

**Table 14.18: SAR Values (WCDMA1900 MHz - Head)**

| 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.  |       |               |            |                       |                          |                          |                          |                         |                         |                  |
| 1880      | 9400 | Left  | Touch         | /          | 22.0                  | 23.7                     | 0.206                    | <b>0.30</b>              | 0.360                   | <b>0.53</b>             | -0.17            |
| 1880      | 9400 | Left  | Tilt          | /          | 22.0                  | 23.7                     | 0.144                    | <b>0.21</b>              | 0.286                   | <b>0.42</b>             | -0.07            |
| 1880      | 9400 | Right | Touch         | /          | 22.0                  | 23.7                     | 0.138                    | <b>0.20</b>              | 0.249                   | <b>0.37</b>             | 0.14             |
| 1880      | 9400 | Right | Tilt          | /          | 22.0                  | 23.7                     | 0.085                    | <b>0.13</b>              | 0.167                   | <b>0.25</b>             | 0.10             |
| 1907.6    | 9538 | Left  | Touch         | Fig.9      | 22.1                  | 23.7                     | 0.234                    | <b>0.34</b>              | 0.382                   | <b>0.55</b>             | 0.05             |
| 1852.4    | 9262 | Left  | Touch         | /          | 22.1                  | 23.7                     | 0.177                    | <b>0.26</b>              | 0.310                   | <b>0.45</b>             | 0.03             |

**Table 14.19: SAR Values (WCDMA1900 MHz Body) -AP ON**

| 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.  |               |            |                       |                          |                          |                          |                         |                         |                  |
| 1880      | 9400 | Front         | Fig.10     | 22.0                  | 23.7                     | 0.249                    | <b>0.37</b>              | 0.413                   | <b>0.61</b>             | -0.01            |
| 1880      | 9400 | Rear          | /          | 22.0                  | 23.7                     | 0.194                    | <b>0.29</b>              | 0.333                   | <b>0.49</b>             | 0.03             |
| 1880      | 9400 | Left          | /          | 22.0                  | 23.7                     | 0.115                    | <b>0.17</b>              | 0.195                   | <b>0.29</b>             | -0.08            |
| 1880      | 9400 | Right         | /          | 22.0                  | 23.7                     | 0.098                    | <b>0.14</b>              | 0.173                   | <b>0.26</b>             | -0.10            |
| 1880      | 9400 | Bottom        | /          | 22.0                  | 23.7                     | 0.210                    | <b>0.31</b>              | 0.397                   | <b>0.59</b>             | 0.04             |
| 1907.6    | 9538 | Front         | /          | 22.1                  | 23.7                     | 0.239                    | <b>0.35</b>              | 0.405                   | <b>0.59</b>             | 0.18             |
| 1852.4    | 9262 | Front         | /          | 22.1                  | 23.7                     | 0.230                    | <b>0.33</b>              | 0.394                   | <b>0.57</b>             | 0.02             |

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

**Table 14.20: SAR Values (WCDMA1900 MHz -Body) -AP OFF**

| 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.  |               |            |                       |                          |                          |                          |                         |                         |                  |
| 1880      | 9400 | Front         | /          | 22.0                  | 23.7                     | 0.249                    | <b>0.37</b>              | 0.413                   | <b>0.61</b>             | -0.01            |
| 1880      | 9400 | Rear          | /          | 22.0                  | 23.7                     | 0.194                    | <b>0.29</b>              | 0.333                   | <b>0.49</b>             | 0.03             |
| 1907.6    | 9538 | Front         | /          | 22.1                  | 23.7                     | 0.239                    | <b>0.35</b>              | 0.405                   | <b>0.59</b>             | 0.18             |
| 1852.4    | 9262 | Front         | /          | 22.1                  | 23.7                     | 0.230                    | <b>0.33</b>              | 0.394                   | <b>0.57</b>             | 0.02             |

