

**Table 14.2-11: SAR Values (LTE Band4 - Head)**

| Ambient Temperature: 22.9 °C |              |                |             |               |               | Liquid Temperature: 22.5 °C |                          |                          |                          |                         |                         |                  |
|------------------------------|--------------|----------------|-------------|---------------|---------------|-----------------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |              | Mode           | Side        | Test Position | Figure No.    | Conduct ed Power (dBm)      | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch.          |                |             |               |               |                             |                          |                          |                          |                         |                         |                  |
| <b>1745</b>                  | <b>20300</b> | <b>1RB_Low</b> | <b>Left</b> | <b>Touch</b>  | <b>Fig.11</b> | <b>23.69</b>                | <b>24.0</b>              | <b>0.125</b>             | <b>0.13</b>              | <b>0.198</b>            | <b>0.21</b>             | <b>-0.15</b>     |
| 1745                         | 20300        | 1RB_Low        | Left        | Tilt          | /             | 23.69                       | 24.0                     | 0.037                    | 0.04                     | 0.063                   | 0.07                    | 0.12             |
| 1745                         | 20300        | 1RB_Low        | Right       | Touch         | /             | 23.69                       | 24.0                     | 0.093                    | 0.10                     | 0.158                   | 0.17                    | 0.06             |
| 1745                         | 20300        | 1RB_Low        | Right       | Tilt          | /             | 23.69                       | 24.0                     | 0.023                    | 0.03                     | 0.043                   | 0.05                    | 0.13             |
| 1732.5                       | 20175        | 50RB_High      | Left        | Touch         | /             | 22.50                       | 23.0                     | 0.104                    | 0.12                     | 0.180                   | 0.20                    | 0.13             |
| 1732.5                       | 20175        | 50RB_High      | Left        | Tilt          | /             | 22.50                       | 23.0                     | 0.029                    | 0.03                     | 0.049                   | 0.05                    | 0.05             |
| 1732.5                       | 20175        | 50RB_High      | Right       | Touch         | /             | 22.50                       | 23.0                     | 0.073                    | 0.08                     | 0.124                   | 0.14                    | 0.08             |
| 1732.5                       | 20175        | 50RB_High      | Right       | Tilt          | /             | 22.50                       | 23.0                     | 0.016                    | 0.02                     | 0.030                   | 0.03                    | 0.08             |

Note1: The LTE mode is QPSK\_20MHz.

**Table 14.2-12: SAR Values (LTE Band4 - Body)**

| Ambient Temperature: 22.9 °C |       |                  |                  |               |                                 | Liquid Temperature: 22.5 °C |                                |                                |                               |                               |                        |
|------------------------------|-------|------------------|------------------|---------------|---------------------------------|-----------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------|
| Frequency                    |       | Mode/<br>Headset | Test<br>Position | Figure<br>No. | Conduct<br>ed<br>Power<br>(dBm) | Max. tune-up<br>Power (dBm) | Measured<br>SAR(10g)<br>(W/kg) | Reported<br>SAR(10g)<br>(W/kg) | Measured<br>SAR(1g)<br>(W/kg) | Reported<br>SAR(1g)<br>(W/kg) | Power<br>Drift<br>(dB) |
| MHz                          | Ch.   |                  |                  |               |                                 |                             |                                |                                |                               |                               |                        |
| 1745                         | 20300 | 1RB_Low          | Front            | /             | 23.69                           | 24.0                        | 0.365                          | 0.39                           | 0.654                         | 0.70                          | 0.12                   |
| 1745                         | 20300 | 1RB_Low          | Rear             | /             | 23.69                           | 24.0                        | 0.329                          | 0.35                           | 0.573                         | 0.62                          | 0.16                   |
| 1745                         | 20300 | 1RB_Low          | Left             | /             | 23.69                           | 24.0                        | 0.070                          | 0.08                           | 0.119                         | 0.13                          | -0.03                  |
| 1745                         | 20300 | 1RB_Low          | Bottom           | /             | 23.69                           | 24.0                        | 0.406                          | 0.44                           | 0.794                         | 0.85                          | 0.12                   |
| 1732.5                       | 20300 | 1RB_Low          | Bottom           | /             | 23.68                           | 24.0                        | 0.400                          | 0.43                           | 0.780                         | 0.84                          | 0.12                   |
| 1720                         | 20300 | 1RB_Low          | Bottom           | Fig.12        | 23.45                           | 24.0                        | 0.470                          | 0.53                           | 0.913                         | 1.04                          | -0.15                  |
| 1732.5                       | 20175 | 50RB_High        | Front            | /             | 22.50                           | 23.0                        | 0.307                          | 0.34                           | 0.518                         | 0.58                          | 0.08                   |
| 1732.5                       | 20175 | 50RB_High        | Rear             | /             | 22.50                           | 23.0                        | 0.240                          | 0.27                           | 0.416                         | 0.47                          | 0.18                   |
| 1732.5                       | 20175 | 50RB_High        | Left             | /             | 22.50                           | 23.0                        | 0.055                          | 0.06                           | 0.093                         | 0.10                          | 0.06                   |
| 1732.5                       | 20175 | 50RB_High        | Bottom           | /             | 22.50                           | 23.0                        | 0.346                          | 0.39                           | 0.659                         | 0.74                          | -0.02                  |
| 1732.5                       | 20175 | 100RB            | Bottom           | /             | 22.45                           | 23.0                        | 0.320                          | 0.36                           | 0.624                         | 0.71                          | 0.01                   |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.2-13: SAR Values (LTE Band7 - Head)**

| Ambient Temperature: 22.9 °C |              |                |             |               |               | Liquid Temperature: 22.5 °C |                          |                          |                          |                         |                         |                  |
|------------------------------|--------------|----------------|-------------|---------------|---------------|-----------------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |              | Mode           | Side        | Test Position | Figure No.    | Conducted Power (dBm)       | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch.          |                |             |               |               |                             |                          |                          |                          |                         |                         |                  |
| <b>2535</b>                  | <b>21100</b> | <b>1RB_Low</b> | <b>Left</b> | <b>Touch</b>  | <b>Fig.13</b> | <b>21.81</b>                | <b>22.6</b>              | <b>0.075</b>             | <b>0.09</b>              | <b>0.143</b>            | <b>0.17</b>             | <b>0.04</b>      |
| 2535                         | 21100        | 1RB_Low        | Left        | Tilt          | /             | 21.81                       | 22.6                     | 0.022                    | 0.03                     | 0.041                   | 0.05                    | -0.02            |
| 2535                         | 21100        | 1RB_Low        | Right       | Touch         | /             | 21.81                       | 22.6                     | 0.044                    | 0.05                     | 0.082                   | 0.10                    | 0.02             |
| 2535                         | 21100        | 1RB_Low        | Right       | Tilt          | /             | 21.81                       | 22.6                     | 0.039                    | 0.05                     | 0.080                   | 0.10                    | -0.08            |
| 2510                         | 20850        | 50RB_Low       | Left        | Touch         | /             | 20.59                       | 21.6                     | 0.052                    | 0.07                     | 0.097                   | 0.12                    | 0.12             |
| 2510                         | 20850        | 50RB_Low       | Left        | Tilt          | /             | 20.59                       | 21.6                     | 0.018                    | 0.02                     | 0.032                   | 0.04                    | -0.03            |
| 2510                         | 20850        | 50RB_Low       | Right       | Touch         | /             | 20.59                       | 21.6                     | 0.038                    | 0.05                     | 0.073                   | 0.09                    | 0.05             |
| 2510                         | 20850        | 50RB_Low       | Right       | Tilt          | /             | 20.59                       | 21.6                     | 0.026                    | 0.03                     | 0.054                   | 0.07                    | 0.01             |

Note1: The LTE mode is QPSK\_20MHz.

**Table 14.2-14: SAR Values (LTE Band7 - Body) AP OFF**

| Ambient Temperature: 22.9 °C |       |                  |                  |               |                             | Liquid Temperature: 22.5 °C       |                                |                                |                               |                               |                        |
|------------------------------|-------|------------------|------------------|---------------|-----------------------------|-----------------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------|
| Frequency                    |       | Mode/<br>Headset | Test<br>Position | Figure<br>No. | Conducted<br>Power<br>(dBm) | Max.<br>tune-up<br>Power<br>(dBm) | Measured<br>SAR(10g)<br>(W/kg) | Reported<br>SAR(10g)<br>(W/kg) | Measured<br>SAR(1g)<br>(W/kg) | Reported<br>SAR(1g)<br>(W/kg) | Power<br>Drift<br>(dB) |
| MHz                          | Ch.   |                  |                  |               |                             |                                   |                                |                                |                               |                               |                        |
| 2535                         | 21100 | 1RB_Low          | Front            | /             | 21.81                       | 22.6                              | 0.212                          | 0.25                           | 0.397                         | 0.48                          | 0.02                   |
| 2560                         | 21350 | 1RB_High         | Rear             | /             | 21.70                       | 22.6                              | 0.314                          | 0.39                           | 0.637                         | 0.78                          | -0.08                  |
| 2535                         | 21100 | 1RB_Low          | Rear             | Fig 14        | 21.81                       | 22.6                              | 0.370                          | 0.44                           | 0.715                         | 0.86                          | -0.08                  |
| 2510                         | 20850 | 1RB_Low          | Rear             | /             | 21.80                       | 22.6                              | 0.367                          | 0.44                           | 0.705                         | 0.85                          | -0.08                  |
| 2510                         | 20850 | 50RB_Low         | Front            | /             | 20.59                       | 21.6                              | 0.159                          | 0.20                           | 0.315                         | 0.40                          | -0.03                  |
| 2510                         | 20850 | 50RB_Low         | Rear             | /             | 20.59                       | 21.6                              | 0.285                          | 0.36                           | 0.585                         | 0.74                          | 0.05                   |
| 2535                         | 21100 | 100RB            | Rear             | /             | 20.44                       | 21.6                              | 0.274                          | 0.36                           | 0.557                         | 0.73                          | -0.08                  |

Note1: The distance between the EUT and the phantom bottom is 15mm.

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.2-15: SAR Values (LTE Band7 - Body) AP ON**

| Ambient Temperature: 22.9 °C |              |                  |                  |               |                             | Liquid Temperature: 22.5 °C       |                                |                                |                               |                               |                        |
|------------------------------|--------------|------------------|------------------|---------------|-----------------------------|-----------------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------|
| Frequency                    |              | Mode/<br>Headset | Test<br>Position | Figure<br>No. | Conducted<br>Power<br>(dBm) | Max.<br>tune-up<br>Power<br>(dBm) | Measured<br>SAR(10g)<br>(W/kg) | Reported<br>SAR(10g)<br>(W/kg) | Measured<br>SAR(1g)<br>(W/kg) | Reported<br>SAR(1g)<br>(W/kg) | Power<br>Drift<br>(dB) |
| MHz                          | Ch.          |                  |                  |               |                             |                                   |                                |                                |                               |                               |                        |
| 2535                         | 21100        | 1RB_Low          | Front            | /             | 17.97                       | 18.5                              | 0.179                          | 0.20                           | 0.384                         | 0.43                          | 0.05                   |
| 2560                         | 21350        | 1RB_Low          | Rear             | /             | 17.67                       | 18.5                              | 0.293                          | 0.35                           | 0.656                         | 0.79                          | -0.16                  |
| 2535                         | 21100        | 1RB_Low          | Rear             | /             | 17.97                       | 18.5                              | 0.336                          | 0.38                           | 0.731                         | 0.83                          | 0.04                   |
| 2510                         | 20850        | 1RB_Low          | Rear             | /             | 17.79                       | 18.5                              | 0.316                          | 0.37                           | 0.683                         | 0.80                          | 0.13                   |
| 2535                         | 21100        | 1RB_Low          | Left             | /             | 17.97                       | 18.5                              | 0.050                          | 0.06                           | 0.090                         | 0.10                          | -0.02                  |
| <b>2560</b>                  | <b>21350</b> | <b>1RB_Low</b>   | <b>Bottom</b>    | <b>Fig.15</b> | <b>17.67</b>                | <b>18.5</b>                       | <b>0.456</b>                   | <b>0.55</b>                    | <b>1.040</b>                  | <b>1.26</b>                   | <b>0.11</b>            |
| 2535                         | 21100        | 1RB_Low          | Bottom           | /             | 17.97                       | 18.5                              | 0.417                          | 0.47                           | 0.941                         | 1.06                          | -0.04                  |
| 2510                         | 20850        | 1RB_Low          | Bottom           | /             | 17.79                       | 18.5                              | 0.371                          | 0.44                           | 0.832                         | 0.98                          | -0.15                  |
| 2510                         | 20850        | 50RB_Low         | Front            | /             | 17.57                       | 18.5                              | 0.185                          | 0.23                           | 0.372                         | 0.46                          | -0.02                  |
| 2510                         | 20850        | 50RB_Low         | Rear             | /             | 17.57                       | 18.5                              | 0.322                          | 0.40                           | 0.725                         | 0.90                          | 0.02                   |
| 2510                         | 20850        | 50RB_Low         | Left             | /             | 17.57                       | 18.5                              | 0.055                          | 0.07                           | 0.088                         | 0.11                          | 0.04                   |
| 2560                         | 21350        | 50RB_Low         | Bottom           | /             | 17.52                       | 18.5                              | 0.437                          | 0.55                           | 0.985                         | 1.23                          | 0.02                   |
| 2535                         | 21100        | 50RB_Low         | Bottom           | /             | 17.50                       | 18.5                              | 0.387                          | 0.49                           | 0.873                         | 1.10                          | -0.02                  |
| 2510                         | 20850        | 50RB_Low         | Bottom           | /             | 17.57                       | 18.5                              | 0.378                          | 0.47                           | 0.848                         | 1.05                          | 0.05                   |
| 2535                         | 21100        | 100RB            | Rear             | /             | 17.51                       | 18.5                              | 0.289                          | 0.36                           | 0.632                         | 0.79                          | 0.17                   |
| 2535                         | 21100        | 100RB            | Bottom           | /             | 17.51                       | 18.5                              | 0.433                          | 0.54                           | 0.980                         | 1.23                          | 0.04                   |
| 2560                         | 21350        | 1RB_Low<br>H1    | Bottom           | /             | 17.67                       | 18.5                              | 0.411                          | 0.50                           | 0.950                         | 1.15                          | -0.02                  |
| 2560                         | 21350        | 1RB_Low<br>H2    | Bottom           | /             | 17.67                       | 18.5                              | 0.425                          | 0.51                           | 1.000                         | 1.21                          | 0.02                   |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.2-16: SAR Values (LTE Band13 - Head)**

| Ambient Temperature: 22.9 °C |       |          |       |               |            |                       | Liquid Temperature: 22.5 °C |                          |                         |                         |                         |                  |
|------------------------------|-------|----------|-------|---------------|------------|-----------------------|-----------------------------|--------------------------|-------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |       | Mode     | Side  | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Power (dBm)    | Measured SAR(10g) (W/kg) | Reported SAR(10g)(W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch.   |          |       |               |            |                       |                             |                          |                         |                         |                         |                  |
| 782                          | 23230 | 1RB_Low  | Left  | Touch         | Fig.16     | 23.56                 | 24.2                        | 0.271                    | 0.31                    | 0.354                   | 0.41                    | -0.02            |
| 782                          | 23230 | 1RB_Low  | Left  | Tilt          | /          | 23.56                 | 24.2                        | 0.185                    | 0.21                    | 0.264                   | 0.31                    | 0.03             |
| 782                          | 23230 | 1RB_Low  | Right | Touch         | /          | 23.56                 | 24.2                        | 0.212                    | 0.25                    | 0.306                   | 0.35                    | 0.02             |
| 782                          | 23230 | 1RB_Low  | Right | Tilt          | /          | 23.56                 | 24.2                        | 0.182                    | 0.21                    | 0.266                   | 0.31                    | -0.01            |
| 782                          | 23230 | 25RB_Low | Left  | Touch         | /          | 22.69                 | 23.2                        | 0.182                    | 0.20                    | 0.273                   | 0.31                    | 0.04             |
| 782                          | 23230 | 25RB_Low | Left  | Tilt          | /          | 22.69                 | 23.2                        | 0.147                    | 0.17                    | 0.211                   | 0.24                    | 0.02             |
| 782                          | 23230 | 25RB_Low | Right | Touch         | /          | 22.69                 | 23.2                        | 0.154                    | 0.17                    | 0.226                   | 0.25                    | -0.05            |
| 782                          | 23230 | 25RB_Low | Right | Tilt          | /          | 22.69                 | 23.2                        | 0.137                    | 0.15                    | 0.200                   | 0.22                    | 0.01             |

Note1: The LTE mode is QPSK\_10MHz.

**Table 14.2-17: SAR Values (LTE Band13 - Body)**

| Ambient Temperature: 22.9 °C |              |                  |                  |               |                              | Liquid Temperature: 22.5 °C |                                |                                |                               |                               |                        |
|------------------------------|--------------|------------------|------------------|---------------|------------------------------|-----------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------|
| Frequency                    |              | Mode/<br>Headset | Test<br>Position | Figure<br>No. | Conduct<br>ed Power<br>(dBm) | Max. tune-up<br>Power (dBm) | Measured<br>SAR(10g)<br>(W/kg) | Reported<br>SAR(10g)<br>(W/kg) | Measured<br>SAR(1g)<br>(W/kg) | Reported<br>SAR(1g)<br>(W/kg) | Power<br>Drift<br>(dB) |
| MHz                          | Ch.          |                  |                  |               |                              |                             |                                |                                |                               |                               |                        |
| 782                          | 23230        | 1RB_Low          | Front            | /             | 23.56                        | 24.2                        | 0.252                          | 0.29                           | 0.356                         | 0.41                          | -0.03                  |
| <b>782</b>                   | <b>23230</b> | <b>1RB_Low</b>   | <b>Rear</b>      | <b>Fig.17</b> | <b>23.56</b>                 | <b>24.2</b>                 | <b>0.364</b>                   | <b>0.42</b>                    | <b>0.482</b>                  | <b>0.56</b>                   | <b>-0.09</b>           |
| 782                          | 23230        | 1RB_Low          | Left             | /             | 23.56                        | 24.2                        | 0.225                          | 0.26                           | 0.338                         | 0.39                          | -0.07                  |
| 782                          | 23230        | 1RB_Low          | Bottom           | /             | 23.56                        | 24.2                        | 0.081                          | 0.09                           | 0.127                         | 0.15                          | 0.05                   |
| 782                          | 23230        | 25RB_Low         | Front            | /             | 22.69                        | 23.2                        | 0.214                          | 0.24                           | 0.292                         | 0.33                          | 0.14                   |
| 782                          | 23230        | 25RB_Low         | Rear             | /             | 22.69                        | 23.2                        | 0.263                          | 0.30                           | 0.372                         | 0.42                          | -0.04                  |
| 782                          | 23230        | 25RB_Low         | Left             | /             | 22.69                        | 23.2                        | 0.183                          | 0.21                           | 0.274                         | 0.31                          | 0.01                   |
| 782                          | 23230        | 25RB_Low         | Bottom           | /             | 22.69                        | 23.2                        | 0.066                          | 0.07                           | 0.104                         | 0.12                          | 0.18                   |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK\_10MHz.

