting mode, the actual duty cycle is 90.23%, so the duty cycle factor is 1.108.

## 13.6 WLAN 5.3GHz Band Conducted Power

| Average Power (dBm) | | | | |
|---|---|---|---|---|
| Channel | Frequency (MHz) | 802.11 a | 802.11 ac20 | 802.11 n20 |
| CH 52 | 5260 | 12.86 | 12.00 | **12.95** |
| CH 56 | 5280 | 11.85 | 10.97 | 11.91 |
| CH 64 | 5320 | 12.54 | 11.67 | 12.59 |

| Average Power (dBm) | | | |
|---|---|---|---|
| Channel | Frequency (MHz) | 802.11 ac40 | 802.11 n40 |
| CH 54 | 5270 | 6.45 | 6.06 |
| CH 62 | 5310 | 6.23 | 6.27 |

| Average Power (dBm) | | |
|---|---|---|
| Channel | Frequency (MHz) | 802.11 ac80 |
| CH 58 | 5290 | 5.83 |

**Note:**
1. SAR test of WLAN 5.3GHz is performed.
2. Per KDB 248227 D01v02r02, choose the highest output power channel to test SAR and determine further SAR exclusion.
3. The output power of all data rate were pre-scan, just the worst case (the lowest data rate) of all mode were shown in report.
4. Per KDB 248227 D01V02r02 section 2.2, when the EUT in continuously transmitting mode, the actual duty cycle is 91.34%, so the duty cycle factor is 1.095.

## 13.7 WLAN 5.6GHz Band Conducted Power

| Average Power (dBm) | | | | |
|---|---|---|---|---|
| Channel | Frequency (MHz) | 802.11 a | 802.11 ac20 | 802.11 n20 |
| CH 100 | 5500 | 11.56 | 11.44 | 11.50 |
| CH 120 | 5600 | **11.58** | 11.40 | 11.60 |
| CH 140 | 5700 | 11.25 | 10.98 | 11.25 |

| Average Power (dBm) | | | |
|---|---|---|---|
| Channel | Frequency (MHz) | 802.11 ac40 | 802.11 n40 |
| CH 102 | 5510 | 7.56 | 7.60 |
| CH 118 | 5590 | 6.86 | 6.88 |
| CH 134 | 5670 | 7.00 | 7.05 |

| Average Power (dBm) | | |
|---|---|---|
| Channel | Frequency (MHz) | 802.11 ac80 |
| CH 106 | 5530 | 7.88 |
| CH 122 | 5610 | 7.73 |

**Note:**
1. SAR test of WLAN 5.6GHz is performed.
2. Per KDB 248227 D01v02r02, choose the highest output power channel to test SAR and determine further SAR exclusion.
3. The output power of all data rate were pre-scan, just the worst case (the lowest data rate) of all mode were shown in report.
4. Per KDB 248227 D01V02r02 section 2.2, when the EUT in continuously transmitting mode, the actual duty cycle is 91.34%, so the duty cycle factor is 1.095.

## 13.8 WLAN 5.8GHz Band Conducted Power

| Average Power (dBm) | | | | |
|---|---|---|---|---|
| Channel | Frequency (MHz) | 802.11 a | 802.11 ac20 | 802.11 n20 |
| CH 149 | 5745 | **13.49** | 11.89 | 13.39 |
| CH 157 | 5785 | 13.36 | 11.81 | 13.35 |
| CH 165 | 5825 | 12.52 | 11.77 | 12.48 |

| Average Power (dBm) | | | |
|---|---|---|---|
| Channel | Frequency (MHz) | 802.11 ac40 | 802.11 n40 |
| CH 151 | 5755 | 11.59 | 13.11 |
| CH 159 | 5795 | 11.17 | 12.74 |

| Average Power (dBm) | | |
|---|---|---|
| Channel | Frequency (MHz) | 802.11 ac80 |
| CH 155 | 5775 | 10.88 |

**Note:**
1. SAR test of WLAN 5.8GHz is performed.
2. Per KDB 248227 D01v02r02, choose the highest output power channel to test SAR and determine further SAR exclusion.
3. The output power of all data rate were pre-scan, just the worst case (the lowest data rate) of all mode were shown in report.
4. Per KDB 248227 D01V02r02 section 2.2, when the EUT in continuously transmitting mode, the actual duty cycle is 91.26%, so the duty cycle factor is 1.096.

## 13.9 Bluetooth Conducted Power

| Average Power (dBm) | | | | |
|---|---|---|---|---|
| Channel | Frequency (MHz) | GFSK | π/4-DQPSK | 8DPSK |
| CH 00 | 2402 | 5.41 | 5.64 | **5.72** |
| CH 39 | 2441 | 4.42 | 4.70 | 4.84 |
| CH 78 | 2480 | 3.78 | 4.13 | 4.34 |

| Average Power (dBm) | | | | | |
|---|---|---|---|---|---|
| Channel | Frequency (MHz) | BLE PHY 1M | BLE PHY 2M | BLE Coded PHY S=2 | BLE Coded PHY S=8 |
| CH 00 | 2402 | 0.54 | 0.24 | 0.48 | 0.30 |
| CH 20 | 2442 | -0.20 | -0.51 | -0.28 | -0.47 |
| CH 39 | 2480 | -1.24 | -1.67 | -1.34 | -1.53 |

**Note:**

1. SAR test of Bluetooth is performed and the mode with highest average power is selected for SAR testing.
2. Per KDB 447498 D04v01 section 2.1.2: 1-mW Test Exemption, SAR test for BLE is not required.
3. The output power of all data rate were pre-scan, just the worst case of all mode were shown in report.
4. Per KDB 248227 D01V02r02 section 2.2, when the EUT in continuously transmitting mode, the actual duty cycle is 100%, so the duty cycle factor is 1.

# 14 Exposure Positions Consideration

## 14.1 EUT Antenna Locations

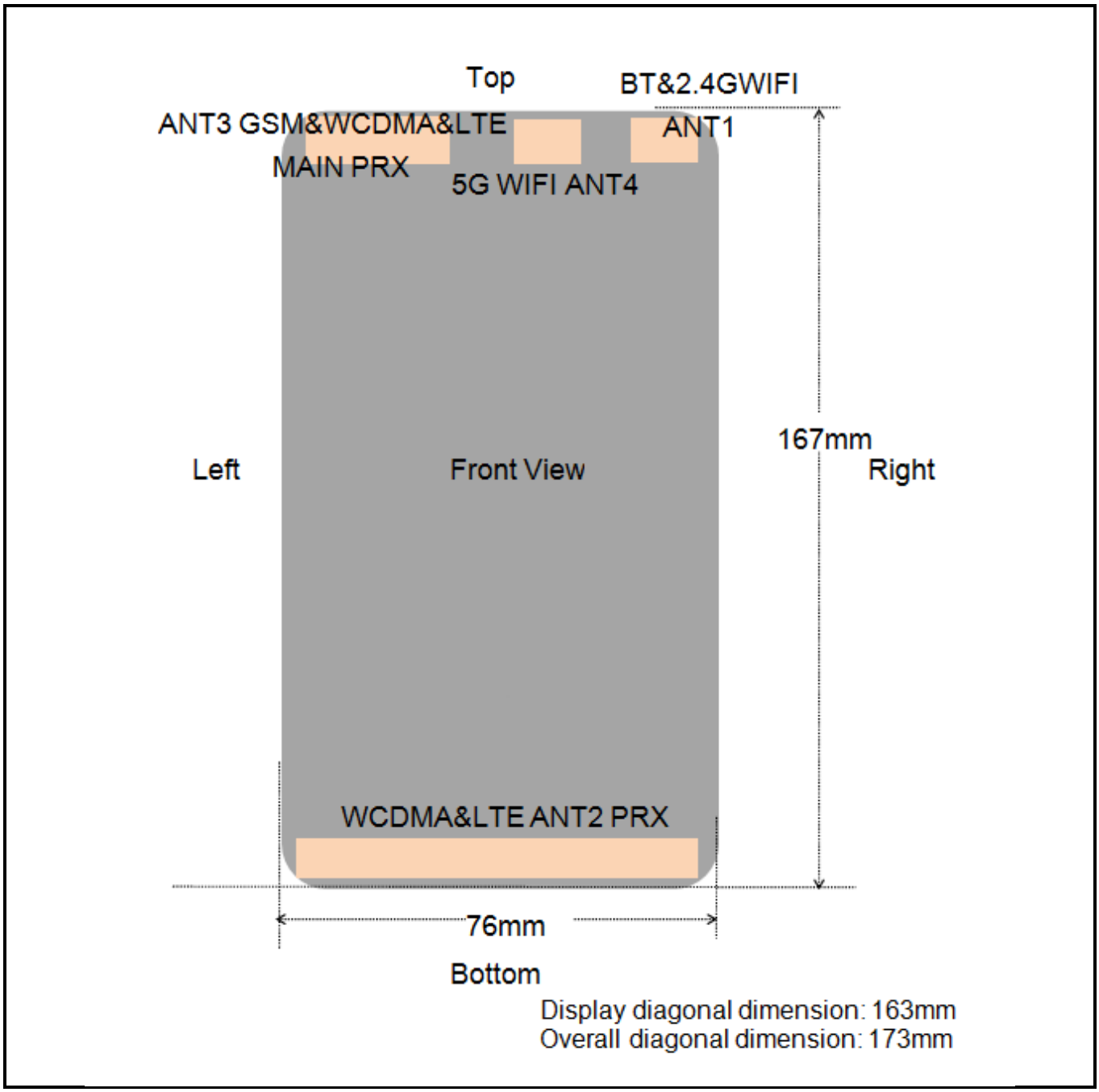



**Fig.14.1 EUT Antenna Locations**

*Note: This antenna diagram is only used as a reference for the distance from the antenna to each edge. For the specific shape of the antenna, please refer to the physical photo.*

## 14.2 Test Positions Consideration

| Distance of Antennas to EUT edge/surface<br>Test distance: 10mm | | | | | | |
|---|---|---|---|---|---|---|
| **Antennas** | **Back** | **Front** | **Top Side** | **Bottom Side** | **Right Side** | **Left Side** |
| 2G/3G/4G ANT2 | <25mm | <25mm | 152mm | <25mm | <25mm | <25mm |
| 2G/3G/4G ANT3 | <25mm | <25mm | <25mm | 150mm | 35mm | <25mm |
| 2.4GWIFI & Bluetooth ANT1 | <25mm | <25mm | <25mm | 145mm | <25mm | 60mm |
| 5GWIFI ANT4 | <25mm | <25mm | <25mm | 159mm | <25mm | 42mm |

| Test Positions<br>Test distance: 10mm | | | | | | |
|---|---|---|---|---|---|---|
| **Antennas** | **Back** | **Front** | **Top Side** | **Bottom Side** | **Right Side** | **Left Side** |
| 2G/3G/4G ANT2 | Yes | Yes | No | Yes | Yes | Yes |
| 2G/3G/4G ANT3 | Yes | Yes | Yes | No | No | Yes |
| 2.4GWIFI & Bluetooth ANT1 | Yes | Yes | Yes | No | Yes | No |
| 5GWIFI ANT4 | Yes | Yes | Yes | No | Yes | No |

**Note:**

1. Head/Body-worn/Hotspot mode SAR assessments are required.
2. Referring to KDB 941225 D06 v02r01, when the overall device length and width are ≥ 9cm * 5cm, the test distance is 10mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge.
3. Per KDB 447498 D04v01, for handsets the test separation distance is determined by the smallest distance between the outer surface of the device and the user, which is 0 mm for head SAR, 10 mm for hotspot SAR, and 10 mm for body-worn SAR.
4. Per KDB 648474 D04 v01r03, when hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg

# 15 SAR Test Results Summary

## 15.1 Standalone Head SAR Data

➢ GSM Head SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | GSM850/Voice | Right Cheek | 3 | 190 | 836.6 | 33.77 | -0.32 | 34.0 | 0.725 | 1.054 | 0.764 |
| | GSM850/Voice | Right Tilted | 3 | 190 | 836.6 | 33.77 | 0.64 | 34.0 | 0.589 | 1.054 | 0.621 |
| | GSM850/Voice | Left Cheek | 3 | 190 | 836.6 | 33.77 | -0.44 | 34.0 | 0.595 | 1.054 | 0.627 |
| | GSM850/Voice | Left Tilted | 3 | 190 | 836.6 | 33.77 | 0.98 | 34.0 | 0.512 | 1.054 | 0.540 |
| | GSM850/Voice | Right Cheek | 3 | 128 | 824.2 | 33.60 | -0.61 | 34.0 | 0.859 | 1.096 | 0.941 |
| 1 | GSM850/Voice | Right Cheek | 3 | 251 | 848.8 | 33.52 | -0.97 | 34.0 | **0.946** | 1.117 | 1.057 |
| | **GSM850/Voice** | **Right Cheek** | **3** | **251** | **848.8** | **33.52** | **1.16** | **34.0** | **0.910** | **1.117** | 1.016 |
| | PCS1900/Voice | Right Cheek | 3 | 512 | 1850.2 | 30.43 | 1.22 | 30.5 | 0.621 | 1.016 | 0.631 |
| 2 | PCS1900/Voice | Right Tilted | 3 | 512 | 1850.2 | 30.43 | 1.35 | 30.5 | **0.829** | 1.016 | 0.842 |
| | PCS1900/Voice | Left Cheek | 3 | 512 | 1850.2 | 30.43 | -0.25 | 30.5 | 0.511 | 1.016 | 0.519 |
| | PCS1900/Voice | Left Tilted | 3 | 512 | 1850.2 | 30.43 | -1.03 | 30.5 | 0.714 | 1.016 | 0.725 |
| | PCS1900/Voice | Right Tilted | 3 | 661 | 1880 | 30.25 | 0.53 | 30.5 | 0.763 | 1.059 | 0.808 |
| | PCS1900/Voice | Right Tilted | 3 | 810 | 1909.8 | 30.09 | -4.02 | 30.5 | 0.794 | 1.099 | 0.873 |
| | **PCS1900/Voice** | **Right Tilted** | **3** | **512** | **1850.2** | **30.43** | **1.29** | **30.5** | **0.792** | **1.016** | **0.805** |
| **ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | |

➢ WCDMA Head SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band II/RMC | Right Cheek | 3 | 9538 | 1907.6 | 23.30 | 0.37 | 23.5 | 0.399 | 1.047 | 0.418 |
| 3 | Band II/RMC | Right Tilted | 3 | 9538 | 1907.6 | 23.30 | -1.90 | 23.5 | **0.485** | 1.047 | 0.508 |
| | Band II/RMC | Left Cheek | 3 | 9538 | 1907.6 | 23.30 | -1.39 | 23.5 | 0.286 | 1.047 | 0.299 |
| | Band II/RMC | Left Tilted | 3 | 9538 | 1907.6 | 23.30 | 1.52 | 23.5 | 0.312 | 1.047 | 0.327 |
| | Band II/RMC | Right Cheek | 2 | 9400 | 1880 | 23.15 | 0.15 | 23.5 | 0.060 | 1.084 | 0.065 |
| | Band II/RMC | Right Tilted | 2 | 9400 | 1880 | 23.15 | 0.51 | 23.5 | 0.059 | 1.084 | 0.064 |
| | Band II/RMC | Left Cheek | 2 | 9400 | 1880 | 23.15 | 0.81 | 23.5 | 0.071 | 1.084 | 0.077 |
| | Band II/RMC | Left Tilted | 2 | 9400 | 1880 | 23.15 | -0.08 | 23.5 | 0.069 | 1.084 | 0.075 |
| | Band IV/RMC | Right Cheek | 3 | 1413 | 1732.6 | 22.99 | 3.25 | 23.0 | 0.393 | 1.002 | 0.394 |
| 4 | Band IV/RMC | Right Tilted | 3 | 1413 | 1732.6 | 22.99 | 3.14 | 23.0 | **0.477** | 1.002 | 0.478 |
| | Band IV/RMC | Left Cheek | 3 | 1413 | 1732.6 | 22.99 | 0.80 | 23.0 | 0.203 | 1.002 | 0.203 |
| | Band IV/RMC | Left Tilted | 3 | 1413 | 1732.6 | 22.99 | 0.70 | 23.0 | 0.299 | 1.002 | 0.300 |
| | Band IV/RMC | Right Cheek | 2 | 1413 | 1732.6 | 23.10 | -1.95 | 23.5 | 0.051 | 1.096 | 0.056 |
| | Band IV/RMC | Right Tilted | 2 | 1413 | 1732.6 | 23.10 | -0.23 | 23.5 | 0.037 | 1.096 | 0.041 |
| | Band IV/RMC | Left Cheek | 2 | 1413 | 1732.6 | 23.10 | -1.66 | 23.5 | 0.039 | 1.096 | 0.043 |
| | Band IV/RMC | Left Tilted | 2 | 1413 | 1732.6 | 23.10 | 0.55 | 23.5 | 0.071 | 1.096 | 0.078 |
| | Band V/RMC | Right Cheek | 3 | 4132 | 826.4 | 24.16 | -0.66 | 24.5 | 0.748 | 1.081 | 0.809 |
| | Band V/RMC | Right Tilted | 3 | 4132 | 826.4 | 24.16 | -0.06 | 24.5 | 0.581 | 1.081 | 0.628 |
| | Band V/RMC | Left Cheek | 3 | 4132 | 826.4 | 24.16 | -0.18 | 24.5 | 0.712 | 1.081 | 0.770 |
| | Band V/RMC | Left Tilted | 3 | 4132 | 826.4 | 24.16 | -0.63 | 24.5 | 0.549 | 1.081 | 0.593 |
| 5 | Band V/RMC | Right Cheek | 3 | 4183 | 836.6 | 23.95 | -1.71 | 24.5 | **0.791** | 1.135 | 0.898 |
| | Band V/RMC | Right Cheek | 3 | 4233 | 846.6 | 24.00 | -0.62 | 24.5 | 0.774 | 1.122 | 0.868 |
| | Band V/RMC | Right Cheek | 2 | 4132 | 826.4 | 24.21 | -0.40 | 24.5 | 0.075 | 1.069 | 0.080 |
| | Band V/RMC | Right Tilted | 2 | 4132 | 826.4 | 24.21 | 0.62 | 24.5 | 0.052 | 1.069 | 0.056 |
| **A ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | |

➢ FDD-LTE Band 2(20MHz) QPSK Head SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band2/1RB#99 | Right Cheek | 3 | 19100 | 1900 | 24.05 | 0.39 | 24.5 | 0.526 | 1.109 | 0.583 |
| 6 | Band2/1RB#99 | Right Tilted | 3 | 19100 | 1900 | 24.05 | 0.10 | 24.5 | **0.684** | 1.109 | 0.759 |
| | Band2/1RB#99 | Left Cheek | 3 | 19100 | 1900 | 24.05 | -1.80 | 24.5 | 0.362 | 1.109 | 0.401 |
| | Band2/1RB#99 | Left Tilted | 3 | 19100 | 1900 | 24.05 | 0.50 | 24.5 | 0.449 | 1.109 | 0.498 |
| | Band2/50%RB#0 | Right Cheek | 3 | 19100 | 1900 | 22.26 | -0.76 | 22.5 | 0.350 | 1.057 | 0.370 |
| | Band2/50%RB#0 | Right Tilted | 3 | 19100 | 1900 | 22.26 | 0.42 | 22.5 | 0.486 | 1.057 | 0.514 |
| | Band2/50%RB#0 | Left Cheek | 3 | 19100 | 1900 | 22.26 | 0.61 | 22.5 | 0.261 | 1.057 | 0.276 |
| | Band2/50%RB#0 | Left Tilted | 3 | 19100 | 1900 | 22.26 | 1.92 | 22.5 | 0.299 | 1.057 | 0.316 |
| | Band2/1RB#99 | Right Cheek | 2 | 19100 | 1900 | 23.91 | 0.87 | 24.0 | 0.096 | 1.021 | 0.098 |
| | Band2/1RB#99 | Right Tilted | 2 | 19100 | 1900 | 23.91 | 1.80 | 24.0 | 0.076 | 1.021 | 0.078 |
| | Band2/1RB#99 | Left Cheek | 2 | 19100 | 1900 | 23.91 | 0.22 | 24.0 | 0.085 | 1.021 | 0.087 |
| | Band2/1RB#99 | Left Tilted | 2 | 19100 | 1900 | 23.91 | -0.76 | 24.0 | 0.061 | 1.021 | 0.062 |
| | Band2/50%RB#49 | Right Cheek | 2 | 19100 | 1900 | 22.17 | -0.65 | 22.5 | 0.070 | 1.079 | 0.076 |
| | Band2/50%RB#49 | Right Tilted | 2 | 19100 | 1900 | 22.17 | 1.74 | 22.5 | 0.069 | 1.079 | 0.074 |
| | Band2/50%RB#49 | Left Cheek | 2 | 19100 | 1900 | 22.17 | -1.03 | 22.5 | 0.063 | 1.079 | 0.068 |
| | Band2/50%RB#49 | Left Tilted | 2 | 19100 | 1900 | 22.17 | -1.84 | 22.5 | 0.052 | 1.079 | 0.056 |
| **A ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | |

➢ FDD-LTE Band 4(20MHz) QPSK Head SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | Band4/1RB#49 | Right Cheek | 3 | 20300 | 1745 | 24.27 | -0.59 | 24.5 | **0.525** | 1.054 | 0.553 |
| | Band4/1RB#49 | Right Tilted | 3 | 20300 | 1745 | 24.27 | -0.71 | 24.5 | 0.505 | 1.054 | 0.532 |
| | Band4/1RB#49 | Left Cheek | 3 | 20300 | 1745 | 24.27 | -0.99 | 24.5 | 0.261 | 1.054 | 0.275 |
| | Band4/1RB#49 | Left Tilted | 3 | 20300 | 1745 | 24.27 | 1.60 | 24.5 | 0.226 | 1.054 | 0.238 |
| | Band4/50%RB#0 | Right Cheek | 3 | 20050 | 1720 | 22.27 | 0.51 | 22.5 | 0.433 | 1.054 | 0.456 |
| | Band4/50%RB#0 | Right Tilted | 3 | 20050 | 1720 | 22.27 | 0.24 | 22.5 | 0.392 | 1.054 | 0.413 |
| | Band4/50%RB#0 | Left Cheek | 3 | 20050 | 1720 | 22.27 | 1.73 | 22.5 | 0.221 | 1.054 | 0.233 |
| | Band4/50%RB#0 | Left Tilted | 3 | 20050 | 1720 | 22.27 | -0.08 | 22.5 | 0.211 | 1.054 | 0.222 |
| | Band4/1RB#99 | Right Cheek | 2 | 20300 | 1745 | 24.33 | 0.09 | 24.5 | 0.102 | 1.04 | 0.106 |
| | Band4/1RB#99 | Right Tilted | 2 | 20300 | 1745 | 24.33 | -1.22 | 24.5 | 0.062 | 1.04 | 0.064 |
| | Band4/1RB#99 | Left Cheek | 2 | 20300 | 1745 | 24.33 | 0.25 | 24.5 | 0.044 | 1.04 | 0.046 |
| | Band4/1RB#99 | Left Tilted | 2 | 20300 | 1745 | 24.33 | -0.27 | 24.5 | 0.023 | 1.04 | 0.024 |
| | Band4/50%RB#49 | Right Cheek | 2 | 20300 | 1745 | 22.30 | -0.89 | 22.5 | 0.065 | 1.047 | 0.068 |
| | Band4/50%RB#49 | Right Tilted | 2 | 20300 | 1745 | 22.30 | -0.32 | 22.5 | 0.042 | 1.047 | 0.044 |
| | Band4/50%RB#49 | Left Cheek | 2 | 20300 | 1745 | 22.30 | 2.51 | 22.5 | 0.036 | 1.047 | 0.038 |
| | Band4/50%RB#49 | Left Tilted | 2 | 20300 | 1745 | 22.30 | -0.69 | 22.5 | 0.018 | 1.047 | 0.019 |
| **A ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | |

➢ FDD-LTE Band 5(10MHz) QPSK Head SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | Band5/1RB#49 | Right Cheek | 3 | 20525 | 836.5 | 24.28 | 0.01 | 24.5 | **0.793** | 1.052 | 0.834 |
| | Band5/1RB#49 | Right Tilted | 3 | 20525 | 836.5 | 24.28 | -0.94 | 24.5 | 0.654 | 1.052 | 0.688 |
| | Band5/1RB#49 | Left Cheek | 3 | 20525 | 836.5 | 24.28 | 1.52 | 24.5 | 0.523 | 1.052 | 0.550 |
| | Band5/1RB#49 | Left Tilted | 3 | 20525 | 836.5 | 24.28 | -0.65 | 24.5 | 0.470 | 1.052 | 0.494 |
| | Band5/1RB#49 | Right Cheek | 3 | 20450 | 829 | 24.10 | -1.31 | 24.5 | 0.712 | 1.096 | 0.780 |
| | Band5/1RB#49 | Right Cheek | 3 | 20600 | 844 | 24.23 | 1.34 | 24.5 | 0.733 | 1.064 | 0.780 |
| | Band5/50%RB#24 | Right Cheek | 3 | 20600 | 844 | 23.05 | -0.47 | 23.5 | 0.638 | 1.109 | 0.708 |
| | Band5/50%RB#24 | Right Tilted | 3 | 20600 | 844 | 23.05 | -1.70 | 23.5 | 0.520 | 1.109 | 0.577 |
| | Band5/50%RB#24 | Left Cheek | 3 | 20600 | 844 | 23.05 | -1.52 | 23.5 | 0.389 | 1.109 | 0.431 |
| | Band5/50%RB#24 | Left Tilted | 3 | 20600 | 844 | 23.05 | -1.07 | 23.5 | 0.378 | 1.109 | 0.419 |
| | Band5/100%RB#0 | Right Cheek | 3 | 20600 | 844 | 22.99 | 1.30 | 23.0 | 0.511 | 1.002 | 0.512 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band5/1RB#49 | Right Cheek | 2 | 20600 | 844 | 24.40 | 3.88 | 24.5 | 0.111 | 1.023 | 0.114 |
| | Band5/1RB#49 | Right Tilted | 2 | 20600 | 844 | 24.40 | 0.65 | 24.5 | 0.057 | 1.023 | 0.058 |
| | Band5/1RB#49 | Left Cheek | 2 | 20600 | 844 | 24.40 | 2.33 | 24.5 | 0.102 | 1.023 | 0.104 |
| | Band5/1RB#49 | Left Tilted | 2 | 20600 | 844 | 24.40 | -1.42 | 24.5 | 0.041 | 1.023 | 0.042 |
| | Band5/50%RB#24 | Right Cheek | 2 | 20600 | 844 | 23.12 | 0.85 | 23.5 | 0.088 | 1.091 | 0.096 |
| | Band5/50%RB#24 | Right Tilted | 2 | 20600 | 844 | 23.12 | -4.47 | 23.5 | 0.044 | 1.091 | 0.048 |
| | Band5/50%RB#24 | Left Cheek | 2 | 20600 | 844 | 23.12 | -1.69 | 23.5 | 0.081 | 1.091 | 0.088 |
| | Band5/50%RB#24 | Left Tilted | 2 | 20600 | 844 | 23.12 | -1.10 | 23.5 | 0.039 | 1.091 | 0.043 |
| **A ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | |

➢ FDD-LTE Band 7(20MHz) QPSK Head SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band7/1RB#49 | Right Cheek | 3 | 20850 | 2510 | 22.69 | -1.54 | 23.0 | 0.502 | 1.074 | 0.539 |
| 9 | Band7/1RB#49 | Right Tilted | 3 | 20850 | 2510 | 22.69 | 1.83 | 23.0 | **0.509** | 1.074 | 0.547 |
| | Band7/1RB#49 | Left Cheek | 3 | 20850 | 2510 | 22.69 | -0.22 | 23.0 | 0.302 | 1.074 | 0.324 |
| | Band7/1RB#49 | Left Tilted | 3 | 20850 | 2510 | 22.69 | 1.75 | 23.0 | 0.288 | 1.074 | 0.309 |
| | Band7/50%RB#24 | Right Cheek | 3 | 20850 | 2510 | 21.73 | -0.17 | 22.0 | 0.350 | 1.064 | 0.372 |
| | Band7/50%RB#24 | Right Tilted | 3 | 20850 | 2510 | 21.73 | 2.39 | 22.0 | 0.356 | 1.064 | 0.379 |
| | Band7/50%RB#24 | Left Cheek | 3 | 20850 | 2510 | 21.73 | -0.71 | 22.0 | 0.250 | 1.064 | 0.266 |
| | Band7/50%RB#24 | Left Tilted | 3 | 20850 | 2510 | 21.73 | -0.18 | 22.0 | 0.232 | 1.064 | 0.247 |
| | Band7/1RB#49 | Right Cheek | 2 | 20850 | 2510 | 22.69 | -0.69 | 23.0 | 0.194 | 1.074 | 0.208 |
| | Band7/1RB#49 | Right Tilted | 2 | 20850 | 2510 | 22.69 | -0.25 | 23.0 | 0.152 | 1.074 | 0.163 |
| | Band7/1RB#49 | Left Cheek | 2 | 20850 | 2510 | 22.69 | -4.51 | 23.0 | 0.342 | 1.074 | 0.367 |
| | Band7/1RB#49 | Left Tilted | 2 | 20850 | 2510 | 22.69 | 0.39 | 23.0 | 0.182 | 1.074 | 0.195 |
| | Band7/50%RB#24 | Right Cheek | 2 | 20850 | 2510 | 21.72 | -0.83 | 22.0 | 0.167 | 1.067 | 0.178 |
| | Band7/50%RB#24 | Right Tilted | 2 | 20850 | 2510 | 21.72 | 1.49 | 22.0 | 0.122 | 1.067 | 0.130 |
| | Band7/50%RB#24 | Left Cheek | 2 | 20850 | 2510 | 21.72 | 0.77 | 22.0 | 0.284 | 1.067 | 0.303 |
| | Band7/50%RB#24 | Left Tilted | 2 | 20850 | 2510 | 21.72 | -1.66 | 22.0 | 0.135 | 1.067 | 0.144 |
| **A ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | |

➢ TDD-LTE Band41(20MHz) QPSK Head SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | D.C Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band41/1RB#99 | Right Cheek | 3 | 41140 | 2645 | 22.64 | -0.54 | 23.0 | 0.630 | 1.086 | 1.008 | 0.690 |
| 10 | Band41/1RB#99 | Right Tilted | 3 | 41140 | 2645 | 22.64 | -1.35 | 23.0 | **0.636** | 1.086 | 1.008 | 0.696 |
| | Band41/1RB#99 | Left Cheek | 3 | 41140 | 2645 | 22.64 | -4.77 | 23.0 | 0.344 | 1.086 | 1.008 | 0.377 |
| | Band41/1RB#99 | Left Tilted | 3 | 41140 | 2645 | 22.64 | -4.53 | 23.0 | 0.340 | 1.086 | 1.008 | 0.372 |
| | Band41/50%RB#0 | Right Cheek | 3 | 41140 | 2645 | 21.70 | 0.49 | 22.0 | 0.529 | 1.072 | 1.008 | 0.572 |
| | Band41/50%RB#0 | Right Tilted | 3 | 41140 | 2645 | 21.70 | -0.54 | 22.0 | 0.524 | 1.072 | 1.008 | 0.566 |
| | Band41/50%RB#0 | Left Cheek | 3 | 41140 | 2645 | 21.70 | -1.88 | 22.0 | 0.367 | 1.072 | 1.008 | 0.397 |
| | Band41/50%RB#0 | Left Tilted | 3 | 41140 | 2645 | 21.70 | 2.92 | 22.0 | 0.393 | 1.072 | 1.008 | 0.425 |
| | Band41/1RB#49 | Right Cheek | 2 | 41140 | 2645 | 23.27 | -3.68 | 23.5 | 0.100 | 1.054 | 1.008 | 0.106 |
| | Band41/1RB#49 | Right Tilted | 2 | 41140 | 2645 | 23.27 | 1.04 | 23.5 | 0.075 | 1.054 | 1.008 | 0.080 |
| | Band41/1RB#49 | Left Cheek | 2 | 41140 | 2645 | 23.27 | 0.99 | 23.5 | 0.151 | 1.054 | 1.008 | 0.160 |
| | Band41/1RB#49 | Left Tilted | 2 | 41140 | 2645 | 23.27 | 0.34 | 23.5 | 0.089 | 1.054 | 1.008 | 0.095 |
| | Band41/50%RB#24 | Right Cheek | 2 | 41140 | 2645 | 22.19 | 4.25 | 22.5 | 0.090 | 1.074 | 1.008 | 0.097 |
| | Band41/50%RB#24 | Right Tilted | 2 | 41140 | 2645 | 22.19 | 2.89 | 22.5 | 0.064 | 1.074 | 1.008 | 0.069 |
| | Band41/50%RB#24 | Left Cheek | 2 | 41140 | 2645 | 22.19 | 4.60 | 22.5 | 0.128 | 1.074 | 1.008 | 0.139 |
| | Band41/50%RB#24 | Left Tilted | 2 | 41140 | 2645 | 22.19 | 0.93 | 22.5 | 0.072 | 1.074 | 1.008 | 0.078 |
| **ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | | |

➢ WLAN 2.4 GHz Head SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | D.C Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2.4GHz/802.11b | Right Cheek | 1 | 1 | 2416 | 16.62 | 1.24 | 17.0 | 0.360 | 1.091 | 1.016 | 0.399 |
| | 2.4GHz/802.11b | Right Tilted | 1 | 1 | 2416 | 16.62 | -2.62 | 17.0 | 0.423 | 1.091 | 1.016 | 0.469 |
| 11 | 2.4GHz/802.11b | Left Cheek | 1 | 1 | 2416 | 16.62 | -0.39 | 17.0 | **0.670** | 1.091 | 1.016 | 0.743 |
| | 2.4GHz/802.11b | Left Tilted | 1 | 1 | 2416 | 16.62 | 0.51 | 17.0 | 0.503 | 1.091 | 1.016 | 0.558 |
| **ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | | |

➢ WLAN 5.2 GHz Head SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | D.C Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5.2GHz/802.11a | Right Cheek | 4 | 36 | 5180 | 13.35 | 2.28 | 13.5 | 0.122 | 1.035 | 1.108 | 0.140 |
| | 5.2GHz/802.11a | Right Tilted | 4 | 36 | 5180 | 13.35 | 1.05 | 13.5 | 0.255 | 1.035 | 1.108 | 0.293 |
| | 5.2GHz/802.11a | Left Cheek | 4 | 36 | 5180 | 13.35 | 1.64 | 13.5 | 0.281 | 1.035 | 1.108 | 0.322 |
| 12 | 5.2GHz/802.11a | Left Tilted | 4 | 36 | 5180 | 13.35 | 0.40 | 13.5 | **0.434** | 1.035 | 1.108 | 0.498 |
| **ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | | |

➢ WLAN 5.3 GHz Head SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | D.C Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5.3GHz/802.11a | Right Cheek | 4 | 52 | 5260 | 12.86 | -0.46 | 13.0 | 0.125 | 1.033 | 1.095 | 0.141 |
| | 5.3GHz/802.11a | Right Tilted | 4 | 52 | 5260 | 12.86 | 0.43 | 13.0 | 0.312 | 1.033 | 1.095 | 0.353 |
| | 5.3GHz/802.11a | Left Cheek | 4 | 52 | 5260 | 12.86 | 1.95 | 13.0 | 0.156 | 1.033 | 1.095 | 0.176 |
| 13 | 5.3GHz/802.11a | Left Tilted | 4 | 52 | 5260 | 12.86 | -0.36 | 13.0 | **0.343** | 1.033 | 1.095 | 0.388 |
| **ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | | |

➢ WLAN 5.6 GHz Head SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | D.C Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5.6GHz/802.11a | Right Cheek | 4 | 120 | 5600 | 11.58 | 1.04 | 12.0 | 0.219 | 1.102 | 1.095 | 0.264 |
| | 5.6GHz/802.11a | Right Tilted | 4 | 120 | 5600 | 11.58 | 1.01 | 12.0 | 0.415 | 1.102 | 1.095 | 0.501 |
| | 5.6GHz/802.11a | Left Cheek | 4 | 120 | 5600 | 11.58 | 1.33 | 12.0 | 0.253 | 1.102 | 1.095 | 0.305 |
| 14 | 5.6GHz/802.11a | Left Tilted | 4 | 120 | 5600 | 11.58 | 0.85 | 12.0 | **0.477** | 1.102 | 1.095 | 0.575 |
| **ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | | |

➢ WLAN 5.8 GHz Head SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | D.C Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5.8GHz/802.11a | Right Cheek | 4 | 149 | 5745 | 13.49 | -0.85 | 13.5 | 0.186 | 1.002 | 1.096 | 0.204 |
| | 5.8GHz/802.11a | Right Tilted | 4 | 149 | 5745 | 13.49 | -1.74 | 13.5 | 0.386 | 1.002 | 1.096 | 0.424 |
| | 5.8GHz/802.11a | Left Cheek | 4 | 149 | 5745 | 13.49 | 0.85 | 13.5 | 0.223 | 1.002 | 1.096 | 0.245 |
| 15 | 5.8GHz/802.11a | Left Tilted | 4 | 149 | 5745 | 13.49 | 1.15 | 13.5 | **0.414** | 1.002 | 1.096 | 0.455 |
| **ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | | |

➢ Bluetooth Head SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | D.C Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | BT/8DPSK | Right Cheek | 1 | 0 | 2402 | 5.72 | -0.74 | 6.0 | 0.023 | 1.067 | 1.000 | 0.025 |
| | BT/8DPSK | Right Tilted | 1 | 0 | 2402 | 5.72 | 1.72 | 6.0 | 0.028 | 1.067 | 1.000 | 0.030 |
| | BT/8DPSK | Left Cheek | 1 | 0 | 2402 | 5.72 | 0.58 | 6.0 | 0.031 | 1.067 | 1.000 | 0.033 |
| 16 | BT/8DPSK | Left Tilted | 1 | 0 | 2402 | 5.72 | 0.34 | 6.0 | **0.032** | 1.067 | 1.000 | 0.034 |
| **ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | | |

**Note:**

1. Per KDB 447498 D04v01, for each exposure position, if the highest output power channel Reported SAR ≤ 0.8W/kg, other channels SAR testing is not necessary.
2. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required when the measured SAR is ≥ 0.8W/kg.
3. Per KDB 941225 D05v02r05, 100% RB allocation SAR measurement is not required when the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg.
4. Per KDB 248227 D01v02r02, for 802.11b DSSS , when the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in that exposure configuration.
5. Per KDB 248227 D01v02r02, OFDM SAR is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg. Cuz the maximum output power specified for OFDM and DSSS are 11.22mW(10.5dBm) and 50.12mW(17.0dBm), the scaled SAR would be 0.743×(11.22/50.12)=0.166W/Kg<1.2 W/kg, therefore, SAR is not required for OFDM.
6. According to KDB 865664 D02v01r02, SAR plot is required for the highest measured SAR in each exposure configuration, wireless mode and frequency band combination.