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

**Table 14.21: SAR Values (LTE Band 2-Head)**

| Ambient Temperature: 21.5°C |       |               |               |                        |                          | Liquid Temperature: 21.0°C |                          |                          |                         |                         |                  |
|-----------------------------|-------|---------------|---------------|------------------------|--------------------------|----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                   |       | Configuration | Test Position | Conduct-ed Power (dBm) | Max. tune-up Power (dBm) | Figure No.                 | 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.   |               |               |                        |                          |                            |                          |                          |                         |                         |                  |
| 1860                        | 18700 | 1RB_Mid       | Left Touch    | 22.10                  | 22.5                     | Fig.11                     | 0.126                    | <b>0.20</b>              | 0.207                   | <b>0.32</b>             | -0.11            |
| 1860                        | 18700 | 50RB_Mid      | Left Touch    | 21.03                  | 22                       | /                          | 0.088                    | <b>0.12</b>              | 0.153                   | <b>0.21</b>             | 0.06             |
| 1860                        | 18700 | 1RB_Mid       | Left Tilt     | 22.10                  | 22.5                     | /                          | 0.103                    | <b>0.10</b>              | 0.187                   | <b>0.18</b>             | 0.07             |
| 1860                        | 18700 | 50RB_Mid      | Left Tilt     | 21.03                  | 22                       | /                          | 0.072                    | <b>0.10</b>              | 0.130                   | <b>0.18</b>             | -0.06            |
| 1860                        | 18700 | 1RB_Mid       | Right Touch   | 22.10                  | 22.5                     | /                          | 0.108                    | <b>0.11</b>              | 0.181                   | <b>0.18</b>             | -0.03            |
| 1860                        | 18700 | 50RB_Mid      | Right Touch   | 21.03                  | 22                       | /                          | 0.077                    | <b>0.11</b>              | 0.130                   | <b>0.18</b>             | 0.05             |
| 1860                        | 18700 | 1RB_Mid       | Right Tilt    | 22.10                  | 22.5                     | /                          | 0.071                    | <b>0.07</b>              | 0.132                   | <b>0.13</b>             | 0.05             |
| 1860                        | 18700 | 50RB_Mid      | Right Tilt    | 21.03                  | 22                       | /                          | 0.057                    | <b>0.08</b>              | 0.119                   | <b>0.17</b>             | 0.08             |

**Table 14.22: SAR Values (LTE Band 2-Body)-AP ON**

| Ambient Temperature: 21.8°C |       |               |               |                        |                          | Liquid Temperature: 21.3°C |                          |                          |                         |                         |                  |
|-----------------------------|-------|---------------|---------------|------------------------|--------------------------|----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                   |       | Configuration | Test Position | Conduct-ed Power (dBm) | Max. tune-up Power (dBm) | Figure No.                 | 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.   |               |               |                        |                          |                            |                          |                          |                         |                         |                  |
| 1860                        | 18700 | 1RB_Mid       | Front         | 22.10                  | 22.5                     | Fig.12                     | 0.231                    | <b>0.25</b>              | 0.372                   | <b>0.41</b>             | -0.01            |
| 1860                        | 18700 | 50RB_Low      | Front         | 21.03                  | 22                       | /                          | 0.168                    | <b>0.21</b>              | 0.288                   | <b>0.36</b>             | -0.07            |
| 1860                        | 18700 | 1RB_Mid       | Rear          | 22.10                  | 22.5                     | /                          | 0.203                    | <b>0.22</b>              | 0.352                   | <b>0.39</b>             | 0.03             |
| 1860                        | 18700 | 50RB_Low      | Rear          | 21.03                  | 22                       | /                          | 0.146                    | <b>0.18</b>              | 0.254                   | <b>0.32</b>             | 0.07             |
| 1860                        | 18700 | 1RB_Mid       | Left          | 22.10                  | 22.5                     | /                          | 0.071                    | <b>0.08</b>              | 0.116                   | <b>0.13</b>             | 0.08             |
| 1860                        | 18700 | 50RB_Low      | Left          | 21.03                  | 22                       | /                          | 0.051                    | <b>0.06</b>              | 0.084                   | <b>0.11</b>             | -0.10            |
| 1860                        | 18700 | 1RB_Mid       | Right         | 22.10                  | 22.5                     | /                          | 0.099                    | <b>0.11</b>              | 0.168                   | <b>0.18</b>             | -0.11            |
| 1860                        | 18700 | 50RB_Low      | Right         | 21.03                  | 22                       | /                          | 0.075                    | <b>0.09</b>              | 0.124                   | <b>0.16</b>             | -0.80            |
| 1860                        | 18700 | 1RB_Mid       | Bottom        | 22.10                  | 22.5                     | /                          | 0.185                    | <b>0.20</b>              | 0.343                   | <b>0.38</b>             | -0.70            |
| 1860                        | 18700 | 50RB_Low      | Bottom        | 21.03                  | 22                       | /                          | 0.142                    | <b>0.18</b>              | 0.268                   | <b>0.34</b>             | -0.10            |