**Table 14.2-18: SAR Values (LTE Band17 - Head)**

| Ambient Temperature: 22.9 °C |       |           |       |               |            | Liquid Temperature: 22.5 °C |                          |                          |                          |                         |                         |                  |
|------------------------------|-------|-----------|-------|---------------|------------|-----------------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |       | Mode      | Side  | Test Position | Figure No. | Conduct ed Power (dBm)      | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch.   |           |       |               |            |                             |                          |                          |                          |                         |                         |                  |
| 711                          | 23800 | 1RB_High  | Left  | Touch         | Fig.18     | 23.73                       | 24.2                     | 0.152                    | 0.17                     | 0.194                   | 0.22                    | 0.17             |
| 711                          | 23800 | 1RB_High  | Left  | Tilt          | /          | 23.73                       | 24.2                     | 0.092                    | 0.10                     | 0.131                   | 0.15                    | 0.04             |
| 711                          | 23800 | 1RB_High  | Right | Touch         | /          | 23.73                       | 24.2                     | 0.101                    | 0.11                     | 0.145                   | 0.16                    | -0.14            |
| 711                          | 23800 | 1RB_High  | Right | Tilt          | /          | 23.73                       | 24.2                     | 0.087                    | 0.10                     | 0.126                   | 0.14                    | -0.02            |
| 709                          | 23780 | 25RB_High | Left  | Touch         | /          | 22.56                       | 23.2                     | 0.096                    | 0.11                     | 0.143                   | 0.17                    | -0.05            |
| 709                          | 23780 | 25RB_High | Left  | Tilt          | /          | 22.56                       | 23.2                     | 0.071                    | 0.08                     | 0.101                   | 0.12                    | 0.01             |
| 709                          | 23780 | 25RB_High | Right | Touch         | /          | 22.56                       | 23.2                     | 0.074                    | 0.09                     | 0.107                   | 0.12                    | 0.06             |
| 709                          | 23780 | 25RB_High | Right | Tilt          | /          | 22.56                       | 23.2                     | 0.051                    | 0.06                     | 0.074                   | 0.09                    | 0.08             |

Note1: The LTE mode is QPSK\_10MHz.

**Table 14.2-19: SAR Values (LTE Band17 - Body)**

| Ambient Temperature: 22.9 °C |              |                  |                  |               |                                 | Liquid Temperature: 22.5 °C       |                                |                                |                               |                               |                        |
|------------------------------|--------------|------------------|------------------|---------------|---------------------------------|-----------------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------|
| Frequency                    |              | Mode/<br>Headset | Test<br>Position | Figure<br>No. | Conduct<br>ed<br>Power<br>(dBm) | Max.<br>tune-up<br>Power<br>(dBm) | Measured<br>SAR(10g)<br>(W/kg) | Reported<br>SAR(10g)<br>(W/kg) | Measured<br>SAR(1g)<br>(W/kg) | Reported<br>SAR(1g)<br>(W/kg) | Power<br>Drift<br>(dB) |
| MHz                          | Ch.          |                  |                  |               |                                 |                                   |                                |                                |                               |                               |                        |
| 711                          | 23800        | 1RB_High         | Front            | /             | 23.73                           | 24.2                              | 0.153                          | 0.17                           | 0.218                         | 0.24                          | -0.01                  |
| <b>711</b>                   | <b>23800</b> | <b>1RB_High</b>  | <b>Rear</b>      | <b>Fig.19</b> | <b>23.73</b>                    | <b>24.2</b>                       | <b>0.265</b>                   | <b>0.30</b>                    | <b>0.366</b>                  | <b>0.41</b>                   | <b>0.05</b>            |
| 711                          | 23800        | 1RB_High         | Left             | /             | 23.73                           | 24.2                              | 0.229                          | 0.26                           | 0.338                         | 0.38                          | -0.01                  |
| 711                          | 23800        | 1RB_High         | Bottom           | /             | 23.73                           | 24.2                              | 0.057                          | 0.06                           | 0.090                         | 0.10                          | 0.18                   |
| 709                          | 23780        | 25RB_High        | Front            | /             | 22.56                           | 23.2                              | 0.166                          | 0.19                           | 0.229                         | 0.27                          | 0.12                   |
| 709                          | 23780        | 25RB_High        | Rear             | /             | 22.56                           | 23.2                              | 0.194                          | 0.22                           | 0.277                         | 0.32                          | 0.00                   |
| 709                          | 23780        | 25RB_High        | Left             | /             | 22.56                           | 23.2                              | 0.166                          | 0.19                           | 0.245                         | 0.28                          | -0.09                  |
| 709                          | 23780        | 25RB_High        | Bottom           | /             | 22.56                           | 23.2                              | 0.047                          | 0.05                           | 0.074                         | 0.09                          | 0.01                   |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK\_10MHz.

**Table 14.2-20: SAR Values (WLAN - Head) – other batteries**

| Ambient Temperature: 22.9 °C |     |         |       |                      |               | Liquid Temperature: 22.5 °C  |                                   |                                |                                |                               |                               |                        |
|------------------------------|-----|---------|-------|----------------------|---------------|------------------------------|-----------------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------|
| Frequency                    |     | Mode    | Side  | Test<br>Positio<br>n | Figure<br>No. | Conducte<br>d Power<br>(dBm) | Max.<br>tune-up<br>Power<br>(dBm) | Measured<br>SAR(10g)<br>(W/kg) | Reported<br>SAR(10g)<br>(W/kg) | Measured<br>SAR(1g)<br>(W/kg) | Reported<br>SAR(1g)<br>(W/kg) | Power<br>Drift<br>(dB) |
| MHz                          | Ch. |         |       |                      |               |                              |                                   |                                |                                |                               |                               |                        |
| 2412                         | 1   | 802.11b | Right | Touch                | /             | 17.42                        | 18.0                              | 0.395                          | 0.45                           | 0.816                         | 0.93                          | 0.11                   |

Note1: The battery1 is TLp025H7C (2500043C7Y).

**Table 14.2-21: SAR Values (GSM1900 - Body) – other batteries**

| Ambient Temperature: 22.9 °C |     |                  |               |                             |                             | Liquid Temperature: 22.5 °C    |                                |                               |                               |                        |
|------------------------------|-----|------------------|---------------|-----------------------------|-----------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------|
| Frequency                    |     | Test<br>Position | Figure<br>No. | Conducted<br>Power<br>(dBm) | Max. tune-up<br>Power (dBm) | Measured<br>SAR(10g)<br>(W/kg) | Reported<br>SAR(10g)<br>(W/kg) | Measured<br>SAR(1g)<br>(W/kg) | Reported<br>SAR(1g)<br>(W/kg) | Power<br>Drift<br>(dB) |
| MHz                          | Ch. |                  |               |                             |                             |                                |                                |                               |                               |                        |
| 1880                         | 661 | Bottom           | /             | 27.38                       | 27.8                        | 0.609                          | 0.67                           | 1.130                         | 1.24                          | 0.06                   |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK\_20MHz.

Note3: The battery1 is TLp025HF (53264353TMC)

### 14.3 SAR results for Standard procedure

There is zoom scan measurement to be added for the highest measured SAR in each exposure configuration/band.

**Table 14.3-1: SAR Values (GSM 850 MHz Band - Head)**

| Ambient Temperature: 22.9 °C |     |      |               |            |                       | Liquid Temperature: 22.5 °C |                          |                         |                         |                         |                  |
|------------------------------|-----|------|---------------|------------|-----------------------|-----------------------------|--------------------------|-------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |     | Side | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Power (dBm)    | Measured SAR(10g) (W/kg) | Reported SAR(10g)(W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch. |      |               |            |                       |                             |                          |                         |                         |                         |                  |
| 848.8                        | 251 | Left | Touch         | Fig.1      | 32.37                 | 33.3                        | 0.219                    | 0.27                    | 0.283                   | 0.35                    | 0.00             |

**Table 14.3-2: SAR Values (GSM 850 MHz Band - Body)**

| Ambient Temperature: 22.9 °C |     |                            |               |            |                       | Liquid Temperature: 22.5 °C |                          |                          |                         |                         |                  |
|------------------------------|-----|----------------------------|---------------|------------|-----------------------|-----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |     | Mode (number of timeslots) | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Power (dBm)    | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch. |                            |               |            |                       |                             |                          |                          |                         |                         |                  |
| 848.8                        | 251 | GPRS (3)                   | Rear          | Fig.2      | 30.38                 | 30.7                        | 0.486                    | 0.52                     | 0.621                   | 0.67                    | 0.07             |

Note1: The distance between the EUT and the phantom bottom is 10mm.

**Table 14.3-3: SAR Values (GSM 1900 MHz Band - Head)**

| Ambient Temperature: 22.9 °C |     |      |               |            |                       | Liquid Temperature: 22.5 °C |                          |                         |                         |                         |                  |
|------------------------------|-----|------|---------------|------------|-----------------------|-----------------------------|--------------------------|-------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |     | Side | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Power (dBm)    | Measured SAR(10g) (W/kg) | Reported SAR(10g)(W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch. |      |               |            |                       |                             |                          |                         |                         |                         |                  |
| 1909.8                       | 810 | Left | Touch         | Fig.3      | 29.71                 | 30.5                        | 0.189                    | 0.23                    | 0.312                   | 0.37                    | 0.11             |

**Table 14.3-4: SAR Values (GSM 1900 MHz Band - Body)**

| Ambient Temperature: 22.9 °C |     |                            |               |            |                       | Liquid Temperature: 22.5 °C |                          |                          |                         |                         |                  |
|------------------------------|-----|----------------------------|---------------|------------|-----------------------|-----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |     | Mode (number of timeslots) | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Power (dBm)    | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch. |                            |               |            |                       |                             |                          |                          |                         |                         |                  |
| 1880                         | 661 | GPRS (3)                   | Bottom        | Fig.4      | 27.38                 | 27.8                        | 0.616                    | 0.68                     | 1.190                   | 1.31                    | -0.03            |

Note1: The distance between the EUT and the phantom bottom is 10mm.

**Table 14.3-5: SAR Values (WCDMA 850 MHz Band - Head)**

| Ambient Temperature: 22.9 °C |      |      |               |            |                       | Liquid Temperature: 22.5 °C |                          |                         |                         |                         |                  |
|------------------------------|------|------|---------------|------------|-----------------------|-----------------------------|--------------------------|-------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |      | Side | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Power (dBm)    | Measured SAR(10g) (W/kg) | Reported SAR(10g)(W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch.  |      |               |            |                       |                             |                          |                         |                         |                         |                  |
| 836.4                        | 4182 | Left | Touch         | Fig.5      | 24.09                 | 24.5                        | 0.232                    | 0.25                    | 0.307                   | 0.34                    | 0.04             |

**Table 14.3-6: SAR Values (WCDMA 850 MHz Band - Body)**

| Ambient Temperature: 22.9 °C |      |               |            |                       |                          | Liquid Temperature: 22.5 °C |                          |                         |                         |                  |
|------------------------------|------|---------------|------------|-----------------------|--------------------------|-----------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |      | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg)    | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch.  |               |            |                       |                          |                             |                          |                         |                         |                  |
| 826.4                        | 4132 | Rear          | Fig.6      | 24.06                 | 24.5                     | 0.350                       | 0.39                     | 0.447                   | 0.49                    | 0.08             |

Note1: The distance between the EUT and the phantom bottom is 10mm.

**Table 14.3-7: SAR Values (WCDMA 1900 MHz Band - Head)**

| Ambient Temperature: 22.9 °C |      |      |               |            |                       | Liquid Temperature: 22.5 °C |                          |                         |                         |                         |                  |
|------------------------------|------|------|---------------|------------|-----------------------|-----------------------------|--------------------------|-------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |      | Side | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Power (dBm)    | Measured SAR(10g) (W/kg) | Reported SAR(10g)(W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch.  |      |               |            |                       |                             |                          |                         |                         |                         |                  |
| 1907.6                       | 9938 | Left | Touch         | Fig.7      | 23.09                 | 23.5                        | 0.186                    | 0.20                    | 0.307                   | 0.34                    | 0.14             |

**Table 14.3-8: SAR Values (WCDMA 1900 MHz Band - Body)**

| Ambient Temperature: 22.9 °C |      |               |            |                       |                          | Liquid Temperature: 22.5 °C |                          |                         |                         |                  |
|------------------------------|------|---------------|------------|-----------------------|--------------------------|-----------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |      | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg)    | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch.  |               |            |                       |                          |                             |                          |                         |                         |                  |
| 1852.4                       | 9662 | Bottom        | Fig.8      | 22.71                 | 23.5                     | 0.492                       | 0.59                     | 0.957                   | 1.15                    | -0.11            |

Note1: The distance between the EUT and the phantom bottom is 10mm.

**Table 14.3-9: SAR Values (LTE Band2 - Head)**

| Ambient Temperature: 22.9 °C |       |         |      |               |            | Liquid Temperature: 22.5 °C |                          |                          |                          |                         |                         |                  |
|------------------------------|-------|---------|------|---------------|------------|-----------------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |       | Mode    | Side | Test Position | Figure No. | Conducted Power (dBm)       | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch.   |         |      |               |            |                             |                          |                          |                          |                         |                         |                  |
| 1880                         | 18900 | 1RB_Low | Left | Touch         | Fig.9      | 23.19                       | 23.7                     | 0.253                    | 0.28                     | 0.418                   | 0.47                    | 0.08             |

Note1: The LTE mode is QPSK\_20MHz.

**Table 14.3-10: SAR Values (LTE Band2 - Body)**

| Ambient Temperature: 22.9 °C |      |         |               |            |                       | Liquid Temperature: 22.5 °C |                          |                          |                         |                         |                  |
|------------------------------|------|---------|---------------|------------|-----------------------|-----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |      | Mode    | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Power (dBm)    | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch.  |         |               |            |                       |                             |                          |                          |                         |                         |                  |
| 19100                        | 1900 | 1RB_Low | Bottom        | Fig.10     | 23.05                 | 23.7                        | 0.557                    | 0.65                     | 1.030                   | 1.20                    | 0.08             |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.3-11: SAR Values (LTE Band4 - Head)**

| Ambient Temperature: 22.9 °C |       |         |      |               |            | Liquid Temperature: 22.5 °C |                          |                          |                          |                         |                         |                  |
|------------------------------|-------|---------|------|---------------|------------|-----------------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |       | Mode    | Side | Test Position | Figure No. | Conduct ed Power (dBm)      | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch.   |         |      |               |            |                             |                          |                          |                          |                         |                         |                  |
| 1745                         | 20300 | 1RB_Low | Left | Touch         | Fig.11     | 23.69                       | 24.0                     | 0.125                    | 0.13                     | 0.198                   | 0.21                    | -0.15            |

Note1: The LTE mode is QPSK\_20MHz.

**Table 14.3-12: SAR Values (LTE Band4 - Body)**

| Ambient Temperature: 22.9 °C      Liquid Temperature: 22.5 °C |       |         |               |            |                        |                          |                          |                          |                         |                         |                  |
|---------------------------------------------------------------|-------|---------|---------------|------------|------------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                                                     |       | Mode    | Test Position | Figure No. | Conduct ed Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                                                           | Ch.   |         |               |            |                        |                          |                          |                          |                         |                         |                  |
| 1720                                                          | 20300 | 1RB_Low | Bottom        | Fig.12     | 23.45                  | 24.0                     | 0.470                    | 0.53                     | 0.913                   | 1.04                    | -0.15            |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.3-13: SAR Values (LTE Band7 - Head)**

| Ambient Temperature: 22.9 °C |       |         |      |               |            | Liquid Temperature: 22.5 °C |                          |                          |                          |                         |                         |                  |
|------------------------------|-------|---------|------|---------------|------------|-----------------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |       | Mode    | Side | Test Position | Figure No. | Conducte d Power (dBm)      | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch.   |         |      |               |            |                             |                          |                          |                          |                         |                         |                  |
| 2535                         | 21100 | 1RB_Low | Left | Touch         | Fig.13     | 21.81                       | 22.6                     | 0.075                    | 0.09                     | 0.143                   | 0.17                    | 0.04             |

Note1: The LTE mode is QPSK\_20MHz.

**Table 14.3-14: SAR Values (LTE Band7 - Body) AP OFF**

| Ambient Temperature: 22.9 °C |       |         |               |            |                       | Liquid Temperature: 22.5 °C |                          |                          |                         |                         |                  |
|------------------------------|-------|---------|---------------|------------|-----------------------|-----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |       | Mode    | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Power (dBm)    | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch.   |         |               |            |                       |                             |                          |                          |                         |                         |                  |
| 2535                         | 21100 | 1RB_Low | Rear          | Fig 14     | 21.81                 | 22.6                        | 0.370                    | 0.44                     | 0.715                   | 0.86                    | -0.08            |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.3-15: SAR Values (LTE Band7 - Body) AP ON**

| Ambient Temperature: 22.9 °C |       |         |               |            |                       | Liquid Temperature: 22.5 °C |                          |                          |                         |                         |                  |
|------------------------------|-------|---------|---------------|------------|-----------------------|-----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |       | Mode    | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Power (dBm)    | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch.   |         |               |            |                       |                             |                          |                          |                         |                         |                  |
| 2560                         | 21350 | 1RB_Low | Bottom        | Fig.15     | 17.67                 | 18.5                        | 0.456                    | 0.55                     | 1.040                   | 1.26                    | 0.11             |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.3-16: SAR Values (LTE Band13 - Head)**

| Ambient Temperature: 22.9 °C |       |         |      |               |            | Liquid Temperature: 22.5 °C |                          |                          |                         |                         |                         |                  |
|------------------------------|-------|---------|------|---------------|------------|-----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |       | Mode    | Side | Test Position | Figure No. | Conducted Power (dBm)       | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g)(W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch.   |         |      |               |            |                             |                          |                          |                         |                         |                         |                  |
| 782                          | 23230 | 1RB_Low | Left | Touch         | Fig.16     | 23.56                       | 24.2                     | 0.271                    | 0.31                    | 0.354                   | 0.41                    | -0.02            |

Note1: The LTE mode is QPSK\_10MHz.