## 15.2 Standalone Body SAR

➢ GSM Body SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | GPRS850/2 slots | Front | 3 | 190 | 836.6 | 31.67 | -0.64 | 32.0 | 0.285 | 1.079 | 0.308 |
| 17 | GPRS850/2 slots | Back | 3 | 190 | 836.6 | 31.67 | 2.03 | 32.0 | **0.451** | 1.079 | 0.487 |
| | GPRS1900/4 slots | Front | 3 | 512 | 1850.2 | 26.70 | -3.15 | 27.0 | 0.459 | 1.072 | 0.492 |
| 18 | GPRS1900/4 slots | Back | 3 | 512 | 1850.2 | 26.70 | 0.79 | 27.0 | **0.539** | 1.072 | 0.578 |
| **A ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g) Averaged over 1g** | | | | | |

➢ WCDMA Body SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band II/RMC | Front | 3 | 9538 | 1907.6 | 23.30 | -0.10 | 23.5 | 0.186 | 1.047 | 0.195 |
| | Band II/RMC | Back | 3 | 9538 | 1907.6 | 23.30 | -3.55 | 23.5 | 0.218 | 1.047 | 0.228 |
| | Band II/RMC | Front | 2 | 9400 | 1880 | 23.15 | 0.40 | 23.5 | 0.166 | 1.084 | 0.180 |
| 19 | Band II/RMC | Back | 2 | 9400 | 1880 | 23.15 | 2.16 | 23.5 | **0.363** | 1.084 | 0.393 |
| | Band IV/RMC | Front | 3 | 1413 | 1732.6 | 22.99 | -1.36 | 23.0 | 0.245 | 1.002 | 0.245 |
| 20 | Band IV/RMC | Back | 3 | 1413 | 1732.6 | 22.99 | -1.89 | 23.0 | **0.821** | 1.002 | 0.823 |
| | Band IV/RMC | Back | 3 | 1312 | 1712.4 | 22.93 | 0.73 | 23.0 | 0.676 | 1.016 | 0.687 |
| | Band IV/RMC | Back | 3 | 1513 | 1752.6 | 22.94 | 0.15 | 23.0 | 0.632 | 1.014 | 0.641 |
| | Band IV/RMC | Front | 2 | 1413 | 1732.6 | 23.10 | -0.28 | 23.5 | 0.105 | 1.096 | 0.115 |
| | Band IV/RMC | Back | 2 | 1413 | 1732.6 | 23.10 | 3.96 | 23.5 | 0.158 | 1.096 | 0.173 |
| | Band V/RMC | Front | 3 | 4132 | 826.4 | 24.16 | -0.03 | 24.5 | 0.255 | 1.081 | 0.276 |
| 21 | Band V/RMC | Back | 3 | 4132 | 826.4 | 24.16 | -1.66 | 24.5 | **0.343** | 1.081 | 0.371 |
| | Band V/RMC | Front | 2 | 4132 | 826.4 | 24.21 | -1.89 | 24.5 | 0.054 | 1.069 | 0.058 |
| | Band V/RMC | Back | 2 | 4132 | 826.4 | 24.21 | -4.65 | 24.5 | 0.091 | 1.069 | 0.097 |
| **A ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g) Averaged over 1g** | | | | | |

➢ FDD-LTE Band 2(20MHz) QPSK Body SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band2/1RB#99 | Front | 3 | 19100 | 1900 | 24.05 | -2.46 | 24.5 | 0.117 | 1.109 | 0.130 |
| | Band2/1RB#99 | Back | 3 | 19100 | 1900 | 24.05 | -0.82 | 24.5 | 0.167 | 1.109 | 0.185 |
| | Band2/50%RB#0 | Front | 3 | 19100 | 1900 | 22.26 | 0.75 | 22.5 | 0.106 | 1.057 | 0.112 |
| | Band2/50%RB#0 | Back | 3 | 19100 | 1900 | 22.26 | -0.63 | 22.5 | 0.150 | 1.057 | 0.159 |
| | Band2/1RB#99 | Front | 2 | 19100 | 1900 | 23.91 | -0.83 | 24.0 | 0.183 | 1.021 | 0.187 |
| 22 | Band2/1RB#99 | Back | 2 | 19100 | 1900 | 23.91 | -0.87 | 24.0 | **0.481** | 1.021 | 0.491 |
| | Band2/50%RB#49 | Front | 2 | 19100 | 1900 | 22.17 | -1.19 | 22.5 | 0.125 | 1.079 | 0.135 |
| | Band2/50%RB#49 | Back | 2 | 19100 | 1900 | 22.17 | 0.28 | 22.5 | 0.333 | 1.079 | 0.359 |
| **A ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g) Averaged over 1g** | | | | | |

➢ FDD-LTE Band 4(20MHz) QPSK Body SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band4/1RB#49 | Front | 3 | 20300 | 1745 | 24.27 | 5.50 | 24.5 | 0.092 | 1.054 | 0.097 |
| | Band4/1RB#49 | Back | 3 | 20300 | 1745 | 24.27 | 1.67 | 24.5 | 0.135 | 1.054 | 0.142 |
| | Band4/50%RB#0 | Front | 3 | 20050 | 1720 | 22.27 | 0.80 | 22.5 | 0.081 | 1.054 | 0.085 |
| | Band4/50%RB#0 | Back | 3 | 20050 | 1720 | 22.27 | -1.36 | 22.5 | 0.133 | 1.054 | 0.140 |
| | Band4/1RB#99 | Front | 2 | 20300 | 1745 | 24.33 | -1.34 | 24.5 | 0.128 | 1.040 | 0.133 |
| 23 | Band4/1RB#99 | Back | 2 | 20300 | 1745 | 24.33 | 1.32 | 24.5 | **0.223** | 1.040 | 0.232 |
| | Band4/50%RB#49 | Front | 2 | 20300 | 1745 | 22.30 | 0.72 | 22.5 | 0.093 | 1.047 | 0.097 |
| | Band4/50%RB#49 | Back | 2 | 20300 | 1745 | 22.30 | -0.01 | 22.5 | 0.162 | 1.047 | 0.170 |
| **A ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g) Averaged over 1g** | | | | | |

➢ FDD-LTE Band 5(10MHz) QPSK Body SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band5/1RB#49 | Front | 3 | 20525 | 836.5 | 24.28 | 1.20 | 24.5 | 0.206 | 1.052 | 0.217 |
| 24 | Band5/1RB#49 | Back | 3 | 20525 | 836.5 | 24.28 | -0.03 | 24.5 | **0.298** | 1.052 | 0.313 |
| | Band5/50%RB#24 | Front | 3 | 20600 | 844 | 23.05 | 1.14 | 23.5 | 0.172 | 1.109 | 0.191 |
| | Band5/50%RB#24 | Back | 3 | 20600 | 844 | 23.05 | -0.10 | 23.5 | 0.240 | 1.109 | 0.266 |
| | Band5/1RB#49 | Front | 2 | 20600 | 844 | 24.40 | -0.78 | 24.5 | 0.079 | 1.023 | 0.081 |
| | Band5/1RB#49 | Back | 2 | 20600 | 844 | 24.40 | 0.07 | 24.5 | 0.136 | 1.023 | 0.139 |
| | Band5/50%RB#24 | Front | 2 | 20600 | 844 | 23.12 | -1.58 | 23.5 | 0.063 | 1.091 | 0.069 |
| | Band5/50%RB#24 | Back | 2 | 20600 | 844 | 23.12 | 0.95 | 23.5 | 0.106 | 1.091 | 0.116 |
| **A ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g) Averaged over 1g** | | | | | |

➢ FDD-LTE Band 7(20MHz) QPSK Body SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band7/1RB#49 | Front | 3 | 20850 | 2510 | 22.69 | 0.39 | 23.0 | 0.072 | 1.074 | 0.077 |
| | Band7/1RB#49 | Back | 3 | 20850 | 2510 | 22.69 | -0.25 | 23.0 | 0.213 | 1.074 | 0.229 |
| | Band7/50%RB#24 | Front | 3 | 20850 | 2510 | 21.73 | -0.04 | 22.0 | 0.062 | 1.064 | 0.066 |
| | Band7/50%RB#24 | Back | 3 | 20850 | 2510 | 21.73 | -0.18 | 22.0 | 0.198 | 1.064 | 0.211 |
| | Band7/1RB#49 | Front | 2 | 20850 | 2510 | 22.69 | -0.41 | 23.0 | 0.448 | 1.074 | 0.481 |
| 25 | Band7/1RB#49 | Back | 2 | 20850 | 2510 | 22.69 | -1.61 | 23.0 | **0.461** | 1.074 | 0.495 |
| | Band7/50%RB#49 | Front | 2 | 20850 | 2510 | 21.72 | 0.38 | 22.0 | 0.369 | 1.067 | 0.394 |
| | Band7/50%RB#49 | Back | 2 | 20850 | 2510 | 21.72 | 0.21 | 22.0 | 0.382 | 1.067 | 0.408 |
| **A ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g) Averaged over 1g** | | | | | |

➢ TDD-LTE Band 41(20MHz) QPSK Body SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | D.C Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band41/1RB#99 | Front | 3 | 41140 | 2645 | 22.64 | 0.01 | 23.0 | 0.137 | 1.086 | 1.008 | 0.150 |
| 26 | Band41/1RB#99 | Back | 3 | 41140 | 2645 | 22.64 | -0.36 | 23.0 | **0.260** | 1.086 | 1.008 | 0.285 |
| | Band41/50%RB#0 | Front | 3 | 41140 | 2645 | 21.70 | 0.00 | 22.0 | 0.102 | 1.072 | 1.008 | 0.110 |
| | Band41/50%RB#0 | Back | 3 | 41140 | 2645 | 21.70 | -0.77 | 22.0 | 0.208 | 1.072 | 1.008 | 0.225 |
| | Band41/1RB#49 | Front | 2 | 41140 | 2645 | 23.27 | -0.30 | 23.5 | 0.199 | 1.054 | 1.008 | 0.211 |
| | Band41/1RB#49 | Back | 2 | 41140 | 2645 | 23.27 | 2.58 | 23.5 | 0.227 | 1.054 | 1.008 | 0.241 |
| | Band41/50%RB#24 | Front | 2 | 41140 | 2645 | 22.19 | -2.01 | 22.5 | 0.173 | 1.074 | 1.008 | 0.187 |
| | Band41/50%RB#24 | Back | 2 | 41140 | 2645 | 22.19 | 4.53 | 22.5 | 0.171 | 1.074 | 1.008 | 0.185 |
| **ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g) Averaged over 1g** | | | | | | |

➢ WLAN 2.4GHz Body SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | D.C Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2.4GHz/802.11b | Front | 1 | 1 | 2416 | 16.62 | 0.42 | 17.0 | 0.192 | 1.091 | 1.016 | 0.213 |
| 27 | 2.4GHz/802.11b | Back | 1 | 1 | 2416 | 16.62 | 4.01 | 17.0 | **0.256** | 1.091 | 1.016 | 0.284 |
| **ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g) Averaged over 1g** | | | | | | |

➢ WLAN 5.2GHz Body SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | D.C Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5.2GHz/802.11a | Front | 4 | 36 | 5180 | 13.35 | 0.98 | 13.5 | 0.162 | 1.035 | 1.108 | 0.186 |
| 28 | 5.2GHz/802.11a | Back | 4 | 36 | 5180 | 13.35 | 2.41 | 13.5 | **0.199** | 1.035 | 1.108 | 0.228 |
| **ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g) Averaged over 1g** | | | | | | |

➢ WLAN 5.3GHz Body SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | D.C Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5.3GHz/802.11a | Front | 4 | 52 | 5260 | 12.86 | 0.41 | 13.0 | 0.167 | 1.033 | 1.095 | 0.189 |
| 29 | 5.3GHz/802.11a | Back | 4 | 52 | 5260 | 12.86 | -0.28 | 13.0 | **0.239** | 1.033 | 1.095 | 0.270 |
| **ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g) Averaged over 1g** | | | | | | |

➢ WLAN 5.6GHz Body SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | D.C Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5.6GHz/802.11a | Front | 4 | 120 | 5600 | 11.58 | 1.28 | 12.0 | 0.134 | 1.102 | 1.095 | 0.162 |
| 30 | 5.6GHz/802.11a | Back | 4 | 120 | 5600 | 11.58 | 4.52 | 12.0 | **0.212** | 1.102 | 1.095 | 0.256 |
| **ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g) Averaged over 1g** | | | | | | |

➢ WLAN 5.8GHz Body SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | D.C Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5.8GHz/802.11a | Front | 4 | 149 | 5745 | 13.49 | 1.93 | 13.5 | 0.212 | 1.002 | 1.096 | 0.233 |
| 31 | 5.8GHz/802.11a | Back | 4 | 149 | 5745 | 13.49 | 0.79 | 13.5 | **0.282** | 1.002 | 1.096 | 0.310 |
| **ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g) Averaged over 1g** | | | | | | |

➢ Bluetooth Body SAR

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | D.C Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | BT/8DPSK | Front | 1 | 0 | 2402 | 5.72 | 0.99 | 6.0 | 0.015 | 1.067 | 1.000 | 0.016 |
| 32 | BT/8DPSK | Back | 1 | 0 | 2402 | 5.72 | 0.46 | 6.0 | **0.021** | 1.067 | 1.000 | 0.022 |
| **ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | | |

**Note:**

1. Body-worn SAR testing was performed at 10mm separation, and this distance is determined by the handset manufacturer that there will be body-worn accessories that users may acquire at the time of equipment certification, to enable users to purchase aftermarket body-worn accessories with the required minimum separation.
2. Per KDB 941225 D06v02r01, when the same wireless modes and device transmission configurations are required for testing body-worn accessories and hotspot mode, it is not necessary to test body-worn accessory SAR for the same device orientation if the test separation distance for hotspot mode is more conservative than that used for body-worn accessories.
3. Per KDB 648474 D04v01r03, when the Reported SAR for a body-worn accessory measured without a headset connected to the handset is ≤ 1.2 W/kg, SAR testing with a headset connected to the handset is not required.
4. The WLAN SAR perform the front and back position, due considered the simultaneous SAR for body-worn.
5. Per KDB 447498 D04v01, for each exposure position, if the highest output channel Reported SAR ≤0.8W/kg, other channels SAR testing is not necessary.
6. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required when the measured SAR is ≥0.8W/kg.
7. Per KDB 941225 D05v02r05, 100% RB allocation SAR measurement is not required when the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg.
8. According to KDB 865664 D02v01r02, SAR plot is required for the highest measured SAR in each exposure configuration, wireless mode and frequency band combination.
9. Highlight part of test data means repeated test.

## 15.3 Body SAR in Hotspot Mode

➢ GSM Body SAR in Hotspot mode

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | GPRS850/2 slots | Front | 3 | 190 | 836.6 | 31.67 | -0.64 | 32.0 | 0.285 | 1.079 | 0.308 |
| 17 | GPRS850/2 slots | Back | 3 | 190 | 836.6 | 31.67 | 2.03 | 32.0 | **0.451** | 1.079 | 0.487 |
| | GPRS850/2 slots | Left | 3 | 190 | 836.6 | 31.67 | -1.06 | 32.0 | 0.117 | 1.079 | 0.126 |
| | GPRS850/2 slots | Top | 3 | 190 | 836.6 | 31.67 | 0.18 | 32.0 | 0.215 | 1.079 | 0.232 |
| | GPRS1900/4 slots | Front | 3 | 512 | 1850.2 | 26.70 | -3.15 | 27.0 | 0.459 | 1.072 | 0.492 |
| | GPRS1900/4 slots | Back | 3 | 512 | 1850.2 | 26.70 | 0.79 | 27.0 | 0.539 | 1.072 | 0.578 |
| | GPRS1900/4 slots | Left | 3 | 512 | 1850.2 | 26.70 | -0.99 | 27.0 | 0.129 | 1.072 | 0.138 |
| | GPRS1900/4 slots | Top | 3 | 512 | 1850.2 | 26.70 | -0.91 | 27.0 | 0.749 | 1.072 | 0.803 |
| 33 | GPRS1900/4 slots | Top | 3 | 661 | 1880 | 26.58 | -0.78 | 27.0 | **0.894** | 1.102 | 0.985 |
| | GPRS1900/4 slots | Top | 3 | 810 | 1909.8 | 26.22 | -0.90 | 27.0 | 0.720 | 1.197 | 0.862 |
| | **GPRS1900/3 slots** | **Top** | **3** | **661** | **1880** | **26.58** | **0.18** | **27.0** | **0.852** | **1.102** | **0.939** |
| **A ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g) Averaged over 1g** | | | | | |

➢ WCDMA Body SAR in Hotspot mode

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band II/RMC | Front | 3 | 9538 | 1907.6 | 23.30 | -0.10 | 23.5 | 0.186 | 1.047 | 0.195 |
| | Band II/RMC | Back | 3 | 9538 | 1907.6 | 23.30 | -3.55 | 23.5 | 0.218 | 1.047 | 0.228 |
| | Band II/RMC | Left | 3 | 9538 | 1907.6 | 23.30 | 1.35 | 23.5 | 0.086 | 1.047 | 0.090 |
| | Band II/RMC | Top | 3 | 9538 | 1907.6 | 23.30 | -0.43 | 23.5 | 0.336 | 1.047 | 0.352 |
| | Band II/RMC | Front | 2 | 9400 | 1880 | 23.15 | 0.40 | 23.5 | 0.166 | 1.084 | 0.180 |
| 19 | Band II/RMC | Back | 2 | 9400 | 1880 | 23.15 | 2.16 | 23.5 | **0.363** | 1.084 | 0.393 |
| | Band II/RMC | Left | 2 | 9400 | 1880 | 23.15 | 0.44 | 23.5 | 0.129 | 1.084 | 0.140 |
| | Band II/RMC | Right | 2 | 9400 | 1880 | 23.15 | 0.33 | 23.5 | 0.089 | 1.084 | 0.096 |
| | Band II/RMC | Bottom | 2 | 9400 | 1880 | 23.15 | 1.07 | 23.5 | 0.299 | 1.084 | 0.324 |
| | Band IV/RMC | Front | 3 | 1413 | 1732.6 | 22.99 | -1.36 | 23.0 | 0.245 | 1.002 | 0.245 |
| | Band IV/RMC | Back | 3 | 1413 | 1732.6 | 22.99 | -1.89 | 23.0 | 0.821 | 1.002 | 0.823 |
| | Band IV/RMC | Left | 3 | 1413 | 1732.6 | 22.99 | -0.30 | 23.0 | 0.126 | 1.002 | 0.126 |
| 34 | Band IV/RMC | Top | 3 | 1413 | 1732.6 | 22.99 | -0.35 | 23.0 | **1.068** | 1.002 | 1.070 |
| | Band IV/RMC | Back | 3 | 1312 | 1712.4 | 22.93 | 0.73 | 23.0 | 0.676 | 1.016 | 0.687 |
| | Band IV/RMC | Back | 3 | 1513 | 1752.6 | 22.94 | 0.15 | 23.0 | 0.632 | 1.014 | 0.641 |
| | Band IV/RMC | Top | 3 | 1312 | 1712.4 | 22.93 | -0.07 | 23.0 | 0.844 | 1.016 | 0.858 |
| | Band IV/RMC | Top | 3 | 1513 | 1752.6 | 22.94 | 3.56 | 23.0 | 0.903 | 1.014 | 0.916 |
| | **Band IV/RMC** | **Top** | **3** | **1413** | **1732.6** | **22.99** | **-3.81** | **23.0** | **1.004** | **1.002** | **1.006** |
| | Band IV/RMC | Front | 2 | 1413 | 1732.6 | 23.10 | -0.28 | 23.5 | 0.105 | 1.096 | 0.115 |
| | Band IV/RMC | Back | 2 | 1413 | 1732.6 | 23.10 | 3.96 | 23.5 | 0.158 | 1.096 | 0.173 |
| | Band IV/RMC | Left | 2 | 1413 | 1732.6 | 23.10 | -1.05 | 23.5 | 0.056 | 1.096 | 0.061 |
| | Band IV/RMC | Right | 2 | 1413 | 1732.6 | 23.10 | -1.87 | 23.5 | 0.038 | 1.096 | 0.042 |
| | Band IV/RMC | Bottom | 2 | 1413 | 1732.6 | 23.10 | 3.07 | 23.5 | 0.242 | 1.096 | 0.265 |
| | Band V/RMC | Front | 3 | 4132 | 826.4 | 24.16 | -0.03 | 24.5 | 0.255 | 1.081 | 0.276 |
| 21 | Band V/RMC | Back | 3 | 4132 | 826.4 | 24.16 | -1.66 | 24.5 | **0.343** | 1.081 | 0.371 |
| | Band V/RMC | Left | 3 | 4132 | 826.4 | 24.16 | 0.78 | 24.5 | 0.111 | 1.081 | 0.120 |
| | Band V/RMC | Top | 3 | 4132 | 826.4 | 24.16 | -0.36 | 24.5 | 0.184 | 1.081 | 0.199 |
| | Band V/RMC | Front | 2 | 4132 | 826.4 | 24.21 | -1.89 | 24.5 | 0.054 | 1.069 | 0.058 |
| | Band V/RMC | Back | 2 | 4132 | 826.4 | 24.21 | -4.65 | 24.5 | 0.091 | 1.069 | 0.097 |
| | Band V/RMC | Left | 2 | 4132 | 826.4 | 24.21 | -0.81 | 24.5 | 0.032 | 1.069 | 0.034 |
| | Band V/RMC | Right | 2 | 4132 | 826.4 | 24.21 | 1.09 | 24.5 | 0.022 | 1.069 | 0.024 |
| | Band V/RMC | Bottom | 2 | 4132 | 826.4 | 24.21 | -0.56 | 24.5 | 0.109 | 1.069 | 0.117 |
| **A ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g) Averaged over 1g** | | | | | |

➢ FDD-LTE Band 2(20MHz) QPSK Body SAR in Hotspot mode

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band2/1RB#99 | Front | 3 | 19100 | 1900 | 24.05 | -2.46 | 24.5 | 0.117 | 1.109 | 0.130 |
| | Band2/1RB#99 | Back | 3 | 19100 | 1900 | 24.05 | -0.82 | 24.5 | 0.167 | 1.109 | 0.185 |
| | Band2/1RB#99 | Left | 3 | 19100 | 1900 | 24.05 | 1.55 | 24.5 | 0.033 | 1.109 | 0.037 |
| | Band2/1RB#99 | Top | 3 | 19100 | 1900 | 24.05 | 0.76 | 24.5 | 0.255 | 1.109 | 0.283 |
| | Band2/50%RB#0 | Front | 3 | 19100 | 1900 | 22.26 | 0.75 | 22.5 | 0.106 | 1.057 | 0.112 |
| | Band2/50%RB#0 | Back | 3 | 19100 | 1900 | 22.26 | -0.63 | 22.5 | 0.150 | 1.057 | 0.159 |
| | Band2/50%RB#0 | Left | 3 | 19100 | 1900 | 22.26 | 0.23 | 22.5 | 0.045 | 1.057 | 0.048 |
| | Band2/50%RB#0 | Top | 3 | 19100 | 1900 | 22.26 | 0.96 | 22.5 | 0.214 | 1.057 | 0.226 |
| | Band2/1RB#99 | Front | 2 | 19100 | 1900 | 23.91 | -0.83 | 24.0 | 0.183 | 1.021 | 0.187 |
| 22 | Band2/1RB#99 | Back | 2 | 19100 | 1900 | 23.91 | -0.87 | 24.0 | **0.481** | 1.021 | 0.491 |
| | Band2/1RB#99 | Left | 2 | 19100 | 1900 | 23.91 | 3.11 | 24.0 | 0.136 | 1.021 | 0.139 |
| | Band2/1RB#99 | Right | 2 | 19100 | 1900 | 23.91 | -0.07 | 24.0 | 0.117 | 1.021 | 0.119 |
| | Band2/1RB#99 | Bottom | 2 | 19100 | 1900 | 23.91 | 1.75 | 24.0 | 0.336 | 1.021 | 0.343 |
| | Band2/50%RB#49 | Front | 2 | 19100 | 1900 | 22.17 | -1.19 | 22.5 | 0.125 | 1.079 | 0.135 |
| | Band2/50%RB#49 | Back | 2 | 19100 | 1900 | 22.17 | 0.28 | 22.5 | 0.333 | 1.079 | 0.359 |
| | Band2/50%RB#49 | Left | 2 | 19100 | 1900 | 22.17 | 0.14 | 22.5 | 0.096 | 1.079 | 0.104 |
| | Band2/50%RB#49 | Right | 2 | 19100 | 1900 | 22.17 | 0.31 | 22.5 | 0.081 | 1.079 | 0.087 |
| | Band2/50%RB#49 | Bottom | 2 | 19100 | 1900 | 22.17 | 3.06 | 22.5 | 0.226 | 1.079 | 0.244 |
| **A ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | |

➢ FDD-LTE Band 4(20MHz) QPSK Body SAR in Hotspot mode

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band4/1RB#49 | Front | 3 | 20300 | 1745 | 24.27 | 5.50 | 24.5 | 0.092 | 1.054 | 0.097 |
| | Band4/1RB#49 | Back | 3 | 20300 | 1745 | 24.27 | 1.67 | 24.5 | 0.135 | 1.054 | 0.142 |
| | Band4/1RB#49 | Left | 3 | 20300 | 1745 | 24.27 | -0.06 | 24.5 | 0.041 | 1.054 | 0.043 |
| | Band4/1RB#49 | Top | 3 | 20300 | 1745 | 24.27 | 0.55 | 24.5 | 0.216 | 1.054 | 0.228 |
| | Band4/50%RB#0 | Front | 3 | 20050 | 1720 | 22.27 | 0.80 | 22.5 | 0.081 | 1.054 | 0.085 |
| | Band4/50%RB#0 | Back | 3 | 20050 | 1720 | 22.27 | -1.36 | 22.5 | 0.133 | 1.054 | 0.140 |
| | Band4/50%RB#0 | Left | 3 | 20050 | 1720 | 22.27 | -0.42 | 22.5 | 0.038 | 1.054 | 0.040 |
| | Band4/50%RB#0 | Top | 3 | 20050 | 1720 | 22.27 | 0.32 | 22.5 | 0.180 | 1.054 | 0.190 |
| | Band4/1RB#99 | Front | 2 | 20300 | 1745 | 24.33 | -1.34 | 24.5 | 0.128 | 1.040 | 0.133 |
| | Band4/1RB#99 | Back | 2 | 20300 | 1745 | 24.33 | 1.32 | 24.5 | 0.223 | 1.040 | 0.232 |
| | Band4/1RB#99 | Left | 2 | 20300 | 1745 | 24.33 | -0.40 | 24.5 | 0.060 | 1.040 | 0.062 |
| | Band4/1RB#99 | Right | 2 | 20300 | 1745 | 24.33 | -1.02 | 24.5 | 0.051 | 1.040 | 0.053 |
| 35 | Band4/1RB#99 | Bottom | 2 | 20300 | 1745 | 24.33 | 0.87 | 24.5 | **0.309** | 1.040 | 0.321 |
| | Band4/50%RB#49 | Front | 2 | 20300 | 1745 | 22.30 | 0.72 | 22.5 | 0.093 | 1.047 | 0.097 |
| | Band4/50%RB#49 | Back | 2 | 20300 | 1745 | 22.30 | -0.01 | 22.5 | 0.162 | 1.047 | 0.170 |
| | Band4/50%RB#49 | Left | 2 | 20300 | 1745 | 22.30 | -1.31 | 22.5 | 0.042 | 1.047 | 0.044 |
| | Band4/50%RB#49 | Right | 2 | 20300 | 1745 | 22.30 | 1.83 | 22.5 | 0.032 | 1.047 | 0.034 |
| | Band4/50%RB#49 | Bottom | 2 | 20300 | 1745 | 22.30 | 2.04 | 22.5 | 0.219 | 1.047 | 0.229 |
| **A ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | |

➢ FDD-LTE Band 5(10MHz) QPSK Body SAR in Hotspot mode

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band5/1RB#49 | Front | 3 | 20525 | 836.5 | 24.28 | 1.20 | 24.5 | 0.206 | 1.052 | 0.217 |
| 24 | Band5/1RB#49 | Back | 3 | 20525 | 836.5 | 24.28 | -0.03 | 24.5 | **0.298** | 1.052 | 0.313 |
| | Band5/1RB#49 | Left | 3 | 20525 | 836.5 | 24.28 | -1.36 | 24.5 | 0.112 | 1.052 | 0.118 |
| | Band5/1RB#49 | Top | 3 | 20525 | 836.5 | 24.28 | 0.19 | 24.5 | 0.226 | 1.052 | 0.238 |
| | Band5/50%RB#24 | Front | 3 | 20600 | 844 | 23.05 | 1.14 | 23.5 | 0.172 | 1.109 | 0.191 |
| | Band5/50%RB#24 | Back | 3 | 20600 | 844 | 23.05 | -0.10 | 23.5 | 0.240 | 1.109 | 0.266 |
| | Band5/50%RB#24 | Left | 3 | 20600 | 844 | 23.05 | 0.71 | 23.5 | 0.086 | 1.109 | 0.095 |
| | Band5/50%RB#24 | Top | 3 | 20600 | 844 | 23.05 | 1.44 | 23.5 | 0.177 | 1.109 | 0.196 |
| | Band5/1RB#49 | Front | 2 | 20600 | 844 | 24.40 | -0.78 | 24.5 | 0.079 | 1.023 | 0.081 |
| | Band5/1RB#49 | Back | 2 | 20600 | 844 | 24.40 | 0.07 | 24.5 | 0.136 | 1.023 | 0.139 |
| | Band5/1RB#49 | Left | 2 | 20600 | 844 | 24.40 | 0.48 | 24.5 | 0.026 | 1.023 | 0.027 |
| | Band5/1RB#49 | Right | 2 | 20600 | 844 | 24.40 | -1.09 | 24.5 | 0.023 | 1.023 | 0.024 |
| | Band5/1RB#49 | Bottom | 2 | 20600 | 844 | 24.40 | 3.90 | 24.5 | 0.116 | 1.023 | 0.119 |
| | Band5/50%RB#24 | Front | 2 | 20600 | 844 | 23.12 | -1.58 | 23.5 | 0.063 | 1.091 | 0.069 |
| | Band5/50%RB#24 | Back | 2 | 20600 | 844 | 23.12 | 0.95 | 23.5 | 0.106 | 1.091 | 0.116 |
| | Band5/50%RB#24 | Left | 2 | 20600 | 844 | 23.12 | 0.53 | 23.5 | 0.021 | 1.091 | 0.023 |
| | Band5/50%RB#24 | Right | 2 | 20600 | 844 | 23.12 | 1.38 | 23.5 | 0.015 | 1.091 | 0.016 |
| | Band5/50%RB#24 | Bottom | 2 | 20600 | 844 | 23.12 | -2.89 | 23.5 | 0.091 | 1.091 | 0.099 |
| **A ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | |