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

**Table 14.23: SAR Values (LTE Band 2-Body)-AP OFF**

| Ambient Temperature: 21.8°C |       |               |               |                        |                          | Liquid Temperature: 21.3°C |                          |                          |                         |                         |                  |
|-----------------------------|-------|---------------|---------------|------------------------|--------------------------|----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency                   |       | Configuration | Test Position | Conduct-ed Power (dBm) | Max. tune-up Power (dBm) | Figure No.                 | 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.   |               |               |                        |                          |                            |                          |                          |                         |                         |                  |
| 1860                        | 18700 | 1RB_Mid       | Front         | 22.10                  | 22.5                     | /                          | 0.231                    | <b>0.25</b>              | 0.372                   | <b>0.41</b>             | -0.01            |
| 1860                        | 18700 | 50RB_Mid      | Front         | 21.03                  | 22                       | /                          | 0.168                    | <b>0.21</b>              | 0.288                   | <b>0.36</b>             | -0.07            |
| 1860                        | 18700 | 1RB_Mid       | Rear          | 22.10                  | 22.5                     | /                          | 0.203                    | <b>0.22</b>              | 0.352                   | <b>0.39</b>             | 0.03             |
| 1860                        | 18700 | 50RB_Mid      | Rear          | 21.03                  | 22                       | /                          | 0.146                    | <b>0.18</b>              | 0.254                   | <b>0.32</b>             | 0.07             |

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

**Table 14.24: SAR Values (LTE Band 4-Head)**

| Ambient Temperature: 22.2°C |       |               |               |                               |                                   | Liquid Temperature: 21.7°C |                                |                                |                               |                               |                        |
|-----------------------------|-------|---------------|---------------|-------------------------------|-----------------------------------|----------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------|
| Frequency                   |       | Configuration | Test Position | Conduct<br>-ed Power<br>(dBm) | Max.<br>tune-up<br>Power<br>(dBm) | Figure<br>No.              | 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       | Left Touch    | 22.22                         | 22.5                              | Fig.13                     | 0.094                          | <b>0.10</b>                    | 0.142                         | <b>0.15</b>                   | -0.04                  |
| 1745                        | 20300 | 50RB_Mid      | Left Touch    | 21.16                         | 22                                | /                          | 0.074                          | <b>0.09</b>                    | 0.117                         | <b>0.14</b>                   | 0.02                   |
| 1745                        | 20300 | 1RB_Low       | Left Tilt     | 22.22                         | 22.5                              | /                          | 0.070                          | <b>0.07</b>                    | 0.124                         | <b>0.13</b>                   | 0.03                   |
| 1745                        | 20300 | 50RB_Mid      | Left Tilt     | 21.16                         | 22                                | /                          | 0.060                          | <b>0.07</b>                    | 0.108                         | <b>0.13</b>                   | 0.09                   |
| 1745                        | 20300 | 1RB_Low       | Right Touch   | 22.22                         | 22.5                              | /                          | 0.089                          | <b>0.09</b>                    | 0.132                         | <b>0.13</b>                   | 0.07                   |
| 1745                        | 20300 | 50RB_Mid      | Right Touch   | 21.16                         | 22                                | /                          | 0.070                          | <b>0.08</b>                    | 0.120                         | <b>0.15</b>                   | 0.02                   |
| 1745                        | 20300 | 1RB_Low       | Right Tilt    | 22.22                         | 22.5                              | /                          | 0.036                          | <b>0.04</b>                    | 0.078                         | <b>0.08</b>                   | 0.05                   |
| 1745                        | 20300 | 50RB_Mid      | Right Tilt    | 21.16                         | 22                                | /                          | 0.028                          | <b>0.03</b>                    | 0.063                         | <b>0.08</b>                   | 0.04                   |