**Table 14.3-17: SAR Values (LTE Band13 - Body)**

| Ambient Temperature: 22.9 °C |       |         |               |            |                        | Liquid Temperature: 22.5 °C |                          |                          |                         |                         |                  |
|------------------------------|-------|---------|---------------|------------|------------------------|-----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |       | Mode    | Test Position | Figure No. | Conduct ed Power (dBm) | Max. tune-up Power (dBm)    | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch.   |         |               |            |                        |                             |                          |                          |                         |                         |                  |
| 782                          | 23230 | 1RB_Low | Rear          | Fig.17     | 23.56                  | 24.2                        | 0.364                    | 0.42                     | 0.482                   | 0.56                    | -0.09            |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK\_10MHz.

**Table 14.3-18: SAR Values (LTE Band17 - Head)**

| Ambient Temperature: 22.9 °C |       |          |      |               |            | Liquid Temperature: 22.5 °C |                          |                          |                          |                         |                         |                  |
|------------------------------|-------|----------|------|---------------|------------|-----------------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |       | Mode     | Side | Test Position | Figure No. | Conduct ed Power (dBm)      | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch.   |          |      |               |            |                             |                          |                          |                          |                         |                         |                  |
| 711                          | 23800 | 1RB_High | Left | Touch         | Fig.18     | 23.73                       | 24.2                     | 0.152                    | 0.17                     | 0.194                   | 0.22                    | 0.17             |

Note1: The LTE mode is QPSK\_10MHz.

**Table 14.3-19: SAR Values (LTE Band17 - Body)**

| Ambient Temperature: 22.9 °C |       |          |               |            |                        | Liquid Temperature: 22.5 °C |                          |                          |                         |                         |                  |
|------------------------------|-------|----------|---------------|------------|------------------------|-----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |       | Mode     | Test Position | Figure No. | Conduct ed Power (dBm) | Max. tune-up Power (dBm)    | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch.   |          |               |            |                        |                             |                          |                          |                         |                         |                  |
| 711                          | 23800 | 1RB_High | Rear          | Fig.19     | 23.73                  | 24.2                        | 0.265                    | 0.30                     | 0.366                   | 0.41                    | 0.05             |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK\_10MHz.

## 14.4 WLAN Evaluation

According to the KDB248227 D01, SAR is measured for 2.4GHz 802.11b DSSS using the initial test position procedure.

### Head Evaluation

**Table 14.4-1: SAR Values (WLAN - Head) – 802.11b 1Mbps (Fast SAR)**

| Ambient Temperature: 22.9 °C |     |       |               |            |                       | Liquid Temperature: 22.5 °C |                          |                          |                         |                         |                  |
|------------------------------|-----|-------|---------------|------------|-----------------------|-----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |     | Side  | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Power (dBm)    | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch. |       |               |            |                       |                             |                          |                          |                         |                         |                  |
| 2412                         | 1   | Left  | Touch         | /          | 17.42                 | 18.0                        | 0.197                    | 0.23                     | 0.352                   | 0.40                    | 0.08             |
| 2412                         | 1   | Left  | Tilt          | /          | 17.42                 | 18.0                        | 0.207                    | 0.24                     | 0.404                   | 0.46                    | 0.07             |
| 2412                         | 1   | Right | Touch         | /          | 17.42                 | 18.0                        | 0.417                    | 0.48                     | 0.831                   | 0.95                    | -0.17            |
| 2412                         | 1   | Right | Tilt          | /          | 17.42                 | 18.0                        | 0.282                    | 0.32                     | 0.548                   | 0.63                    | 0.12             |

As shown above table, the initial test position for head is "Right Touch". So the head SAR of WLAN is presented as below:

**Table 14.4-2: SAR Values (WLAN - Head) – 802.11b 1Mbps (Full SAR)**

| Ambient Temperature: 22.9 °C |          |              |               |               |                       | Liquid Temperature: 22.5 °C |                          |                          |                         |                         |                  |
|------------------------------|----------|--------------|---------------|---------------|-----------------------|-----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |          | Side         | Test Position | Figure No.    | Conducted Power (dBm) | Max. tune-up Power (dBm)    | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch.      |              |               |               |                       |                             |                          |                          |                         |                         |                  |
| 2412                         | 1        | Left         | Touch         | /             | 17.42                 | 18.0                        | 0.209                    | 0.24                     | 0.387                   | 0.44                    | 0.08             |
| <b>2412</b>                  | <b>1</b> | <b>Right</b> | <b>Touch</b>  | <b>Fig.20</b> | <b>17.42</b>          | <b>18.0</b>                 | <b>0.400</b>             | <b>0.46</b>              | <b>0.832</b>            | <b>0.95</b>             | <b>-0.17</b>     |
| 2412                         | 1        | Right        | Tilt          | /             | 17.42                 | 18.0                        | 0.272                    | 0.31                     | 0.566                   | 0.65                    | 0.12             |
| 2462                         | 11       | Right        | Touch         | /             | 16.32                 | 17.0                        | 0.332                    | 0.39                     | 0.696                   | 0.81                    | -0.09            |

Note1: When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest estimated 1-g SAR conditions determined by area scans, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg.

Note2: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. The scaled reported SAR is presented as below.

**Table 14.4-3: SAR Values (WLAN - Head) – 802.11b 1Mbps (Scaled Reported SAR)**

| Ambient Temperature: 22.9 °C |     |       |               |                    | Liquid Temperature: 22.5 °C |                          |                                 |
|------------------------------|-----|-------|---------------|--------------------|-----------------------------|--------------------------|---------------------------------|
| Frequency                    |     | Side  | Test Position | Actual duty factor | maximum duty factor         | Reported SAR (1g) (W/kg) | Scaled reported SAR (1g) (W/kg) |
| MHz                          | Ch. |       |               |                    |                             |                          |                                 |
| 2412                         | 1   | Right | Touch         | 97.51%             | 100%                        | <b>0.95</b>              | <b>0.97</b>                     |
| 2412                         | 1   | Left  | Touch         | 97.51%             | 100%                        | <b>0.44</b>              | <b>0.45</b>                     |

SAR is not required for OFDM because the 802.11b adjusted SAR ≤ 1.2 W/kg.

## Body Evaluation

**Table 14.4-4: SAR Values (WLAN - Body) – 802.11b 1Mbps (Fast SAR)**

| Ambient Temperature: 22.9 °C |     |               |            |                       |                          | Liquid Temperature: 22.5 °C |                          |                         |                         |                  |
|------------------------------|-----|---------------|------------|-----------------------|--------------------------|-----------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                    |     | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg)    | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz                          | Ch. |               |            |                       |                          |                             |                          |                         |                         |                  |
| 2412                         | 1   | Front         | /          | 17.42                 | 18.0                     | 0.108                       | 0.12                     | 0.196                   | 0.22                    | -0.19            |
| 2412                         | 1   | Rear          | /          | 17.42                 | 18.0                     | 0.104                       | 0.12                     | 0.188                   | 0.21                    | -0.13            |
| 2412                         | 1   | Left          | /          | 17.42                 | 18.0                     | 0.060                       | 0.07                     | 0.111                   | 0.13                    | -0.09            |
| 2412                         | 1   | Top           | /          | 17.42                 | 18.0                     | 0.091                       | 0.10                     | 0.160                   | 0.18                    | 0.12             |

As shown above table, the initial test position for body is “Front”. So the body SAR of WLAN is presented as below:

**Table 14.4-5: SAR Values (WLAN - Body) – 802.11b 1Mbps (Full SAR)**

| Ambient Temperature: 22.9 °C |     |                  |               |                             |                             | Liquid Temperature: 22.5 °C    |                                |                               |                               |                        |
|------------------------------|-----|------------------|---------------|-----------------------------|-----------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------|
| Frequency                    |     | Test<br>Position | Figure<br>No. | Conducted<br>Power<br>(dBm) | Max. tune-up<br>Power (dBm) | Measured<br>SAR(10g)<br>(W/kg) | Reported<br>SAR(10g)<br>(W/kg) | Measured<br>SAR(1g)<br>(W/kg) | Reported<br>SAR(1g)<br>(W/kg) | Power<br>Drift<br>(dB) |
| MHz                          | Ch. |                  |               |                             |                             |                                |                                |                               |                               |                        |
| 2412                         | 1   | Front            | Fig.21        | 17.42                       | 18.0                        | 0.110                          | 0.13                           | 0.195                         | 0.22                          | -0.19                  |

Note1: When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest estimated 1-g SAR conditions determined by area scans, on the highest maximum output power channel, until the reported SAR is  $\leq$  0.8 W/kg.

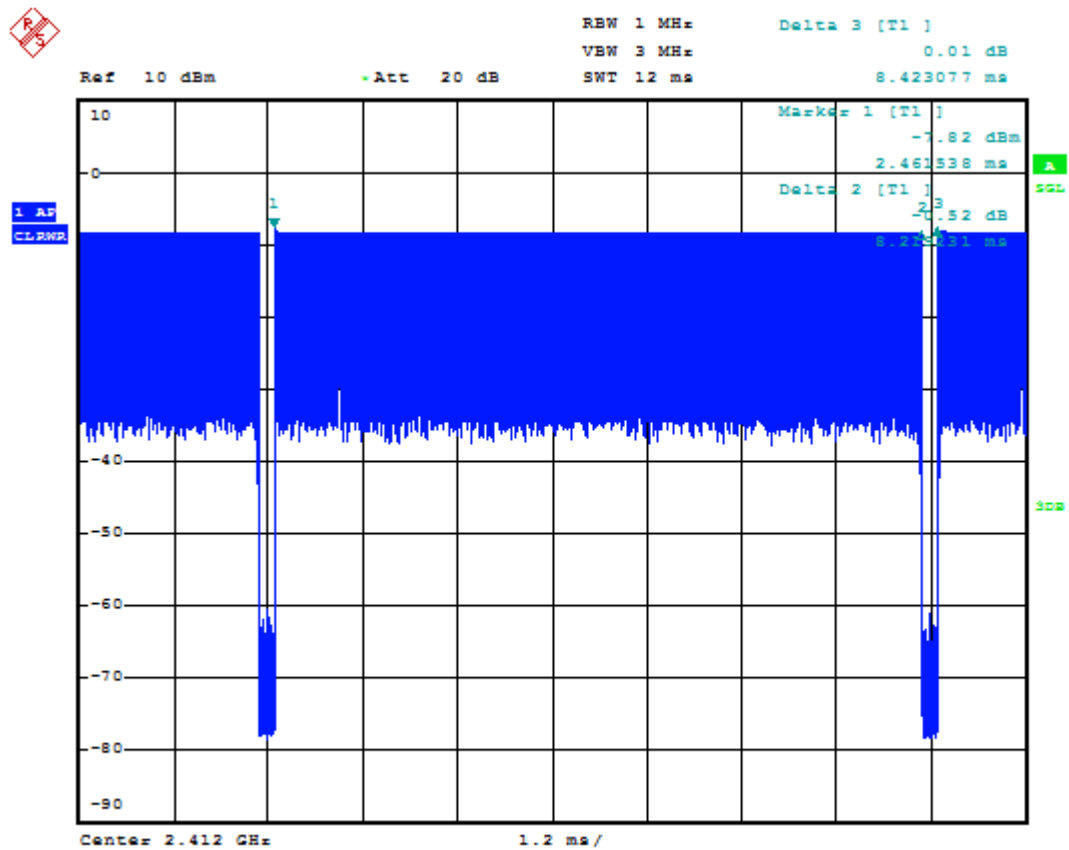
Note2: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is  $\leq$  1.2 W/kg or all required channels are tested.

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. The scaled reported SAR is presented as below.

**Table 14.4-6: SAR Values (WLAN - Body) – 802.11b 1Mbps (Scaled Reported SAR)**

| Ambient Temperature: 22.9 °C |     |               |                    |                     | Liquid Temperature: 22.5 °C |                                 |
|------------------------------|-----|---------------|--------------------|---------------------|-----------------------------|---------------------------------|
| Frequency                    |     | Test Position | Actual duty factor | maximum duty factor | Reported SAR (1g) (W/kg)    | Scaled reported SAR (1g) (W/kg) |
| MHz                          | Ch. |               |                    |                     |                             |                                 |
| 2412                         | 1   | Front         | 97.51%             | 100%                | 0.22                        | 0.23                            |

SAR is not required for OFDM because the 802.11b adjusted SAR  $\leq$  1.2 W/kg.



Picture 14.1 Duty factor plot

## 15 SAR Measurement Variability

SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium.

The following procedures are applied to determine if repeated measurements are required.

- 1) Repeated measurement is not required when the original highest measured SAR is  $< 0.80$  W/kg; steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is  $\geq 0.80$  W/kg, repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is  $> 1.20$  or when the original or repeated measurement is  $\geq 1.45$  W/kg ( $\sim 10\%$  from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is  $\geq 1.5$  W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is  $> 1.20$ .

**Table 15.1: SAR Measurement Variability for Body GSM1900 (1g)**

| Frequency |     | Test Position | Spacing (mm) | Original SAR (W/kg) | First Repeated SAR (W/kg) | The Ratio | Second Repeated SAR (W/kg) |
|-----------|-----|---------------|--------------|---------------------|---------------------------|-----------|----------------------------|
| MHz       | Ch. |               |              |                     |                           |           |                            |
| 1880      | 661 | Bottom        | 10           | 1.190               | 1.186                     | 1.00      | /                          |

**Table 15.2: SAR Measurement Variability for Body WCDMA1900 (1g)**

| Frequency |      | Test Position | Spacing (mm) | Original SAR (W/kg) | First Repeated SAR (W/kg) | The Ratio | Second Repeated SAR (W/kg) |
|-----------|------|---------------|--------------|---------------------|---------------------------|-----------|----------------------------|
| MHz       | Ch.  |               |              |                     |                           |           |                            |
| 1852.4    | 9662 | Bottom        | 10           | 0.957               | 0.951                     | 1.01      | /                          |

**Table 15.3: SAR Measurement Variability for Body LTE Band2 (1g)**

| Frequency |       | Test Position | Spacing (mm) | Original SAR (W/kg) | First Repeated SAR (W/kg) | The Ratio | Second Repeated SAR (W/kg) |
|-----------|-------|---------------|--------------|---------------------|---------------------------|-----------|----------------------------|
| MHz       | Ch.   |               |              |                     |                           |           |                            |
| 1900      | 19100 | Bottom        | 10           | 1.030               | 1.016                     | 1.01      | /                          |

**Table 15.4: SAR Measurement Variability for Body LTE Band4 (1g)**

| Frequency |       | Test Position | Spacing (mm) | Original SAR (W/kg) | First Repeated SAR (W/kg) | The Ratio | Second Repeated SAR (W/kg) |
|-----------|-------|---------------|--------------|---------------------|---------------------------|-----------|----------------------------|
| MHz       | Ch.   |               |              |                     |                           |           |                            |
| 1720      | 20300 | Bottom        | 10           | 0.913               | 0.901                     | 1.01      | /                          |

**Table 15.5: SAR Measurement Variability for Body LTE Band7 (1g) AP ON**

| Frequency |       | Test Position | Spacing (mm) | Original SAR (W/kg) | First Repeated SAR (W/kg) | The Ratio | Second Repeated SAR (W/kg) |
|-----------|-------|---------------|--------------|---------------------|---------------------------|-----------|----------------------------|
| MHz       | Ch.   |               |              |                     |                           |           |                            |
| 2560      | 21350 | Bottom        | 10           | 1.040               | 1.021                     | 1.02      | /                          |

**Table 15.6: SAR Measurement Variability for WLAN Head (1g)**

| Frequency |     | Side  | Test Position | Original SAR (W/kg) | First Repeated SAR (W/kg) | The Ratio | Second Repeated SAR (W/kg) |
|-----------|-----|-------|---------------|---------------------|---------------------------|-----------|----------------------------|
| MHz       | Ch. |       |               |                     |                           |           |                            |
| 2412      | 1   | Right | Touch         | 0.832               | 0.821                     | 1.01      | /                          |