➢ FDD-LTE Band 7(20MHz) QPSK Body SAR in Hotspot mode

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band7/1RB#49 | Front | 3 | 20850 | 2510 | 22.69 | 0.39 | 23.0 | 0.072 | 1.074 | 0.077 |
| | Band7/1RB#49 | Back | 3 | 20850 | 2510 | 22.69 | -0.25 | 23.0 | 0.213 | 1.074 | 0.229 |
| | Band7/1RB#49 | Left | 3 | 20850 | 2510 | 22.69 | 0.79 | 23.0 | 0.160 | 1.074 | 0.172 |
| | Band7/1RB#49 | Top | 3 | 20850 | 2510 | 22.69 | -0.70 | 23.0 | 0.318 | 1.074 | 0.342 |
| | Band7/50%RB#24 | Front | 3 | 20850 | 2510 | 21.73 | -0.04 | 22.0 | 0.062 | 1.064 | 0.066 |
| | Band7/50%RB#24 | Back | 3 | 20850 | 2510 | 21.73 | -0.18 | 22.0 | 0.198 | 1.064 | 0.211 |
| | Band7/50%RB#24 | Left | 3 | 20850 | 2510 | 21.73 | 0.69 | 22.0 | 0.113 | 1.064 | 0.120 |
| | Band7/50%RB#24 | Top | 3 | 20850 | 2510 | 21.73 | 0.89 | 22.0 | 0.224 | 1.064 | 0.238 |
| | Band7/1RB#49 | Front | 2 | 20850 | 2510 | 22.69 | -0.41 | 23.0 | 0.448 | 1.074 | 0.481 |
| | Band7/1RB#49 | Back | 2 | 20850 | 2510 | 22.69 | -1.61 | 23.0 | 0.461 | 1.074 | 0.495 |
| 36 | Band7/1RB#49 | Left | 2 | 20850 | 2510 | 22.69 | -0.93 | 23.0 | **0.474** | 1.074 | 0.509 |
| | Band7/1RB#49 | Right | 2 | 20850 | 2510 | 22.69 | -1.11 | 23.0 | 0.221 | 1.074 | 0.237 |
| | Band7/1RB#49 | Bottom | 2 | 20850 | 2510 | 22.69 | 2.92 | 23.0 | 0.299 | 1.074 | 0.321 |
| | Band7/50%RB#49 | Front | 2 | 20850 | 2510 | 21.72 | 0.38 | 22.0 | 0.369 | 1.067 | 0.394 |
| | Band7/50%RB#49 | Back | 2 | 20850 | 2510 | 21.72 | 0.21 | 22.0 | 0.382 | 1.067 | 0.408 |
| | Band7/50%RB#49 | Left | 2 | 20850 | 2510 | 21.72 | 0.59 | 22.0 | 0.404 | 1.067 | 0.431 |
| | Band7/50%RB#49 | Right | 2 | 20850 | 2510 | 21.72 | -1.73 | 22.0 | 0.186 | 1.067 | 0.198 |
| | Band7/50%RB#49 | Bottom | 2 | 20850 | 2510 | 21.72 | 3.45 | 22.0 | 0.240 | 1.067 | 0.256 |
| **A ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | |

➢ TDD-LTE Band 41(20MHz) QPSK Body SAR in Hotspot mode

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | D.C Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band41/1RB#99 | Front | 3 | 41140 | 2645 | 22.64 | 0.01 | 23.0 | 0.137 | 1.086 | 1.008 | 0.150 |
| | Band41/1RB#99 | Back | 3 | 41140 | 2645 | 22.64 | -0.36 | 23.0 | 0.260 | 1.086 | 1.008 | 0.285 |
| | Band41/1RB#99 | Left | 3 | 41140 | 2645 | 22.64 | 0.96 | 23.0 | 0.129 | 1.086 | 1.008 | 0.141 |
| 37 | Band41/1RB#99 | Top | 3 | 41140 | 2645 | 22.64 | -0.47 | 23.0 | **0.405** | 1.086 | 1.008 | 0.443 |
| | Band41/50%RB#0 | Front | 3 | 41140 | 2645 | 21.70 | 0.00 | 22.0 | 0.102 | 1.072 | 1.008 | 0.110 |
| | Band41/50%RB#0 | Back | 3 | 41140 | 2645 | 21.70 | -0.77 | 22.0 | 0.208 | 1.072 | 1.008 | 0.225 |
| | Band41/50%RB#0 | Left | 3 | 41140 | 2645 | 21.70 | 0.90 | 22.0 | 0.135 | 1.072 | 1.008 | 0.146 |
| | Band41/50%RB#0 | Top | 3 | 41140 | 2645 | 21.70 | -0.91 | 22.0 | 0.351 | 1.072 | 1.008 | 0.379 |
| | Band41/1RB#49 | Front | 2 | 41140 | 2645 | 23.27 | -0.30 | 23.5 | 0.199 | 1.054 | 1.008 | 0.211 |
| | Band41/1RB#49 | Back | 2 | 41140 | 2645 | 23.27 | 2.58 | 23.5 | 0.227 | 1.054 | 1.008 | 0.241 |
| | Band41/1RB#49 | Left | 2 | 41140 | 2645 | 23.27 | 3.48 | 23.5 | 0.224 | 1.054 | 1.008 | 0.238 |
| | Band41/1RB#49 | Right | 2 | 41140 | 2645 | 23.27 | 0.77 | 23.5 | 0.086 | 1.054 | 1.008 | 0.091 |
| | Band41/1RB#49 | Bottom | 2 | 41140 | 2645 | 23.27 | 0.08 | 23.5 | 0.145 | 1.054 | 1.008 | 0.154 |
| | Band41/50%RB#24 | Front | 2 | 41140 | 2645 | 22.19 | -2.01 | 22.5 | 0.173 | 1.074 | 1.008 | 0.187 |
| | Band41/50%RB#24 | Back | 2 | 41140 | 2645 | 22.19 | 4.53 | 22.5 | 0.171 | 1.074 | 1.008 | 0.185 |
| | Band41/50%RB#24 | Left | 2 | 41140 | 2645 | 22.19 | 0.79 | 22.5 | 0.195 | 1.074 | 1.008 | 0.211 |
| | Band41/50%RB#24 | Right | 2 | 41140 | 2645 | 22.19 | -0.45 | 22.5 | 0.050 | 1.074 | 1.008 | 0.054 |
| | Band41/50%RB#24 | Bottom | 2 | 41140 | 2645 | 22.19 | -0.57 | 22.5 | 0.131 | 1.074 | 1.008 | 0.142 |
| **ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | | |

➢ WLAN 2.4GHz Body SAR in Hotspot mode

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | D.C Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2.4GHz/802.11b | Front | 1 | 1 | 2416 | 16.62 | 0.42 | 17.0 | 0.192 | 1.091 | 1.016 | 0.213 |
| | 2.4GHz/802.11b | Back | 1 | 1 | 2416 | 16.62 | 4.01 | 17.0 | 0.256 | 1.091 | 1.016 | 0.284 |
| | 2.4GHz/802.11b | Right | 1 | 1 | 2416 | 16.62 | 1.35 | 17.0 | 0.312 | 1.091 | 1.016 | 0.346 |
| 38 | 2.4GHz/802.11b | Top | 1 | 1 | 2416 | 16.62 | 0.81 | 17.0 | **0.335** | 1.091 | 1.016 | 0.371 |
| **ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | | |

➢ WLAN 5.2GHz Body SAR in Hotspot mode

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | D.C Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5.2GHz/802.11a | Front | 4 | 36 | 5180 | 13.35 | 0.98 | 13.5 | 0.162 | 1.035 | 1.108 | 0.186 |
| | 5.2GHz/802.11a | Back | 4 | 36 | 5180 | 13.35 | 2.41 | 13.5 | 0.199 | 1.035 | 1.108 | 0.228 |
| | 5.2GHz/802.11a | Right | 4 | 36 | 5180 | 13.35 | -0.39 | 13.5 | 0.125 | 1.035 | 1.108 | 0.143 |
| 39 | 5.2GHz/802.11a | Top | 4 | 36 | 5180 | 13.35 | 0.88 | 13.5 | **0.239** | 1.035 | 1.108 | 0.274 |
| **ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | | |

➢ WLAN 5.8GHz Body SAR in Hotspot mode

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | D.C Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5.8GHz/802.11a | Front | 4 | 149 | 5745 | 13.49 | 1.93 | 13.5 | 0.212 | 1.002 | 1.096 | 0.233 |
| | 5.8GHz/802.11a | Back | 4 | 149 | 5745 | 13.49 | 0.79 | 13.5 | 0.282 | 1.002 | 1.096 | 0.310 |
| | 5.8GHz/802.11a | Right | 4 | 149 | 5745 | 13.49 | -1.47 | 13.5 | 0.126 | 1.002 | 1.096 | 0.138 |
| 40 | 5.8GHz/802.11a | Top | 4 | 149 | 5745 | 13.49 | 0.51 | 13.5 | **0.359** | 1.002 | 1.096 | 0.394 |
| **ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | | |

➢ Bluetooth Body SAR in Hotspot mode

| Plot No. | Band/Mode | Test Position | ANT | CH. | Freq. (MHz) | Ave. Power (dBm) | Power Drift (dB) | Tune-Up Limit (dBm) | Meas. $SAR_{1g}$ (W/kg) | Scaling Factor | D.C Factor | Reported $SAR_{1g}$ (W/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | BT/8DPSK | Front | 1 | 0 | 2402 | 5.72 | 0.99 | 6.0 | 0.015 | 1.067 | 1.000 | 0.016 |
| 32 | BT/8DPSK | Back | 1 | 0 | 2402 | 5.72 | 0.46 | 6.0 | **0.021** | 1.067 | 1.000 | 0.022 |
| | BT/8DPSK | Right | 1 | 0 | 2402 | 5.72 | -1.30 | 6.0 | 0.019 | 1.067 | 1.000 | 0.020 |
| | BT/8DPSK | Top | 1 | 0 | 2402 | 5.72 | 2.21 | 6.0 | 0.020 | 1.067 | 1.000 | 0.021 |
| **ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | | | |

**Note:**

1. Per KDB 447498 D04v01, for each exposure position, if the highest output channel Reported SAR ≤0.8W/kg, other channels SAR testing is not necessary.
2. Additional WLAN SAR testing was performed for simultaneous transmission analysis.
3. For Hotspot SAR testing, per KDB 941225 D06v02r01, for EUT dimension ≥ 9cm*5cm, the test distance is 10mm. SAR must be measured for all surfaces and sides with a transmitting antenna located within 2.5cm from that surface or edge.
4. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. If HSDPA output power is < 0.25dB higher than RMC 12.2kbps, or Reported SAR with RMC 12.2kbps setting is ≤ 1.2W/kg, HSDPA SAR evaluation can be excluded.
5. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required when the measured SAR is ≥0.8W/kg.
6. Per KDB 648474 D04v01r03, when the Reported SAR for a body-worn accessory measured without a headset connected to the handset is > 1.2 W/kg, SAR testing with a headset connected to the handset is required.
7. Per KDB 941225 D05v02r05, 100% RB allocation SAR measurement is not required when 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.
8. According to KDB 865664 D02v01r02, SAR plot is required for the highest measured SAR in each exposure configuration, wireless mode and frequency band combination.
9. Highlight part of test data means repeated test.

## 15.4 Repeated SAR measurement

| Band/ Mode | Test Position | CH. | Freq. (MHz) | Measured SAR (W/kg) | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Original | 1st Repeated | | 2nd Repeated | |
| | | | | | Value | Ratio | Value | Ratio |
| GSM850/Voice | Right Cheek | 3 | 251 | 0.946 | 0.910 | 1.04 | / | / |
| PCS1900/Voice | Right Tilted | 3 | 512 | 0.829 | 0.792 | 1.05 | / | / |
| GPRS1900/3 slots | Top | 3 | 661 | 0.894 | 0.852 | 1.05 | / | / |
| Band IV/RMC | Top | 3 | 1413 | 1.068 | 1.004 | 1.06 | / | / |
| **ANSI / IEEE C95.1 – SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population** | | | | **1.6 W/kg (mW/g)<br>Averaged over 1g** | | | | |

**Note:**

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥0.8 W/kg
2. Per KDB 865664 D01v01r04, if the ratio of *original* and *repeated* is ≤ 1.2 and the measured SAR <1.45 W/kg, only one repeated measurement is required.

## 15.5 Multi-Band Simultaneous Transmission Considerations

➢ **Simultaneous Transmission Capabilities**

According to FCC KDB Publication 447498 D04v01, transmitters are considered to be transmitting simultaneously when there is overlapping transmission, with the exception of transmissions during network hand-offs with maximum hand-off duration less than 30 seconds. Possible transmission paths for the EUT are shown in below Figure and are color-coded to indicate communication modes which share the same path. Modes which share the same transmission path cannot transmit simultaneously with one another.

**Fig.15.1 Simultaneous Transmission Paths**

➢ **Simultaneous Transmission Procedures**

This device contains transmitters that may operate simultaneously. Therefore simultaneous transmission analysis is required. Per FCC KDB 447498 D04v01, simultaneous transmission SAR test exclusion may be applied when the sum of the 1-g SAR for all the simultaneous transmitting antennas in a specific a physical test configuration is ≤ 1.6 W/kg. When standalone SAR is not required to be measured, per FCC KDB 447498 D04v01 Appendix E, E.1), the following equation must be used to estimate the standalone 1g SAR for simultaneous transmission assessment involving that transmitter.

$$SAR_{est} = 1.6 \cdot P_{ant} / P_{th} \ [\mathrm{W/kg}].$$

Note:

1. Per KDB 447498 D04v01 section 2.1.2: 1-mW Test Exemption, $P_{th}$ =1mW.

➢ **Multi-Band simultaneous Transmission Consideration**

| | Position | Applicable Combination |
|---|---|---|
| **Simultaneous Transmission Consideration** | Head | WWAN (Voice) + WLAN 2.4 GHz/5.2GHz/5.3GHz/5.6GHz /5.8GHz |
| | | WWAN (Voice) + Bluetooth |
| | Body | WWAN (Data) + WLAN 2.4 GHz/5.2GHz/5.3GHz/5.6GHz /5.8GHz |
| | | WWAN (Data) + Bluetooth |
| | Hotspot | WWAN (Data) + WLAN 2.4 GHz/5.2GHz/5.8GHz |
| | | WWAN (Data) + Bluetooth |

**Note:**

1. WLAN 2.4GHz Band, WLAN 5.2GHz Band, WLAN 5.3GHz Band, WLAN 5.6GHz Band, WLAN 5.8GHz Band and Bluetooth share the same antenna, and cannot transmit simultaneously.
2. WCDMALTE ANT 2 and WCDMA/LTE ANT 3 cannot transmit simultaneously.
3. GSM/WCDMA/LTE shares the same antenna, and cannot transmit simultaneously.
4. The Report SAR summation is calculated based on the same configuration and test position.
5. Per KDB 447498 D04v01, simultaneous transmission SAR is compliant if,
   i. Scalar SAR summation < 1.6 W/kg.
   ii. SPLSR = $(SAR_1 + SAR_2)^{1.5}$ / (*min. separation distance, mm*), and the peak separation distance is determined from the square root of $[(x_1-x_2)^2 + (y_1-y_2)^2 + (z_1-z_2)^2]$, where $(x_1, y_1, z_1)$ and $(x_2, y_2, z_2)$ are the coordinates of the extrapolated peak SAR locations in the zoom scan If SPLSR ≤ 0.04, simultaneously transmission SAR measurement is not necessary
   iii. Simultaneously transmission SAR measurement, and the Reported multi-band SAR < 1.6 W/kg

## 15.6 SAR Simultaneous Transmission Analysis

➢ **Simultaneous Transmission**

| Position | | Standalone SAR(W/kg) | | | | $\Sigma SAR_{1g}$ (W/kg) | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2 | 1+3 | 1+4 |
| | | WWAN | 2.4G WLAN | 5G WLAN | BT | | | |
| Head | Right Cheek | 1.057 | 0.399 | 0.264 | 0.025 | 1.456 | 1.321 | 1.082 |
| | Right Tilted | 0.873 | 0.469 | 0.501 | 0.030 | 1.342 | 1.374 | 0.903 |
| | Left Cheek | 0.770 | 0.743 | 0.322 | 0.033 | 1.513 | 1.092 | 0.803 |
| | Left Tilted | 0.725 | 0.558 | 0.575 | 0.034 | 1.283 | 1.3 | 0.759 |
| Body-worn | Front | 0.492 | 0.213 | 0.233 | 0.016 | 0.705 | 0.725 | 0.508 |
| | Back | 0.823 | 0.284 | 0.310 | 0.022 | 1.107 | 1.133 | 0.845 |
| Hotspot | Front | 0.492 | 0.213 | 0.233 | 0.016 | 0.705 | 0.725 | 0.508 |
| | Back | 0.823 | 0.284 | 0.310 | 0.022 | 1.107 | 1.133 | 0.845 |
| | Left | 0.509 | / | / | / | 0.509 | 0.509 | 0.509 |
| | Right | 0.237 | 0.346 | 0.143 | 0.020 | 0.583 | 0.38 | 0.257 |
| | Top | 1.070 | 0.371 | 0.394 | 0.021 | 1.441 | 1.464 | 1.091 |
| | Bottom | 0.343 | / | / | / | 0.343 | 0.343 | 0.343 |

➢ **Simultaneous Transmission Conclusion**

The above numerical summed SAR results for all the case simultaneous transmission conditions were below the SAR limit. Therefore, the above analysis is sufficient to determine that simultaneous transmission cases will not exceed the SAR limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D04v01.

## 15.7 Measurement Uncertainty

Per KDB865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEC/IEEE 62209-1528:2020 is not required in SAR reports submitted for equipment approval. The equivalent ratio (1.5/1.6) is applied to extremity and occupational exposure conditions.

# 16 Reference

[1]. FCC 47 CFR Part 2 “Frequency Allocations and Radio Treaty Matters; General Rules and Regulations”

[2]. ANSI/IEEE Std. C95.1-1992, “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz”, September 1992

[3]. IEC/IEEE 62209-1528:2020, “Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices –Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz)”, October 2020

[4]. OpenSAR V5 Software User Manual

[5]. FCC KDB 248227 D01 v02r02, “SAR GUIDANCE FOR IEEE 802.11 (Wi-Fi) TRANSMITTERS”, October 2015

[6]. FCC KDB 447498 D04 v01, “RF EXPOSURE PROCEDURES AND EQUIPMENT AUTHORIZATION POLICIES FOR MOBILE AND PORTABLE DEVICES”, November 2021

[7]. FCC KDB 648474 D04 v01r03, “SAR EVALUATION CONSIDERATIONS FOR WIRELESS HANDSETS”, October 2015

[8]. FCC KDB 941225 D01 v03r01, “3G SAR MEAUREMENT PROCEDURES”, October 2015

[9]. FCC KDB 941225 D05 v02r05, “SAR EVALUATION CONSIDERATIONS FOR LTE DEVICES”, Dec 2015

[10]. FCC KDB 941225 D06 v02r01, " SAR EVALUATION PROCEDURES FOR PORTABLE DEVICES WITH WIRELESS ROUTER CAPABILITIES", October 2015

[11]. FCC KDB 865664 D01 v01r04, “SAR MEASUREMENT REQUIREMENTS FOR 100 MHz TO 6 GHz”, August 2015

# Appendix A: Plots of SAR System Check

# System check at 835 MHz

Date of measurement: 15/3/2024

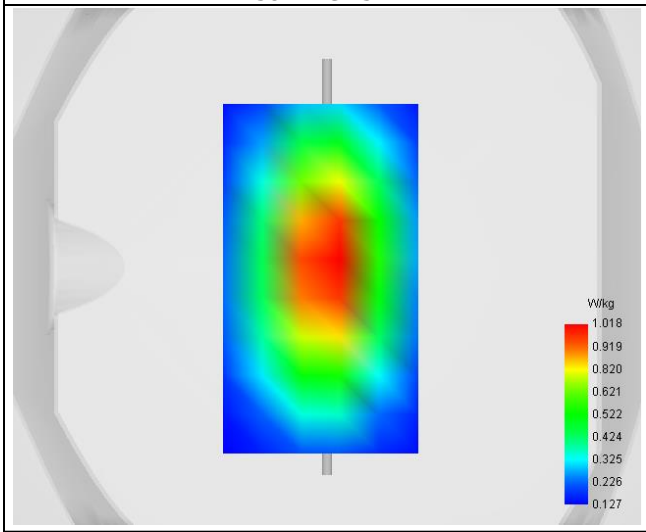
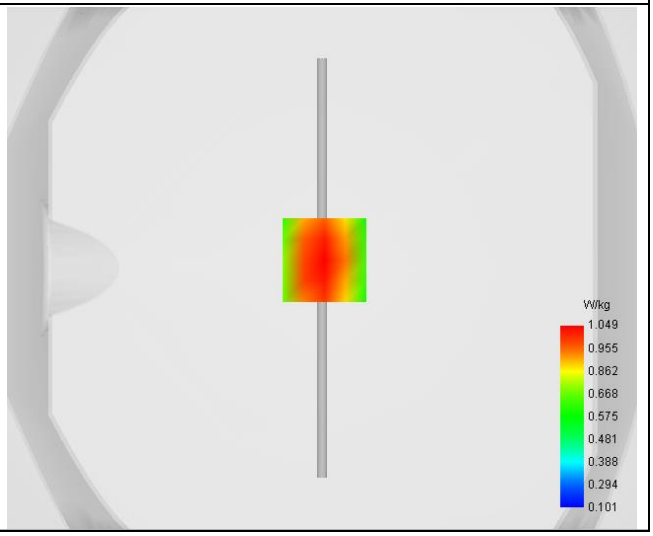
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.42 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | CW835 |
| Channels | Middle |
| Signal | CW (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 835.000000 |
| **Relative permitivity (real part)** | 41.228951 |
| **Conductivity (S/m)** | 0.899950 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



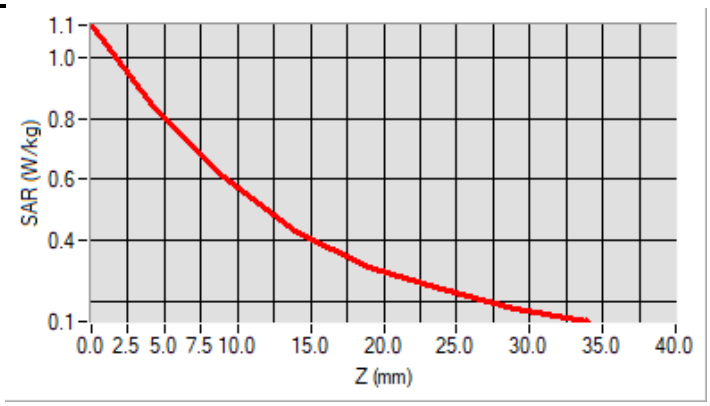


Maximum location: X=1.00, Y=3.00 ; SAR Peak: 1.11 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.596881 |
| SAR 1g (W/Kg) | 0.962340 |
| Variation (%) | -1.010000 |

## E. Z Axis Scan



# System check at 1750 MHz

Date of measurement: 17/3/2024

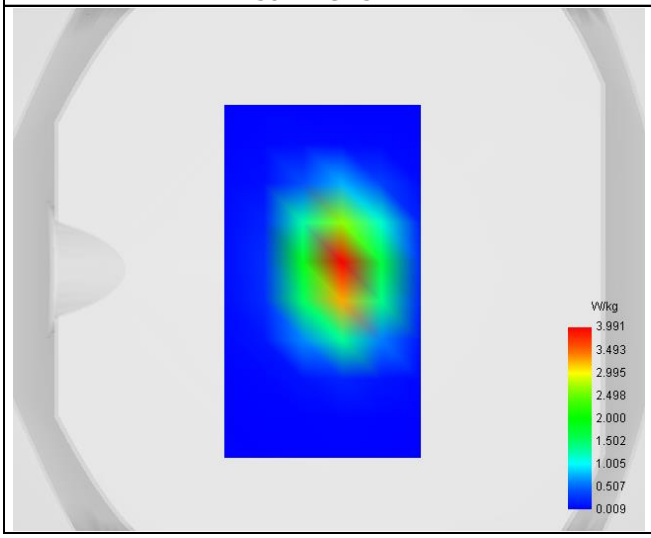
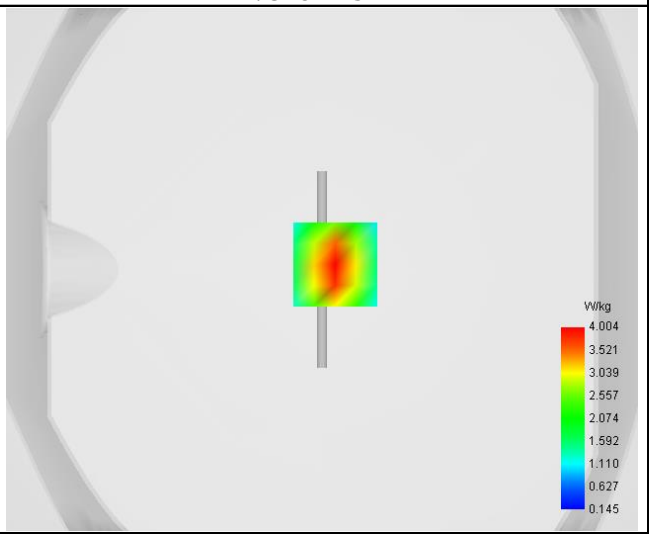
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.52 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | CW1750 |
| Channels | Middle |
| Signal | CW (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 1750.000000 |
| **Relative permitivity (real part)** | 39.520538 |
| **Conductivity (S/m)** | 1.348941 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

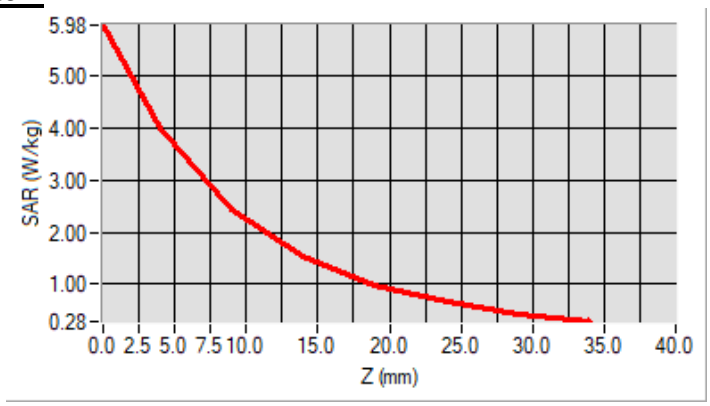


Maximum location: X=5.00, Y=2.00 ; SAR Peak: 5.94 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 1.933364 |
| SAR 1g (W/Kg) | 3.581100 |
| Variation (%) | -1.180000 |

## E. Z Axis Scan



# System check at 1900 MHz

Date of measurement: 17/3/2024

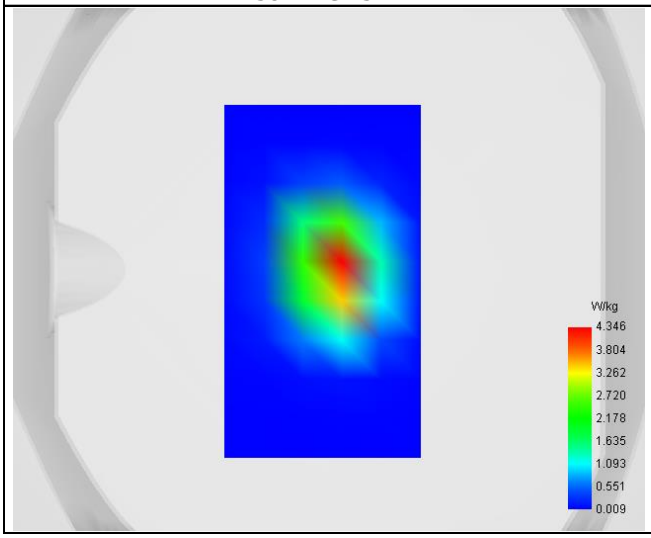
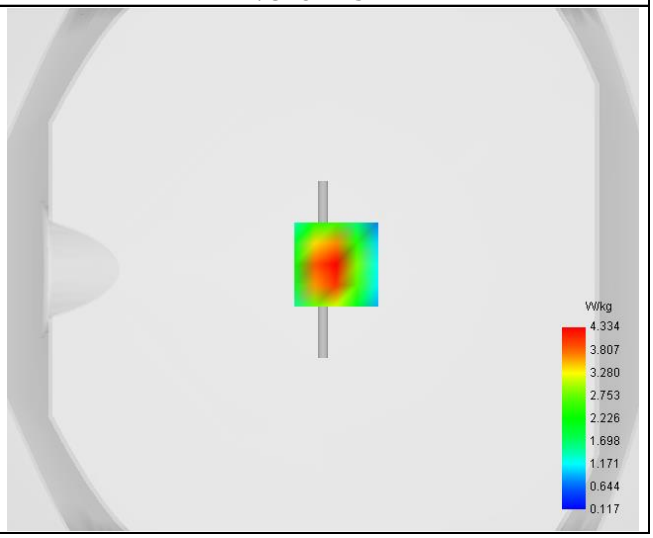
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.44 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | CW1900 |
| Channels | Middle |
| Signal | CW (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 1900.000000 |
| **Relative permitivity (real part)** | 39.441618 |
| **Conductivity (S/m)** | 1.376000 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



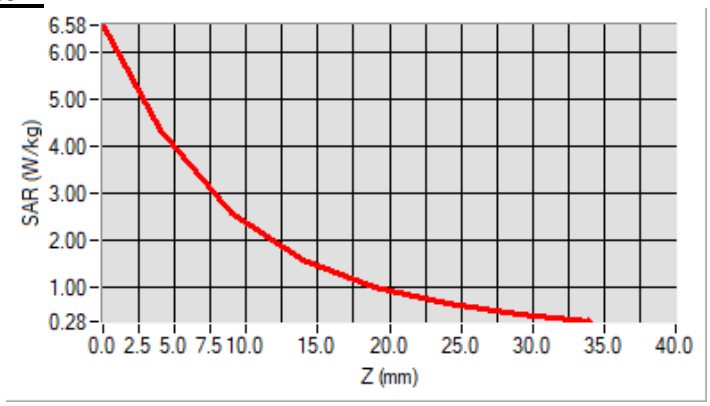


Maximum location: X=5.00, Y=2.00 ; SAR Peak: 6.71 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 2.110053 |
| SAR 1g (W/Kg) | 4.087111 |
| Variation (%) | 3.100000 |

## E. Z Axis Scan



# System check at 2450 MHz

Date of measurement: 20/3/2024

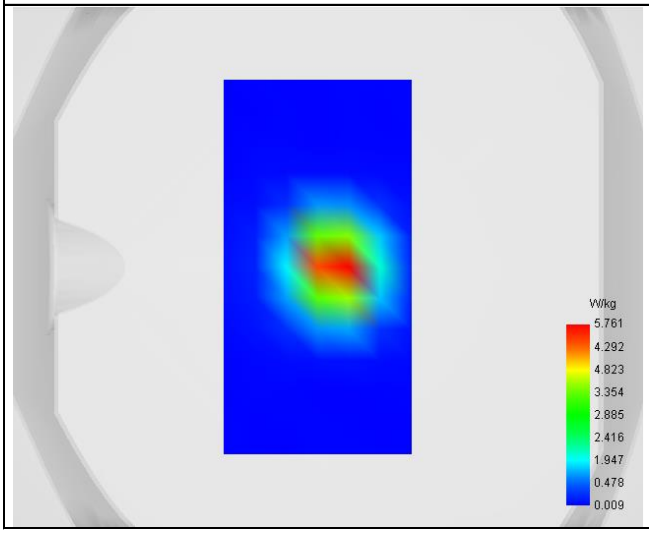
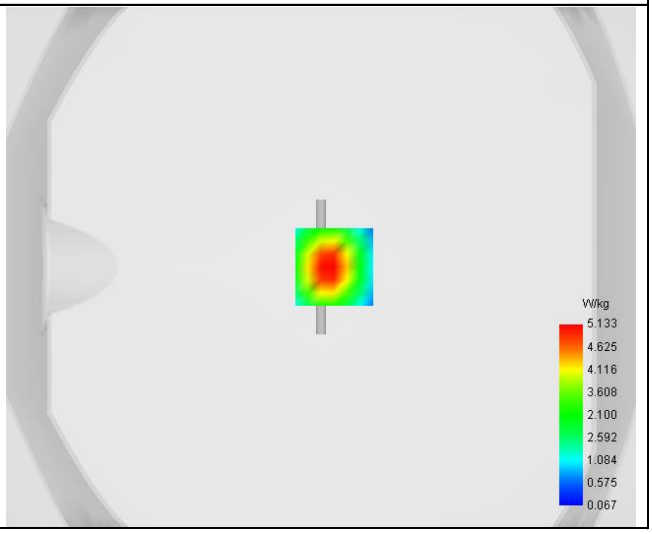
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.39 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 7x7x7,dx=5mm dy=5mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | CW2450 |
| Channels | Middle |
| Signal | CW (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 2450.000000 |
| **Relative permitivity (real part)** | 38.641615 |
| **Conductivity (S/m)** | 1.769028 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



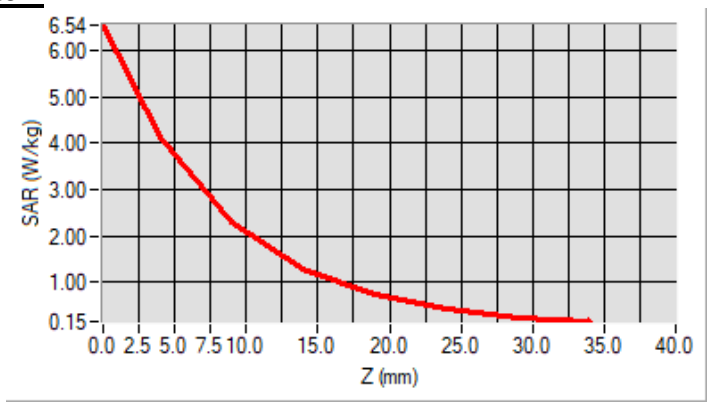


Maximum location: X=5.00, Y=0.00 ; SAR Peak: 6.58 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 2.347047 |
| SAR 1g (W/Kg) | 5.311106 |
| Variation (%) | -2.040000 |

## E. Z Axis Scan



# System check at 2600 MHz

Date of measurement: 20/3/2024

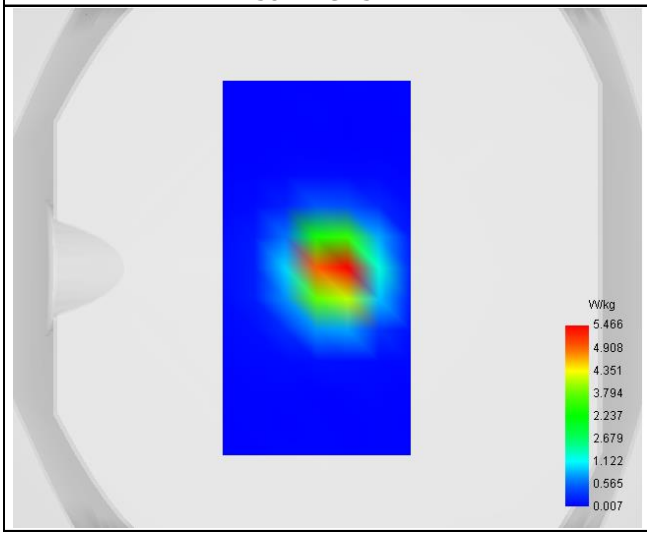
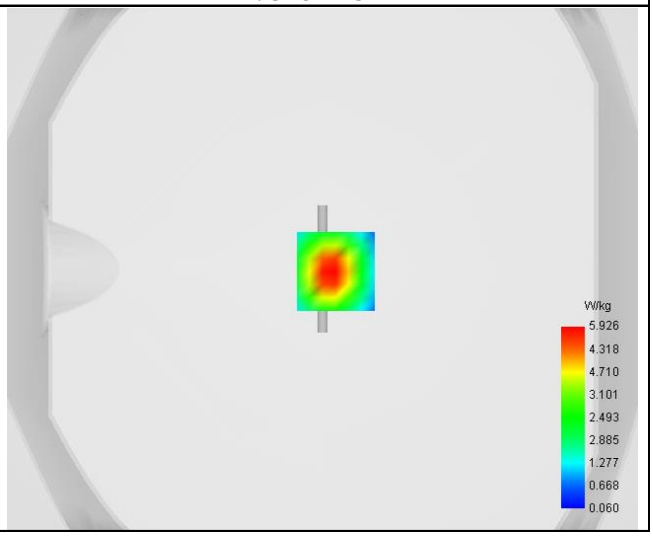
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.17 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 7x7x7,dx=5mm dy=5mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | CW2600 |
| Channels | Middle |
| Signal | CW (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 2600.000000 |
| **Relative permitivity (real part)** | 38.450726 |
| **Conductivity (S/m)** | 1.930680 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