**Table 14.25: SAR Values (LTE Band 4-Body)–AP ON**

| Ambient Temperature: 21.8°C |       |               |               |                               |                                   | Liquid Temperature: 21.3°C |                                |                                |                               |                               |                        |
|-----------------------------|-------|---------------|---------------|-------------------------------|-----------------------------------|----------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------|
| Frequency                   |       | Configuration | Test Position | Conduct<br>-ed Power<br>(dBm) | Max.<br>tune-up<br>Power<br>(dBm) | Figure<br>No.              | 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         | 22.22                         | 22.5                              | /                          | 0.228                          | <b>0.24</b>                    | 0.428                         | <b>0.46</b>                   | -0.04                  |
| 1745                        | 20300 | 50RB_Mid      | Front         | 21.16                         | 22                                | /                          | 0.163                          | <b>0.20</b>                    | 0.308                         | <b>0.37</b>                   | 0.02                   |
| 1745                        | 20300 | 1RB_Low       | Rear          | 22.22                         | 22.5                              | /                          | 0.316                          | <b>0.34</b>                    | 0.584                         | <b>0.62</b>                   | 0.03                   |
| 1745                        | 20300 | 50RB_Mid      | Rear          | 21.16                         | 22                                | /                          | 0.218                          | <b>0.26</b>                    | 0.402                         | <b>0.49</b>                   | 0.09                   |
| 1745                        | 20300 | 1RB_Low       | Left          | 22.22                         | 22.5                              | /                          | 0.056                          | <b>0.06</b>                    | 0.092                         | <b>0.10</b>                   | 0.07                   |
| 1745                        | 20300 | 50RB_Mid      | Left          | 21.16                         | 22                                | /                          | 0.046                          | <b>0.06</b>                    | 0.083                         | <b>0.10</b>                   | 0.02                   |
| 1745                        | 20300 | 1RB_Low       | Right         | 22.22                         | 22.5                              | /                          | 0.048                          | <b>0.05</b>                    | 0.080                         | <b>0.09</b>                   | 0.05                   |
| 1745                        | 20300 | 50RB_Mid      | Right         | 21.16                         | 22                                | /                          | 0.035                          | <b>0.04</b>                    | 0.071                         | <b>0.09</b>                   | 0.04                   |
| 1745                        | 20300 | 1RB_Low       | Bottom        | 22.22                         | 22.5                              | Fig.14                     | 0.395                          | <b>0.42</b>                    | 0.740                         | <b>0.79</b>                   | 0.04                   |
| 1745                        | 20300 | 50RB_Mid      | Bottom        | 21.16                         | 22                                | /                          | 0.273                          | <b>0.33</b>                    | 0.525                         | <b>0.64</b>                   | 0.02                   |

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

**Table 14.26: SAR Values (LTE Band 4-Body)–AP OFF**

| Ambient Temperature: 21.8°C |       |               |               |                               |                                   | Liquid Temperature: 21.3°C |                                |                                |                               |                               |                        |
|-----------------------------|-------|---------------|---------------|-------------------------------|-----------------------------------|----------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------|
| Frequency                   |       | Configuration | Test Position | Conduct<br>-ed Power<br>(dBm) | Max.<br>tune-up<br>Power<br>(dBm) | Figure<br>No.              | 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         | 22.22                         | 22.5                              | /                          | 0.228                          | <b>0.24</b>                    | 0.428                         | <b>0.46</b>                   | -0.04                  |
| 1745                        | 20300 | 50RB_Low      | Front         | 21.16                         | 22                                | /                          | 0.163                          | <b>0.20</b>                    | 0.308                         | <b>0.37</b>                   | 0.02                   |
| 1745                        | 20300 | 1RB_Low       | Rear          | 22.22                         | 22.5                              | /                          | 0.316                          | <b>0.34</b>                    | 0.584                         | <b>0.62</b>                   | 0.03                   |
| 1745                        | 20300 | 50RB_Low      | Rear          | 21.16                         | 22                                | /                          | 0.218                          | <b>0.26</b>                    | 0.402                         | <b>0.49</b>                   | 0.09                   |