## 16 Measurement Uncertainty

### 16.1 Measurement Uncertainty for Normal SAR Tests (300MHz~3GHz)

| No.                        | Error Description                               | Type | Uncertainty value | Probably Distribution | Div.       | (Ci) 1g | (Ci) 10g | Std. Unc. (1g) | Std. Unc. (10g) | Degree of freedom |
|----------------------------|-------------------------------------------------|------|-------------------|-----------------------|------------|---------|----------|----------------|-----------------|-------------------|
| <b>Measurement system</b>  |                                                 |      |                   |                       |            |         |          |                |                 |                   |
| 1                          | Probe calibration                               | B    | 5.5               | N                     | 1          | 1       | 1        | 5.5            | 5.5             | $\infty$          |
| 2                          | Isotropy                                        | B    | 4.7               | R                     | $\sqrt{3}$ | 0.7     | 0.7      | 1.9            | 1.9             | $\infty$          |
| 3                          | Boundary effect                                 | B    | 1.0               | R                     | $\sqrt{3}$ | 1       | 1        | 0.6            | 0.6             | $\infty$          |
| 4                          | Linearity                                       | B    | 4.7               | R                     | $\sqrt{3}$ | 1       | 1        | 2.7            | 2.7             | $\infty$          |
| 5                          | Detection limit                                 | B    | 1.0               | R                     | $\sqrt{3}$ | 1       | 1        | 0.6            | 0.6             | $\infty$          |
| 6                          | Readout electronics                             | B    | 0.3               | R                     | $\sqrt{3}$ | 1       | 1        | 0.3            | 0.3             | $\infty$          |
| 7                          | Response time                                   | B    | 0.8               | R                     | $\sqrt{3}$ | 1       | 1        | 0.5            | 0.5             | $\infty$          |
| 8                          | Integration time                                | B    | 2.6               | R                     | $\sqrt{3}$ | 1       | 1        | 1.5            | 1.5             | $\infty$          |
| 9                          | RF ambient conditions-noise                     | B    | 0                 | R                     | $\sqrt{3}$ | 1       | 1        | 0              | 0               | $\infty$          |
| 10                         | RF ambient conditions-reflection                | B    | 0                 | R                     | $\sqrt{3}$ | 1       | 1        | 0              | 0               | $\infty$          |
| 11                         | Probe positioned mech. restrictions             | B    | 0.4               | R                     | $\sqrt{3}$ | 1       | 1        | 0.2            | 0.2             | $\infty$          |
| 12                         | Probe positioning with respect to phantom shell | B    | 2.9               | R                     | $\sqrt{3}$ | 1       | 1        | 1.7            | 1.7             | $\infty$          |
| 13                         | Post-processing                                 | B    | 1.0               | R                     | $\sqrt{3}$ | 1       | 1        | 0.6            | 0.6             | $\infty$          |
| <b>Test sample related</b> |                                                 |      |                   |                       |            |         |          |                |                 |                   |
| 14                         | Test sample positioning                         | A    | 3.3               | N                     | 1          | 1       | 1        | 3.3            | 3.3             | 71                |
| 15                         | Device holder uncertainty                       | A    | 3.4               | N                     | 1          | 1       | 1        | 3.4            | 3.4             | 5                 |
| 16                         | Drift of output power                           | B    | 5.0               | R                     | $\sqrt{3}$ | 1       | 1        | 2.9            | 2.9             | $\infty$          |
| <b>Phantom and set-up</b>  |                                                 |      |                   |                       |            |         |          |                |                 |                   |
| 17                         | Phantom uncertainty                             | B    | 4.0               | R                     | $\sqrt{3}$ | 1       | 1        | 2.3            | 2.3             | $\infty$          |
| 18                         | Liquid conductivity (target)                    | B    | 5.0               | R                     | $\sqrt{3}$ | 0.64    | 0.43     | 1.8            | 1.2             | $\infty$          |
| 19                         | Liquid conductivity (meas.)                     | A    | 2.06              | N                     | 1          | 0.64    | 0.43     | 1.32           | 0.89            | 43                |
| 20                         | Liquid permittivity (target)                    | B    | 5.0               | R                     | $\sqrt{3}$ | 0.6     | 0.49     | 1.7            | 1.4             | $\infty$          |
| 21                         | Liquid permittivity (meas.)                     | A    | 1.6               | N                     | 1          | 0.6     | 0.49     | 1.0            | 0.8             | 521               |

|                                                    |                                             |  |  |  |  |      |      |     |
|----------------------------------------------------|---------------------------------------------|--|--|--|--|------|------|-----|
| Combined standard uncertainty                      | $u_c' = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$ |  |  |  |  | 9.25 | 9.12 | 257 |
| Expanded uncertainty (confidence interval of 95 %) | $u_e = 2u_c$                                |  |  |  |  | 18.5 | 18.2 |     |

### 16.2 Measurement Uncertainty for Normal SAR Tests (3~6GHz)

| No.                        | Error Description                               | Type | Uncertainty value | Probably Distribution | Div.       | (Ci) 1g | (Ci) 10g | Std. Unc. (1g) | Std. Unc. (10g) | Degree of freedom |
|----------------------------|-------------------------------------------------|------|-------------------|-----------------------|------------|---------|----------|----------------|-----------------|-------------------|
| <b>Measurement system</b>  |                                                 |      |                   |                       |            |         |          |                |                 |                   |
| 1                          | Probe calibration                               | B    | 6.5               | N                     | 1          | 1       | 1        | 6.5            | 6.5             | $\infty$          |
| 2                          | Isotropy                                        | B    | 4.7               | R                     | $\sqrt{3}$ | 0.7     | 0.7      | 1.9            | 1.9             | $\infty$          |
| 3                          | Boundary effect                                 | B    | 2.0               | R                     | $\sqrt{3}$ | 1       | 1        | 1.2            | 1.2             | $\infty$          |
| 4                          | Linearity                                       | B    | 4.7               | R                     | $\sqrt{3}$ | 1       | 1        | 2.7            | 2.7             | $\infty$          |
| 5                          | Detection limit                                 | B    | 1.0               | R                     | $\sqrt{3}$ | 1       | 1        | 0.6            | 0.6             | $\infty$          |
| 6                          | Readout electronics                             | B    | 0.3               | R                     | $\sqrt{3}$ | 1       | 1        | 0.3            | 0.3             | $\infty$          |
| 7                          | Response time                                   | B    | 0.8               | R                     | $\sqrt{3}$ | 1       | 1        | 0.5            | 0.5             | $\infty$          |
| 8                          | Integration time                                | B    | 2.6               | R                     | $\sqrt{3}$ | 1       | 1        | 1.5            | 1.5             | $\infty$          |
| 9                          | RF ambient conditions-noise                     | B    | 0                 | R                     | $\sqrt{3}$ | 1       | 1        | 0              | 0               | $\infty$          |
| 10                         | RF ambient conditions-reflection                | B    | 0                 | R                     | $\sqrt{3}$ | 1       | 1        | 0              | 0               | $\infty$          |
| 11                         | Probe positioned mech. restrictions             | B    | 0.8               | R                     | $\sqrt{3}$ | 1       | 1        | 0.5            | 0.5             | $\infty$          |
| 12                         | Probe positioning with respect to phantom shell | B    | 6.7               | R                     | $\sqrt{3}$ | 1       | 1        | 3.9            | 3.9             | $\infty$          |
| 13                         | Post-processing                                 | B    | 4.0               | R                     | $\sqrt{3}$ | 1       | 1        | 2.3            | 2.3             | $\infty$          |
| <b>Test sample related</b> |                                                 |      |                   |                       |            |         |          |                |                 |                   |
| 14                         | Test sample positioning                         | A    | 3.3               | N                     | 1          | 1       | 1        | 3.3            | 3.3             | 71                |
| 15                         | Device holder uncertainty                       | A    | 3.4               | N                     | 1          | 1       | 1        | 3.4            | 3.4             | 5                 |
| 16                         | Drift of output power                           | B    | 5.0               | R                     | $\sqrt{3}$ | 1       | 1        | 2.9            | 2.9             | $\infty$          |
| <b>Phantom and set-up</b>  |                                                 |      |                   |                       |            |         |          |                |                 |                   |
| 17                         | Phantom uncertainty                             | B    | 4.0               | R                     | $\sqrt{3}$ | 1       | 1        | 2.3            | 2.3             | $\infty$          |
| 18                         | Liquid conductivity (target)                    | B    | 5.0               | R                     | $\sqrt{3}$ | 0.64    | 0.43     | 1.8            | 1.2             | $\infty$          |
| 19                         | Liquid conductivity (meas.)                     | A    | 2.06              | N                     | 1          | 0.64    | 0.43     | 1.32           | 0.89            | 43                |

|                                                    |                              |                                             |     |   |            |     |      |      |      |          |
|----------------------------------------------------|------------------------------|---------------------------------------------|-----|---|------------|-----|------|------|------|----------|
| 20                                                 | Liquid permittivity (target) | B                                           | 5.0 | R | $\sqrt{3}$ | 0.6 | 0.49 | 1.7  | 1.4  | $\infty$ |
| 21                                                 | Liquid permittivity (meas.)  | A                                           | 1.6 | N | 1          | 0.6 | 0.49 | 1.0  | 0.8  | 521      |
| Combined standard uncertainty                      |                              | $u_c' = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$ |     |   |            |     |      | 10.8 | 10.7 | 257      |
| Expanded uncertainty (confidence interval of 95 %) |                              | $u_e = 2u_c$                                |     |   |            |     |      | 21.6 | 21.4 |          |

### 16.3 Measurement Uncertainty for Fast SAR Tests (300MHz~3GHz)

| No.                        | Error Description                               | Type | Uncertainty value | Probably Distribution | Div.       | (Ci) 1g | (Ci) 10g | Std. Unc. (1g) | Std. Unc. (10g) | Degree of freedom |
|----------------------------|-------------------------------------------------|------|-------------------|-----------------------|------------|---------|----------|----------------|-----------------|-------------------|
| <b>Measurement system</b>  |                                                 |      |                   |                       |            |         |          |                |                 |                   |
| 1                          | Probe calibration                               | B    | 5.5               | N                     | 1          | 1       | 1        | 5.5            | 5.5             | $\infty$          |
| 2                          | Isotropy                                        | B    | 4.7               | R                     | $\sqrt{3}$ | 0.7     | 0.7      | 1.9            | 1.9             | $\infty$          |
| 3                          | Boundary effect                                 | B    | 1.0               | R                     | $\sqrt{3}$ | 1       | 1        | 0.6            | 0.6             | $\infty$          |
| 4                          | Linearity                                       | B    | 4.7               | R                     | $\sqrt{3}$ | 1       | 1        | 2.7            | 2.7             | $\infty$          |
| 5                          | Detection limit                                 | B    | 1.0               | R                     | $\sqrt{3}$ | 1       | 1        | 0.6            | 0.6             | $\infty$          |
| 6                          | Readout electronics                             | B    | 0.3               | R                     | $\sqrt{3}$ | 1       | 1        | 0.3            | 0.3             | $\infty$          |
| 7                          | Response time                                   | B    | 0.8               | R                     | $\sqrt{3}$ | 1       | 1        | 0.5            | 0.5             | $\infty$          |
| 8                          | Integration time                                | B    | 2.6               | R                     | $\sqrt{3}$ | 1       | 1        | 1.5            | 1.5             | $\infty$          |
| 9                          | RF ambient conditions-noise                     | B    | 0                 | R                     | $\sqrt{3}$ | 1       | 1        | 0              | 0               | $\infty$          |
| 10                         | RF ambient conditions-reflection                | B    | 0                 | R                     | $\sqrt{3}$ | 1       | 1        | 0              | 0               | $\infty$          |
| 11                         | Probe positioned mech. Restrictions             | B    | 0.4               | R                     | $\sqrt{3}$ | 1       | 1        | 0.2            | 0.2             | $\infty$          |
| 12                         | Probe positioning with respect to phantom shell | B    | 2.9               | R                     | $\sqrt{3}$ | 1       | 1        | 1.7            | 1.7             | $\infty$          |
| 13                         | Post-processing                                 | B    | 1.0               | R                     | $\sqrt{3}$ | 1       | 1        | 0.6            | 0.6             | $\infty$          |
| 14                         | Fast SAR z-Approximation                        | B    | 7.0               | R                     | $\sqrt{3}$ | 1       | 1        | 4.0            | 4.0             | $\infty$          |
| <b>Test sample related</b> |                                                 |      |                   |                       |            |         |          |                |                 |                   |
| 15                         | Test sample positioning                         | A    | 3.3               | N                     | 1          | 1       | 1        | 3.3            | 3.3             | 71                |
| 16                         | Device holder uncertainty                       | A    | 3.4               | N                     | 1          | 1       | 1        | 3.4            | 3.4             | 5                 |
| 17                         | Drift of output power                           | B    | 5.0               | R                     | $\sqrt{3}$ | 1       | 1        | 2.9            | 2.9             | $\infty$          |

| Phantom and set-up                                 |                              |                                             |      |   |            |      |      |      |      |          |
|----------------------------------------------------|------------------------------|---------------------------------------------|------|---|------------|------|------|------|------|----------|
| 18                                                 | Phantom uncertainty          | B                                           | 4.0  | R | $\sqrt{3}$ | 1    | 1    | 2.3  | 2.3  | $\infty$ |
| 19                                                 | Liquid conductivity (target) | B                                           | 5.0  | R | $\sqrt{3}$ | 0.64 | 0.43 | 1.8  | 1.2  | $\infty$ |
| 20                                                 | Liquid conductivity (meas.)  | A                                           | 2.06 | N | 1          | 0.64 | 0.43 | 1.32 | 0.89 | 43       |
| 21                                                 | Liquid permittivity (target) | B                                           | 5.0  | R | $\sqrt{3}$ | 0.6  | 0.49 | 1.7  | 1.4  | $\infty$ |
| 22                                                 | Liquid permittivity (meas.)  | A                                           | 1.6  | N | 1          | 0.6  | 0.49 | 1.0  | 0.8  | 521      |
| Combined standard uncertainty                      |                              | $u_c' = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$ |      |   |            |      |      | 10.1 | 9.95 | 257      |
| Expanded uncertainty (confidence interval of 95 %) |                              | $u_e = 2u_c$                                |      |   |            |      |      | 20.2 | 19.9 |          |

#### 16.4 Measurement Uncertainty for Fast SAR Tests (3~6GHz)

| No.                        | Error Description                               | Type | Uncertainty value | Probably Distribution | Div.       | (Ci) 1g | (Ci) 10g | Std. Unc. (1g) | Std. Unc. (10g) | Degree of freedom |
|----------------------------|-------------------------------------------------|------|-------------------|-----------------------|------------|---------|----------|----------------|-----------------|-------------------|
| <b>Measurement system</b>  |                                                 |      |                   |                       |            |         |          |                |                 |                   |
| 1                          | Probe calibration                               | B    | 6.5               | N                     | 1          | 1       | 1        | 6.5            | 6.5             | $\infty$          |
| 2                          | Isotropy                                        | B    | 4.7               | R                     | $\sqrt{3}$ | 0.7     | 0.7      | 1.9            | 1.9             | $\infty$          |
| 3                          | Boundary effect                                 | B    | 2.0               | R                     | $\sqrt{3}$ | 1       | 1        | 1.2            | 1.2             | $\infty$          |
| 4                          | Linearity                                       | B    | 4.7               | R                     | $\sqrt{3}$ | 1       | 1        | 2.7            | 2.7             | $\infty$          |
| 5                          | Detection limit                                 | B    | 1.0               | R                     | $\sqrt{3}$ | 1       | 1        | 0.6            | 0.6             | $\infty$          |
| 6                          | Readout electronics                             | B    | 0.3               | R                     | $\sqrt{3}$ | 1       | 1        | 0.3            | 0.3             | $\infty$          |
| 7                          | Response time                                   | B    | 0.8               | R                     | $\sqrt{3}$ | 1       | 1        | 0.5            | 0.5             | $\infty$          |
| 8                          | Integration time                                | B    | 2.6               | R                     | $\sqrt{3}$ | 1       | 1        | 1.5            | 1.5             | $\infty$          |
| 9                          | RF ambient conditions-noise                     | B    | 0                 | R                     | $\sqrt{3}$ | 1       | 1        | 0              | 0               | $\infty$          |
| 10                         | RF ambient conditions-reflection                | B    | 0                 | R                     | $\sqrt{3}$ | 1       | 1        | 0              | 0               | $\infty$          |
| 11                         | Probe positioned mech. Restrictions             | B    | 0.8               | R                     | $\sqrt{3}$ | 1       | 1        | 0.5            | 0.5             | $\infty$          |
| 12                         | Probe positioning with respect to phantom shell | B    | 6.7               | R                     | $\sqrt{3}$ | 1       | 1        | 3.9            | 3.9             | $\infty$          |
| 13                         | Post-processing                                 | B    | 1.0               | R                     | $\sqrt{3}$ | 1       | 1        | 0.6            | 0.6             | $\infty$          |
| 14                         | Fast SAR z-Approximation                        | B    | 14.0              | R                     | $\sqrt{3}$ | 1       | 1        | 8.1            | 8.1             | $\infty$          |
| <b>Test sample related</b> |                                                 |      |                   |                       |            |         |          |                |                 |                   |

|                                                    |                              |                                             |      |   |            |      |      |      |      |          |
|----------------------------------------------------|------------------------------|---------------------------------------------|------|---|------------|------|------|------|------|----------|
| 15                                                 | Test sample positioning      | A                                           | 3.3  | N | 1          | 1    | 1    | 3.3  | 3.3  | 71       |
| 16                                                 | Device holder uncertainty    | A                                           | 3.4  | N | 1          | 1    | 1    | 3.4  | 3.4  | 5        |
| 17                                                 | Drift of output power        | B                                           | 5.0  | R | $\sqrt{3}$ | 1    | 1    | 2.9  | 2.9  | $\infty$ |
| <b>Phantom and set-up</b>                          |                              |                                             |      |   |            |      |      |      |      |          |
| 18                                                 | Phantom uncertainty          | B                                           | 4.0  | R | $\sqrt{3}$ | 1    | 1    | 2.3  | 2.3  | $\infty$ |
| 19                                                 | Liquid conductivity (target) | B                                           | 5.0  | R | $\sqrt{3}$ | 0.64 | 0.43 | 1.8  | 1.2  | $\infty$ |
| 20                                                 | Liquid conductivity (meas.)  | A                                           | 2.06 | N | 1          | 0.64 | 0.43 | 1.32 | 0.89 | 43       |
| 21                                                 | Liquid permittivity (target) | B                                           | 5.0  | R | $\sqrt{3}$ | 0.6  | 0.49 | 1.7  | 1.4  | $\infty$ |
| 22                                                 | Liquid permittivity (meas.)  | A                                           | 1.6  | N | 1          | 0.6  | 0.49 | 1.0  | 0.8  | 521      |
| Combined standard uncertainty                      |                              | $u_c' = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$ |      |   |            |      |      | 13.3 | 13.2 | 257      |
| Expanded uncertainty (confidence interval of 95 %) |                              | $u_e = 2u_c$                                |      |   |            |      |      | 26.6 | 26.4 |          |

## 17 MAIN TEST INSTRUMENTS

**Table 17.1: List of Main Instruments**

| No. | Name                  | Type          | Serial Number | Calibration Date         | Valid Period |
|-----|-----------------------|---------------|---------------|--------------------------|--------------|
| 01  | Network analyzer      | E5071C        | MY46110673    | January 26, 2016         | One year     |
| 02  | Power meter           | NRVD          | 102196        | March 03, 2016           | One year     |
| 03  | Power sensor          | NRV-Z5        | 100596        |                          |              |
| 04  | Signal Generator      | E4438C        | MY49071430    | February 01, 2016        | One Year     |
| 05  | Amplifier             | 60S1G4        | 0331848       | No Calibration Requested |              |
| 06  | BTS                   | E5515C        | MY50263375    | January 30, 2016         | One year     |
| 07  | BTS                   | CMW500        | 129942        | March 03, 2016           | One year     |
| 08  | E-field Probe         | SPEAG EX3DV4  | 3617          | August 26, 2015          | One year     |
| 09  | DAE                   | SPEAG DAE4    | 777           | August 26, 2015          | One year     |
| 10  | Dipole Validation Kit | SPEAG D750V3  | 1017          | July 23, 2015            | One year     |
| 11  | Dipole Validation Kit | SPEAG D835V2  | 4d069         | July 23, 2015            | One year     |
| 12  | Dipole Validation Kit | SPEAG D1750V2 | 1003          | July 16, 2015            | One year     |
| 13  | Dipole Validation Kit | SPEAG D1900V2 | 5d101         | July 23, 2015            | One year     |
| 14  | Dipole Validation Kit | SPEAG D2450V2 | 853           | July 24, 2015            | One year     |
| 15  | Dipole Validation Kit | SPEAG D2600V2 | 1012          | July 24, 2015            | One year     |