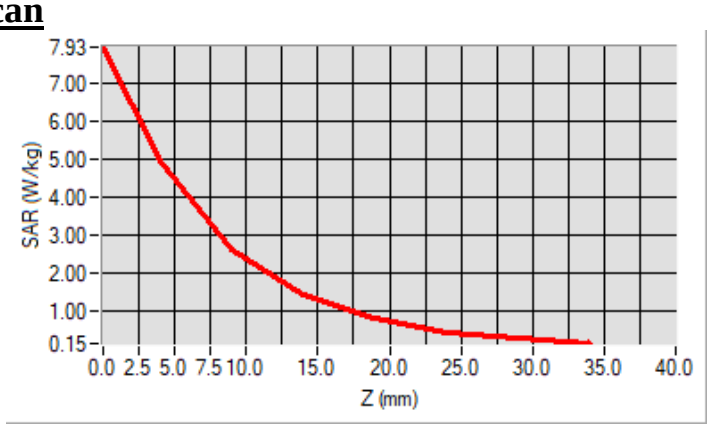


Maximum location: X=5.00, Y=-1.00 ; SAR Peak: 7.99 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 2.245531 |
| SAR 1g (W/Kg) | 5.267883 |
| Variation (%) | 4.380000 |

## E. Z Axis Scan



# System check at 5200 MHz

Date of measurement: 23/3/2024

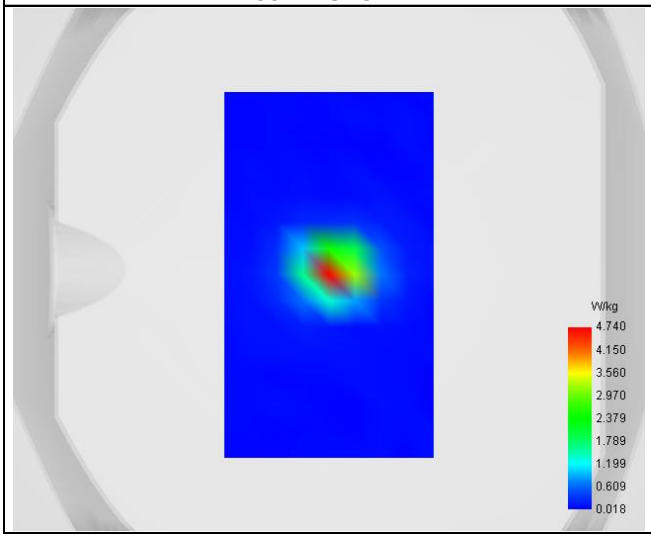
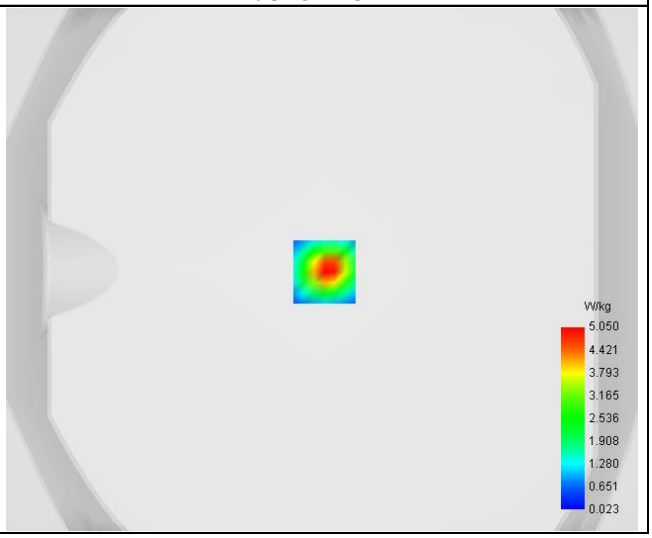
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 1.42 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 7x7x12,dx=4mm dy=4mm dz=2mm,Complete |
| Phantom | Validation plane |
| Device Position | Dipole |
| Band | CW5200 |
| Channels | Middle |
| Signal | CW (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 5200.000000 |
| **Relative permitivity (real part)** | 35.931105 |
| **Conductivity (S/m)** | 4.648943 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

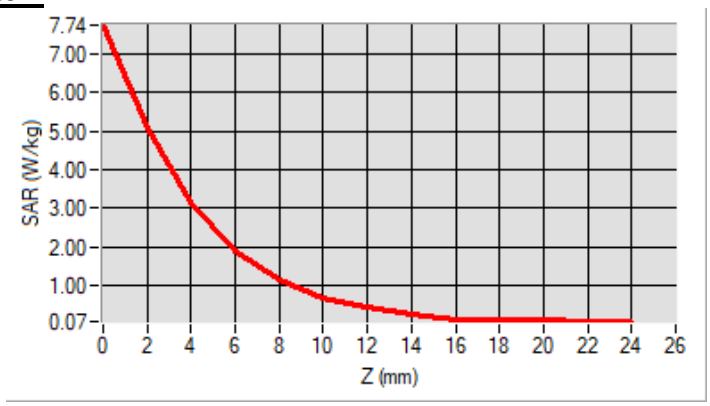


Maximum location: X=1.00, Y=-1.00 ; SAR Peak: 8.13 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.952256 |
| SAR 1g (W/Kg) | 3.111084 |
| Variation (%) | -3.560000 |

## E. Z Axis Scan



# System check at 5400 MHz

Date of measurement: 23/3/2024

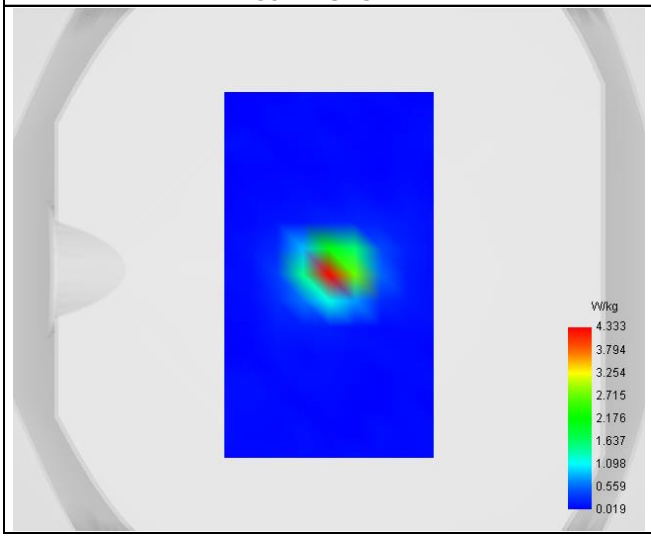
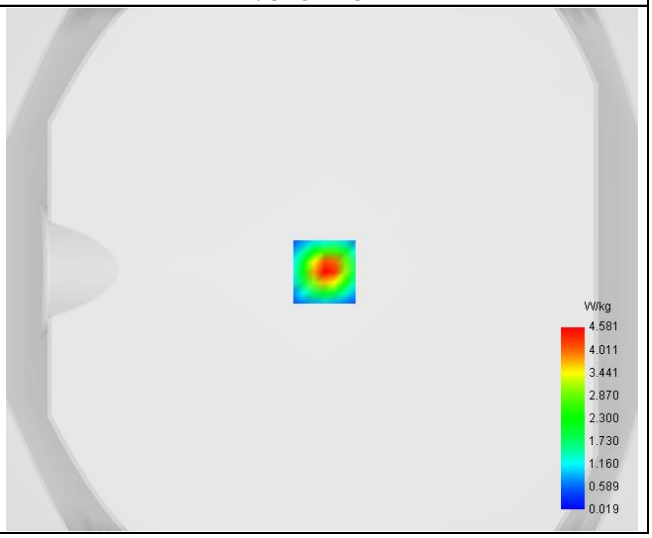
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 1.40 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 7x7x12,dx=4mm dy=4mm dz=2mm,Complete |
| Phantom | Validation plane |
| Device Position | Dipole |
| Band | CW5400 |
| Channels | Middle |
| Signal | CW (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 5400.000000 |
| **Relative permitivity (real part)** | 35.702511 |
| **Conductivity (S/m)** | 4.853661 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



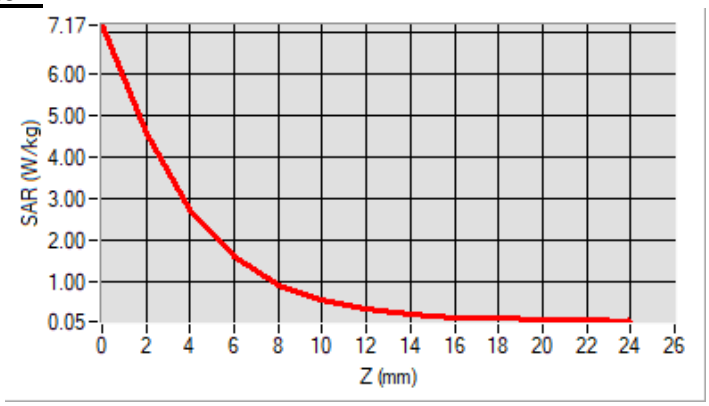


Maximum location: X=1.00, Y=-1.00 ; SAR Peak: 7.50 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.967344 |
| SAR 1g (W/Kg) | 3.307217 |
| Variation (%) | 1.830000 |

## E. Z Axis Scan



# System check at 5600 MHz

Date of measurement: 26/3/2024

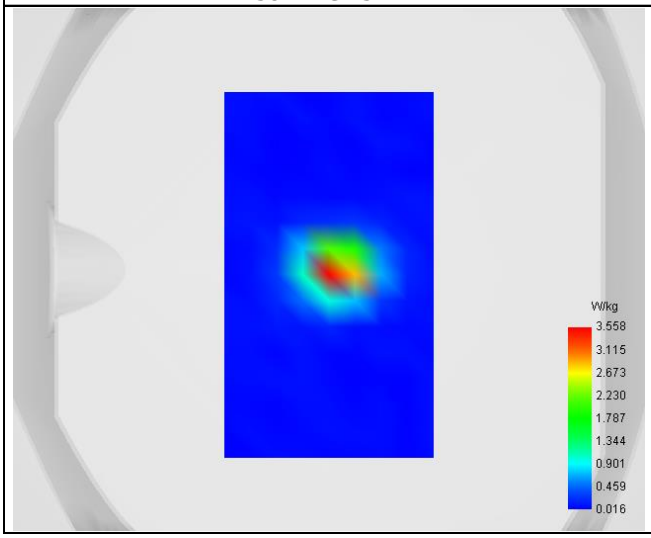
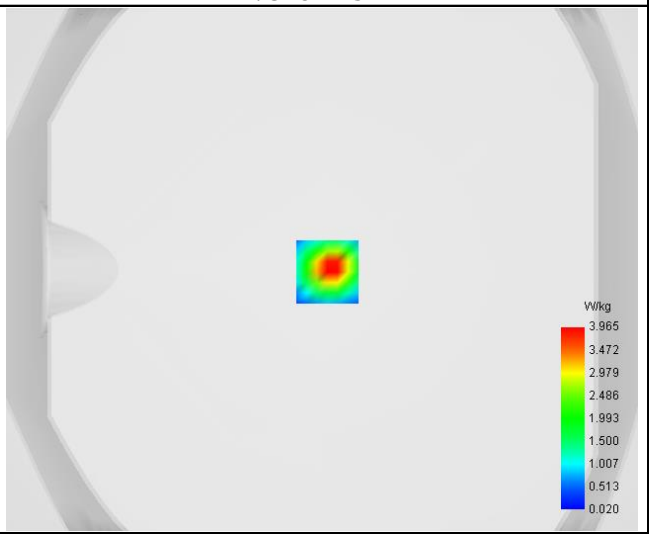
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 1.26 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 7x7x12,dx=4mm dy=4mm dz=2mm,Complete |
| Phantom | Validation plane |
| Device Position | Dipole |
| Band | CW5600 |
| Channels | Middle |
| Signal | CW (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 5600.000000 |
| **Relative permitivity (real part)** | 35.474119 |
| **Conductivity (S/m)** | 5.058533 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



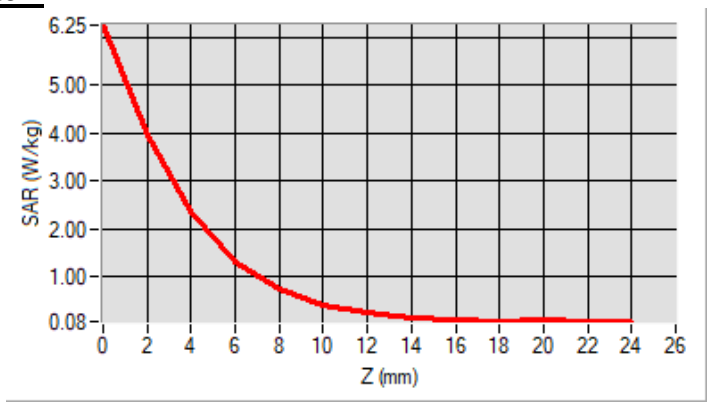


Maximum location: X=2.00, Y=-1.00 ; SAR Peak: 6.82 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.955427 |
| SAR 1g (W/Kg) | 3.193580 |
| Variation (%) | -2.039000 |

## E. Z Axis Scan



# System check at 5800 MHz

Date of measurement: 29/3/2024

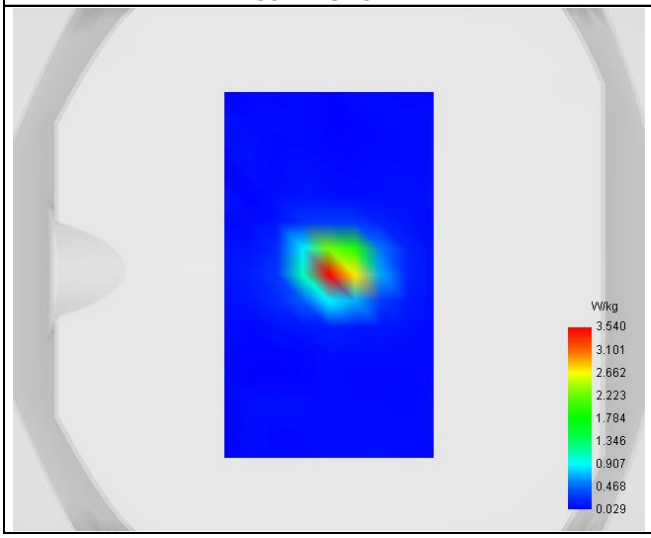
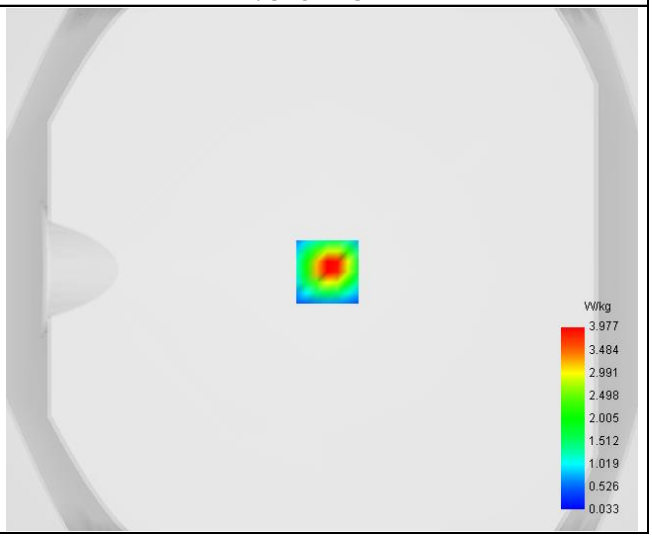
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 1.18 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 7x7x12,dx=4mm dy=4mm dz=2mm,Complete |
| Phantom | Validation plane |
| Device Position | Dipole |
| Band | CW5800 |
| Channels | Middle |
| Signal | CW (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 5800.000000 |
| **Relative permitivity (real part)** | 35.245399 |
| **Conductivity (S/m)** | 5.263200 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

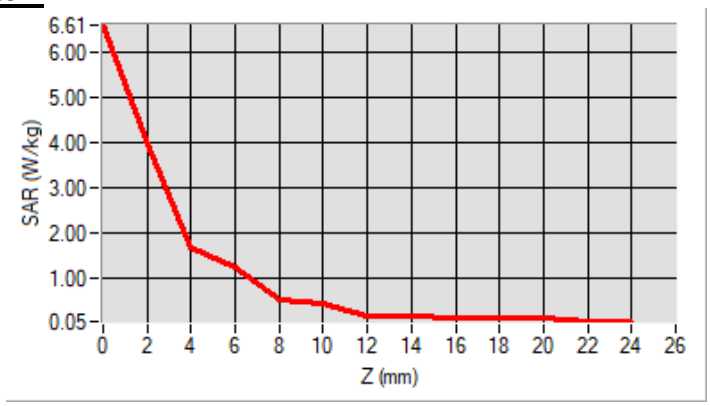


Maximum location: X=2.00, Y=-1.00 ; SAR Peak: 7.02 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.927417 |
| SAR 1g (W/Kg) | 3.203111 |
| Variation (%) | 0.570000 |

## E. Z Axis Scan



# Appendix B: Plots of SAR Test Data

# SAR Measurement at GSM850 (Cheek, Right)

Date of measurement: 15/3/2024

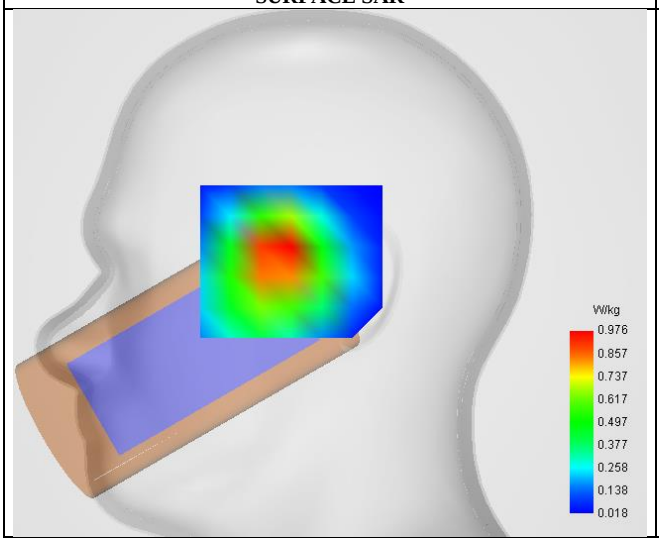
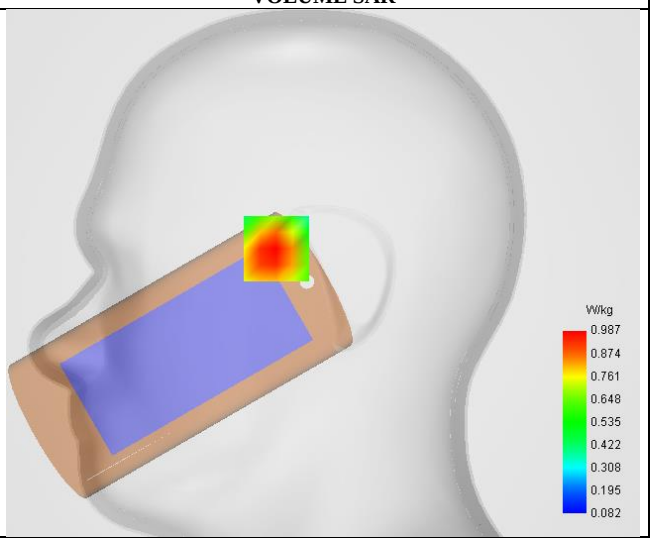
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.42 |
| Area Scan | dx=15mm dy=15mm |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Right head |
| Device Position | Cheek |
| Band | GSM850 |
| Channels | High |
| Signal | TDMA (Crest factor: 8.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 848.799988 |
| **Relative permitivity (real part)** | 41.181683 |
| **Conductivity (S/m)** | 0.902521 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



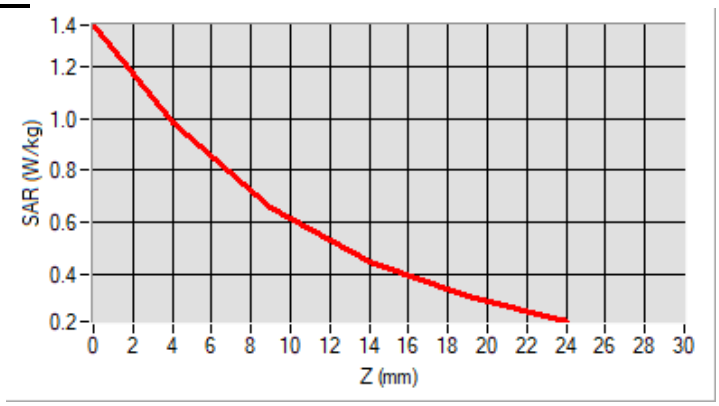


Maximum location: X=-23.00, Y=12.00 ; SAR Peak: 1.36 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.627795 |
| SAR 1g (W/Kg) | 0.945722 |
| Variation (%) | -0.970000 |

## E. Z Axis Scan



# SAR Measurement at GSM1900 (Tilt, Right)

Date of measurement: 17/3/2024

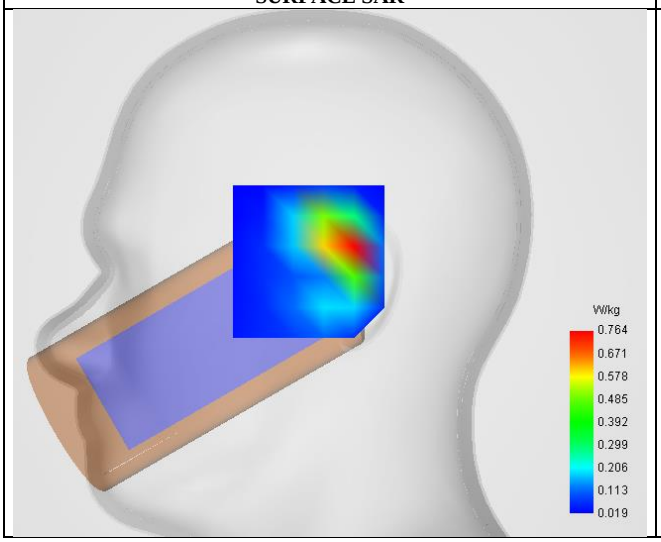
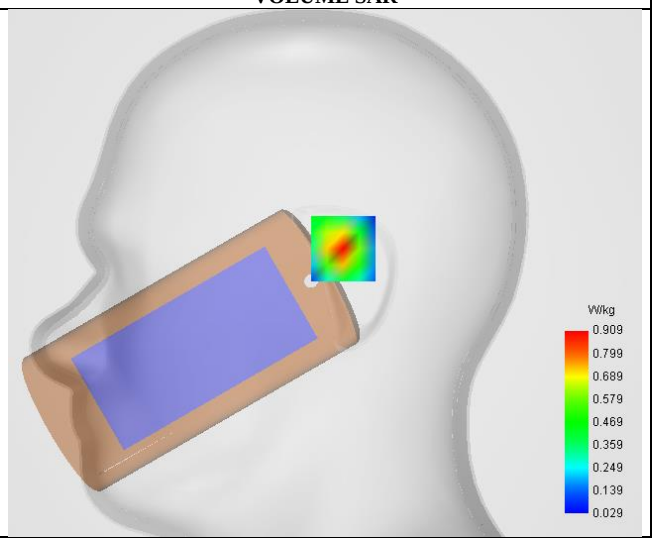
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.44 |
| Area Scan | dx=15mm dy=15mm |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Right head |
| Device Position | Tilt |
| Band | GSM1900 |
| Channels | Low |
| Signal | TDMA (Crest factor: 8.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 1850.199951 |
| **Relative permitivity (real part)** | 39.441633 |
| **Conductivity (S/m)** | 1.376607 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



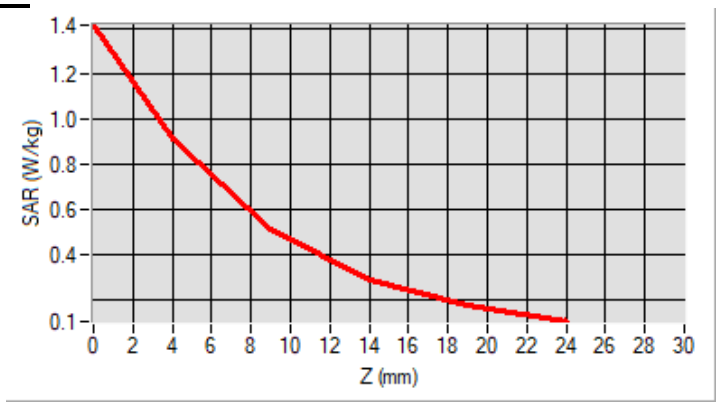


Maximum location: X=9.00, Y=12.00 ; SAR Peak: 1.43 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.423296 |
| SAR 1g (W/Kg) | 0.829328 |
| Variation (%) | 1.350000 |

## E. Z Axis Scan



# SAR Measurement at Band2_WCDMA1900 (Tilt, Right)

Date of measurement: 17/3/2024

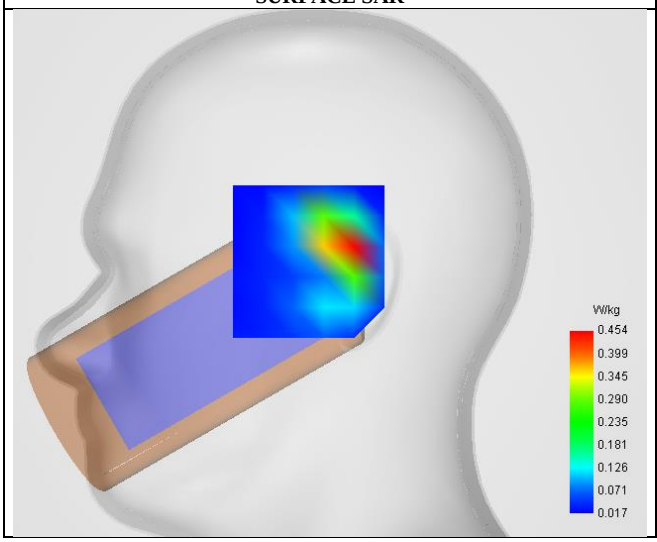
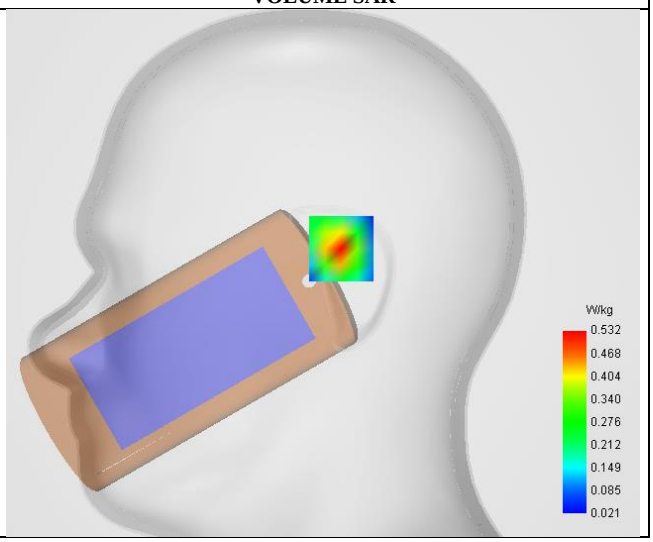
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.44 |
| Area Scan | dx=15mm dy=15mm |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Right head |
| Device Position | Tilt |
| Band | Band2_WCDMA1900 |
| Channels | High |
| Signal | WCDMA (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 1907.600000 |
| **Relative permitivity (real part)** | 39.441600 |
| **Conductivity (S/m)** | 1.375843 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



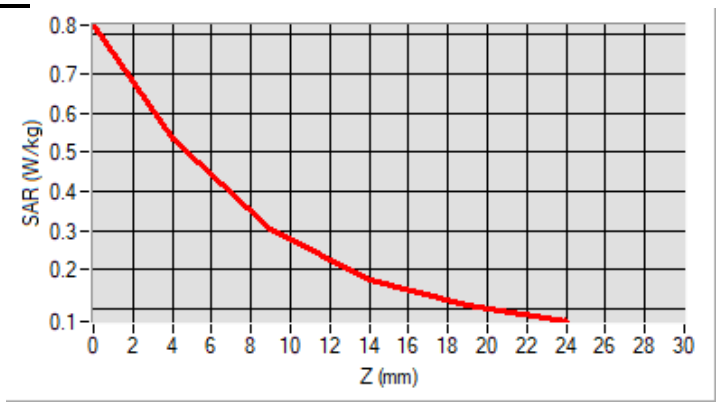


Maximum location: X=9.00, Y=12.00 ; SAR Peak: 0.84 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.248884 |
| SAR 1g (W/Kg) | 0.485437 |
| Variation (%) | -1.900000 |

## E. Z Axis Scan



# SAR Measurement at CUSTOM (WCDMA_1700) (Tilt, Right)

Date of measurement: 17/3/2024

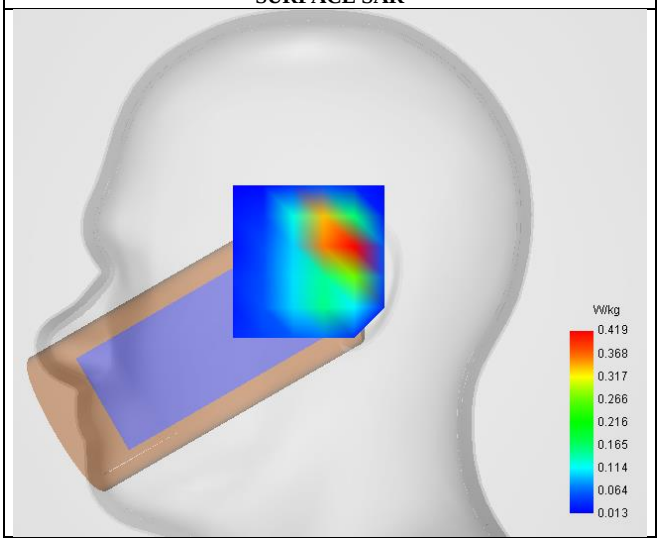
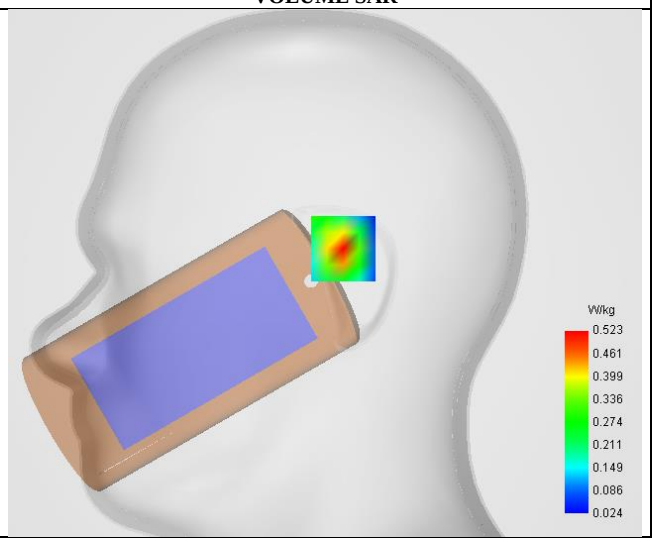
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.52 |
| Area Scan | dx=15mm dy=15mm |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Right head |
| Device Position | Tilt |
| Band | WCDMA 1700 |
| Channels | Middle |
| Signal | WCDMA (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 1732.599976 |
| **Relative permitivity (real part)** | 39.548941 |
| **Conductivity (S/m)** | 1.338740 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



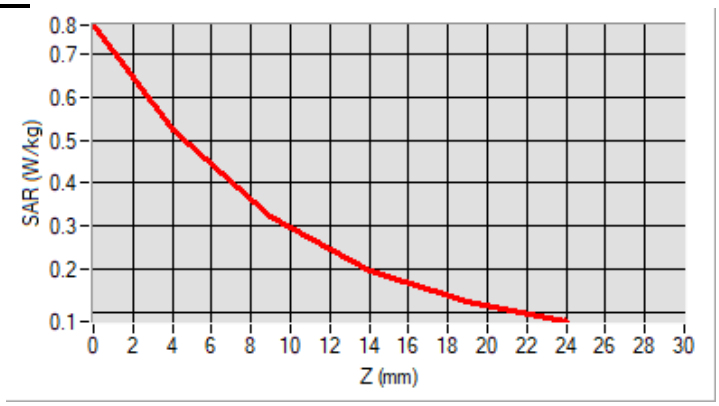


Maximum location: X=9.00, Y=12.00 ; SAR Peak: 0.78 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.253411 |
| SAR 1g (W/Kg) | 0.477071 |
| Variation (%) | 3.140000 |