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

**Table 14.27: SAR Values (LTE Band 5-Head)**

| Ambient Temperature: 22.0°C |       |               |               |                                  |                                   | Liquid Temperature: 21.5°C |                                |                                |                               |                               |                        |
|-----------------------------|-------|---------------|---------------|----------------------------------|-----------------------------------|----------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------|
| Frequency                   |       | Configuration | Test Position | Conduct<br>-ed<br>Power<br>(dBm) | Max.<br>tune-up<br>Power<br>(dBm) | Figure<br>No.              | 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.   |               |               |                                  |                                   |                            |                                |                                |                               |                               |                        |
| 844                         | 20600 | 1RB_Mid       | Left Touch    | 22.46                            | 22.5                              | Fig.15                     | 0.140                          | <b>0.14</b>                    | 0.185                         | <b>0.19</b>                   | -0.07                  |
| 844                         | 20600 | 25RB_Mid      | Left Touch    | 21.41                            | 22                                | /                          | 0.090                          | <b>0.10</b>                    | 0.133                         | <b>0.15</b>                   | 0.06                   |
| 844                         | 20600 | 1RB_Mid       | Left Tilt     | 22.46                            | 22.5                              | /                          | 0.085                          | <b>0.09</b>                    | 0.124                         | <b>0.13</b>                   | 0.05                   |
| 844                         | 20600 | 25RB_Mid      | Left Tilt     | 21.41                            | 22                                | /                          | 0.062                          | <b>0.07</b>                    | 0.089                         | <b>0.10</b>                   | 0.03                   |
| 844                         | 20600 | 1RB_Mid       | Right Touch   | 22.46                            | 22.5                              | /                          | 0.078                          | <b>0.08</b>                    | 0.116                         | <b>0.12</b>                   | -0.07                  |
| 844                         | 20600 | 25RB_Mid      | Right Touch   | 21.41                            | 22                                | /                          | 0.058                          | <b>0.07</b>                    | 0.086                         | <b>0.10</b>                   | 0.07                   |
| 844                         | 20600 | 1RB_Mid       | Right Tilt    | 22.46                            | 22.5                              | /                          | 0.036                          | <b>0.04</b>                    | 0.055                         | <b>0.06</b>                   | 0.08                   |
| 844                         | 20600 | 25RB_Mid      | Right Tilt    | 21.41                            | 22                                | /                          | 0.025                          | <b>0.03</b>                    | 0.040                         | <b>0.05</b>                   | 0.13                   |

**Table 14.28: SAR Values (LTE Band 5-Body) -AP ON**

| Ambient Temperature: 22.4°C |       |               |               |                                  |                                   | Liquid Temperature: 21.9°C |                                |                                |                               |                               |                        |
|-----------------------------|-------|---------------|---------------|----------------------------------|-----------------------------------|----------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------|
| Frequency                   |       | Configuration | Test Position | Conduct<br>-ed<br>Power<br>(dBm) | Max.<br>tune-up<br>Power<br>(dBm) | Figure<br>No.              | 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.   |               |               |                                  |                                   |                            |                                |                                |                               |                               |                        |
| 844                         | 20600 | 1RB_Mid       | Front         | 22.46                            | 22.5                              | /                          | 0.065                          | <b>0.07</b>                    | 0.084                         | <b>0.08</b>                   | 0.11                   |
| 844                         | 20600 | 25RB_Mid      | Front         | 21.41                            | 22                                | /                          | 0.045                          | <b>0.05</b>                    | 0.065                         | <b>0.07</b>                   | 0.06                   |
| 844                         | 20600 | 1RB_Mid       | Rear          | 22.46                            | 22.5                              | Fig.16                     | 0.080                          | <b>0.08</b>                    | 0.109                         | <b>0.11</b>                   | 0.18                   |
| 844                         | 20600 | 25RB_Mid      | Rear          | 21.41                            | 22                                | /                          | 0.061                          | <b>0.07</b>                    | 0.089                         | <b>0.10</b>                   | 0.04                   |
| 844                         | 20600 | 1RB_Mid       | Left          | 22.46                            | 22.5                              | /                          | 0.074                          | <b>0.07</b>                    | 0.104                         | <b>0.10</b>                   | 0.19                   |
| 844                         | 20600 | 25RB_Mid      | Left          | 21.41                            | 22                                | /                          | 0.039                          | <b>0.04</b>                    | 0.057                         | <b>0.07</b>                   | -0.10                  |
| 844                         | 20600 | 1RB_Mid       | Right         | 22.46                            | 22.5                              | /                          | 0.068                          | <b>0.07</b>                    | 0.101                         | <b>0.10</b>                   | -0.04                  |
| 844                         | 20600 | 25RB_Mid      | Right         | 21.41                            | 22                                | /                          | 0.049                          | <b>0.06</b>                    | 0.072                         | <b>0.08</b>                   | 0.03                   |
| 844                         | 20600 | 1RB_Mid       | Bottom        | 22.46                            | 22.5                              | /                          | 0.006                          | <b>0.01</b>                    | 0.012                         | <b>0.01</b>                   | 0.17                   |
| 844                         | 20600 | 25RB_Mid      | Bottom        | 21.41                            | 22                                | /                          | 0.003                          | <b>&lt;0.01</b>                | 0.007                         | <b>0.01</b>                   | -0.18                  |