\*\*\*END OF REPORT BODY\*\*\*

## ANNEX A Graph Results

### 850 Left Cheek High

Date: 2016-4-2

Electronics: DAE4 Sn777

Medium: Head 850 MHz

Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.939$  mho/m;  $\epsilon_r = 41.022$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: GSM 850 Frequency: 848.8 MHz Duty Cycle: 1:8.3

Probe: EX3DV4 - SN3617 ConvF(9.56, 9.56, 9.56)

**Area Scan (71x121x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.305 W/kg

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

Reference Value = 6.602 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.349 W/kg

**SAR(1 g) = 0.283 W/kg; SAR(10 g) = 0.219 W/kg**

Maximum value of SAR (measured) = 0.312 W/kg

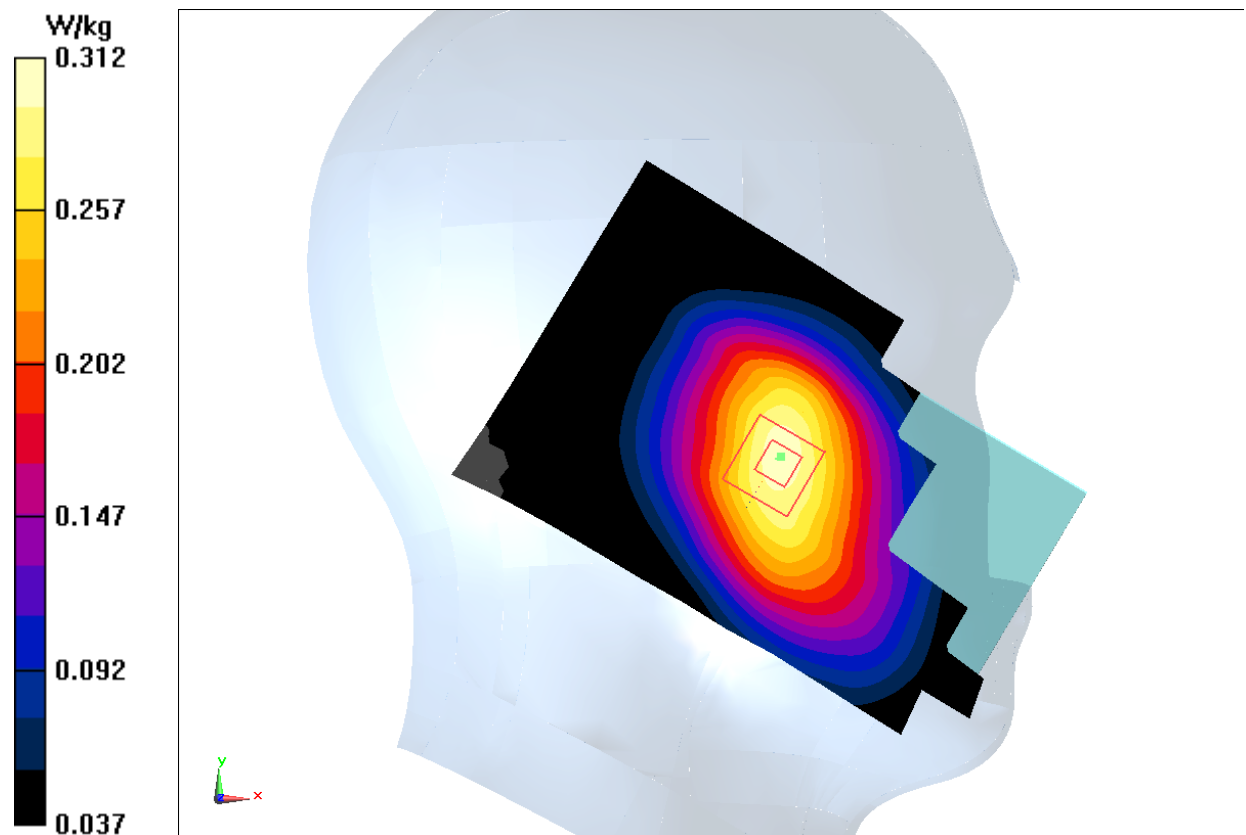
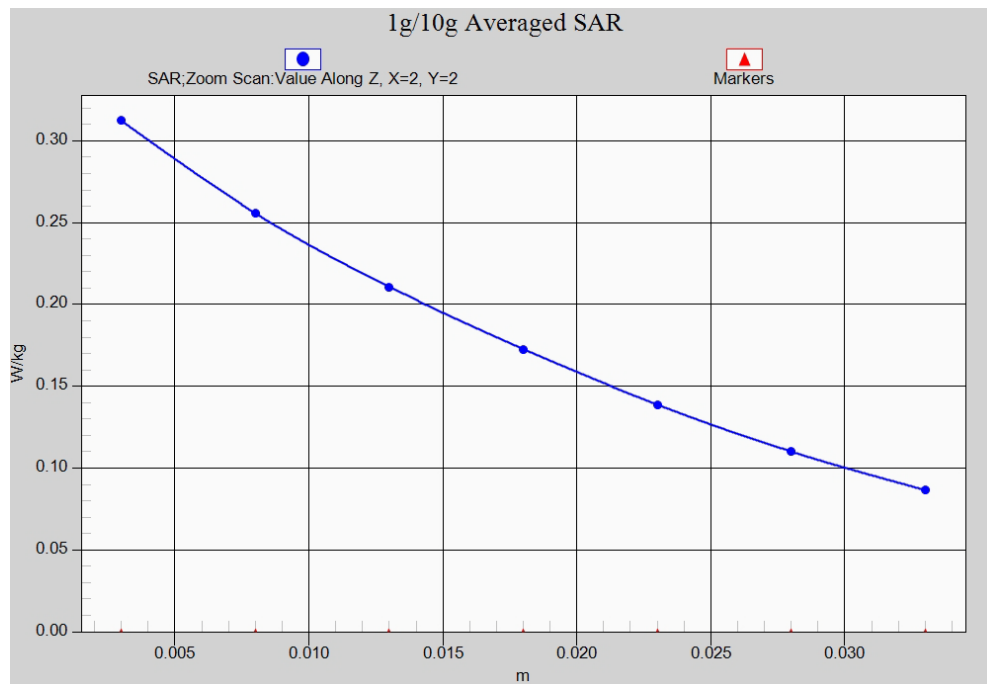


Fig.1 850MHz



**Fig. 1-1 Z-Scan at power reference point (850 MHz)**

### 850 Body Rear High

Date: 2016-4-2

Electronics: DAE4 Sn777

Medium: Body 850 MHz

Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.956$  mho/m;  $\epsilon_r = 56.311$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 848.8 MHz Duty Cycle: 1:2.67

Probe: EX3DV4 - SN3617 ConvF(9.71, 9.71, 9.71)

**Area Scan (121x71x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.846 W/kg

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

Reference Value = 24.92 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.772 W/kg

**SAR(1 g) = 0.621 W/kg; SAR(10 g) = 0.486 W/kg**

Maximum value of SAR (measured) = 0.646 W/kg

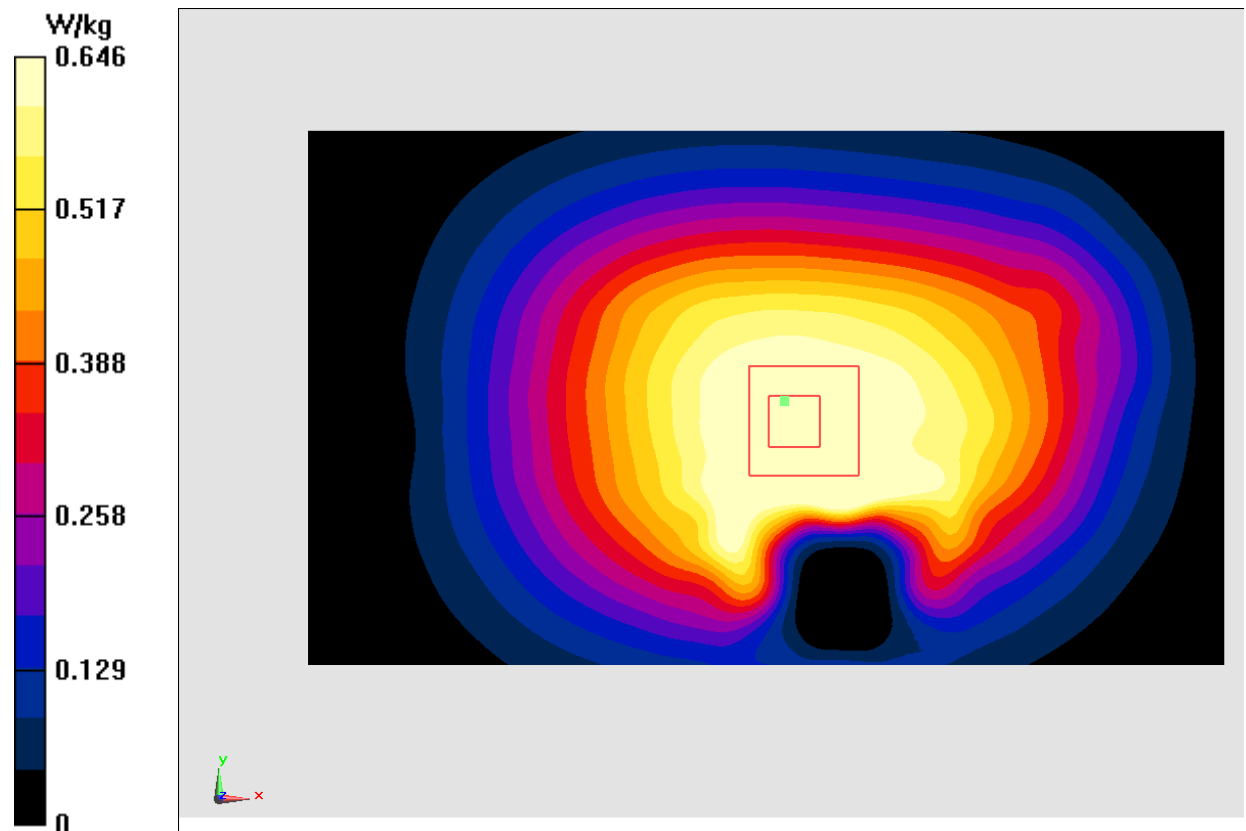
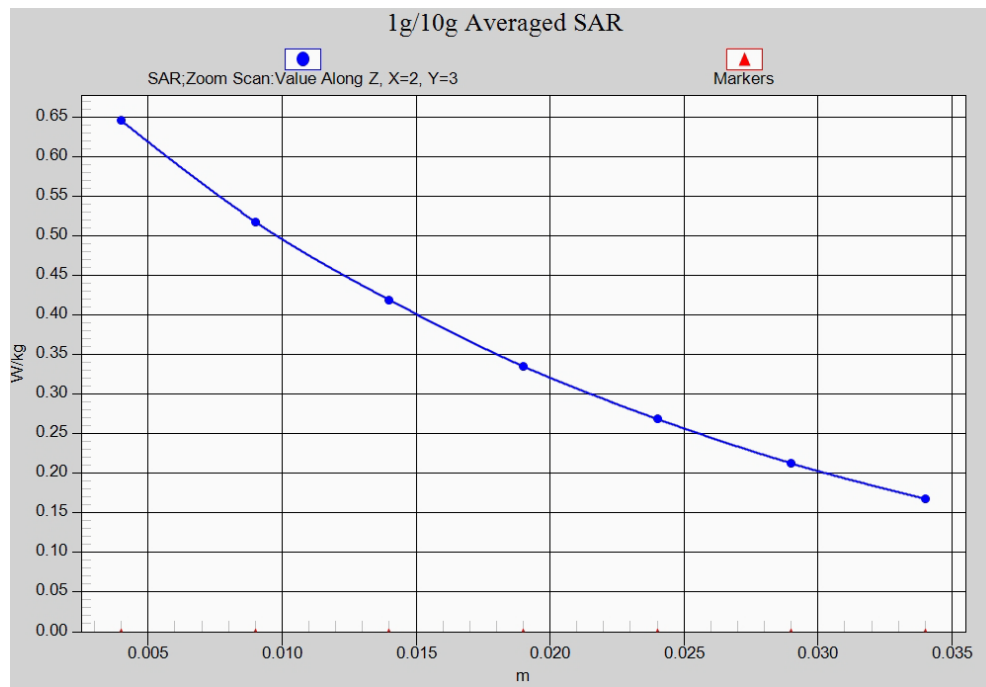


Fig.2 850 MHz



**Fig. 2-1 Z-Scan at power reference point (850 MHz)**

### 1900 Left Cheek High

Date: 2016-4-4

Electronics: DAE4 Sn777

Medium: Head 1900 MHz

Medium parameters used:  $f = 1909.8$  MHz;  $\sigma = 1.446$  mho/m;  $\epsilon_r = 38.761$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1909.8 MHz Duty Cycle: 1:8.3

Probe: EX3DV4 - SN3617 ConvF(8.07, 8.07, 8.07)

**Area Scan (71x111x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.408 W/kg

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

Reference Value = 5.489 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.482 W/kg

**SAR(1 g) = 0.312 W/kg; SAR(10 g) = 0.189 W/kg**

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

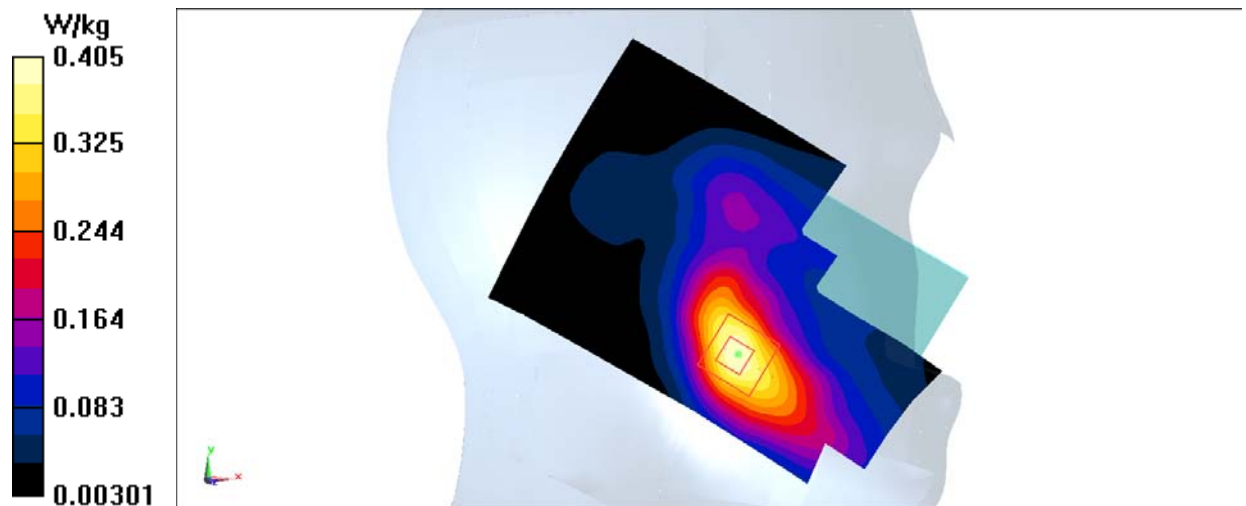
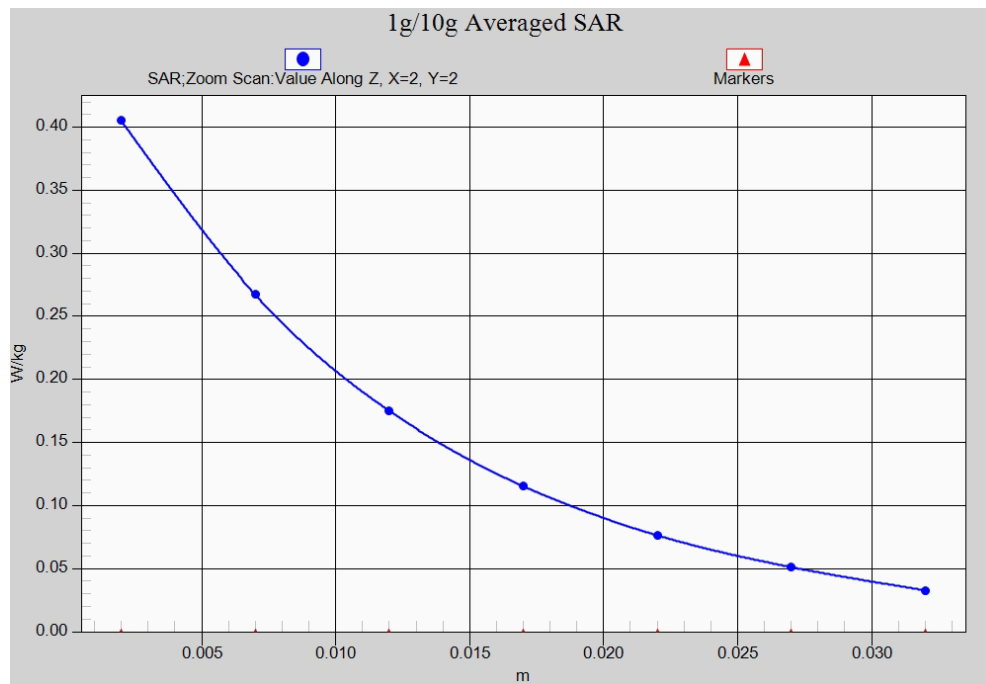


Fig.3 1900 MHz



**Fig. 3-1 Z-Scan at power reference point (1900 MHz)**

### 1900 Body Bottom Middle

Date: 2016-4-4

Electronics: DAE4 Sn777

Medium: Body 1900 MHz

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.536$  mho/m;  $\epsilon_r = 55.083$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1880 MHz Duty Cycle: 1:2.67

Probe: EX3DV4 - SN3617 ConvF(7.74, 7.74, 7.74)

**Area Scan (121x71x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

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

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

Reference Value = 25.31 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 2.16 W/kg

**SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.616 W/kg**

Maximum value of SAR (measured) = 1.32 W/kg

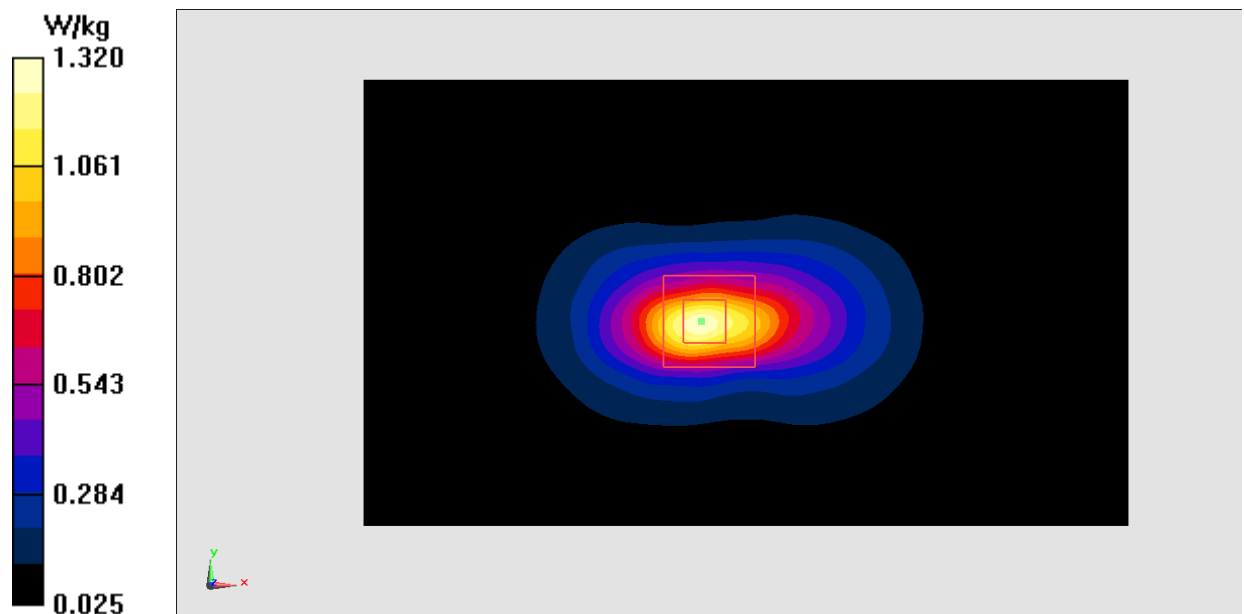


Fig.4 1900 MHz

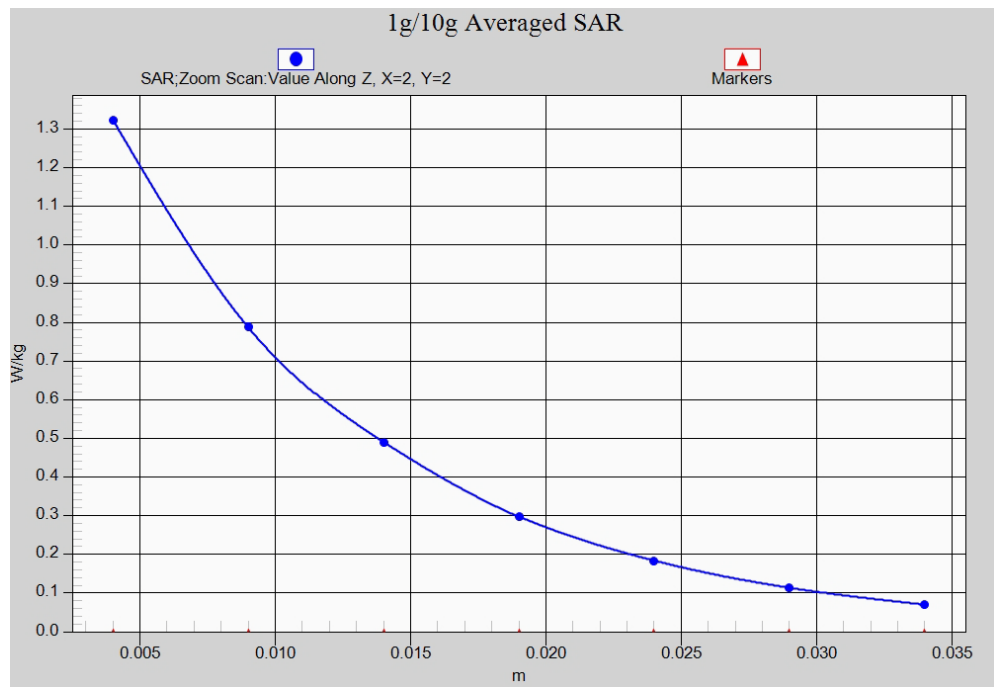


Fig. 4-1 Z-Scan at power reference point (1900 MHz)

### WCDMA 850 Left Cheek Middle

Date: 2016-4-2

Electronics: DAE4 Sn777

Medium: Head 850 MHz

Medium parameters used (interpolated):  $f = 836.4$  MHz;  $\sigma = 0.939$  mho/m;  $\epsilon_r = 41.495$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(9.56, 9.56, 9.56)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.331 W/kg

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

Reference Value = 7.080 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.397 W/kg

**SAR(1 g) = 0.307 W/kg; SAR(10 g) = 0.232 W/kg**

Maximum value of SAR (measured) = 0.348 W/kg

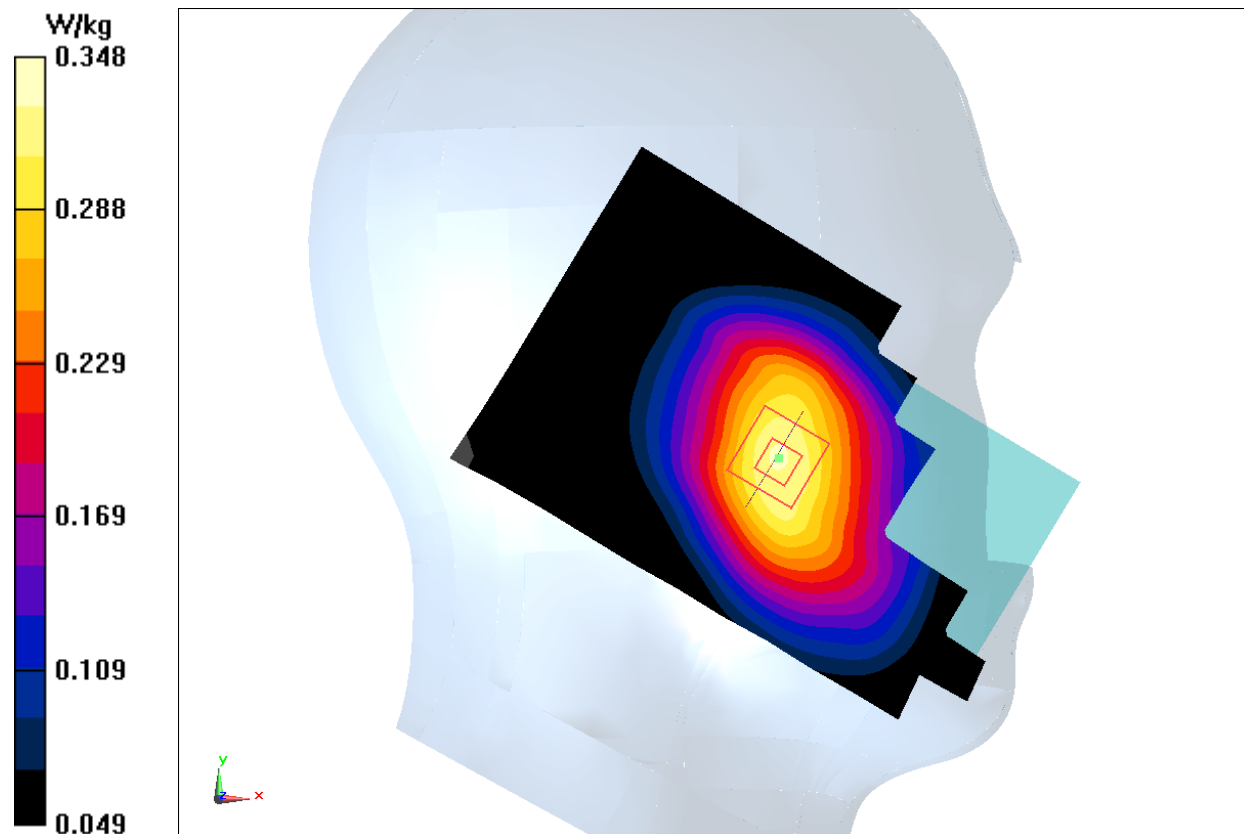


Fig.5 WCDMA 850

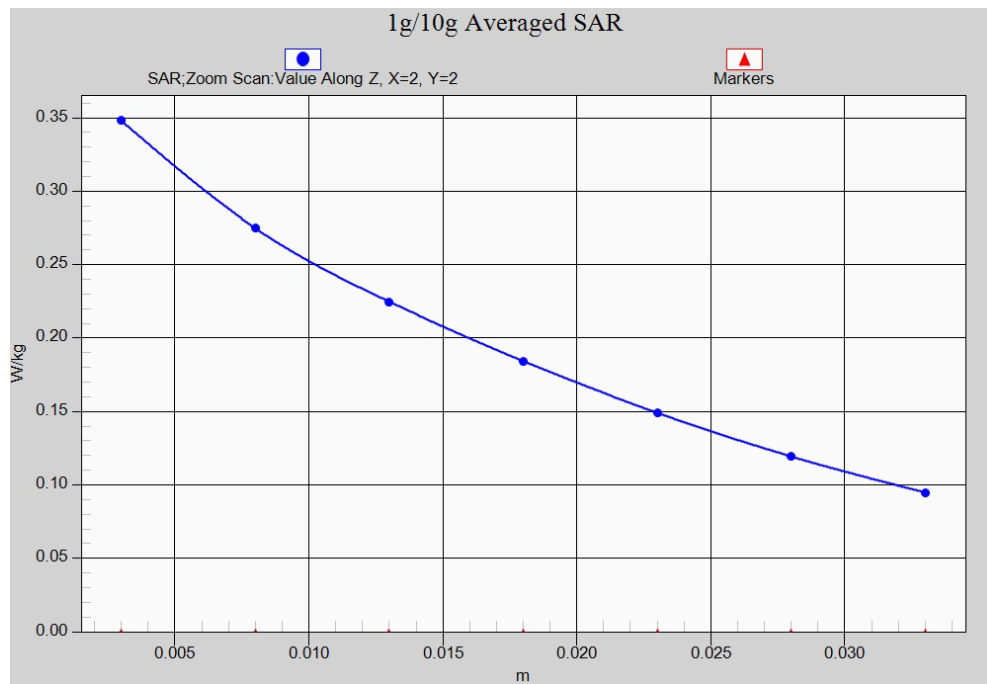


Fig. 5-1 Z-Scan at power reference point (1900 MHz)

## WCDMA 850 Body Rear Low

Date: 2016-4-2

Electronics: DAE4 Sn777

Medium: Body 850 MHz

Medium parameters used (interpolated):  $f = 826.4$  MHz;  $\sigma = 0.929$  mho/m;  $\epsilon_r = 57.16$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C

Communication System: WCDMA; Frequency: 826.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(9.71, 9.71, 9.71)

**Area Scan (121x71x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.496 W/kg

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

Reference Value = 21.74 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.551 W/kg

**SAR(1 g) = 0.447 W/kg; SAR(10 g) = 0.350 W/kg**

Maximum value of SAR (measured) = 0.465 W/kg

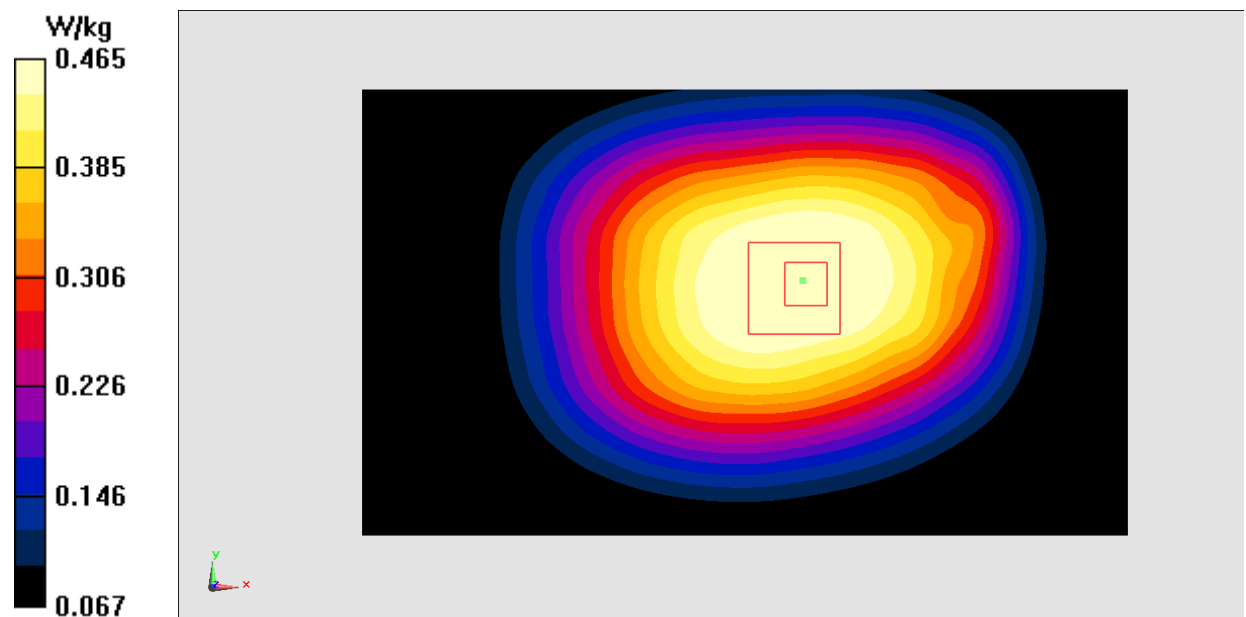
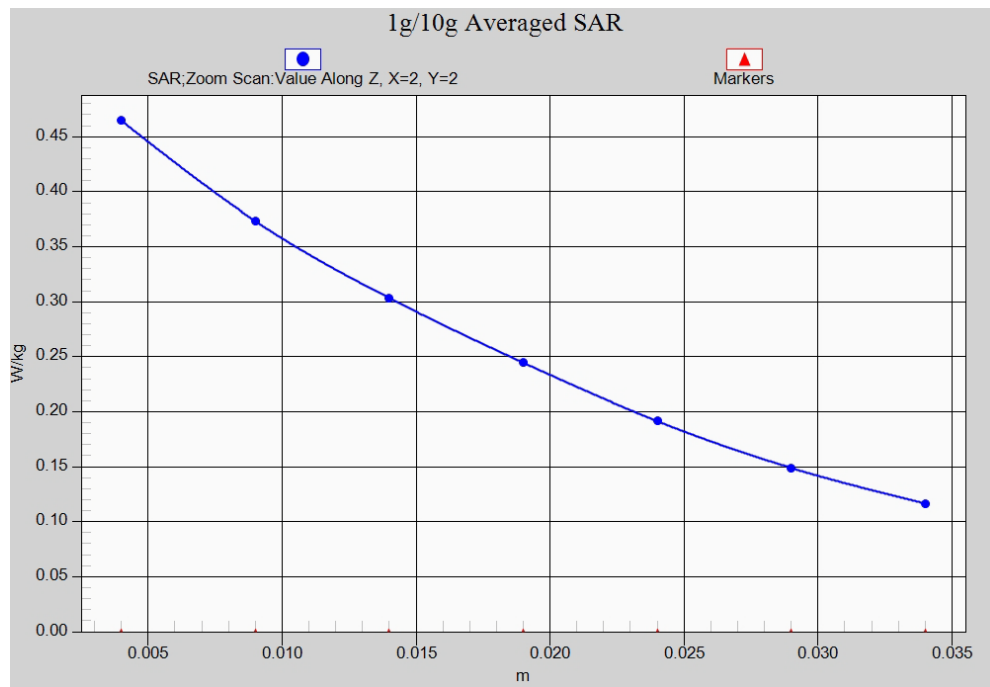


Fig.6 WCDMA 850



**Fig. 6-1 Z-Scan at power reference point (WCDMA850)**

## WCDMA 1900 Left Cheek High

Date: 2016-4-4

Electronics: DAE4 Sn777

Medium: Head 1900 MHz

Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.435$  mho/m;  $\epsilon_r = 38.866$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(8.07, 8.07, 8.07)

**Area Scan (71x111x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.412 W/kg

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

Reference Value = 5.305 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.481 W/kg