## E. Z Axis Scan



# SAR Measurement at Band5_WCDMA850 (Cheek, Right)

Date of measurement: 15/3/2024

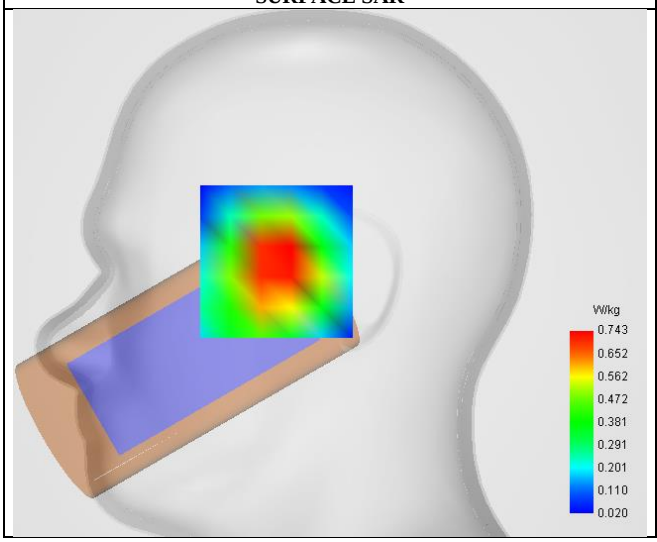
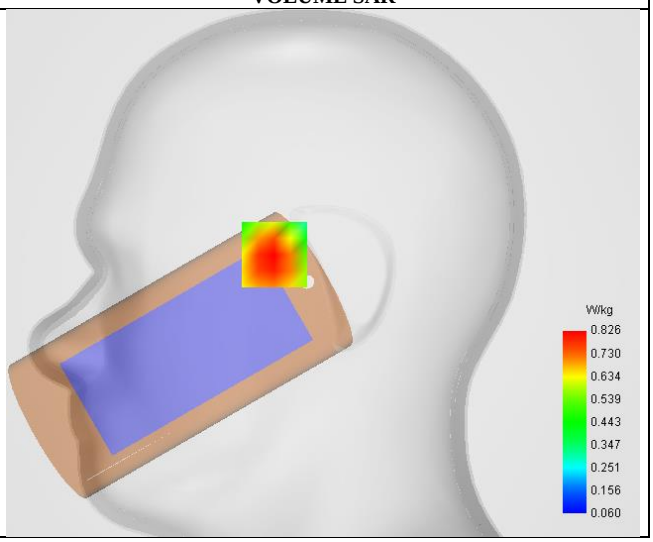
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.42 |
| Area Scan | dx=15mm dy=15mm |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Right head |
| Device Position | Cheek |
| Band | Band5_WCDMA850 |
| Channels | Middle |
| Signal | WCDMA (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 836.599976 |
| **Relative permitivity (real part)** | 41.234032 |
| **Conductivity (S/m)** | 0.899432 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



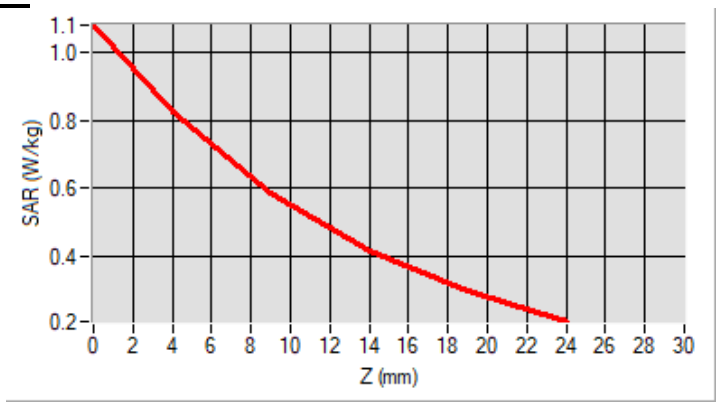


Maximum location: X=-24.00, Y=9.00 ; SAR Peak: 1.08 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.538091 |
| SAR 1g (W/Kg) | 0.790659 |
| Variation (%) | -1.710000 |

## E. Z Axis Scan



# SAR Measurement at LTE band 2 (Tilt, Right)

Date of measurement: 17/3/2024

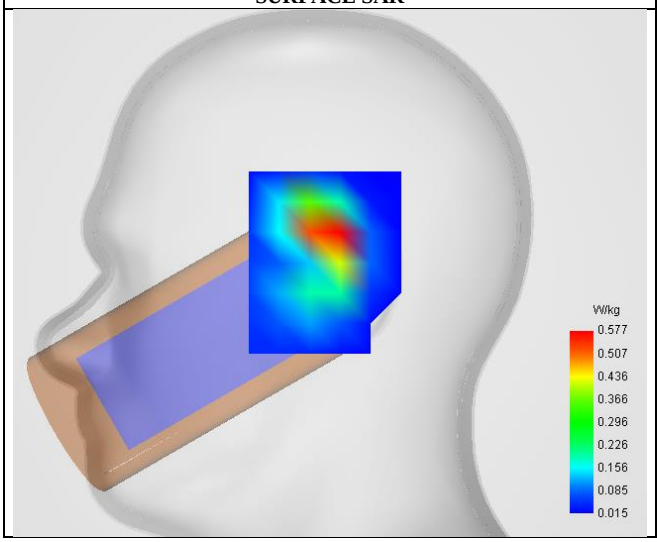
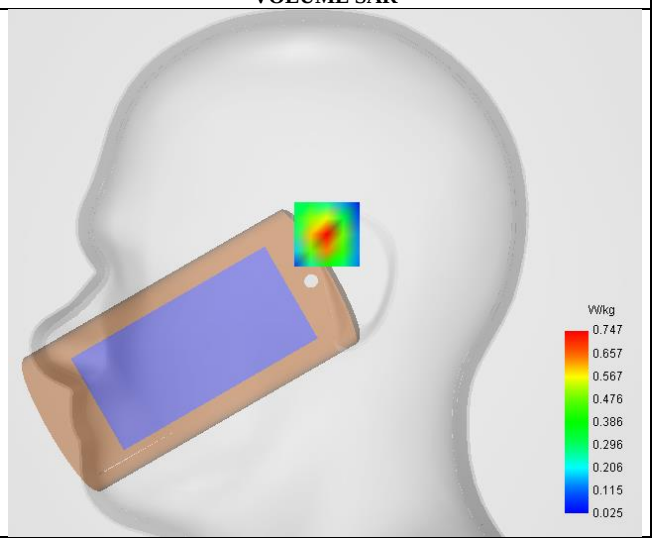
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.44 |
| Area Scan | dx=15mm dy=15mm |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Right head |
| Device Position | Tilt |
| Band | LTE band 2 |
| Channels | High |
| Signal | LTE (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 1900.000000 |
| **Relative permitivity (real part)** | 39.441618 |
| **Conductivity (S/m)** | 1.376000 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

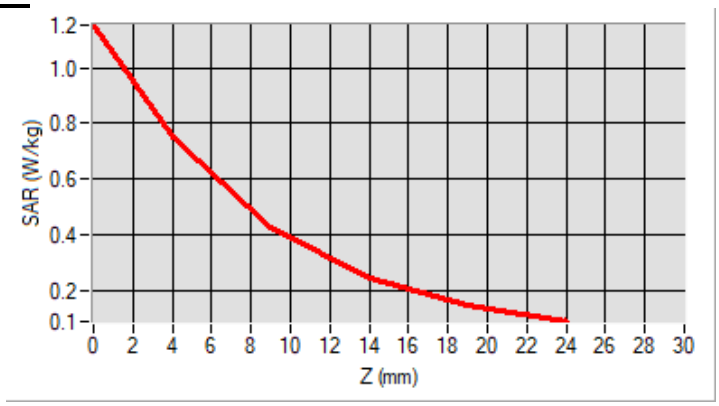


Maximum location: X=1.00, Y=19.00 ; SAR Peak: 1.18 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.347136 |
| SAR 1g (W/Kg) | 0.684424 |
| Variation (%) | 0.100000 |

## E. Z Axis Scan



# SAR Measurement at CUSTOM (LTE_Band_4) (Cheek, Right)

Date of measurement: 17/3/2024

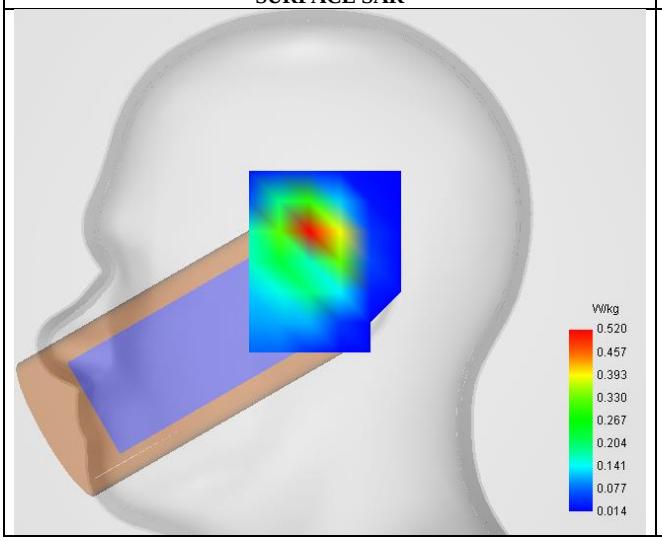
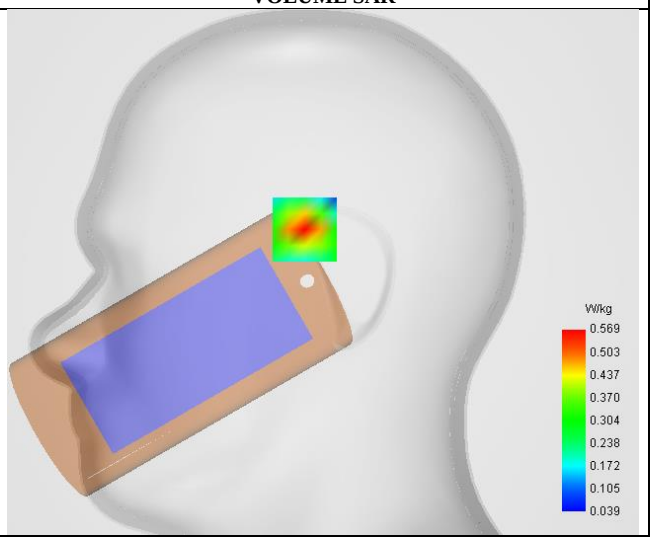
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.52 |
| Area Scan | dx=15mm dy=15mm |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Right head |
| Device Position | Cheek |
| Band | LTE Band 4 |
| Channels | High |
| Signal | LTE (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 1745.000000 |
| **Relative permitivity (real part)** | 39.528413 |
| **Conductivity (S/m)** | 1.346100 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



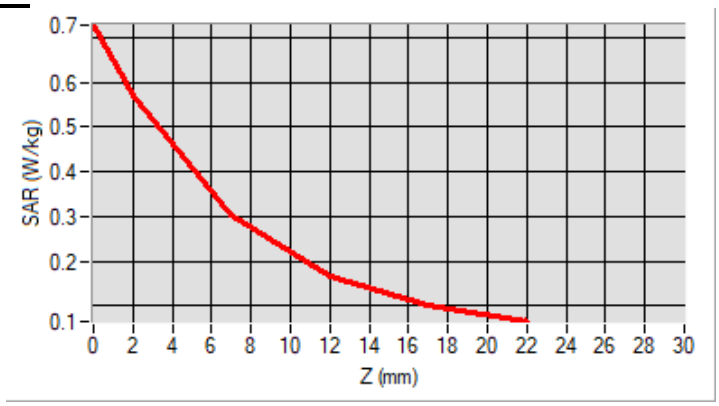


Maximum location: X=-9.00, Y=21.00 ; SAR Peak: 0.93 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.278202 |
| SAR 1g (W/Kg) | 0.525131 |
| Variation (%) | -0.590000 |

## E. Z Axis Scan



# SAR Measurement at LTE band 5 (Cheek, Right)

Date of measurement: 15/3/2024

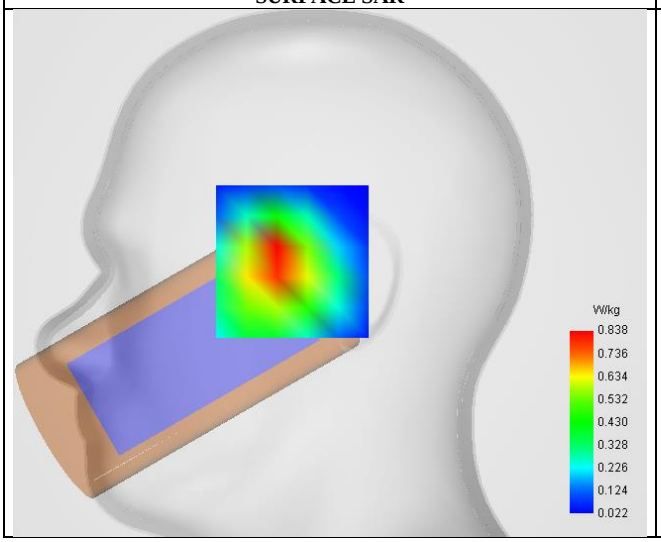
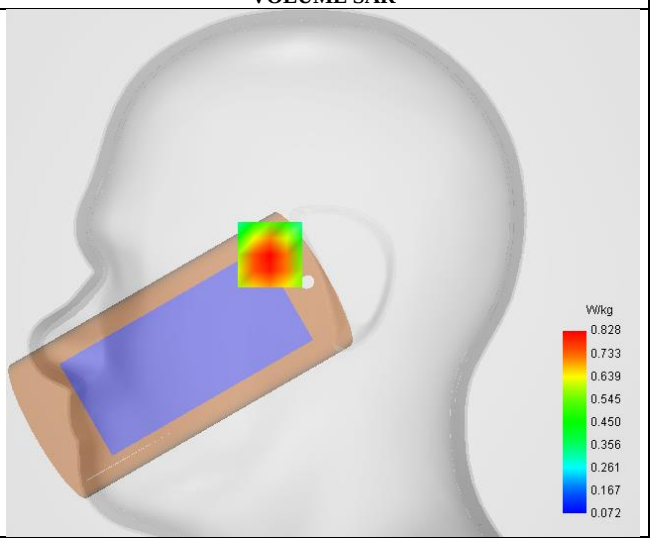
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.42 |
| Area Scan | dx=15mm dy=15mm |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Right head |
| Device Position | Cheek |
| Band | LTE band 5 |
| Channels | Middle |
| Signal | LTE (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 836.500000 |
| **Relative permitivity (real part)** | 41.234032 |
| **Conductivity (S/m)** | 0.899432 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



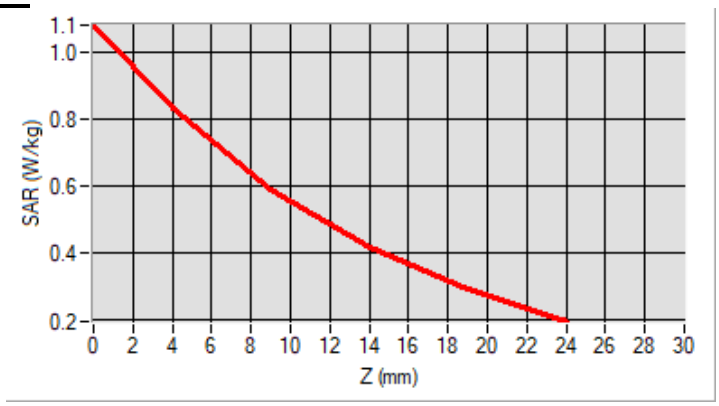


Maximum location: X=-26.00, Y=9.00 ; SAR Peak: 1.08 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.535982 |
| SAR 1g (W/Kg) | 0.792559 |
| Variation (%) | 0.010000 |

## E. Z Axis Scan



# SAR Measurement at LTE band 7 (Tilt, Right)

Date of measurement: 20/3/2024

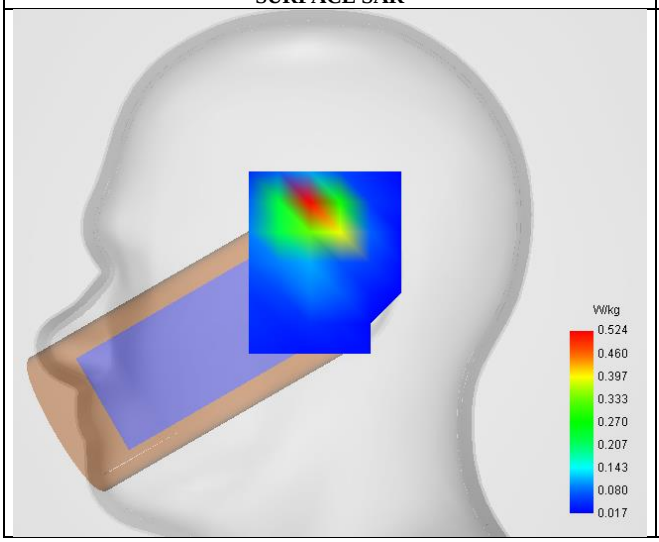
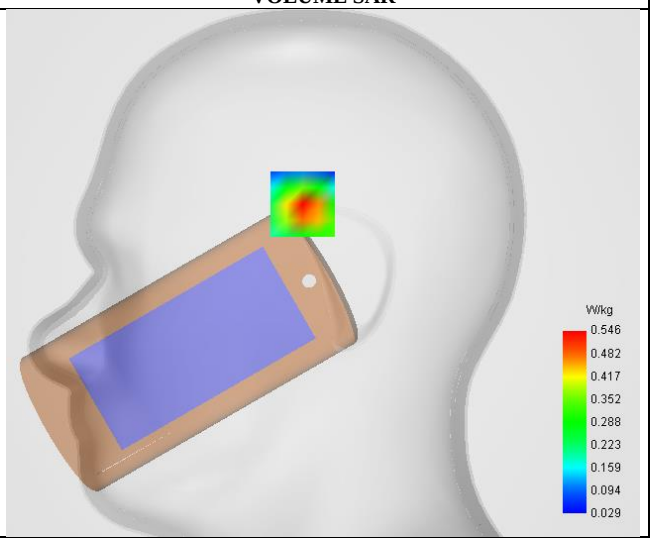
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.17 |
| Area Scan | dx=15mm dy=15mm |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Right head |
| Device Position | Tilt |
| Band | LTE band 7 |
| Channels | Low |
| Signal | LTE (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 2510.000000 |
| **Relative permitivity (real part)** | 38.565217 |
| **Conductivity (S/m)** | 1.833729 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



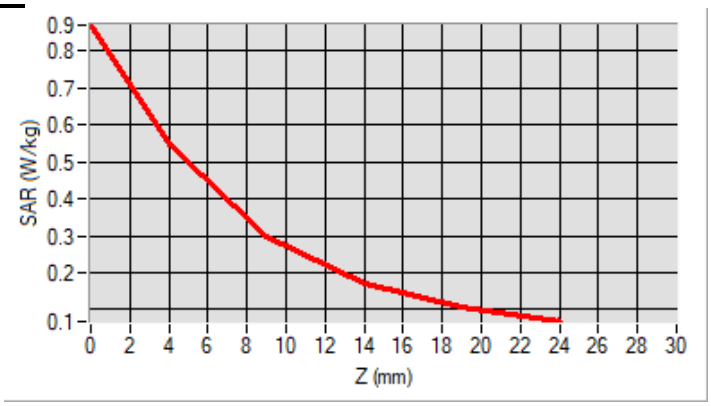


Maximum location: X=-10.00, Y=34.00 ; SAR Peak: 0.89 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.262740 |
| SAR 1g (W/Kg) | 0.509406 |
| Variation (%) | 1.830000 |

## E. Z Axis Scan



# SAR Measurement at LTE band 41 (Tilt, Right)

Date of measurement: 20/3/2024

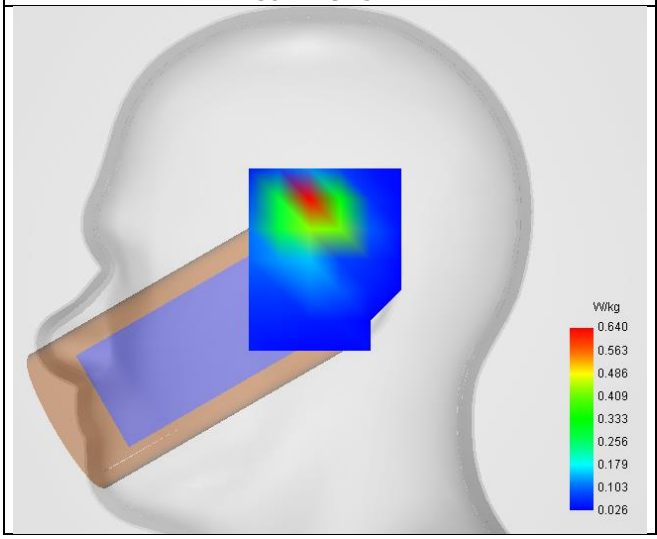
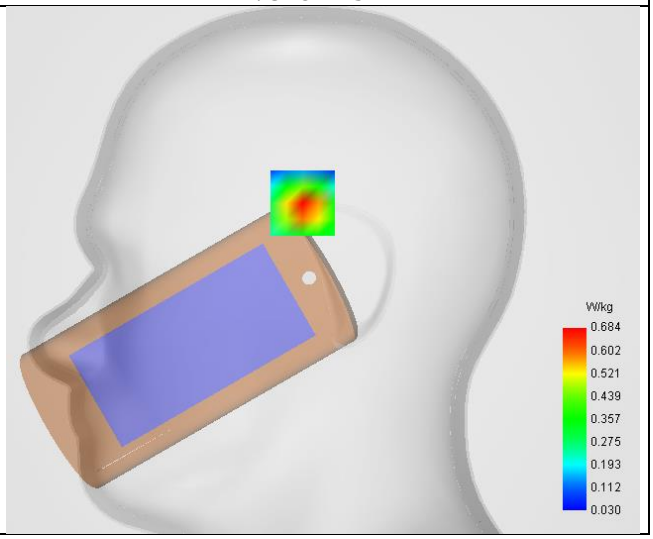
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.17 |
| Area Scan | dx=15mm dy=15mm |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Right head |
| Device Position | Tilt |
| Band | LTE band 41 |
| Channels | High |
| Signal | LTE (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 2645.000000 |
| **Relative permitivity (real part)** | 38.393452 |
| **Conductivity (S/m)** | 1.994311 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



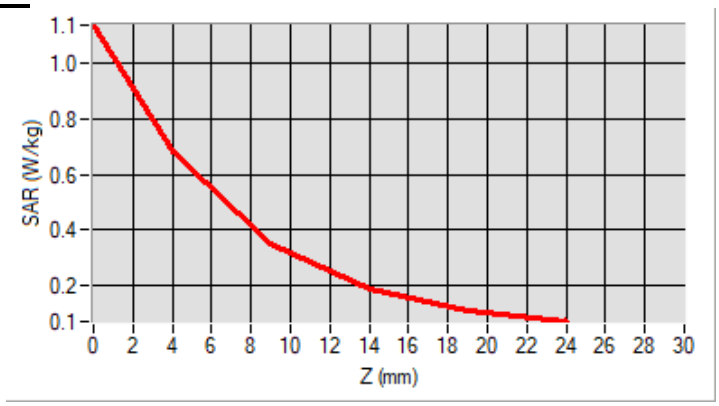


Maximum location: X=-10.00, Y=33.00 ; SAR Peak: 1.16 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.317102 |
| SAR 1g (W/Kg) | 0.636496 |
| Variation (%) | -1.350000 |

## E. Z Axis Scan



# SAR Measurement at IEEE 802.11b ISM (Cheek, Left)

Date of measurement: 20/3/2024

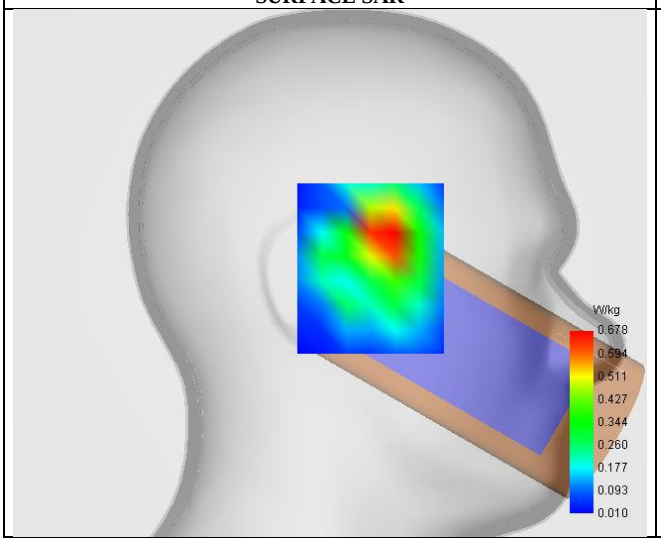
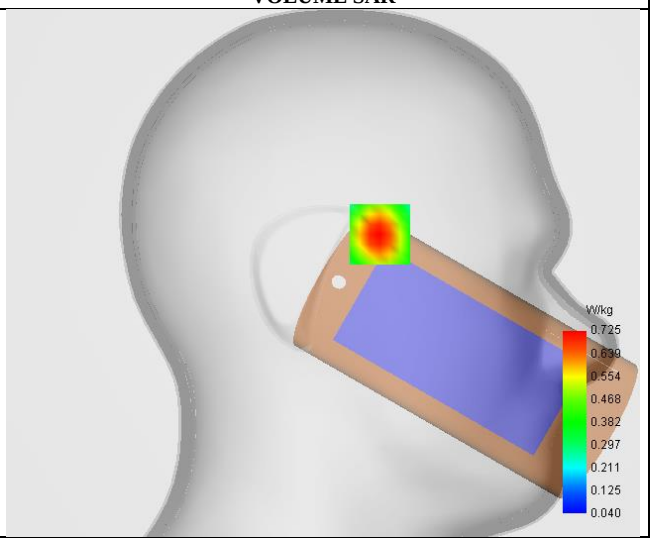
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.39 |
| Area Scan | dx=12mm dy=12mm |
| Zoom Scan | 7x7x7,dx=5mm dy=5mm dz=5mm,Complete |
| Phantom | Left head |
| Device Position | Cheek |
| Band | IEEE 802.11b ISM |
| Channels | Low |
| Signal | IEEE802.b (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 2416.000000 |
| **Relative permitivity (real part)** | 38.702020 |
| **Conductivity (S/m)** | 1.739222 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

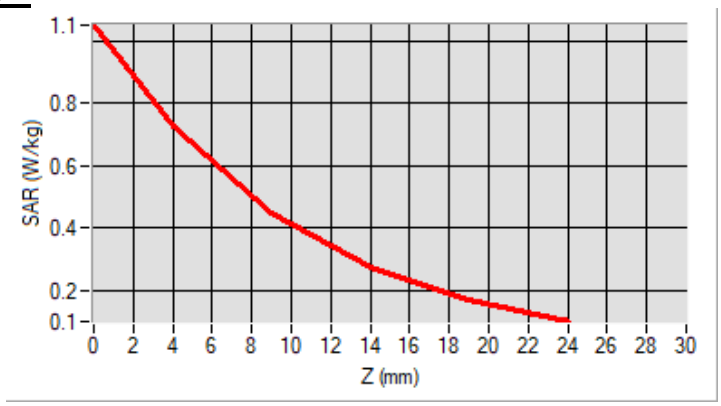


Maximum location: X=-28.00, Y=19.00 ; SAR Peak: 1.05 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.386506 |
| SAR 1g (W/Kg) | 0.670094 |
| Variation (%) | -0.390000 |

## E. Z Axis Scan



# SAR Measurement at CUSTOM (5.2GHz_802.11a) (Tilt, Left)

Date of measurement: 23/3/2024

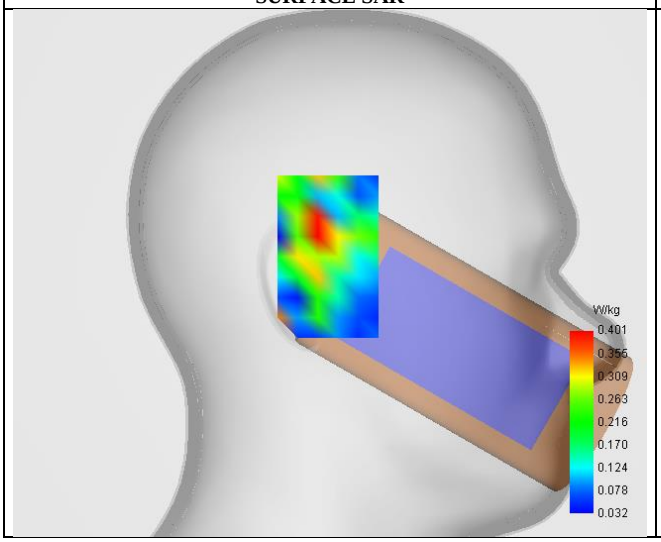
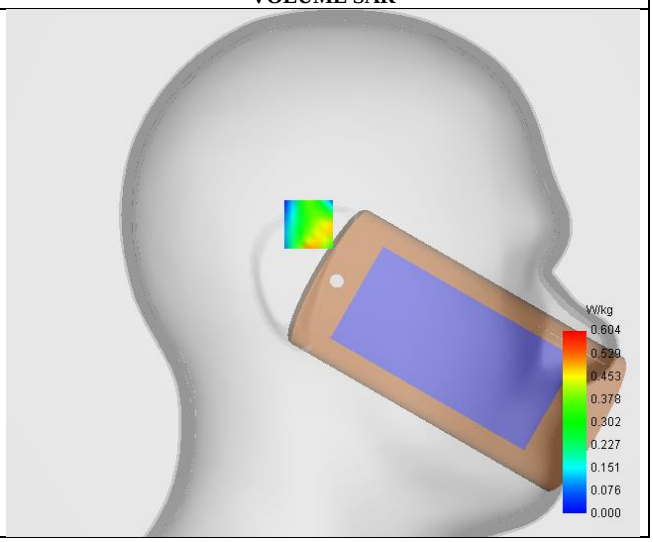
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 1.42 |
| Area Scan | dx=10mm dy=10mm |
| Zoom Scan | 7x7x12,dx=4mm dy=4mm dz=2mm,Complete |
| Phantom | Left head |
| Device Position | Tilt |
| Band | 5.2GHz_802.11a |
| Channels | Low |
| Signal | 5.2GHz (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 5180.000000 |
| **Relative permitivity (real part)** | 35.954333 |
| **Conductivity (S/m)** | 4.628501 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

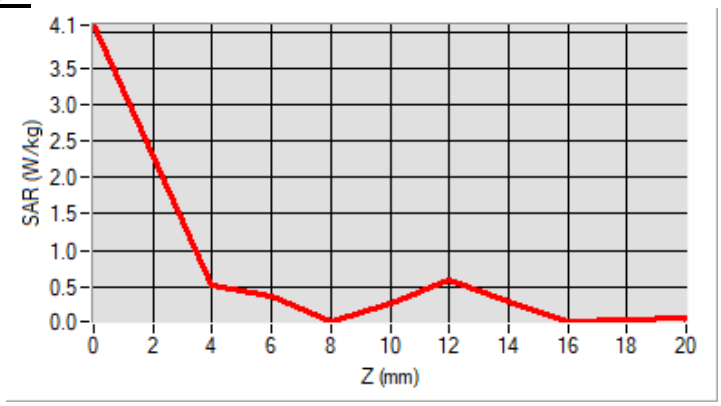


Maximum location: X=7.00, Y=24.00 ; SAR Peak: 2.07 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.225695 |
| SAR 1g (W/Kg) | 0.434020 |
| Variation (%) | 0.400002 |

## E. Z Axis Scan



# SAR Measurement at CUSTOM (5.3GHz_802.11a) (Tilt, Left)

Date of measurement: 23/3/2024

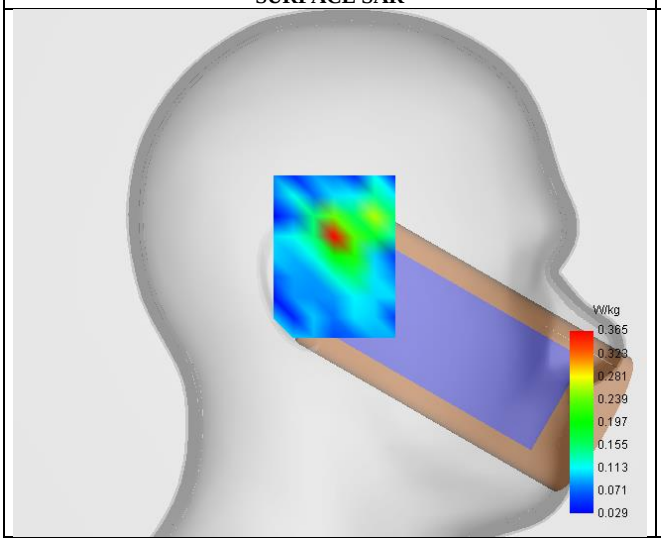
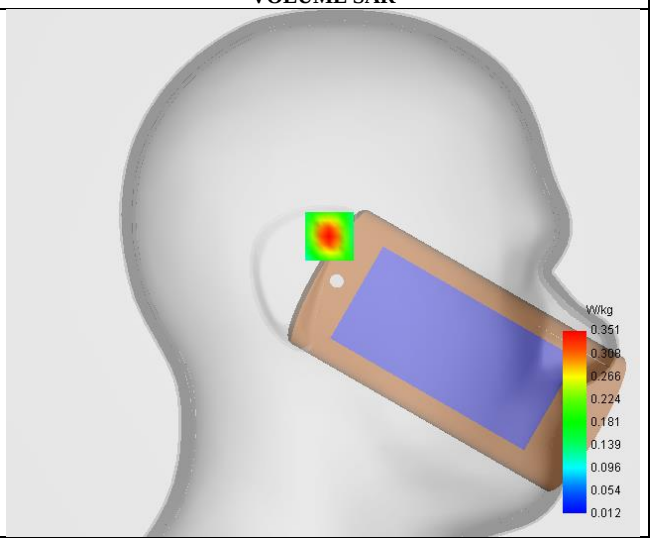
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423E-PGO-413 |
| ConvF | 1.42 |
| Area Scan | dx=10mm dy=10mm |
| Zoom Scan | 7x7x12,dx=4mm dy=4mm dz=2mm,Complete |
| Phantom | Left head |
| Device Position | Tilt |
| Band | 5.3GHz/802.11a |
| Channels | Low |
| Signal | 5.3GHz (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 5260.000000 |
| **Relative permitivity (real part)** | 35.862541 |
| **Conductivity (S/m)** | 4.710408 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

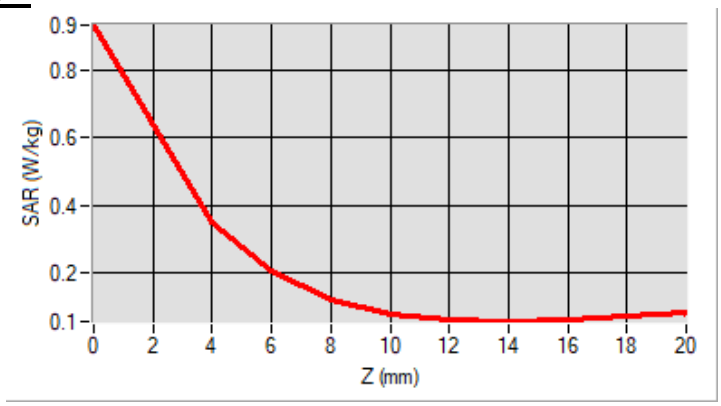


Maximum location: X=-3.00, Y=18.00 ; SAR Peak: 0.93 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.155538 |
| SAR 1g (W/Kg) | 0.343029 |
| Variation (%) | -0.360000 |