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

**Table 14.29: SAR Values (LTE Band 5-Body) -AP OFF**

| Ambient Temperature: 22.4°C |       |               |               |                                  |                                   | Liquid Temperature: 21.9°C |                                |                                |                               |                               |                        |
|-----------------------------|-------|---------------|---------------|----------------------------------|-----------------------------------|----------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------|
| Frequency                   |       | Configuration | Test Position | Conduct<br>-ed<br>Power<br>(dBm) | Max.<br>tune-up<br>Power<br>(dBm) | Figure<br>No.              | 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.   |               |               |                                  |                                   |                            |                                |                                |                               |                               |                        |
| 844                         | 20600 | 1RB_Mid       | Front         | 22.46                            | 22.5                              | /                          | 0.065                          | <b>0.07</b>                    | 0.084                         | <b>0.08</b>                   | 0.11                   |
| 844                         | 20600 | 25RB_Mid      | Front         | 21.41                            | 22                                | /                          | 0.045                          | <b>0.05</b>                    | 0.065                         | <b>0.07</b>                   | 0.06                   |
| 844                         | 20600 | 1RB_Mid       | Rear          | 22.46                            | 22.5                              | /                          | 0.080                          | <b>0.08</b>                    | <b>0.109</b>                  | <b>0.11</b>                   | 0.18                   |
| 844                         | 20600 | 25RB_Mid      | Rear          | 21.41                            | 22                                | /                          | 0.061                          | <b>0.07</b>                    | 0.089                         | <b>0.10</b>                   | 0.04                   |

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

**Table 14.30: SAR Values (LTE Band 7-Head)**

| Frequency |       | Configuration | Test Position | Conduct -ed Power (dBm) | Max. tune-up Power (dBm) | Figure No. | 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_High      | Left Touch    | 22.47                   | 22.5                     | Fig.17     | 0.284                    | <b>0.29</b>              | 0.545                   | <b>0.55</b>             | 0.09             |
| 2535      | 21100 | 50RB_High     | Left Touch    | 21.61                   | 22                       | /          | 0.260                    | <b>0.28</b>              | 0.494                   | <b>0.54</b>             | 0.05             |
| 2560      | 21350 | 1RB_High      | Left Tilt     | 22.47                   | 22.5                     | /          | 0.122                    | <b>0.12</b>              | 0.244                   | <b>0.25</b>             | 0.06             |
| 2535      | 21100 | 50RB_High     | Left Tilt     | 21.61                   | 22                       | /          | 0.091                    | <b>0.10</b>              | 0.181                   | <b>0.20</b>             | 0.07             |
| 2560      | 21350 | 1RB_High      | Right Touch   | 22.47                   | 22.5                     | /          | 0.176                    | <b>0.18</b>              | 0.355                   | <b>0.36</b>             | 0.03             |
| 2535      | 21100 | 50RB_High     | Right Touch   | 21.61                   | 22                       | /          | 0.133                    | <b>0.15</b>              | 0.267                   | <b>0.29</b>             | 0.08             |
| 2560      | 21350 | 1RB_High      | Right Tilt    | 22.47                   | 22.5                     | /          | 0.070                    | <b>0.07</b>              | 0.150                   | <b>0.15</b>             | 0.01             |
| 2535      | 21100 | 50RB_High     | Right Tilt    | 21.61                   | 22                       | /          | 0.065                    | <b>0.07</b>              | 0.139                   | <b>0.15</b>             | 0.05             |