**SAR(1 g) = 0.307 W/kg; SAR(10 g) = 0.186 W/kg**

Maximum value of SAR (measured) = 0.399 W/kg

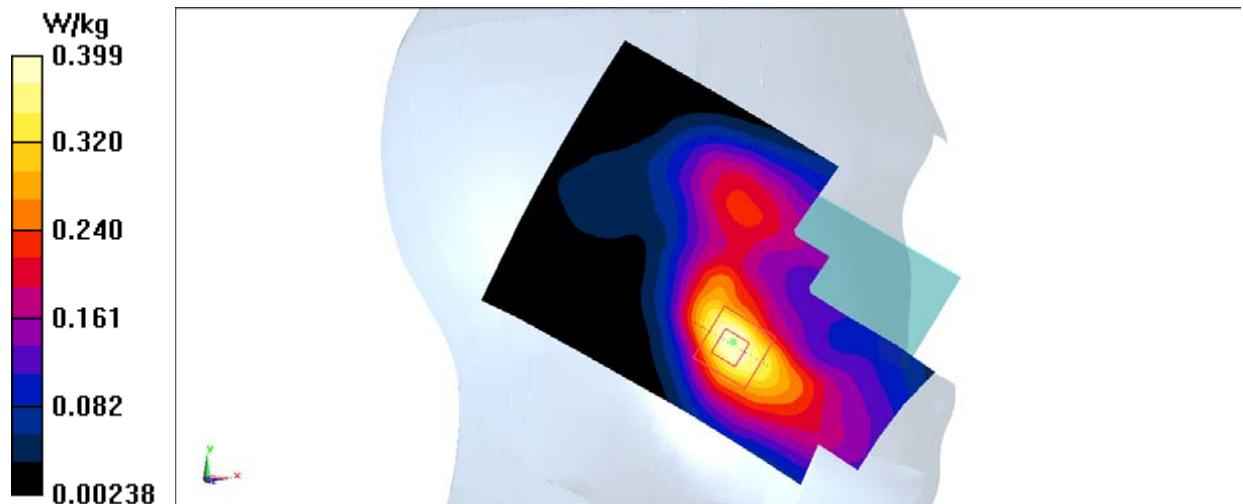


Fig.7 WCDMA1900

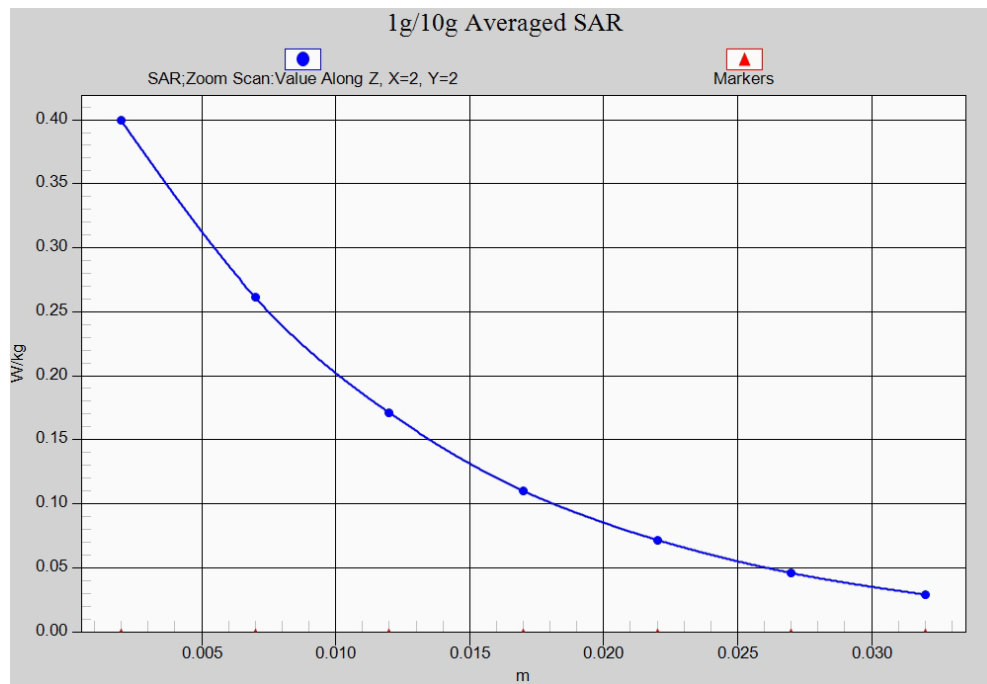


Fig. 7-1 Z-Scan at power reference point (WCDMA850)

### WCDMA 1900 Body Bottom Low

Date: 2016-4-4

Electronics: DAE4 Sn777

Medium: Body 1900 MHz

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.495$  mho/m;  $\epsilon_r = 55.591$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(7.74, 7.74, 7.74)

**Area Scan (121x71x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 1.11 W/kg

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

Reference Value = 19.58 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 1.72 W/kg

**SAR(1 g) = 0.957 W/kg; SAR(10 g) = 0.492 W/kg**

Maximum value of SAR (measured) = 1.09 W/kg

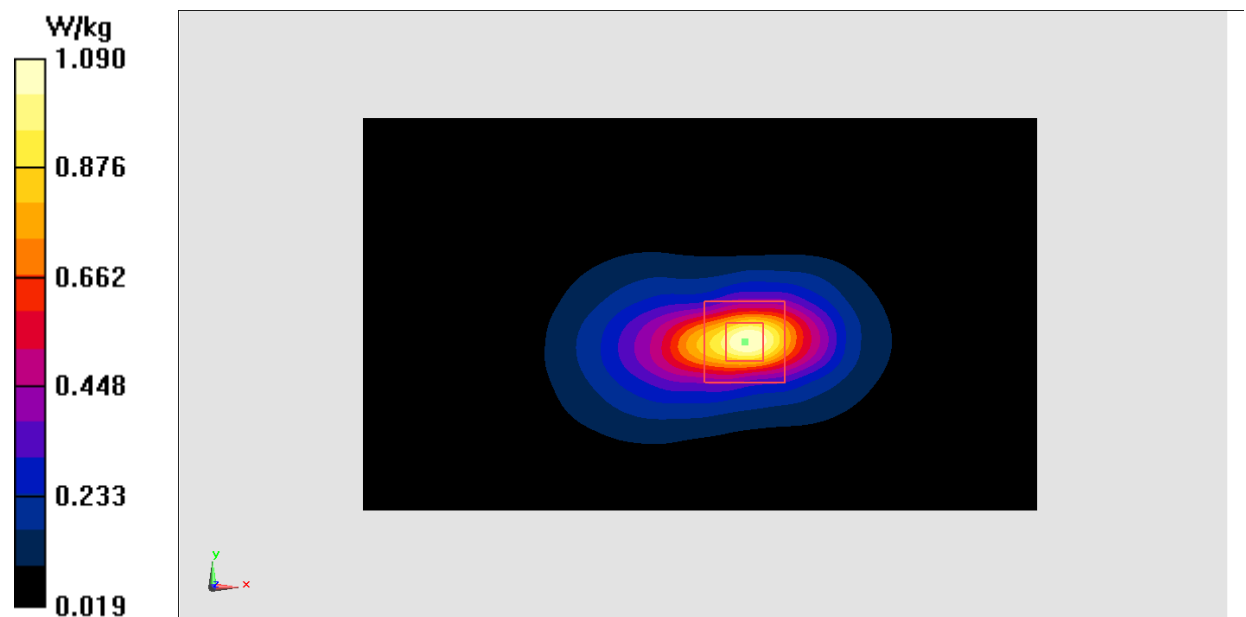
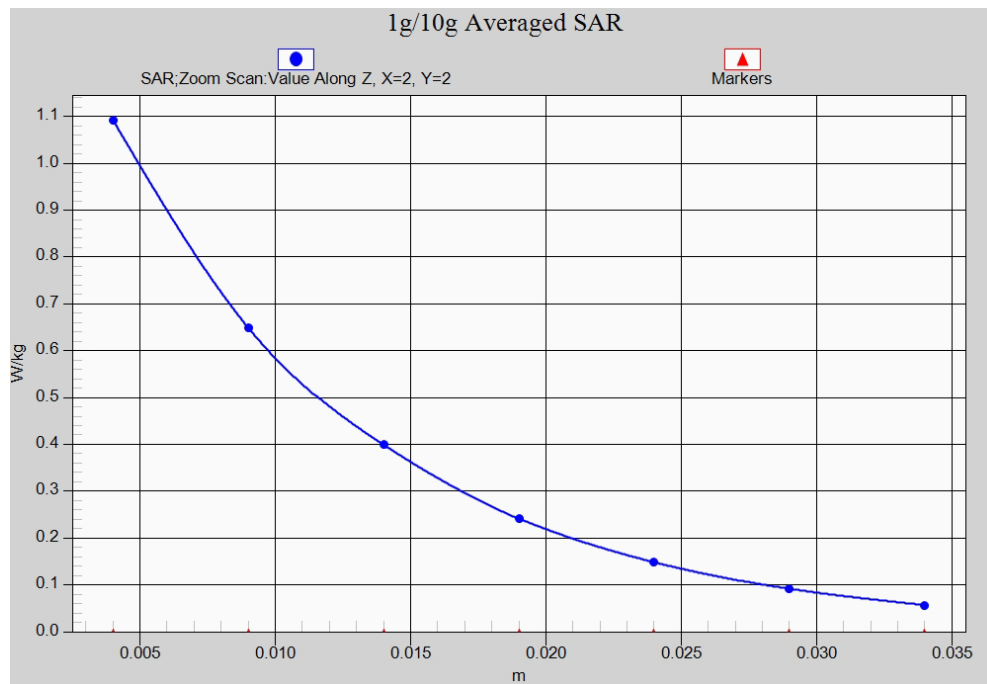


Fig.8 WCDMA1900



**Fig. 8-1 Z-Scan at power reference point (WCDMA1900)**

### LTE Band2 Left Cheek Middle with QPSK\_20M\_1RB\_Low

Date: 2016-4-4

Electronics: DAE4 Sn777

Medium: Head 1900 MHz

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.422$  mho/m;  $\epsilon_r = 38.89$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band2 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(8.07, 8.07, 8.07)

**Area Scan (71x111x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

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

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

Reference Value = 6.908 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.653 W/kg

**SAR(1 g) = 0.418 W/kg; SAR(10 g) = 0.253 W/kg**

Maximum value of SAR (measured) = 0.497 W/kg

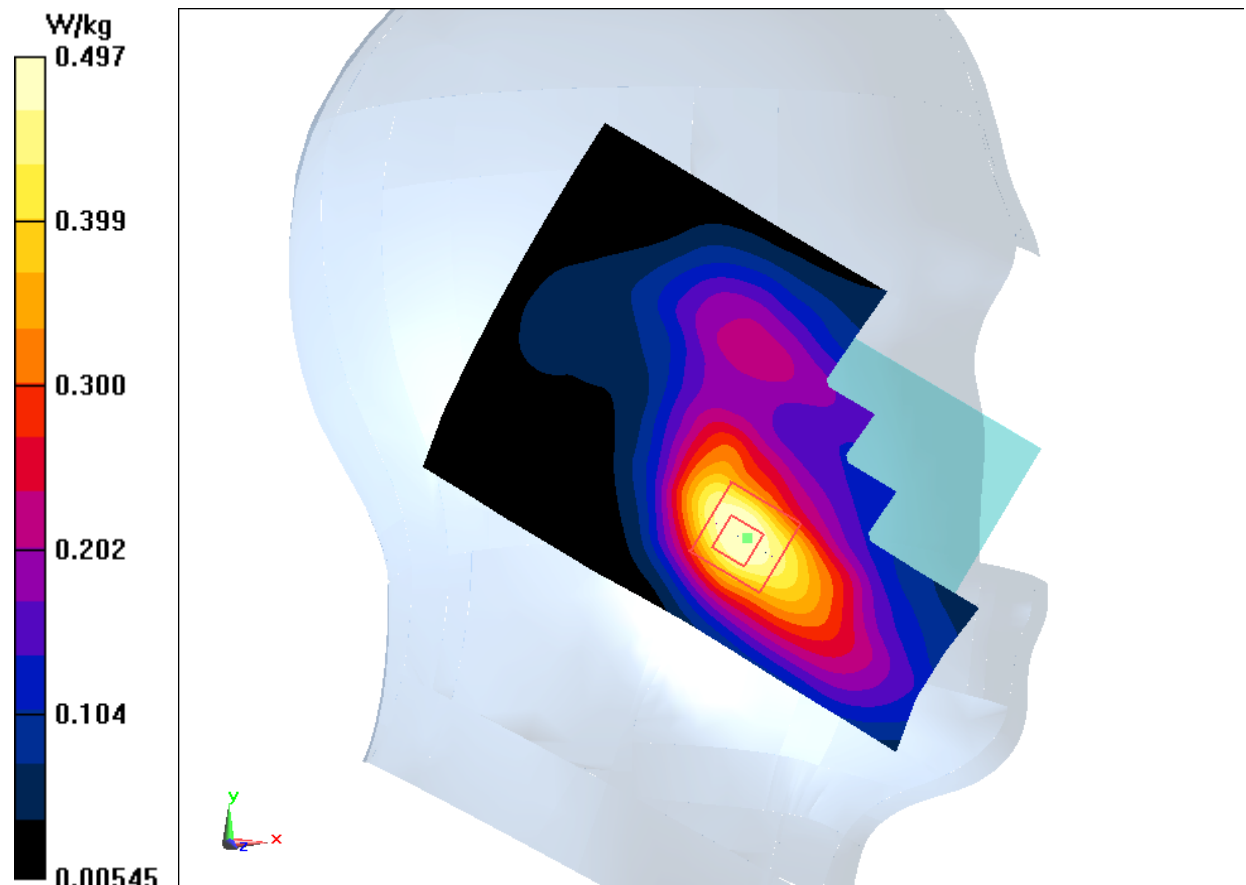
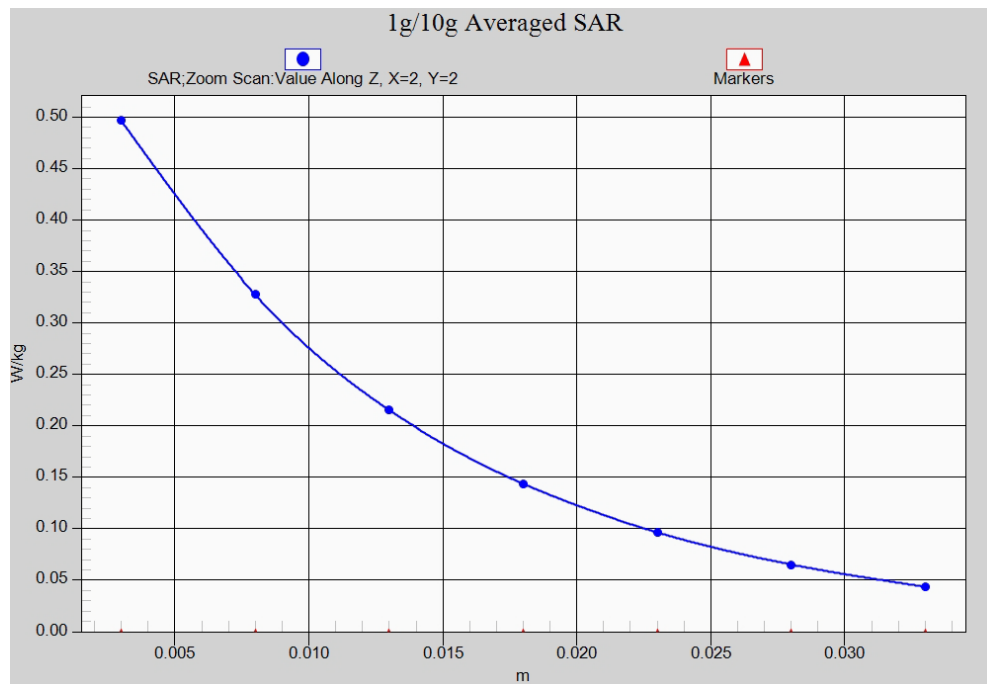


Fig.9 LTE Band2



**Fig. 9-1 Z-Scan at power reference point (LTE Band2)**

### LTE Band2 Body Bottom High with QPSK\_20M\_1RB\_Low

Date: 2016-4-4

Electronics: DAE4 Sn777

Medium: Body 1900 MHz

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.568$  mho/m;  $\epsilon_r = 54.08$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band4 Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(7.74, 7.74, 7.74)

**Area Scan (121x71x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 1.18 W/kg

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

Reference Value = 22.64 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.76 W/kg

**SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.557 W/kg**

Maximum value of SAR (measured) = 1.17 W/kg

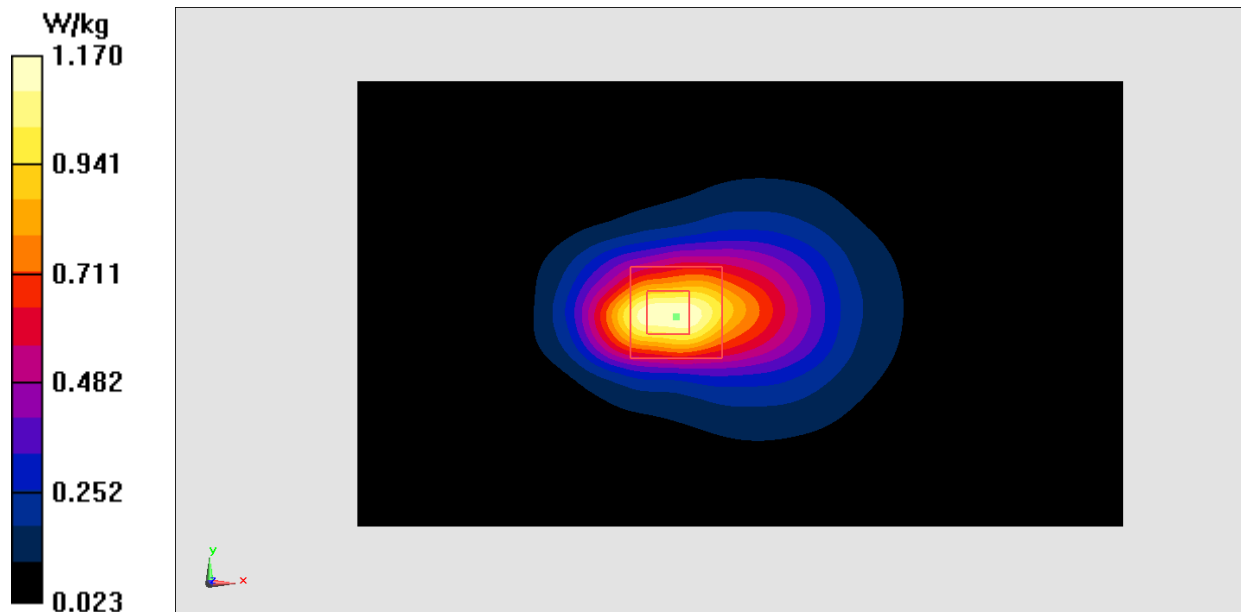
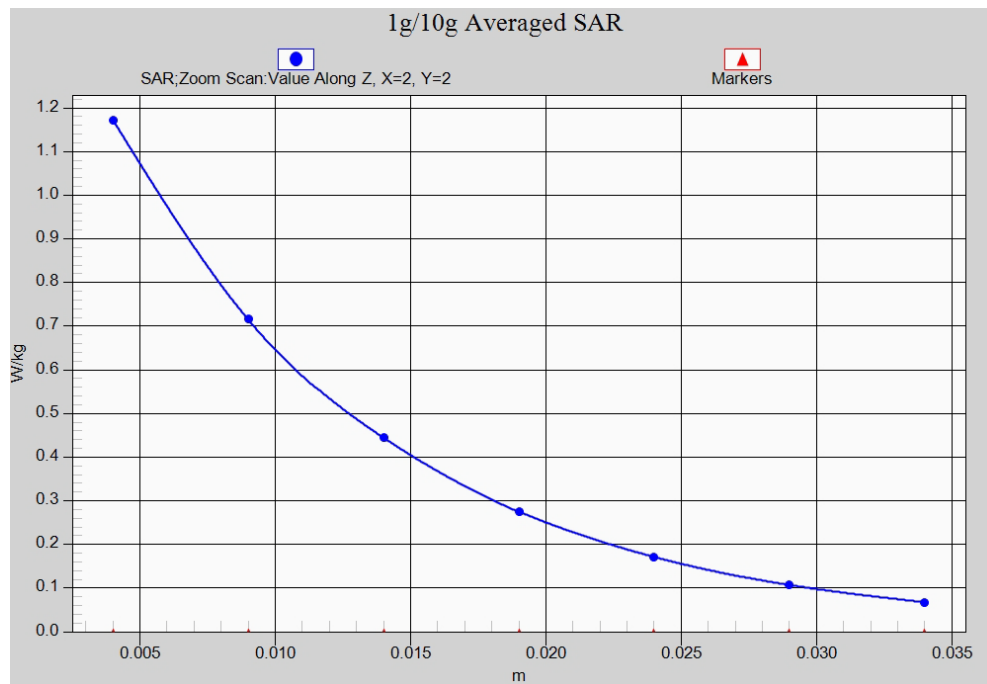