## E. Z Axis Scan



# SAR Measurement at CUSTOM (5.6GHz_802.11a) (Tilt, Left)

Date of measurement: 26/3/2024

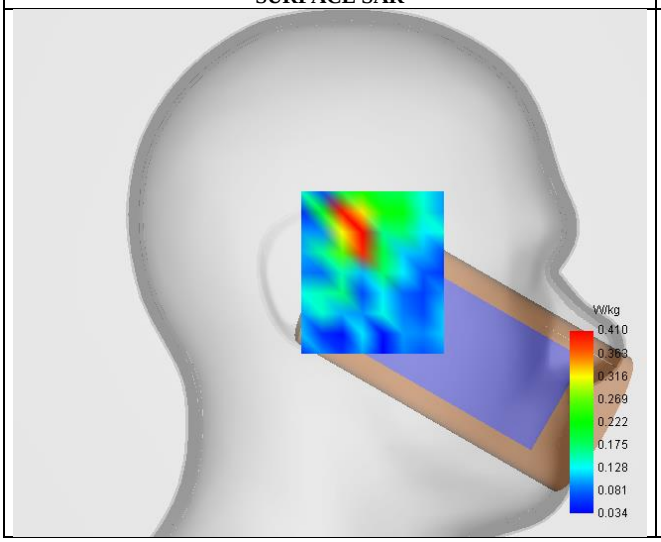
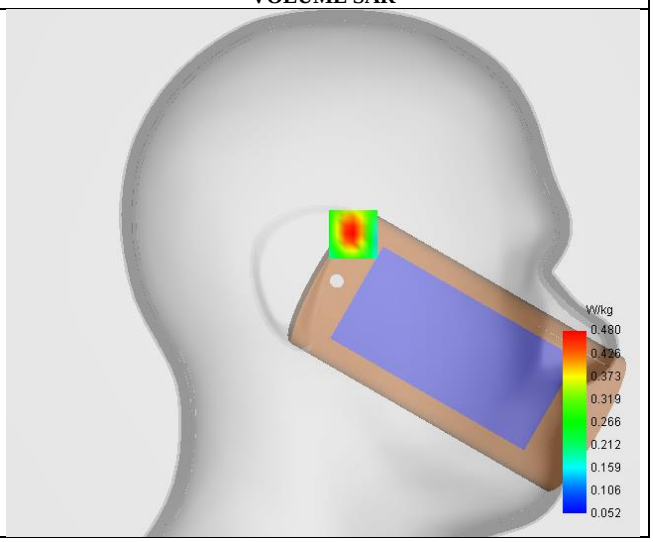
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 1.26 |
| Area Scan | dx=10mm dy=10mm |
| Zoom Scan | 7x7x12,dx=4mm dy=4mm dz=2mm,Complete |
| Phantom | Left head |
| Device Position | Tilt |
| Band | 5.6GHz_802.11a |
| Channels | Middle |
| Signal | 5.6GHz (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 5600.000000 |
| **Relative permitivity (real part)** | 35.474119 |
| **Conductivity (S/m)** | 5.058533 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

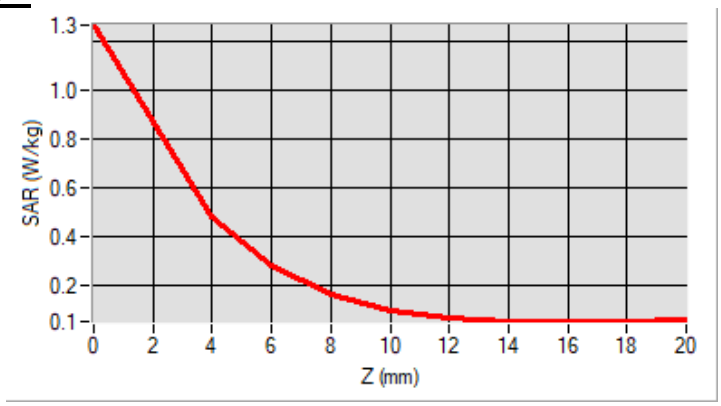


Maximum location: X=-15.00, Y=19.00 ; SAR Peak: 1.27 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.210148 |
| SAR 1g (W/Kg) | 0.476746 |
| Variation (%) | 0.850000 |

## E. Z Axis Scan



# SAR Measurement at CUSTOM (5.8GHz_802.11a) (Tilt, Left)

Date of measurement: 29/3/2024

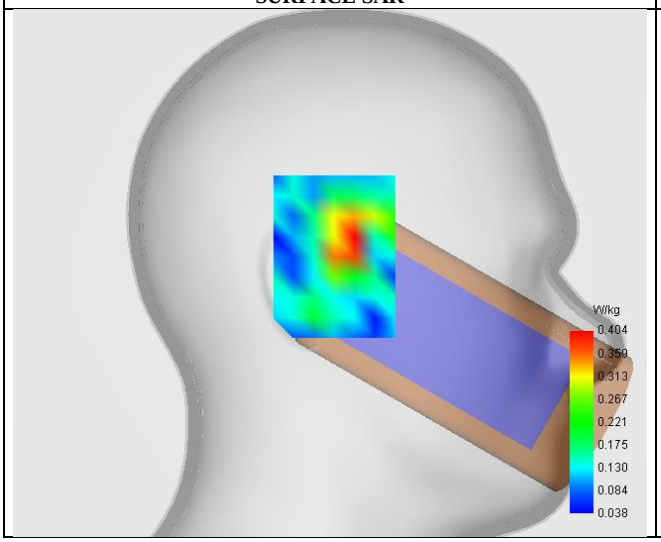
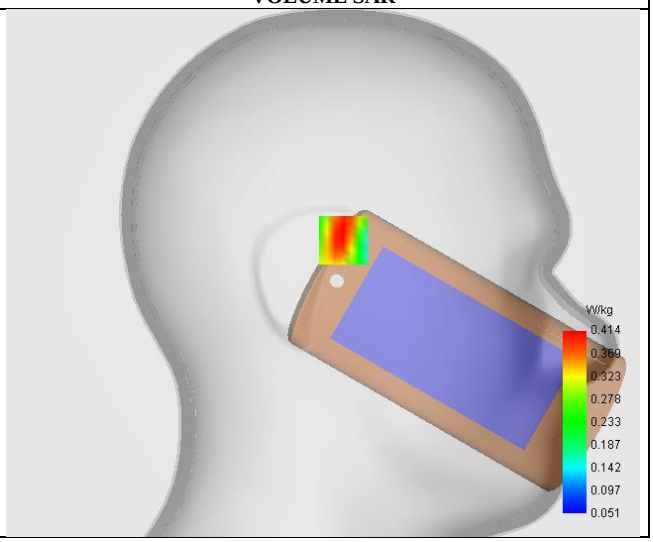
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 1.18 |
| Area Scan | dx=10mm dy=10mm |
| Zoom Scan | 7x7x12,dx=4mm dy=4mm dz=2mm,Complete |
| Phantom | Left head |
| Device Position | Tilt |
| Band | 5.8GHz_802.11a |
| Channels | Low |
| Signal | 5.8GHz (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 5745.000000 |
| **Relative permitivity (real part)** | 35.308250 |
| **Conductivity (S/m)** | 5.203842 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

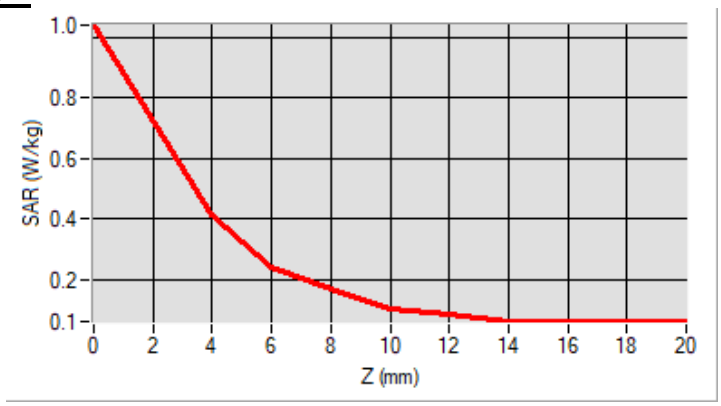


Maximum location: X=-10.00, Y=16.00 ; SAR Peak: 0.99 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.198868 |
| SAR 1g (W/Kg) | 0.414491 |
| Variation (%) | 1.150000 |

## E. Z Axis Scan



# SAR Measurement at Bluetooth (Tilt, Left)

Date of measurement: 20/3/2024

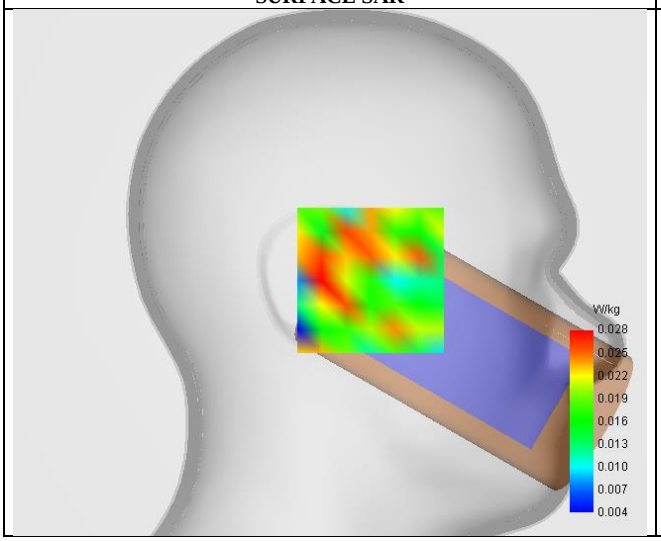
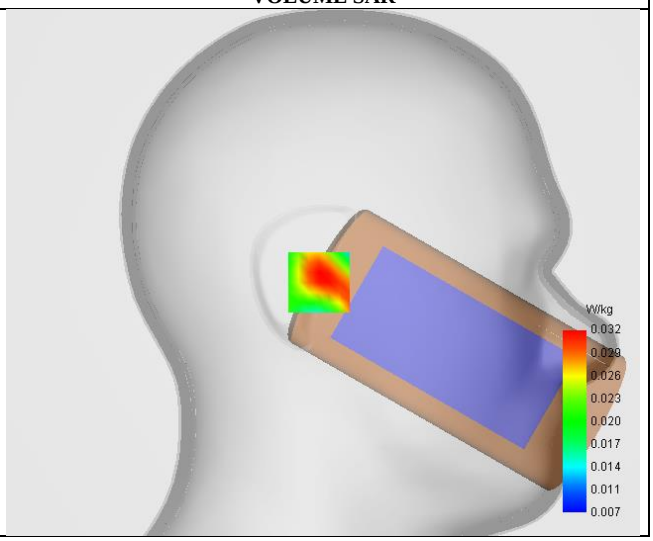
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.39 |
| Area Scan | dx=12mm dy=12mm |
| Zoom Scan | 7x7x7,dx=5mm dy=5mm dz=5mm,Complete |
| Phantom | Left head |
| Device Position | Tilt |
| Band | Bluetooth |
| Channels | Low |
| Signal | Bluetooth (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 2402.000000 |
| **Relative permitivity (real part)** | 38.730429 |
| **Conductivity (S/m)** | 1.725311 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



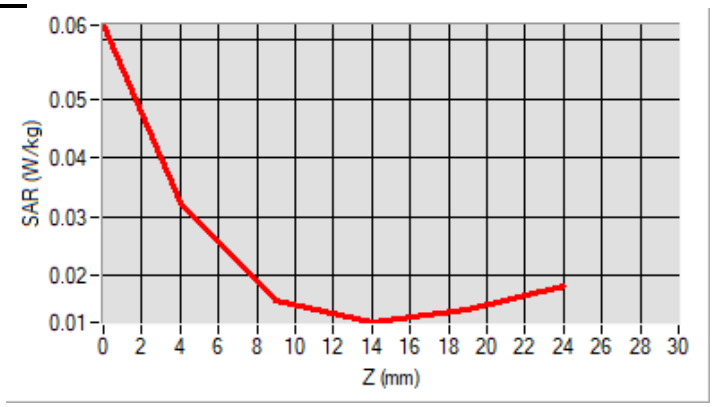


Maximum location: X=2.00, Y=-5.00 ; SAR Peak: 0.06 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.021135 |
| SAR 1g (W/Kg) | 0.031661 |
| Variation (%) | 0.340000 |

## E. Z Axis Scan



# SAR Measurement at CUSTOM (GPRS8504Txslots) (Body, Validation Plane)

Date of measurement: 15/3/2024

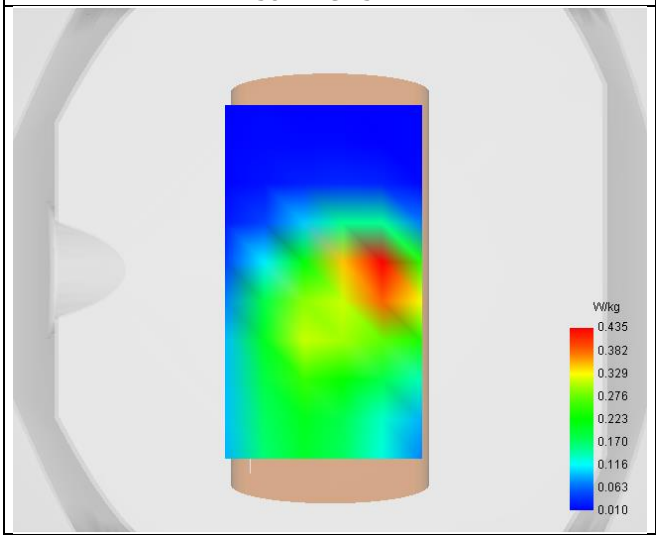
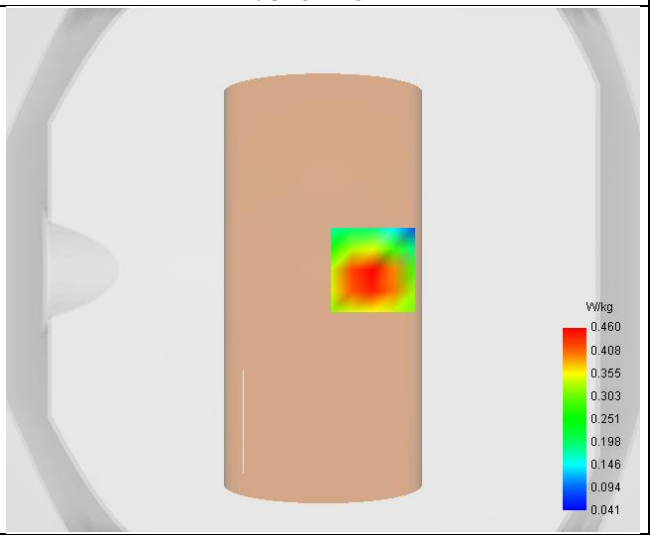
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.26 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | GPRS 850 |
| Channels | Middle |
| Signal | GSM (Crest factor: 2.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 836.599976 |
| **Relative permitivity (real part)** | 41.234032 |
| **Conductivity (S/m)** | 0.899432 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



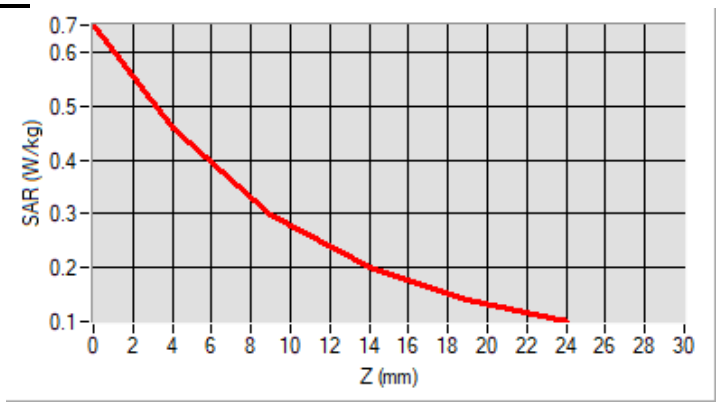


Maximum location: X=19.00, Y=0.00 ; SAR Peak: 0.67 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.278965 |
| SAR 1g (W/Kg) | 0.451274 |
| Variation (%) | 2.030000 |

## E. Z Axis Scan



# SAR Measurement at CUSTOM (GPRS19004Txslots) (Body, Validation Plane)

Date of measurement: 17/3/2024

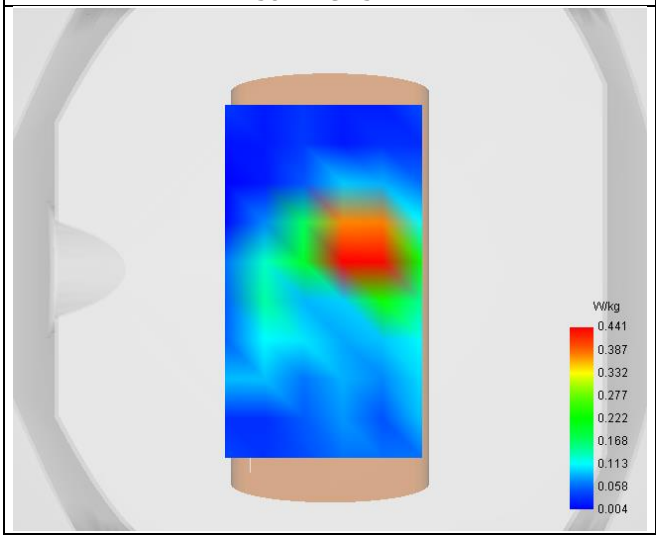
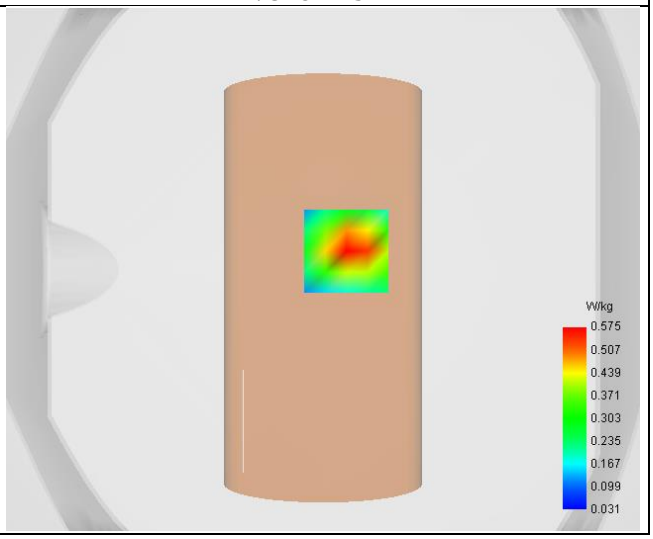
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.44 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | GPRS 1900 |
| Channels | Low |
| Signal | GSM (Crest factor: 2.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 1850.199951 |
| **Relative permitivity (real part)** | 39.441633 |
| **Conductivity (S/m)** | 1.376607 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



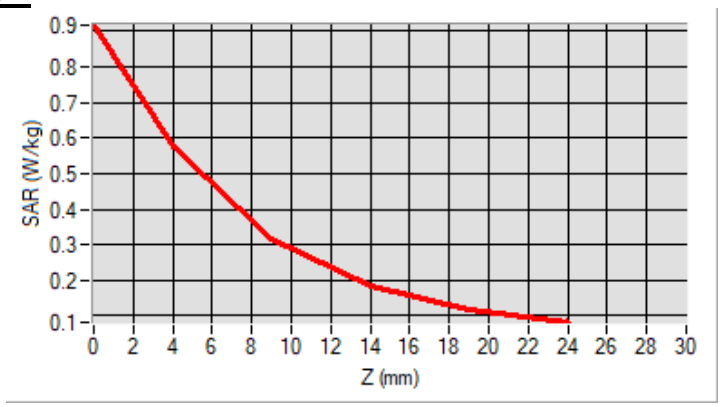


Maximum location: X=9.00, Y=7.00 ; SAR Peak: 0.93 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.291312 |
| SAR 1g (W/Kg) | 0.539371 |
| Variation (%) | 0.790000 |

## E. Z Axis Scan



# SAR Measurement at Band2_WCDMA1900 (Body, Validation Plane)

Date of measurement: 17/3/2024

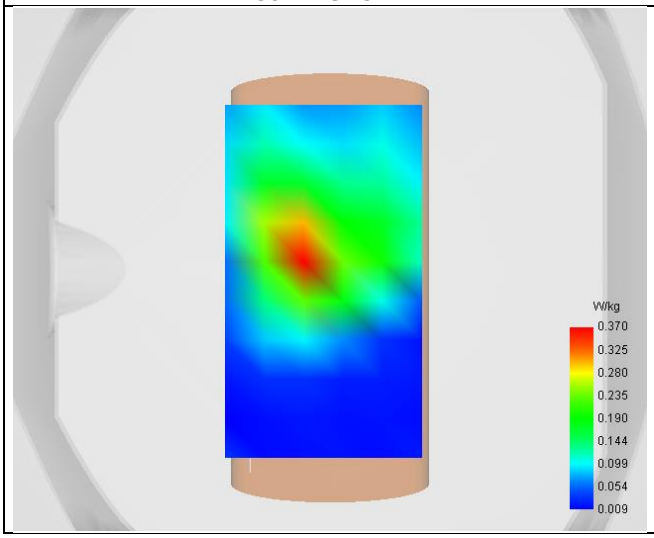
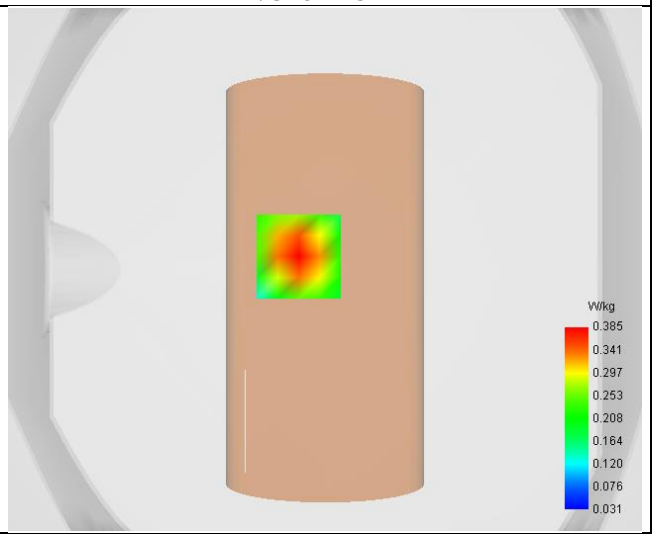
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.44 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | Band2_WCDMA1900 |
| Channels | Middle |
| Signal | WCDMA (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 1880.000000 |
| **Relative permitivity (real part)** | 39.441600 |
| **Conductivity (S/m)** | 1.376218 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

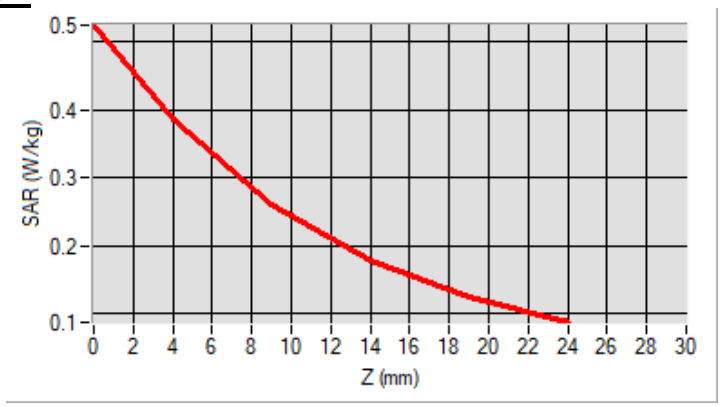


Maximum location: X=-10.00, Y=5.00 ; SAR Peak: 0.53 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.227319 |
| SAR 1g (W/Kg) | 0.362552 |
| Variation (%) | 2.160000 |

## E. Z Axis Scan



# SAR Measurement at CUSTOM (WCDMA_1700) (Body, Validation Plane)

Date of measurement: 17/3/2024

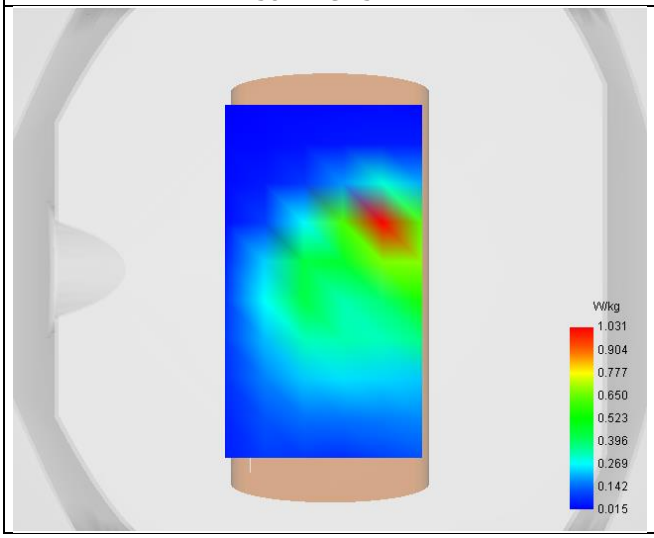
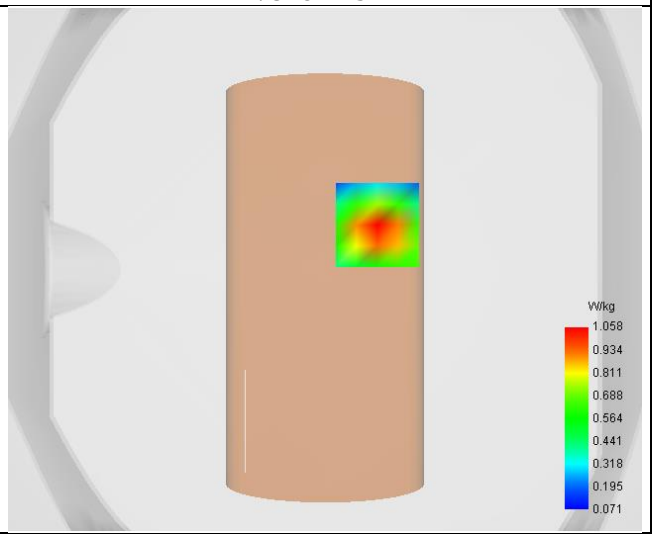
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.52 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | WCDMA 1700 |
| Channels | Middle |
| Signal | WCDMA (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 1732.599976 |
| **Relative permitivity (real part)** | 39.548941 |
| **Conductivity (S/m)** | 1.338740 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



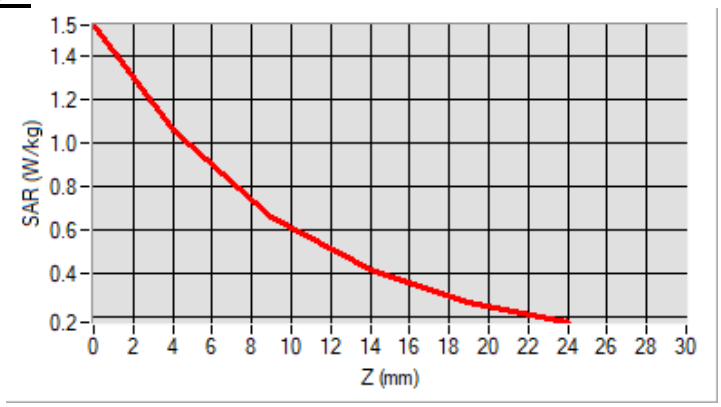


Maximum location: X=20.00, Y=17.00 ; SAR Peak: 1.30 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.471567 |
| SAR 1g (W/Kg) | 0.820721 |
| Variation (%) | -1.890000 |

## E. Z Axis Scan



# SAR Measurement at Band5_WCDMA850 (Body, Validation Plane)

Date of measurement: 15/3/2024

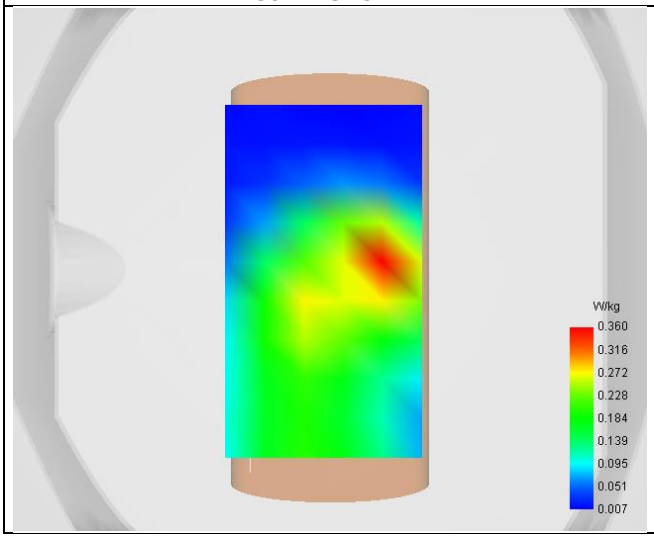
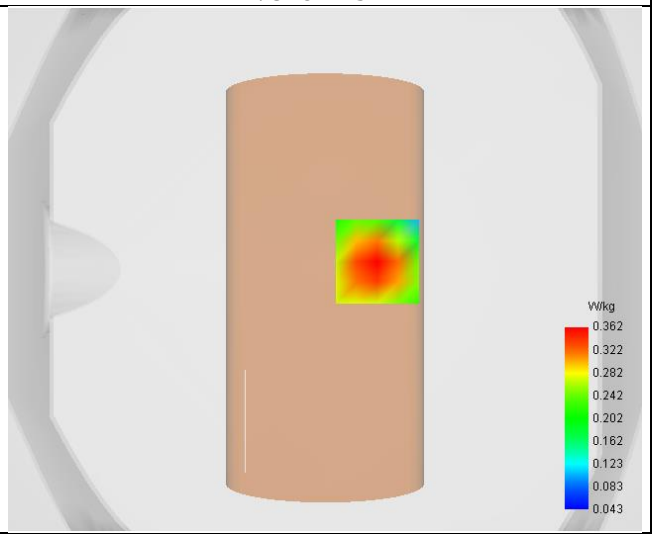
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.42 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | Band5_WCDMA850 |
| Channels | Low |
| Signal | WCDMA (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 826.400000 |
| **Relative permitivity (real part)** | 41.274036 |
| **Conductivity (S/m)** | 0.895436 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



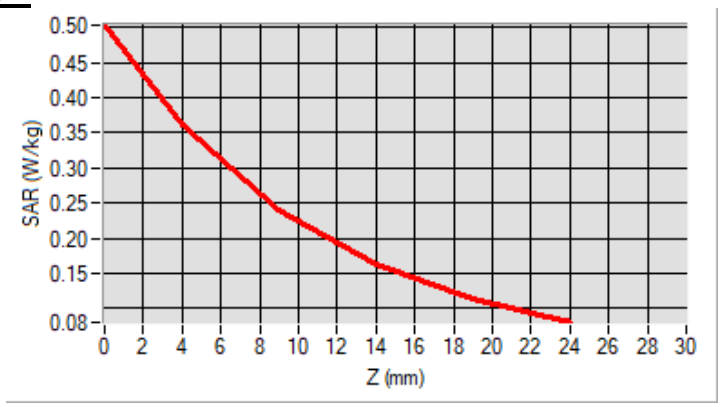


Maximum location: X=20.00, Y=3.00 ; SAR Peak: 0.51 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.218962 |
| SAR 1g (W/Kg) | 0.343313 |
| Variation (%) | -1.660000 |

## E. Z Axis Scan



# SAR Measurement at LTE band 2 (Body, Validation Plane)

Date of measurement: 17/3/2024

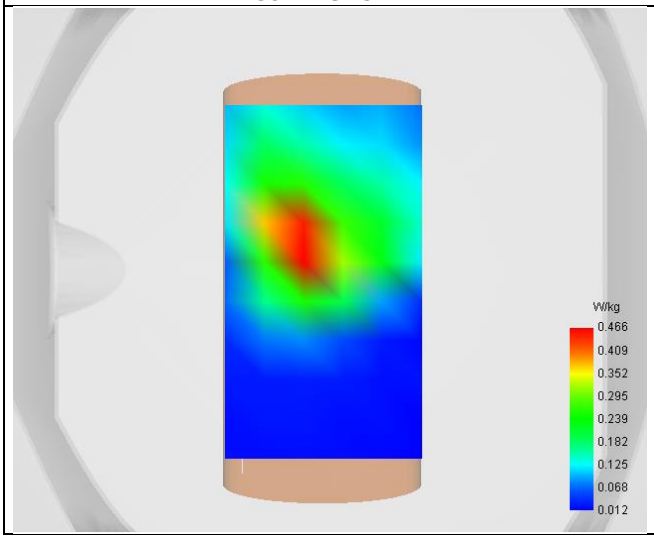
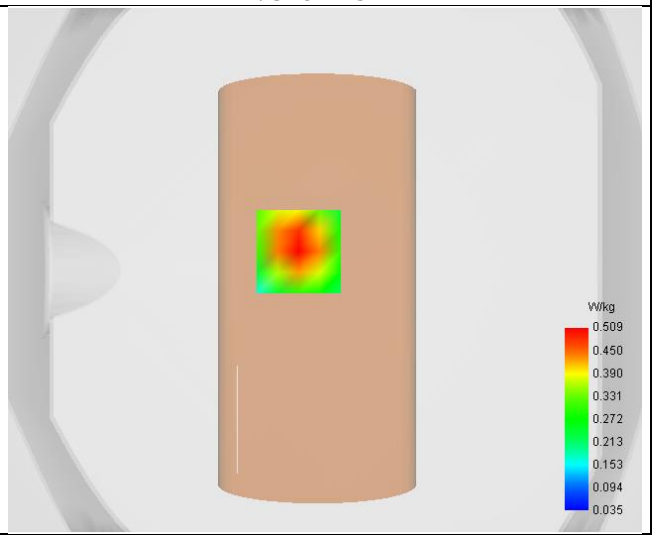
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.44 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | LTE band 2 |
| Channels | High |
| Signal | LTE (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 1900.000000 |
| **Relative permitivity (real part)** | 39.441618 |
| **Conductivity (S/m)** | 1.376000 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



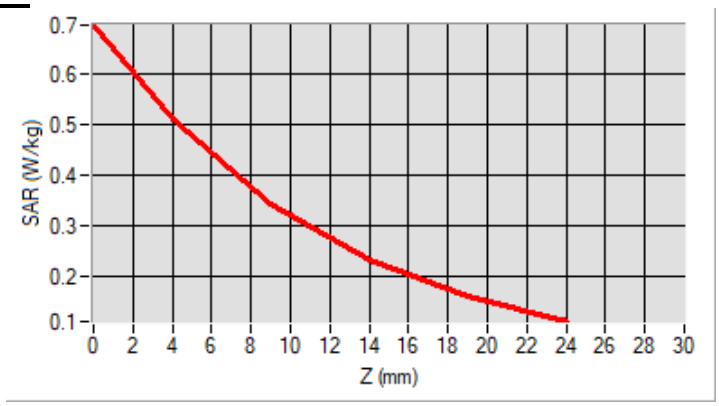


Maximum location: X=-10.00, Y=7.00 ; SAR Peak: 0.70 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.301881 |
| SAR 1g (W/Kg) | 0.480722 |
| Variation (%) | -0.870000 |