**Table 14.31: SAR Values (LTE Band 7-Body) -AP ON**

| Frequency |       | Configuration | Test Position | Conduct -ed Power (dBm) | Max. tune-up Power (dBm) | Figure No. | 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_High      | Front         | 22.47                   | 22.5                     | /          | 0.405                    | <b>0.41</b>              | 0.738                   | <b>0.74</b>             | 0.03             |
| 2535      | 21100 | 50RB_High     | Front         | 21.61                   | 22                       | /          | 0.033                    | <b>0.04</b>              | 0.589                   | <b>0.64</b>             | 0.13             |
| 2560      | 21350 | 1RB_High      | Rear          | 22.47                   | 22.5                     | Fig.18     | 0.432                    | <b>0.43</b>              | 0.815                   | <b>0.82</b>             | 0.06             |
| 2535      | 21100 | 1RB_High      | Rear          | 22.29                   | 22.5                     | /          | 0.403                    | <b>0.42</b>              | 0.775                   | <b>0.81</b>             | 0.14             |
| 2510      | 20850 | 1RB_High      | Rear          | 22.21                   | 22.5                     | /          | 0.397                    | <b>0.42</b>              | 0.760                   | <b>0.81</b>             | 0.05             |
| 2535      | 21100 | 50RB_High     | Rear          | 21.61                   | 22                       | /          | 0.396                    | <b>0.43</b>              | 0.726                   | <b>0.79</b>             | 0.11             |
| 2560      | 21350 | 100RB_High    | Rear          | 21.54                   | 22                       | /          | 0.341                    | <b>0.38</b>              | 0.665                   | <b>0.74</b>             | 0.12             |
| 2560      | 21350 | 1RB_High      | Left          | 22.47                   | 22.5                     | /          | 0.253                    | <b>0.25</b>              | 0.448                   | <b>0.45</b>             | 0.06             |
| 2535      | 21100 | 50RB_High     | Left          | 21.61                   | 22                       | /          | 0.183                    | <b>0.20</b>              | 0.382                   | <b>0.42</b>             | 0.08             |
| 2560      | 21350 | 1RB_High      | Right         | 22.47                   | 22.5                     | /          | 0.090                    | <b>0.09</b>              | 0.158                   | <b>0.16</b>             | -0.07            |
| 2535      | 21100 | 50RB_High     | Right         | 21.61                   | 22                       | /          | 0.073                    | <b>0.08</b>              | 0.121                   | <b>0.13</b>             | 0.03             |
| 2560      | 21350 | 1RB_High      | Bottom        | 22.47                   | 22.5                     | /          | 0.325                    | <b>0.33</b>              | 0.676                   | <b>0.68</b>             | -0.06            |
| 2535      | 21100 | 50RB_High     | Bottom        | 21.61                   | 22                       | /          | 0.265                    | <b>0.29</b>              | 0.550                   | <b>0.60</b>             | -0.11            |

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

**Table 14.32: SAR Values (LTE Band 7-Body) -AP OFF**

| Frequency |       | Configuration | Test Position | Conduct -ed Power (dBm) | Max. tune-up Power (dBm) | Figure No. | 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_High      | Front         | 22.47                   | 22.5                     | /          | 0.405                    | <b>0.41</b>              | 0.738                   | <b>0.74</b>             | 0.03             |
| 2535      | 21100 | 50RB_High     | Front         | 21.61                   | 22                       | /          | 0.033                    | <b>0.04</b>              | 0.589                   | <b>0.64</b>             | 0.13             |
| 2560      | 21350 | 1RB_High      | Rear          | 22.47                   | 22.5                     | /          | 0.432                    | <b>0.43</b>              | 0.815                   | <b>0.82</b>             | 0.06             |
| 2535      | 21100 | 1RB_High      | Rear          | 22.29                   | 22.5                     | /          | 0.403                    | <b>0.42</b>              | 0.775                   | <b>0.81</b>             | 0.14             |
| 2510      | 20850 | 1RB_High      | Rear          | 22.21                   | 22.5                     | /          | 0.397                    | <b>0.42</b>              | 0.760                   | <b>0.81</b>             | 0.05             |
| 2535      | 21100 | 50RB_High     | Rear          | 21.61                   | 22                       | /          | 0.396                    | <b>0.43</b>              | 0.726                   | <b>0.79</b>             | 0.11             |
| 2560      | 21350 | 100RB_High    | Rear          | 21.54                   | 22                       | /          | 0.341                    | <b>0.38</b>              | 0.665                   | <b>0.74</b>             | 0.12             |