Fig.10 LTE Band2



**Fig. 10-1 Z-Scan at power reference point (LTE Band2)**

### **LTE Band4 Left Cheek High with QPSK\_20M\_1RB\_Low**

Date: 2016-3-29

Electronics: DAE4 Sn777

Medium: Head 1750 MHz

Medium parameters used:  $f = 1745$  MHz;  $\sigma = 1.321$  mho/m;  $\epsilon_r = 41.33$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C

Communication System: LTE Band4 Frequency: 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(8.34, 8.34, 8.34)

**Area Scan (71x111x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.248 W/kg

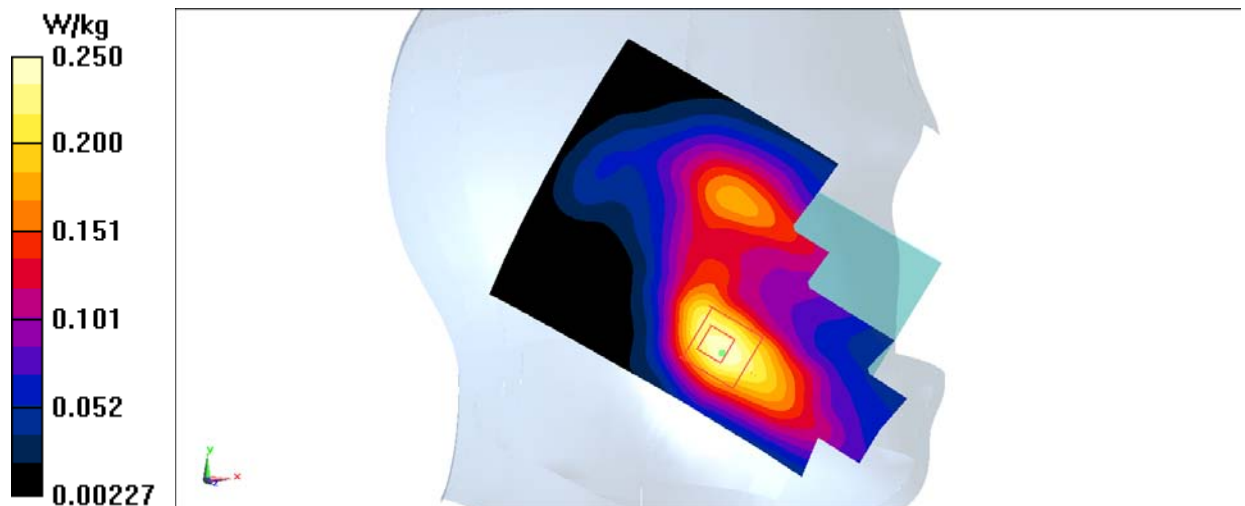
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.756 V/m; Power Drift = -0.15 dB

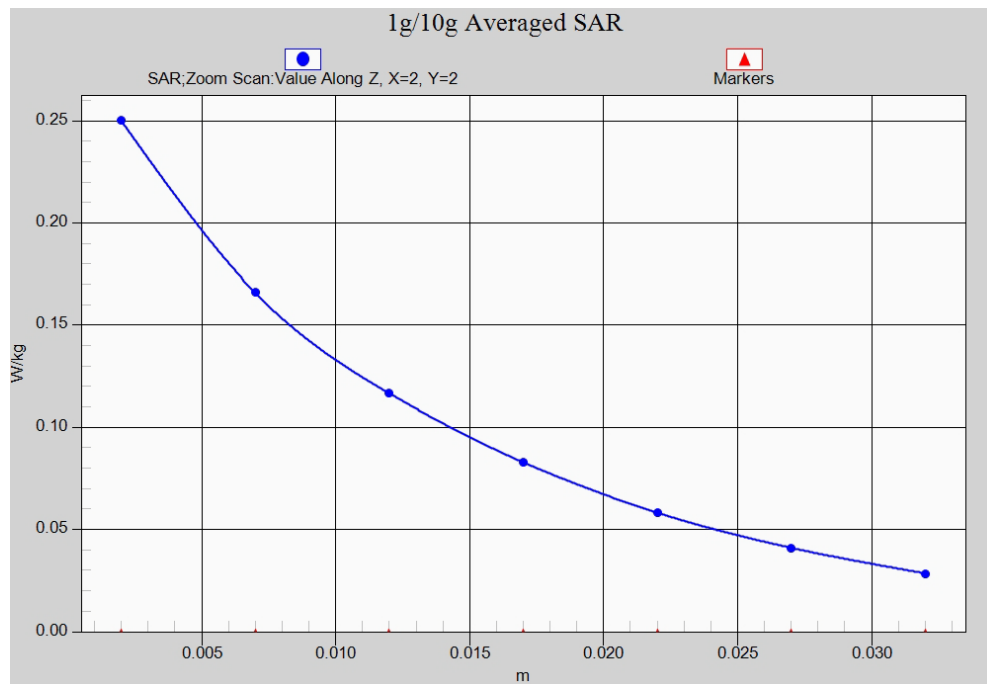
Peak SAR (extrapolated) = 0.298 W/kg

**SAR(1 g) = 0.198 W/kg; SAR(10 g) = 0.125 W/kg**

Maximum value of SAR (measured) = 0.250 W/kg



**Fig.11 LTE Band4**



**Fig. 11-1 Z-Scan at power reference point (LTE Band4)**

### LTE Band4 Body Bottom Low with QPSK\_20M\_1RB\_Low

Date: 2016-3-29

Electronics: DAE4 Sn777

Medium: Body 1750 MHz

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.425$  mho/m;  $\epsilon_r = 55.86$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band4 Frequency: 1720 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(7.96, 7.96, 7.96)

**Area Scan (121x71x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 1.05 W/kg

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

Reference Value = 22.55 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 1.63 W/kg

**SAR(1 g) = 0.913 W/kg; SAR(10 g) = 0.470 W/kg**

Maximum value of SAR (measured) = 1.01 W/kg

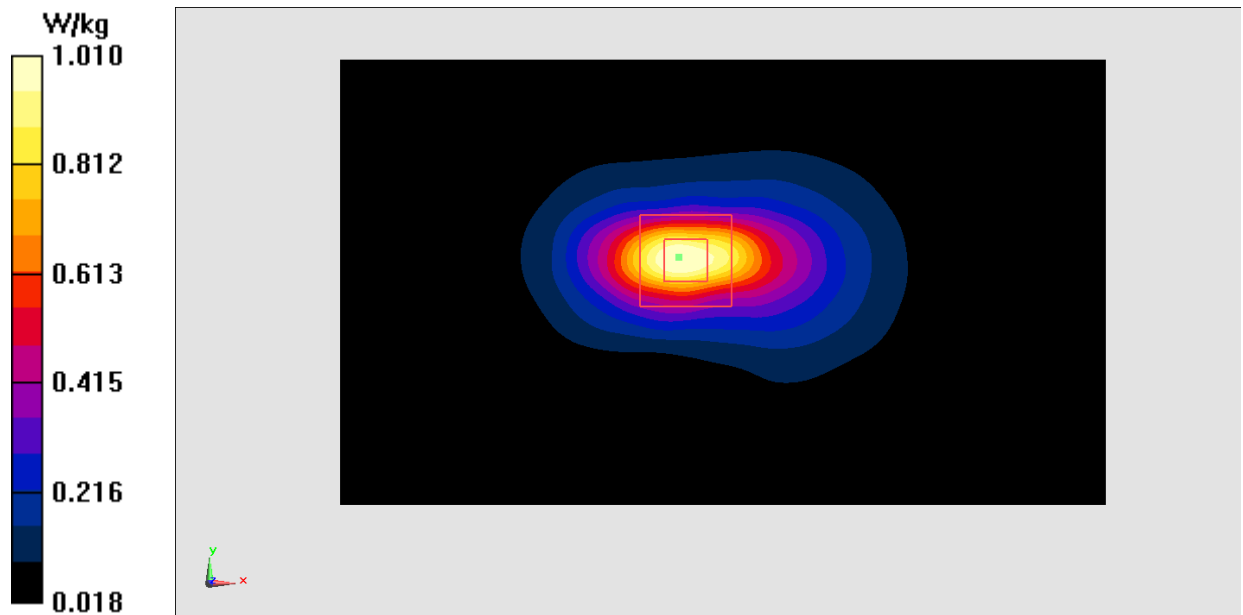


Fig.12 LTE Band4

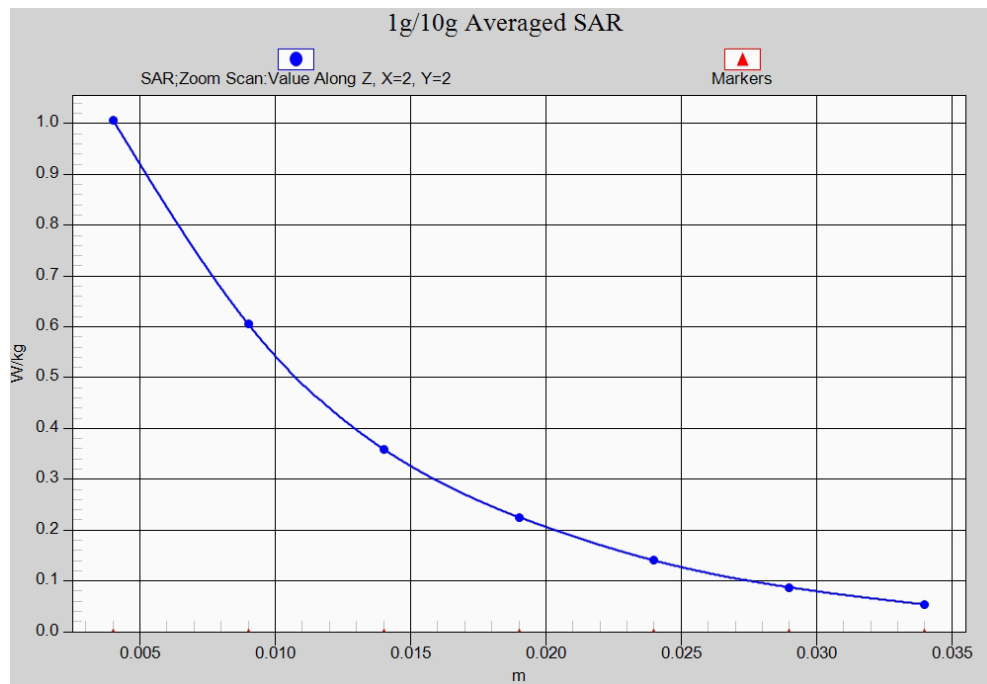


Fig. 12-1 Z-Scan at power reference point (LTE Band4)

### LTE Band7 Left Cheek Middle with QPSK\_20M\_1RB\_Low

Date: 2016-4-1

Electronics: DAE4 Sn777

Medium: Head 2600 MHz

Medium parameters used:  $f = 2535$  MHz;  $\sigma = 1.865$  mho/m;  $\epsilon_r = 39.68$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band7 Frequency: 2535 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(7.21, 7.21, 7.21)

**Area Scan (91x141x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.191 W/kg

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

Reference Value = 2.190 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.274 W/kg

**SAR(1 g) = 0.143 W/kg; SAR(10 g) = 0.075 W/kg**

Maximum value of SAR (measured) = 0.176 W/kg

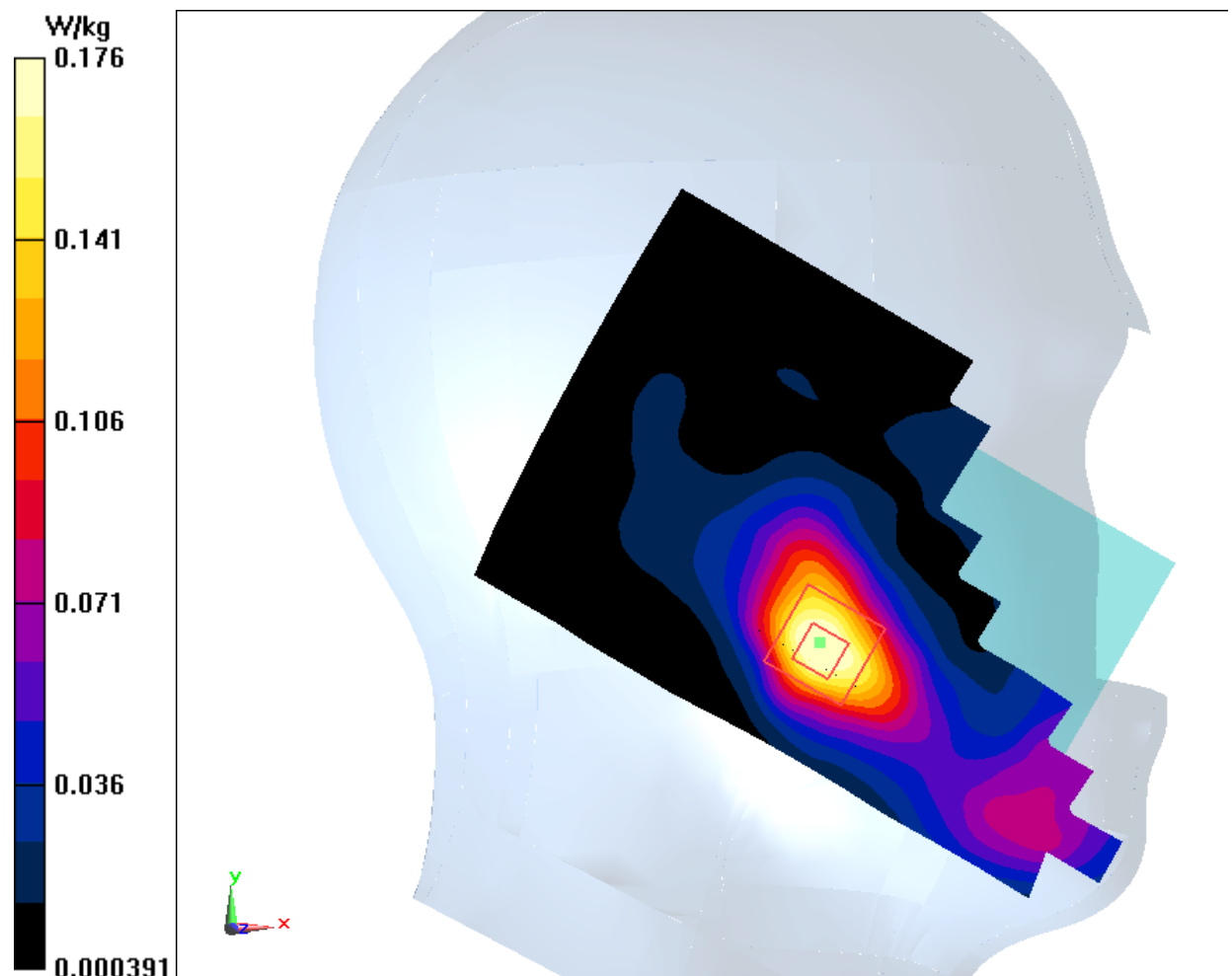
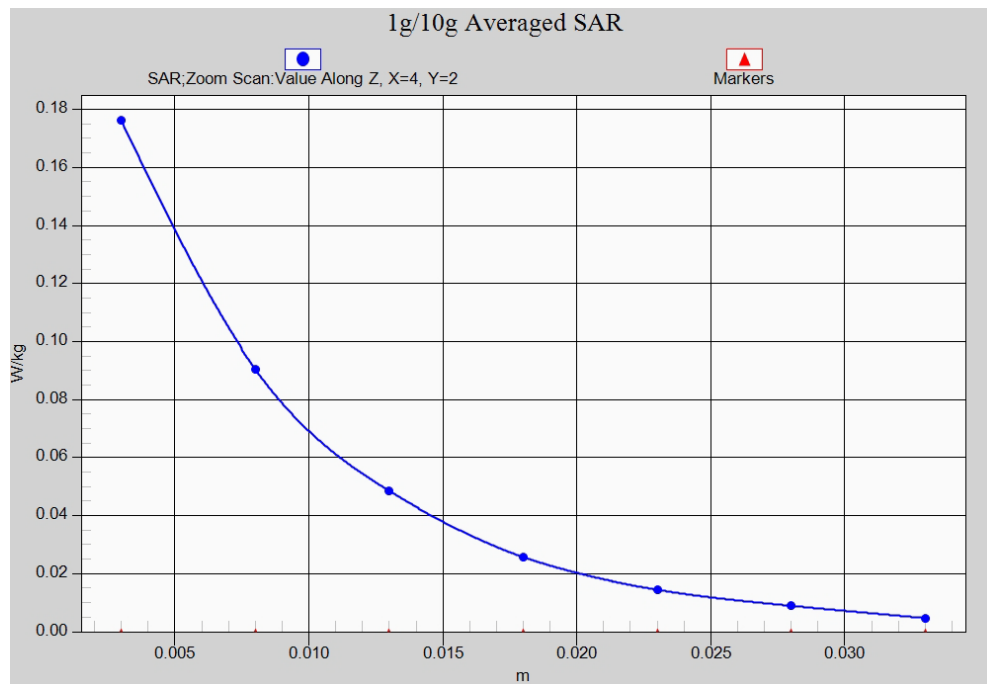


Fig.13 LTE Band7



**Fig. 13-1 Z-Scan at power reference point (LTE Band7)**