## E. Z Axis Scan



# SAR Measurement at CUSTOM (LTE_Band_4) (Body, Validation Plane)

Date of measurement: 17/3/2024

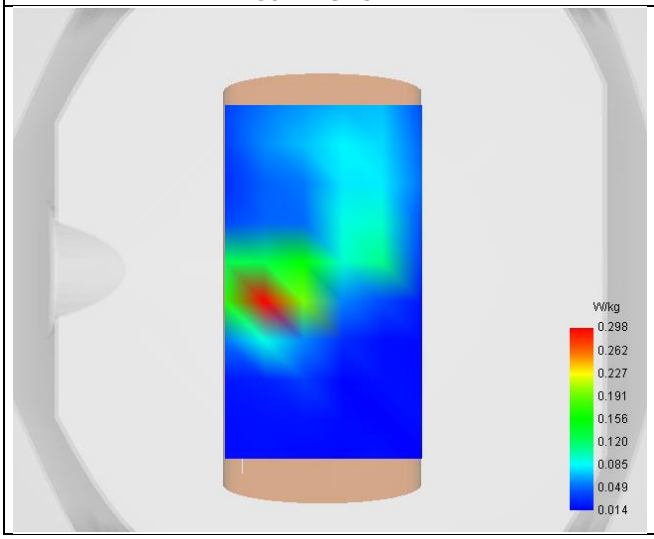
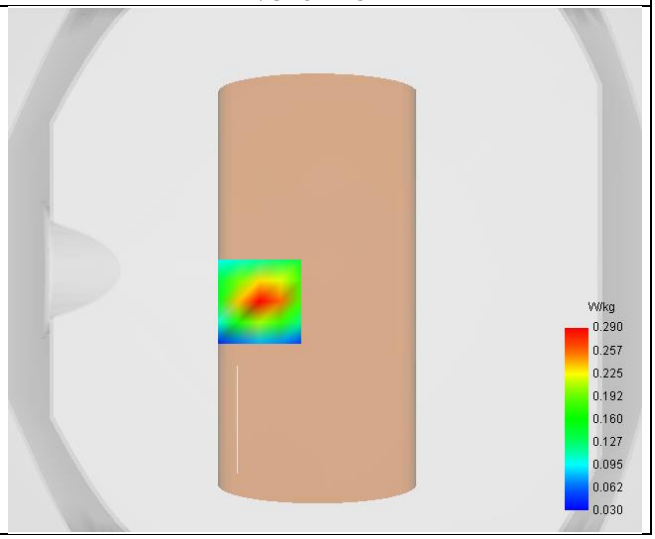
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.52 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | LTE Band 4 |
| Channels | High |
| Signal | LTE (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 1745.000000 |
| **Relative permitivity (real part)** | 39.528413 |
| **Conductivity (S/m)** | 1.346100 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

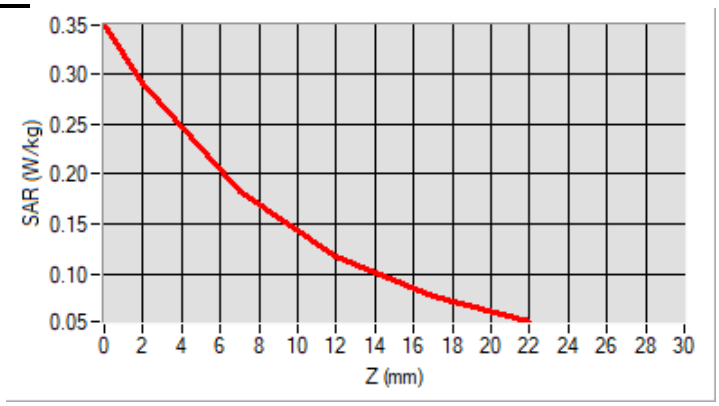


Maximum location: X=-25.00, Y=-12.00 ; SAR Peak: 0.35 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.128933 |
| SAR 1g (W/Kg) | 0.223168 |
| Variation (%) | 1.320000 |

## E. Z Axis Scan



# SAR Measurement at LTE band 5 (Body, Validation Plane)

Date of measurement: 15/3/2024

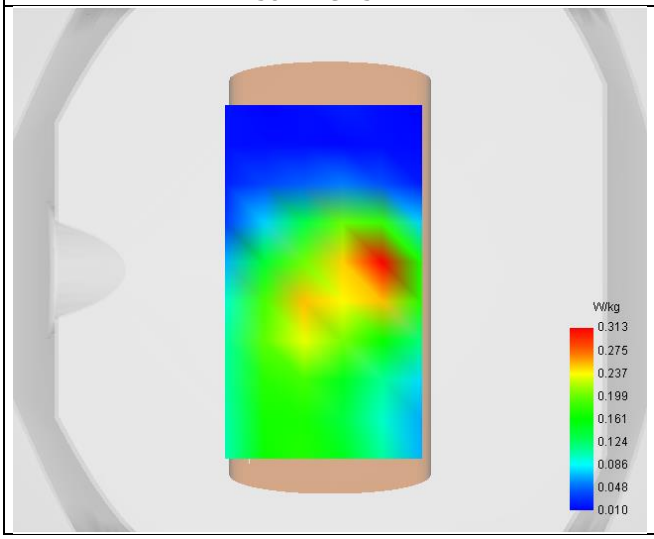
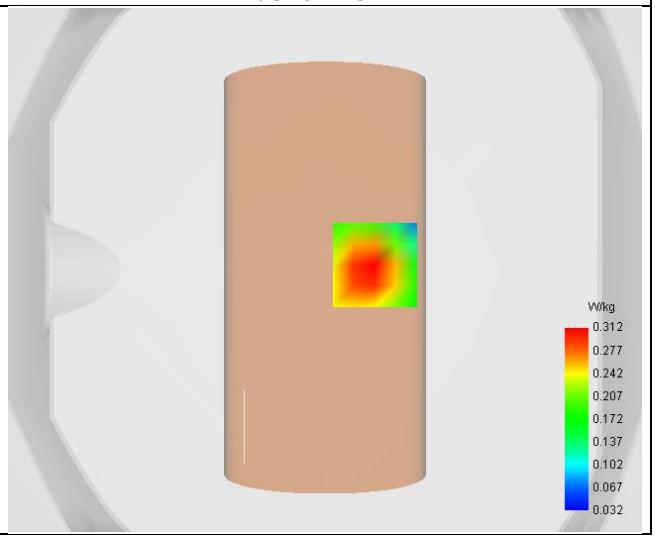
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.42 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | LTE band 5 |
| Channels | Middle |
| Signal | LTE (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 836.500000 |
| **Relative permitivity (real part)** | 41.234032 |
| **Conductivity (S/m)** | 0.899432 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



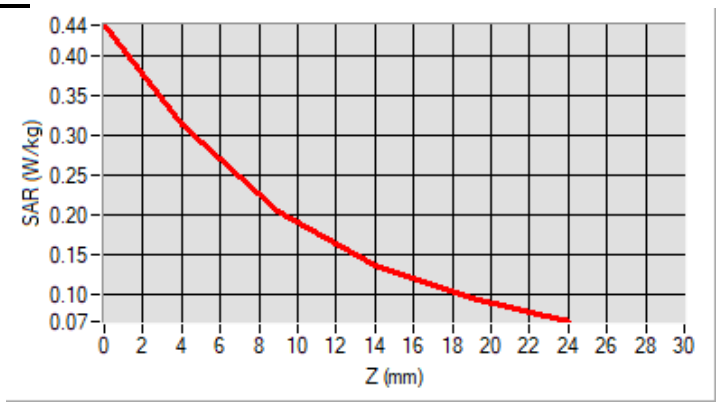


Maximum location: X=19.00, Y=2.00 ; SAR Peak: 0.44 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.188612 |
| SAR 1g (W/Kg) | 0.298428 |
| Variation (%) | -0.030000 |

## E. Z Axis Scan



# SAR Measurement at LTE band 7 (Body, Validation Plane)

Date of measurement: 20/3/2024

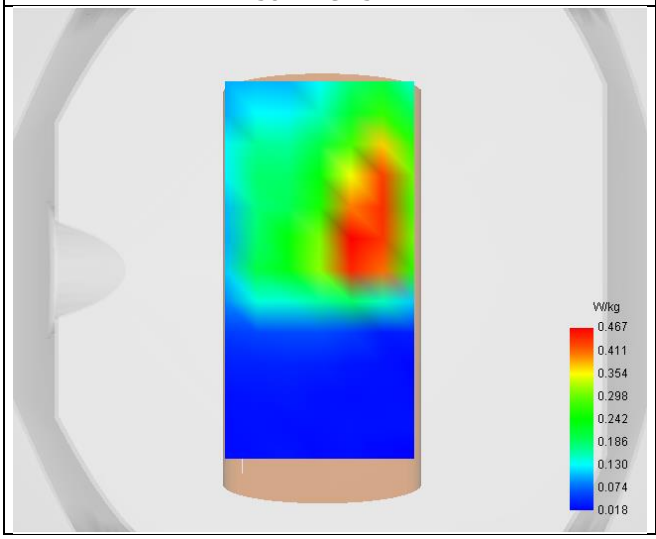
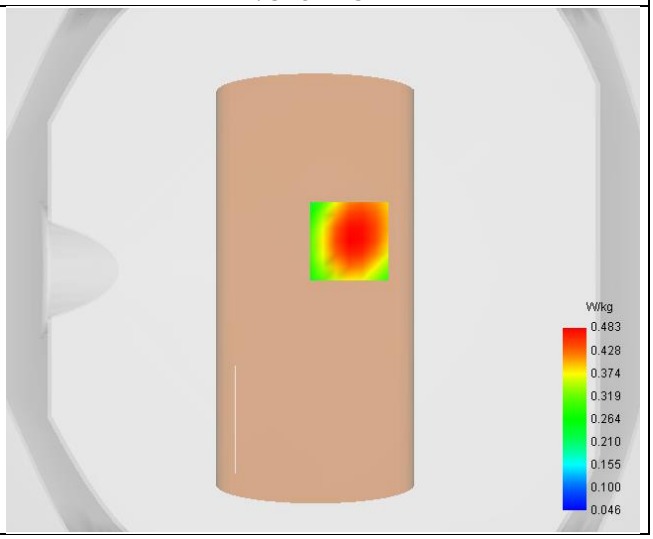
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.17 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 7x7x7,dx=5mm dy=5mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | LTE band 7 |
| Channels | Low |
| Signal | LTE (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 2510.000000 |
| **Relative permitivity (real part)** | 38.565217 |
| **Conductivity (S/m)** | 1.833729 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

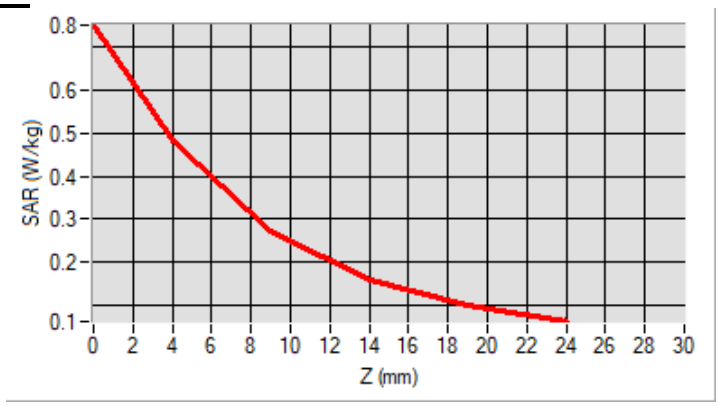


Maximum location: X=10.00, Y=11.00 ; SAR Peak: 0.76 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.271809 |
| SAR 1g (W/Kg) | 0.460858 |
| Variation (%) | -1.610000 |

## E. Z Axis Scan



# SAR Measurement at LTE band 41 (Body, Validation Plane)

Date of measurement: 20/3/2024

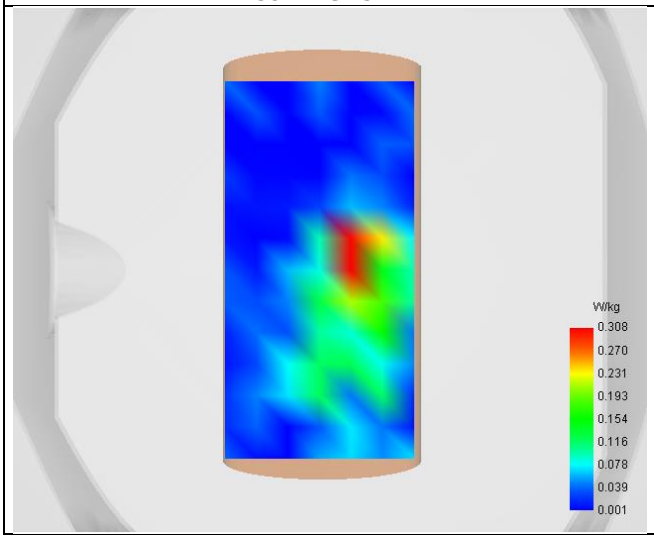
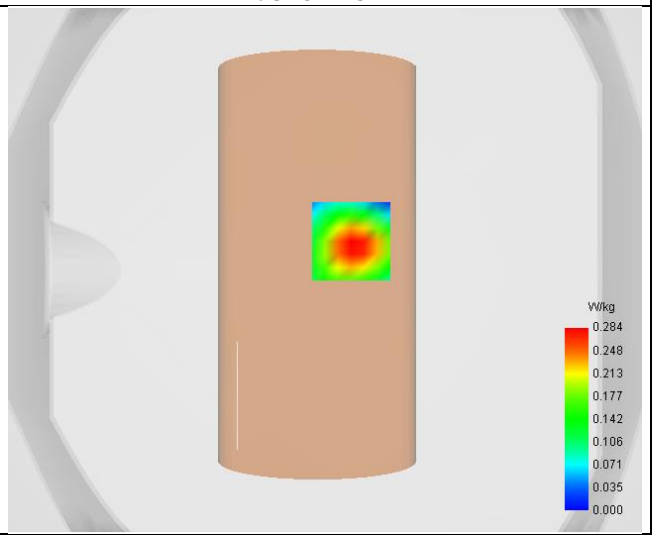
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.15 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 7x7x7,dx=5mm dy=5mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | LTE band 41 |
| Channels | High |
| Signal | LTE (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 2645.000000 |
| **Relative permitivity (real part)** | 38.393452 |
| **Conductivity (S/m)** | 1.994311 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



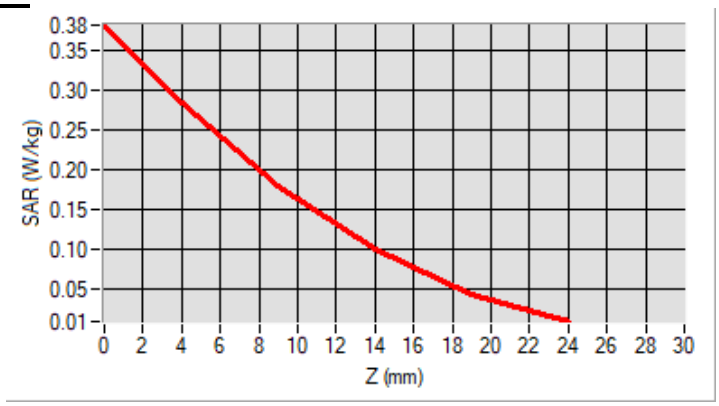


Maximum location: X=10.00, Y=11.00 ; SAR Peak: 0.38 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.134837 |
| SAR 1g (W/Kg) | 0.260410 |
| Variation (%) | -0.360000 |

## E. Z Axis Scan



# SAR Measurement at IEEE 802.11b ISM (Body, Validation Plane)

Date of measurement: 20/3/2024

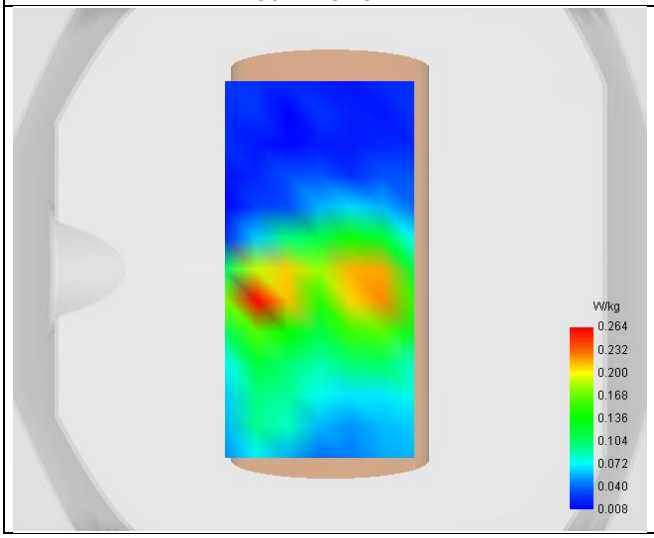
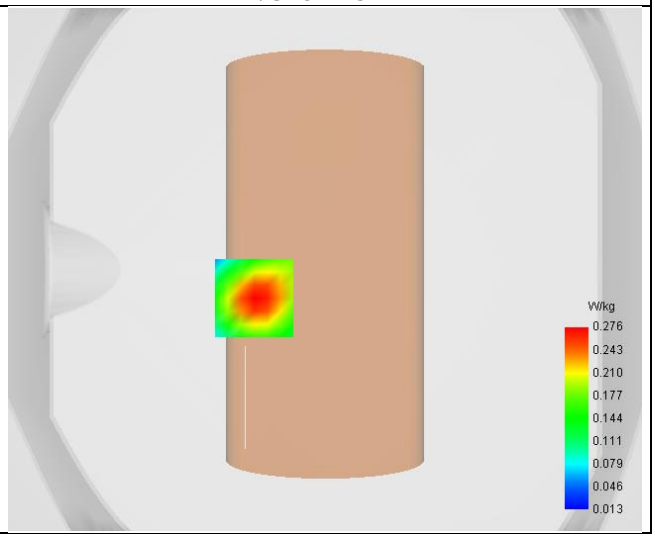
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.39 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 7x7x7,dx=5mm dy=5mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | IEEE 802.11b ISM |
| Channels | Low |
| Signal | IEEE802.b (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 2416.000000 |
| **Relative permitivity (real part)** | 38.702020 |
| **Conductivity (S/m)** | 1.739222 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



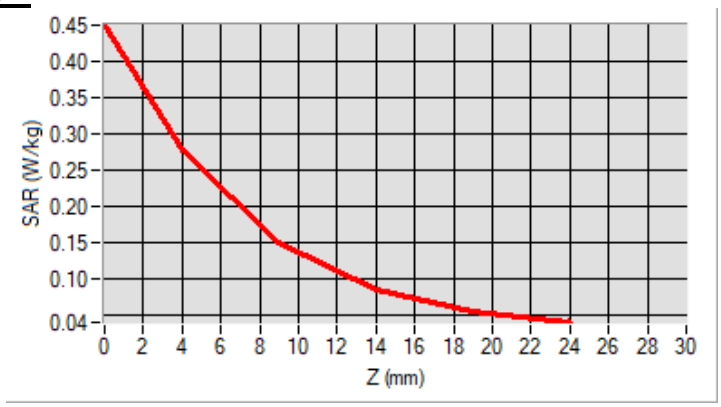


Maximum location: X=-27.00, Y=-11.00 ; SAR Peak: 0.45 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.140381 |
| SAR 1g (W/Kg) | 0.255660 |
| Variation (%) | 4.010000 |

## E. Z Axis Scan



# SAR Measurement at CUSTOM (5.2GHz_802.11a) (Body, Validation Plane)

Date of measurement: 23/3/2024

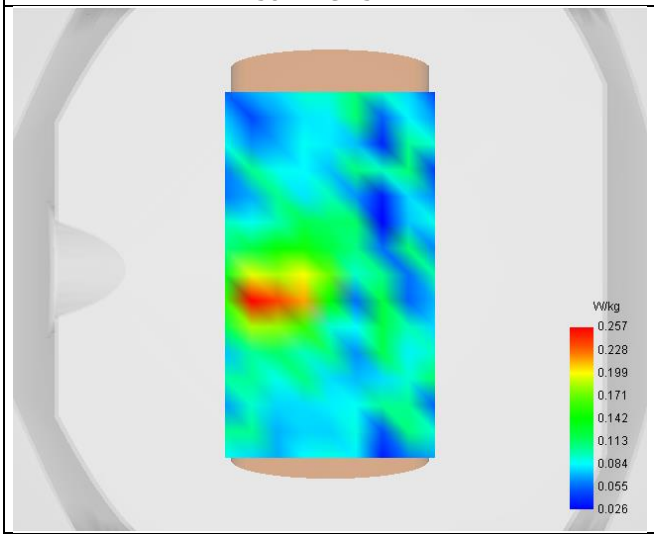
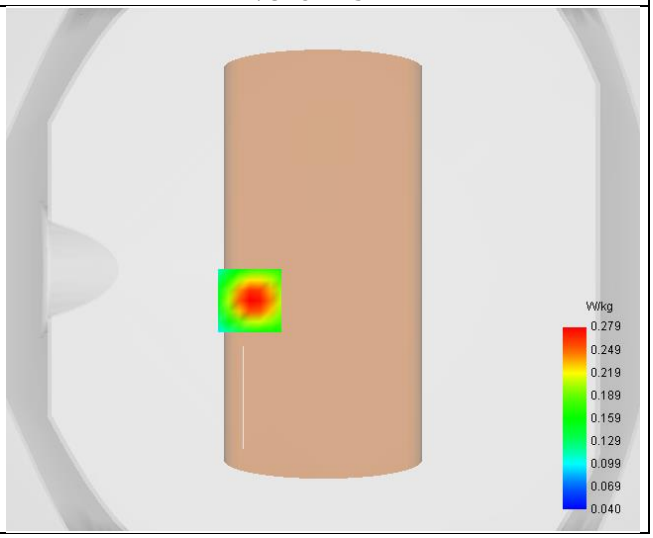
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 1.42 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 7x7x12,dx=4mm dy=4mm dz=2mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | 5.2GHz_802.11a |
| Channels | Low |
| Signal | 5.2GHz (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 5180.000000 |
| **Relative permitivity (real part)** | 35.954333 |
| **Conductivity (S/m)** | 4.628501 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



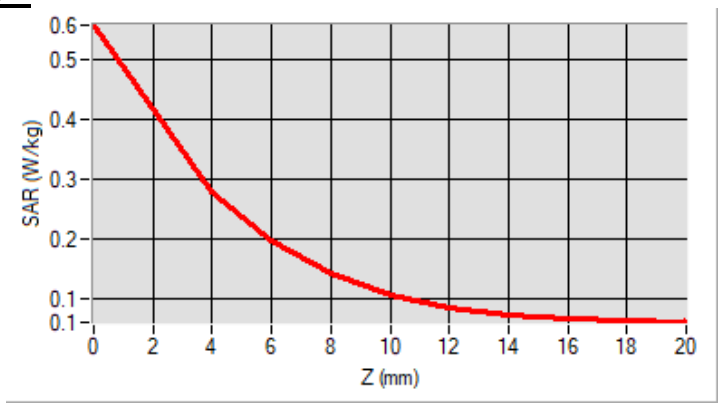


Maximum location: X=-28.00, Y=-12.00 ; SAR Peak: 0.41 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.116622 |
| SAR 1g (W/Kg) | 0.198634 |
| Variation (%) | 2.410000 |

## E. Z Axis Scan



# SAR Measurement at CUSTOM (5.3GHz_802.11a) (Body, Validation Plane)

Date of measurement: 23/3/2024

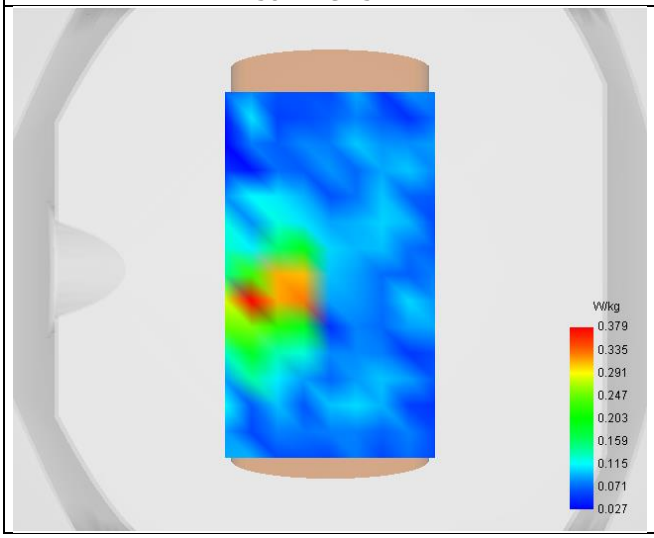
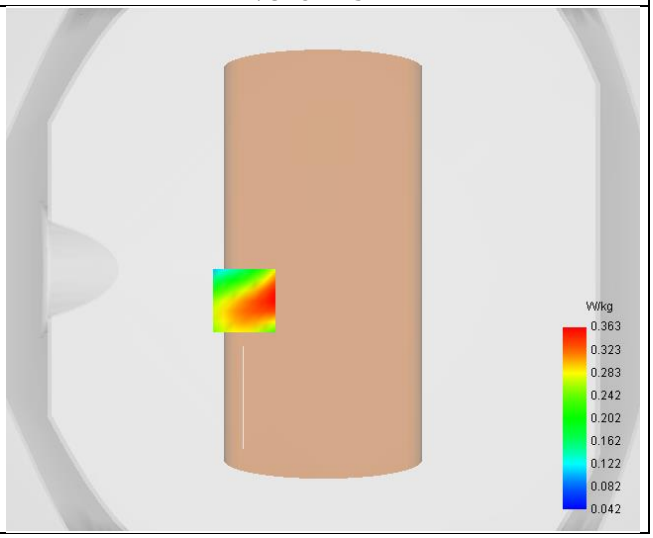
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 1.42 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 7x7x12,dx=4mm dy=4mm dz=2mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | 5.3GHz 802.11a |
| Channels | Low |
| Signal | 5.3GHz (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 5260.000000 |
| **Relative permitivity (real part)** | 35.862541 |
| **Conductivity (S/m)** | 4.710408 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



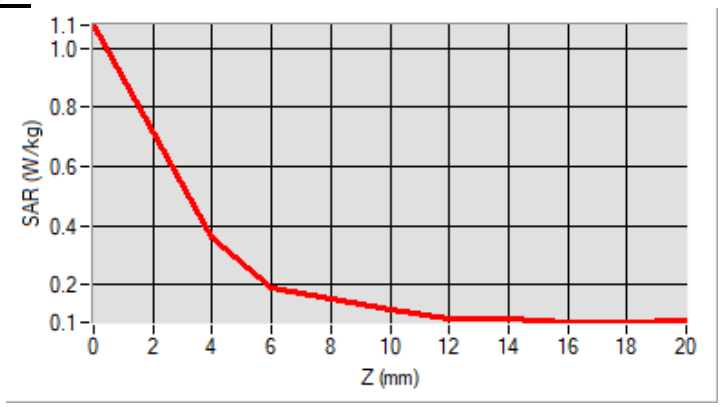


Maximum location: X=-30.00, Y=-12.00 ; SAR Peak: 0.57 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.133145 |
| SAR 1g (W/Kg) | 0.238993 |
| Variation (%) | -0.280000 |

## E. Z Axis Scan



# SAR Measurement at CUSTOM (5.6GHz_802.11a) (Body, Validation Plane)

Date of measurement: 26/3/2024

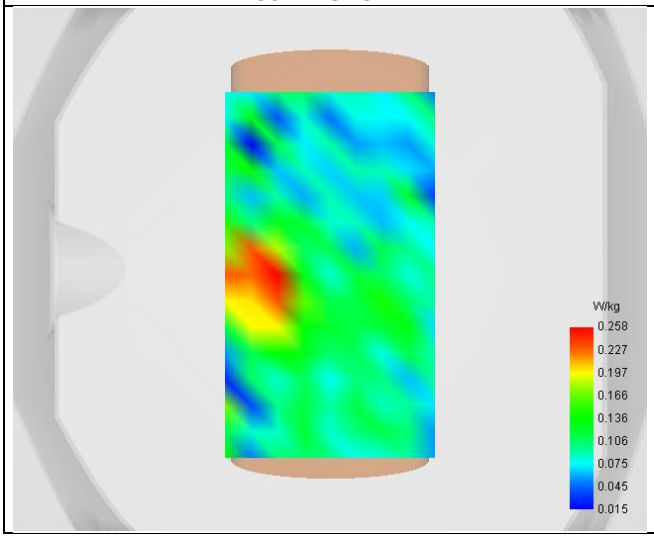
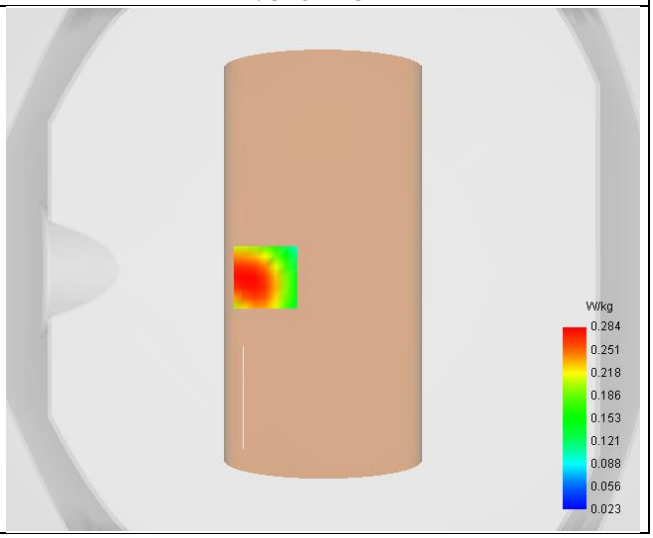
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 1.26 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 7x7x12,dx=4mm dy=4mm dz=2mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | 5.6GHz_802.11a |
| Channels | Middle |
| Signal | 5.6GHz (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 5600.000000 |
| **Relative permitivity (real part)** | 35.474119 |
| **Conductivity (S/m)** | 5.058533 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

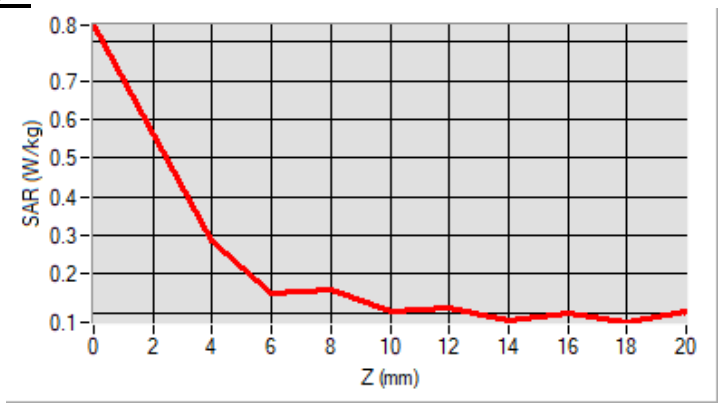


Maximum location: X=-22.00, Y=-3.00 ; SAR Peak: 0.45 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.126716 |
| SAR 1g (W/Kg) | 0.212475 |
| Variation (%) | 4.520000 |

## E. Z Axis Scan



# SAR Measurement at CUSTOM (5.8GHz_802.11a) (Body, Validation Plane)

Date of measurement: 29/3/2024

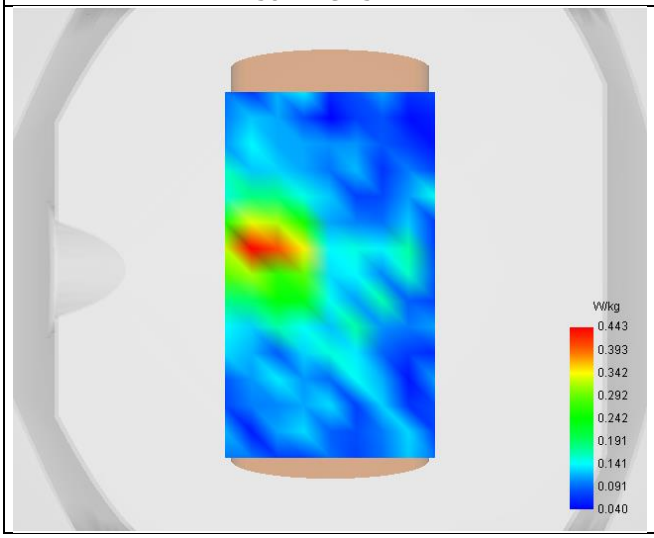
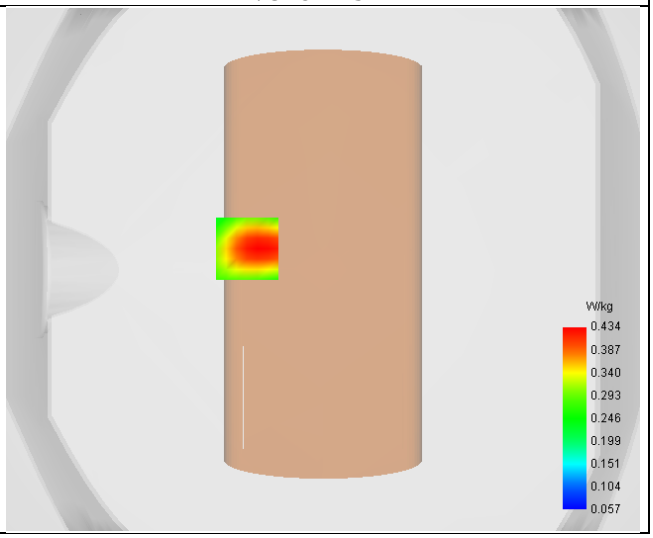
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 1.18 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 7x7x12,dx=4mm dy=4mm dz=2mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | 5.8GHz_802.11a |
| Channels | Low |
| Signal | 5.8GHz (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 5745.000000 |
| **Relative permitivity (real part)** | 35.308250 |
| **Conductivity (S/m)** | 5.203842 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

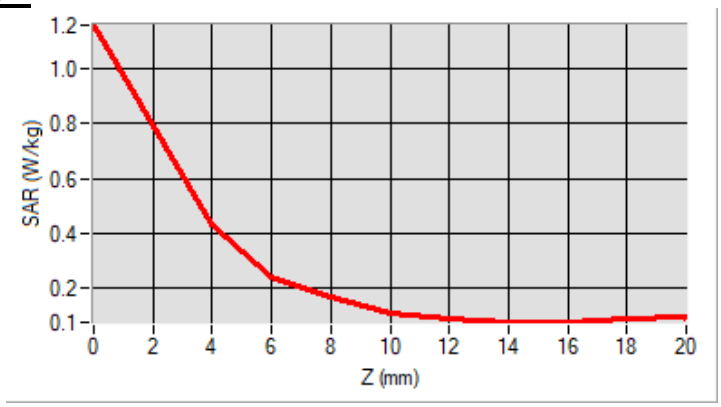


Maximum location: X=-29.00, Y=8.00 ; SAR Peak: 0.71 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.154939 |
| SAR 1g (W/Kg) | 0.282345 |
| Variation (%) | 0.790000 |

## E. Z Axis Scan



# SAR Measurement at Bluetooth (Body, Validation Plane)

Date of measurement: 20/3/2024

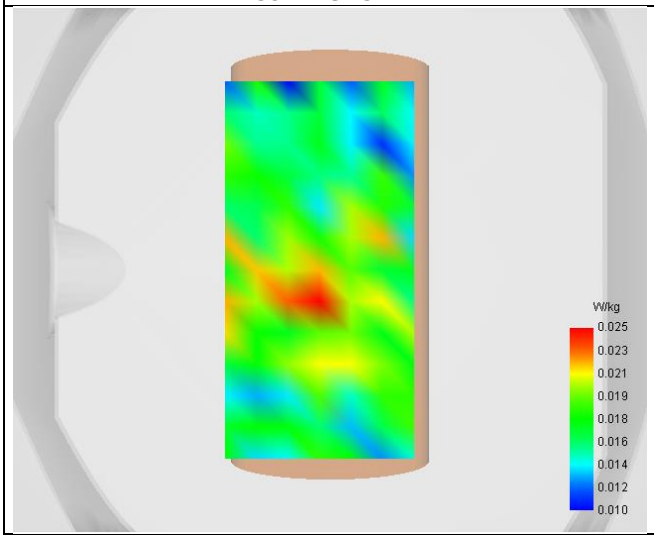
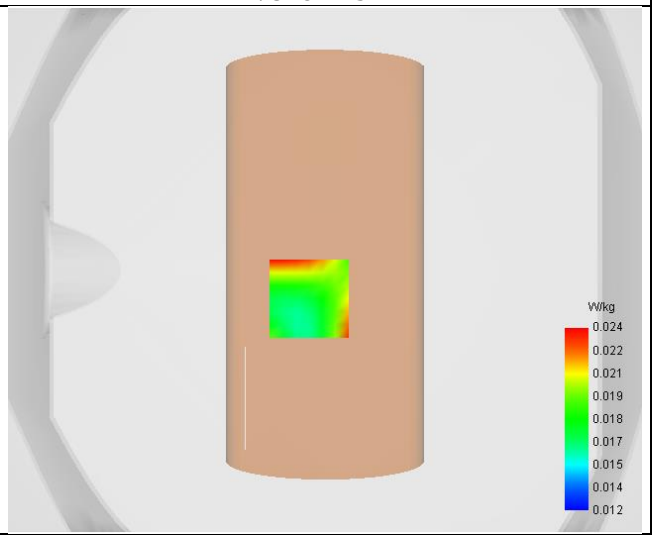
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.39 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 7x7x7,dx=5mm dy=5mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | Bluetooth |
| Channels | Low |
| Signal | Bluetooth (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 2402.000000 |
| **Relative permitivity (real part)** | 38.730429 |
| **Conductivity (S/m)** | 1.725311 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



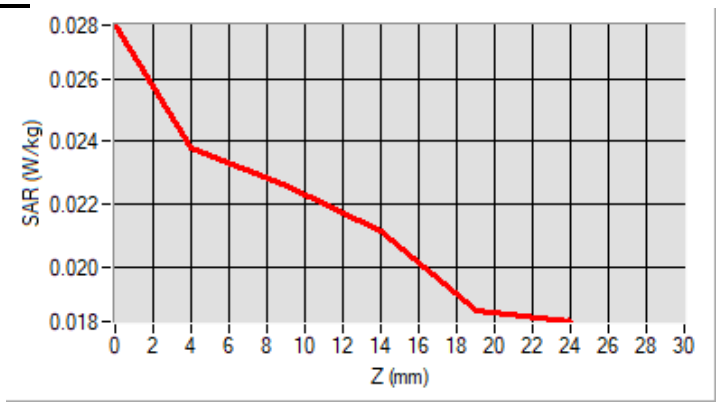


Maximum location: X=-6.00, Y=-11.00 ; SAR Peak: 0.03 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.018703 |
| SAR 1g (W/Kg) | 0.021266 |
| Variation (%) | 0.459999 |

## E. Z Axis Scan



# SAR Measurement at CUSTOM (GPRS19004Txslots) (Body, Validation Plane)

Date of measurement: 17/3/2024

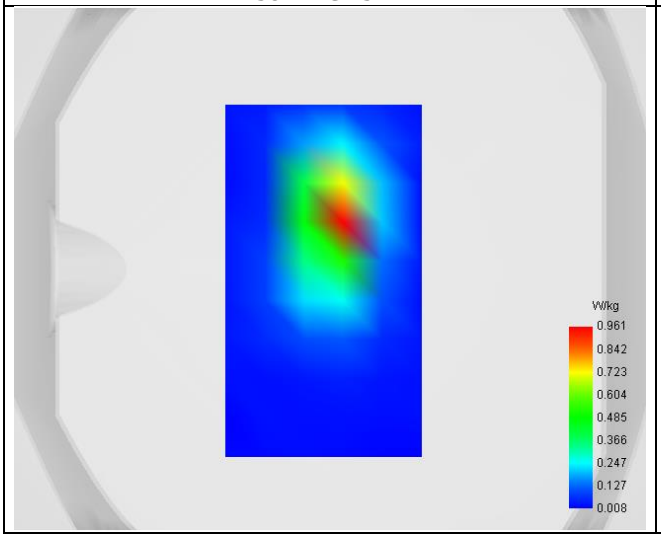
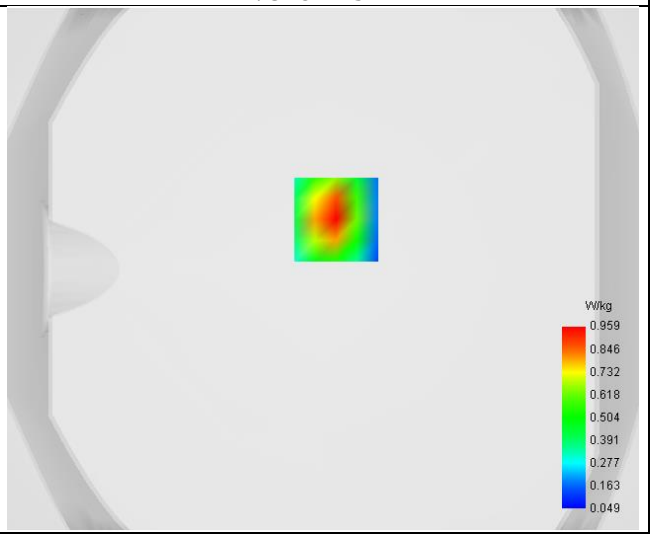
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.44 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | GPRS 1900 |
| Channels | Middle |
| Signal | GSM (Crest factor: 2.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 1880.000000 |
| **Relative permitivity (real part)** | 39.441600 |
| **Conductivity (S/m)** | 1.376218 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



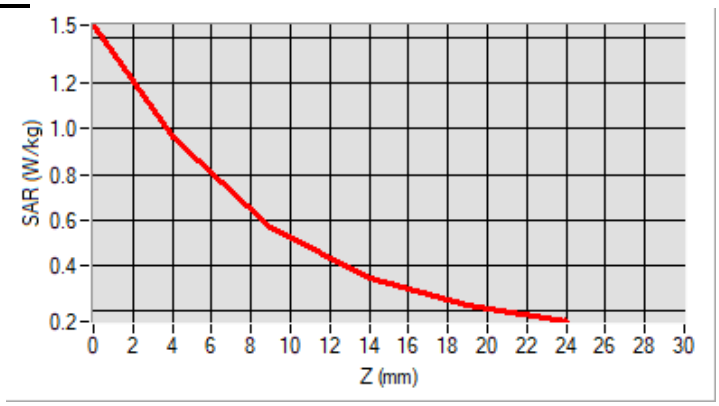


Maximum location: X=5.00, Y=19.00 ; SAR Peak: 1.47 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.484454 |
| SAR 1g (W/Kg) | 0.894316 |
| Variation (%) | -0.780000 |

## E. Z Axis Scan



# SAR Measurement at CUSTOM (WCDMA_1700) (Body, Validation Plane)

Date of measurement: 17/3/2024

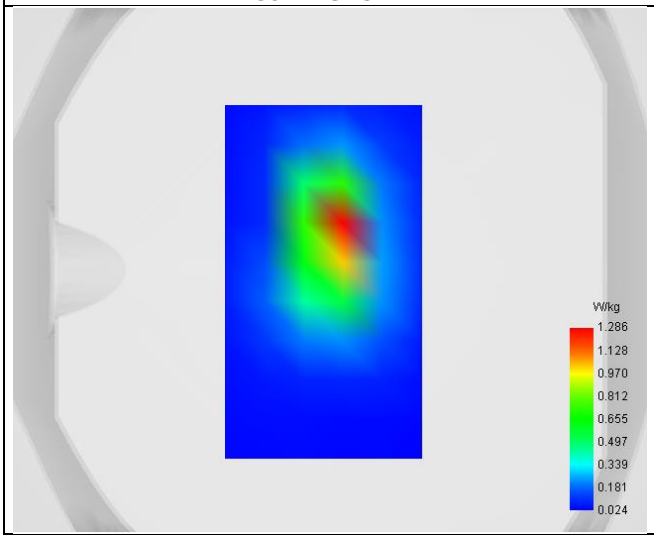
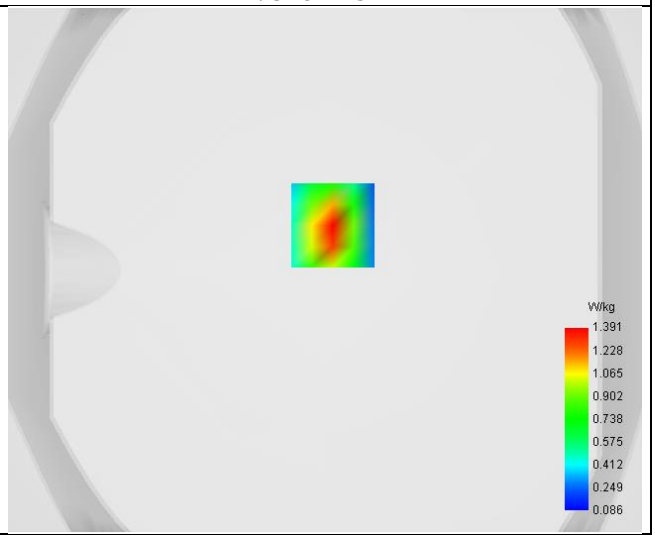
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.52 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | WCDMA 1700 |
| Channels | Middle |
| Signal | WCDMA (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 1732.599976 |
| **Relative permitivity (real part)** | 39.548941 |
| **Conductivity (S/m)** | 1.338740 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



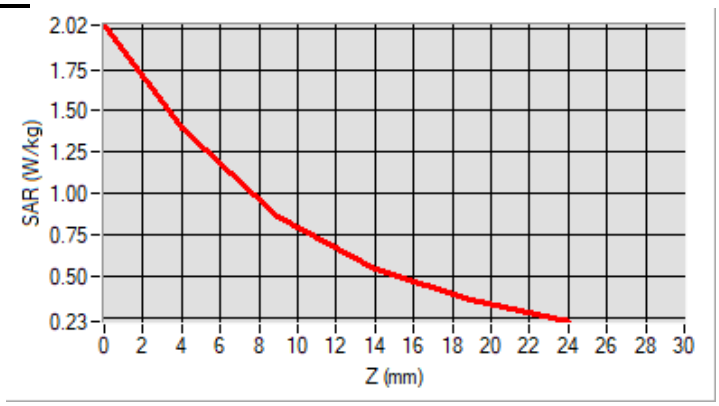


Maximum location: X=3.00, Y=17.00 ; SAR Peak: 1.70 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.595766 |
| SAR 1g (W/Kg) | 1.067628 |
| Variation (%) | -0.350000 |

## E. Z Axis Scan



# SAR Measurement at CUSTOM (LTE_Band_4) (Body, Validation Plane)

Date of measurement: 17/3/2024

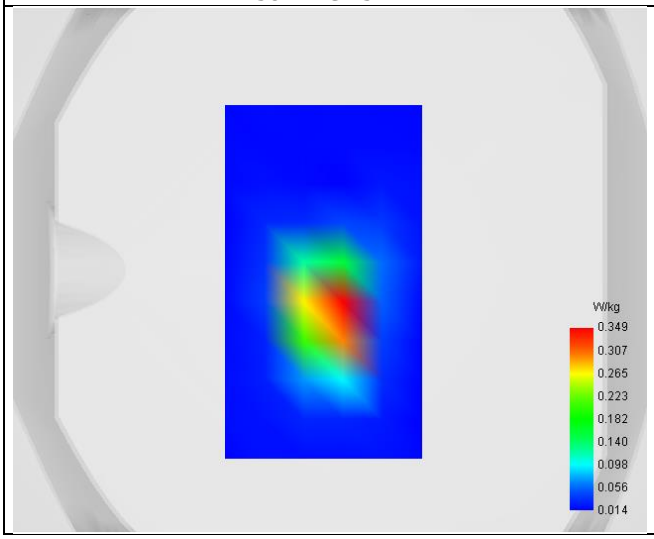
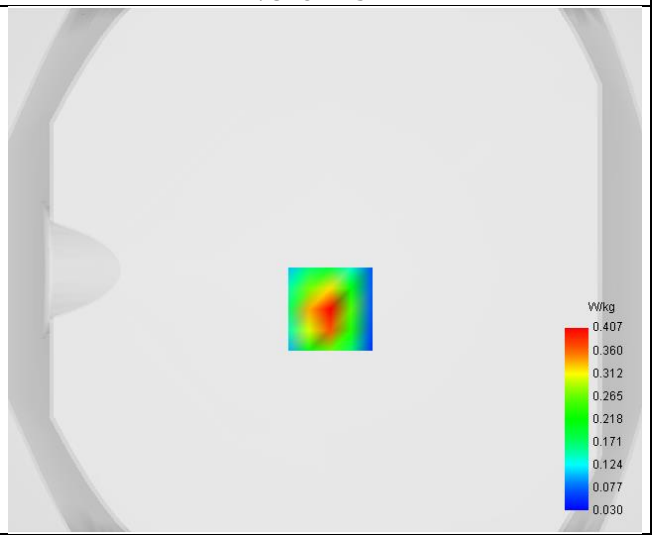
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.52 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | LTE Band 4 |
| Channels | High |
| Signal | LTE (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 1745.000000 |
| **Relative permitivity (real part)** | 39.528413 |
| **Conductivity (S/m)** | 1.346100 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

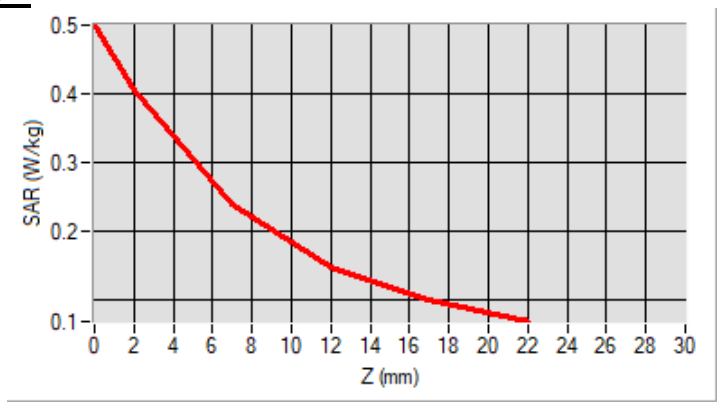


Maximum location: X=2.00, Y=-15.00 ; SAR Peak: 0.51 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.170996 |
| SAR 1g (W/Kg) | 0.308971 |
| Variation (%) | 0.870000 |

## E. Z Axis Scan



# SAR Measurement at LTE band 7 (Body, Validation Plane)

Date of measurement: 20/3/2024

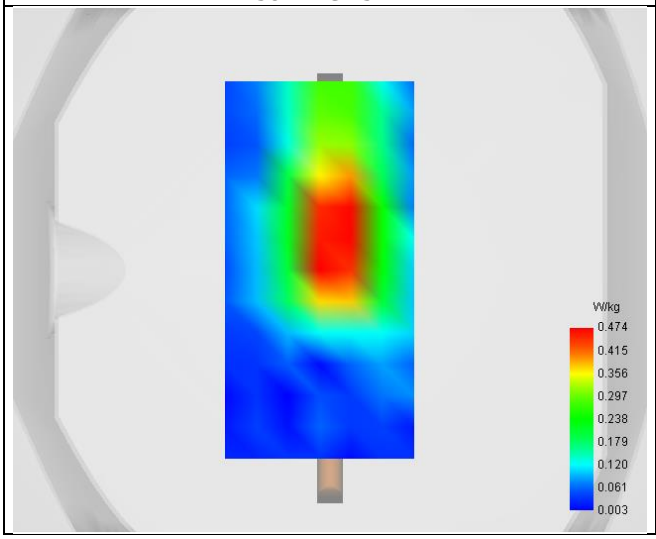
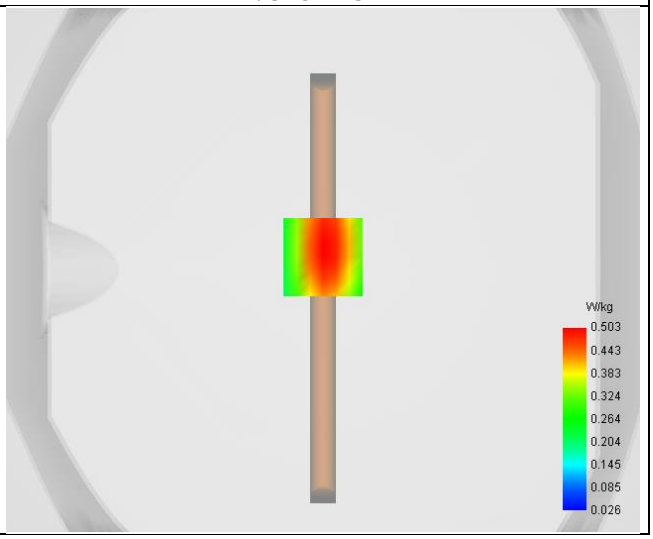
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.17 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 7x7x7,dx=5mm dy=5mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | LTE band 7 |
| Channels | Low |
| Signal | LTE (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 2510.000000 |
| **Relative permitivity (real part)** | 38.565217 |
| **Conductivity (S/m)** | 1.833729 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



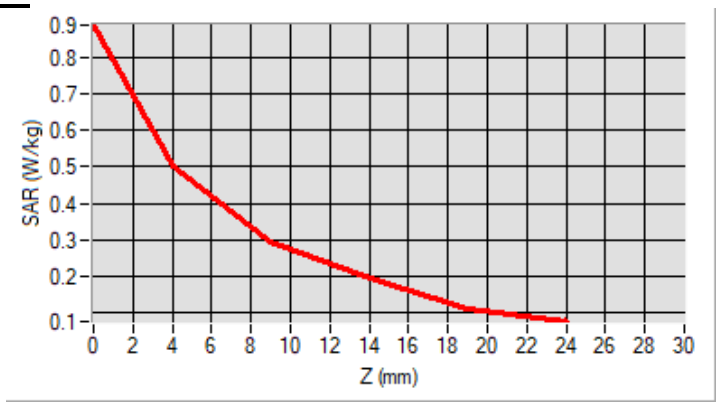


Maximum location: X=0.00, Y=5.00 ; SAR Peak: 0.73 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.281633 |
| SAR 1g (W/Kg) | 0.473673 |
| Variation (%) | -0.930000 |

## E. Z Axis Scan



# SAR Measurement at LTE band 41 (Body, Validation Plane)

Date of measurement: 20/3/2024

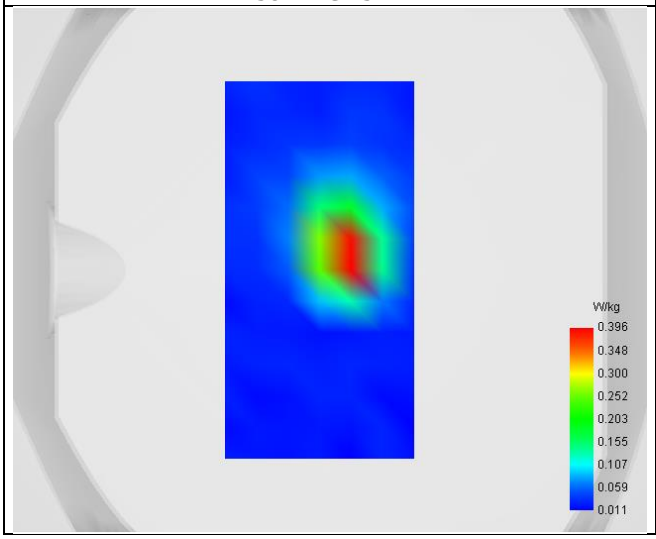
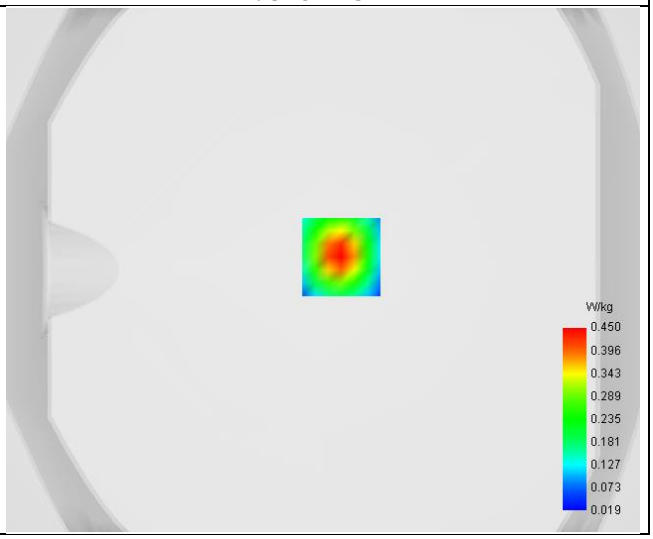
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.17 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 7x7x7,dx=5mm dy=5mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | LTE band 41 |
| Channels | High |
| Signal | LTE (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 2645.000000 |
| **Relative permitivity (real part)** | 38.393452 |
| **Conductivity (S/m)** | 1.994311 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



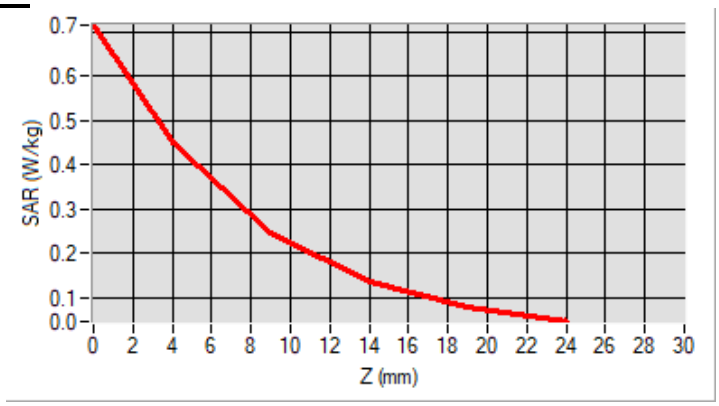


Maximum location: X=7.00, Y=5.00 ; SAR Peak: 0.72 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.202846 |
| SAR 1g (W/Kg) | 0.404988 |
| Variation (%) | -0.469999 |

## E. Z Axis Scan



# SAR Measurement at IEEE 802.11b ISM (Body, Validation Plane)

Date of measurement: 20/3/2024

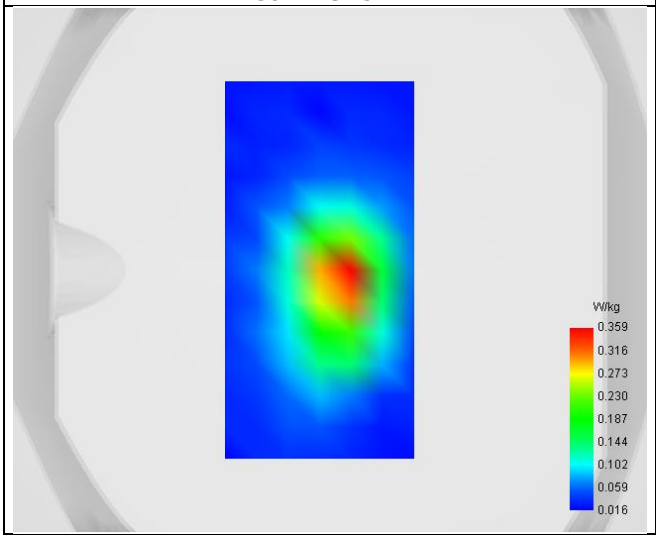
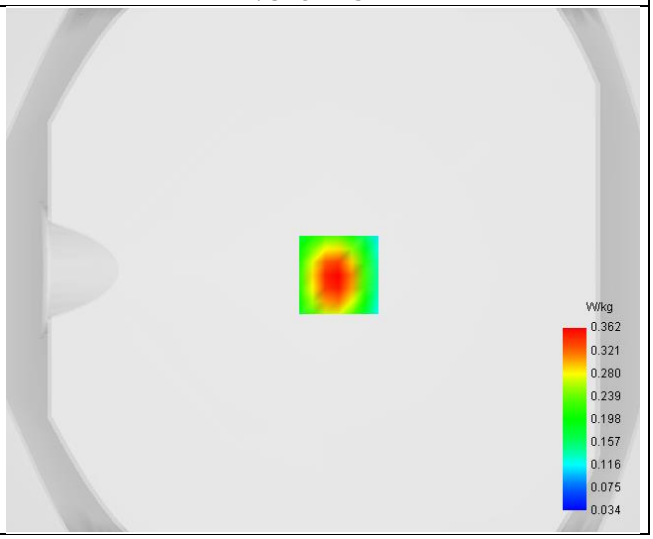
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 2.39 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 7x7x7,dx=5mm dy=5mm dz=5mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | IEEE 802.11b ISM |
| Channels | Low |
| Signal | IEEE802.b (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 2416.000000 |
| **Relative permitivity (real part)** | 38.702020 |
| **Conductivity (S/m)** | 1.739222 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



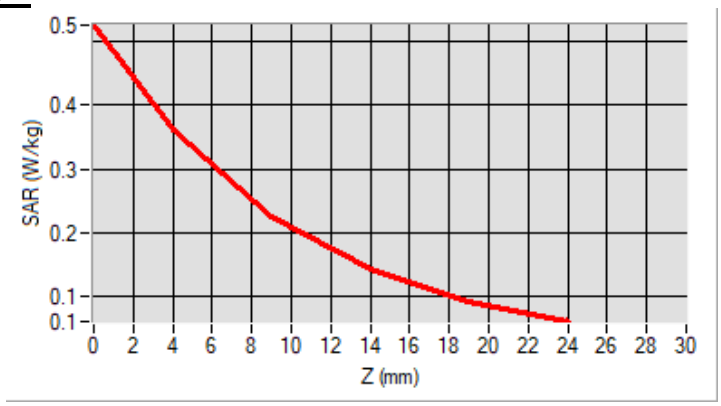


Maximum location: X=6.00, Y=-2.00 ; SAR Peak: 0.53 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.194861 |
| SAR 1g (W/Kg) | 0.334839 |
| Variation (%) | 0.810000 |

## E. Z Axis Scan



# SAR Measurement at CUSTOM (5.2GHz_802.11a) (Body, Validation Plane)

Date of measurement: 23/3/2024

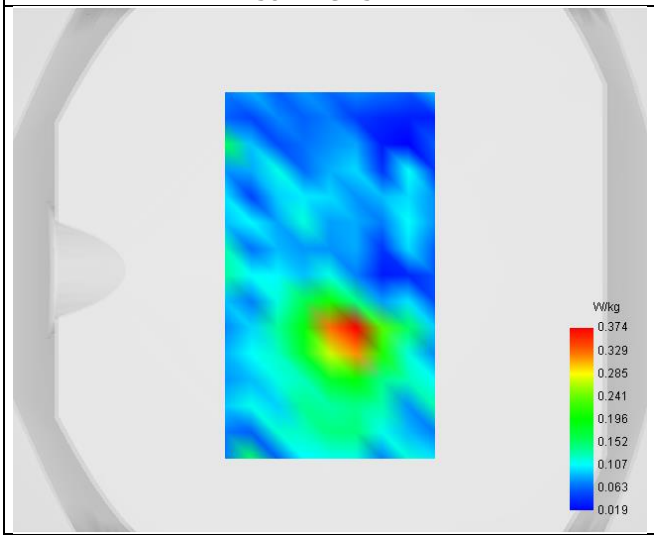
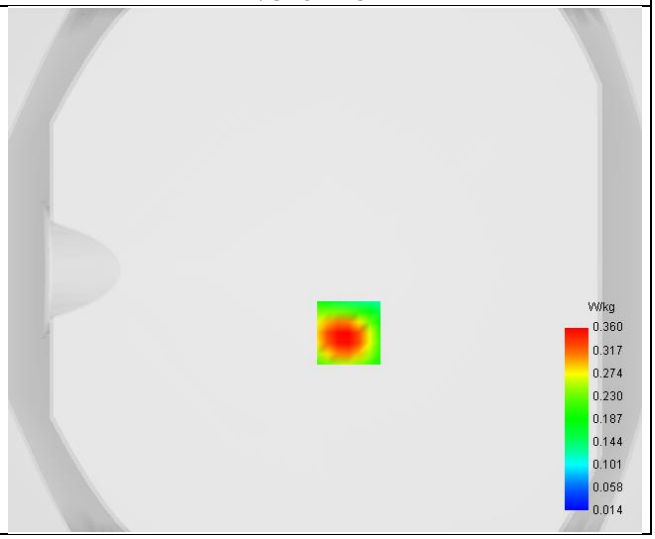
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 1.42 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 7x7x12,dx=4mm dy=4mm dz=2mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | 5.2GHz_802.11a |
| Channels | Low |
| Signal | 5.2GHz (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 5180.000000 |
| **Relative permitivity (real part)** | 35.954333 |
| **Conductivity (S/m)** | 4.628501 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

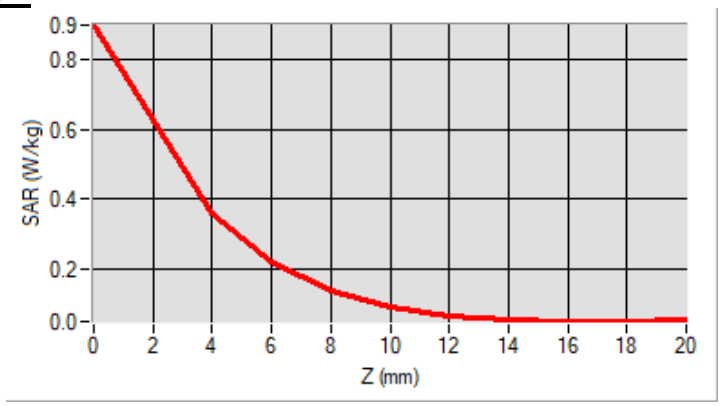


Maximum location: X=9.00, Y=-24.00 ; SAR Peak: 0.62 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.120303 |
| SAR 1g (W/Kg) | 0.239358 |
| Variation (%) | 0.879997 |

## E. Z Axis Scan



# SAR Measurement at CUSTOM (5.8GHz_802.11a) (Body, Validation Plane)

Date of measurement: 29/3/2024

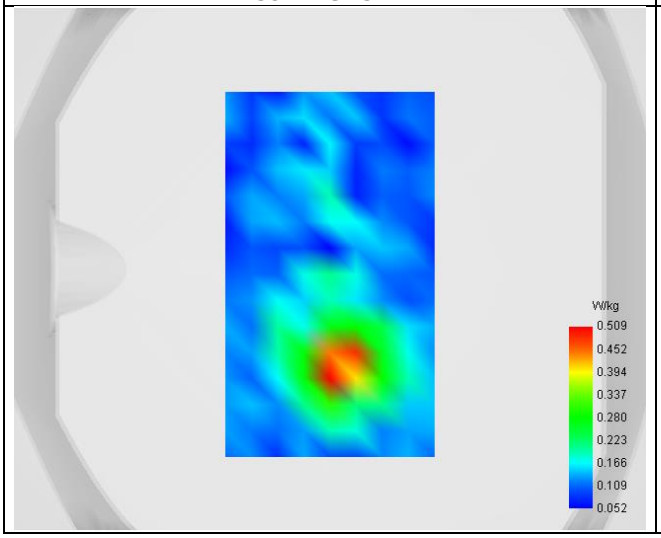
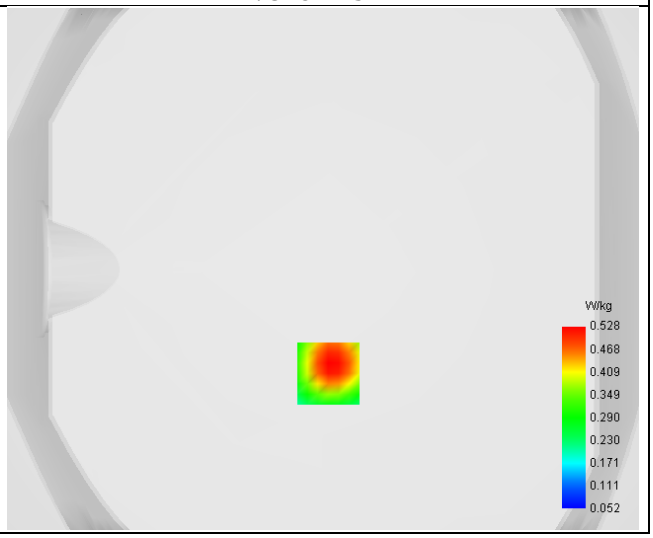
## A. Experimental conditions.

| | |
|---|---|
| Probe | 2423-EPGO-413 |
| ConvF | 1.18 |
| Area Scan | surf_sam_plan.txt |
| Zoom Scan | 7x7x12,dx=4mm dy=4mm dz=2mm,Complete |
| Phantom | Validation plane |
| Device Position | Body |
| Band | 5.8GHz_802.11a |
| Channels | Low |
| Signal | 5.8GHz (Crest factor: 1.0) |

## B. Permitivity

| | |
|---|---|
| **Frequency (MHz)** | 5745.000000 |
| **Relative permitivity (real part)** | 35.308250 |
| **Conductivity (S/m)** | 5.203842 |

## C. SAR Surface and Volume

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



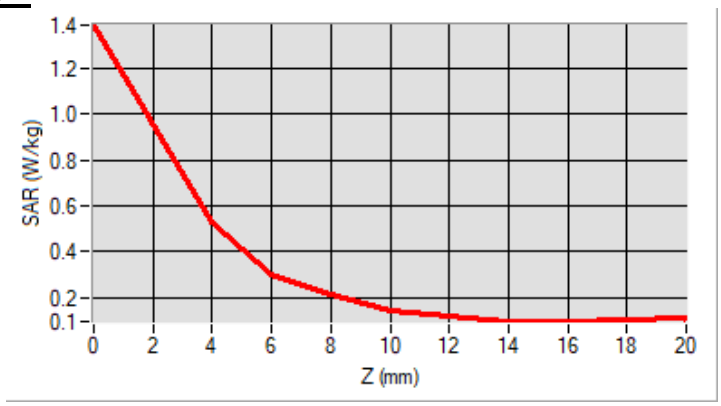


Maximum location: X=2.00, Y=-40.00 ; SAR Peak: 0.90 W/kg

## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.180399 |
| SAR 1g (W/Kg) | 0.358879 |
| Variation (%) | 0.510002 |

## E. Z Axis Scan



**------End of Report----**