**Table 14.33: SAR Values (WLAN 2.4G- Head) for other batteries**

| 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. |       |               |            |                       |                          |                          |                          |                         |                         |                  |
| 2462      | 11  | Right | Touch         | /          | 16.23                 | 17.5                     | 0.279                    | <b>0.37</b>              | 0.618                   | <b>0.83</b>             | -0.10            |

**Table 14.34: SAR Values (WCDMA1700 MHz -Body) for other batteries**

| 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.  |               |            |                       |                          |                          |                          |                         |                         |                  |
| 1712.4    | 1312 | Rear          | /          | 23.26                 | 23.5                     | 0.552                    | <b>0.58</b>              | 1.14                    | <b>1.20</b>             | 0.05             |

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

### 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 14.35: SAR Values (GSM 850 MHz - Head)**

| 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 | Right | Touch         | Fig.1      | 31.55                 | 33.5                     | 0.203                    | <b>0.32</b>              | 0.264                   | <b>0.41</b>             | 0.08             |

**Table 14.36: SAR Values (GSM 850 MHz -Body) –AP ON**

| 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. |               |            |                       |                          |                          |                          |                         |                         |                  |
| 848.8     | 251 | Rear          | Fig.2      | 27.44                 | 28.5                     | 0.414                    | <b>0.53</b>              | 0.541                   | <b>0.69</b>             | -0.04            |

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

**Table 14.37: SAR Values (GSM 1900 MHz - Head)**

| 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      | 29.96                 | 30.5                     | 0.099                    | <b>0.11</b>              | 0.158                   | <b>0.18</b>             | 0.07             |

**Table 14.38: SAR Values (GSM 1900 MHz -Body) –AP ON**

| 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. |               |            |                       |                          |                          |                          |                         |                         |                  |
| 1909.8    | 810 | Rear          | Fig.4      | 24.44                 | 25.5                     | 0.205                    | <b>0.26</b>              | 0.326                   | <b>0.42</b>             | 0.19             |

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

**Table 14.39: SAR Values (WCDMA 850 MHz - Head)**

| 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.  |      |               |            |                       |                          |                          |                          |                         |                         |                  |
| 846.6     | 4233 | Left | Touch         | Fig.5      | 22.7                  | 24                       | 0.148                    | <b>0.20</b>              | 0.195                   | <b>0.26</b>             | 0.11             |

**Table 14.40: SAR Values (WCDMA 850 MHz -Body) –AP ON**

| 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.  |               |            |                       |                          |                          |                          |                         |                         |                  |
| 846.6     | 4233 | Rear          | Fig.6      | 22.7                  | 24                       | 0.165                    | <b>0.22</b>              | 0.212                   | <b>0.29</b>             | 0.08             |

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

**Table 14.41: SAR Values (WCDMA1700 MHz - Head)**

| 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.  |      |               |            |                       |                          |                          |                          |                         |                         |                  |
| 1752.6    | 1513 | Left | Touch         | Fig.7      | 23.15                 | 23.5                     | 0.152                    | <b>0.16</b>              | 0.228                   | <b>0.25</b>             | 0.15             |

**Table 14.42: SAR Values (WCDMA1700 MHz -Body) –AP ON**

| 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.  |               |            |                       |                          |                          |                          |                         |                         |                  |
| 1712.4    | 1312 | Rear          | Fig.8      | 23.26                 | 23.5                     | 0.662                    | <b>0.70</b>              | 1.250                   | <b>1.32</b>             | 0.11             |

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

**Table 14.43: SAR Values (WCDMA1900 MHz - Head)**

| 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    | 9538 | Left | Touch         | Fig.9      | 22.1                  | 23.7                     | 0.234                    | <b>0.34</b>              | 0.382                   | <b>0.55</b>             | 0.05             |

**Table 14.44: SAR Values (WCDMA1900 MHz -Body) –AP ON**

| 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.  |               |            |                       |                          |                          |                          |                         |                         |                  |
| 1880      | 9400 | Front         | Fig.10     | 22.0                  | 23.7                     | 0.249                    | <b>0.37</b>              | 0.413                   | <b>0.61</b>             | -0.01            |

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

**Table 14.45: SAR Values (LTE Band 2-Head)**

| Frequency |       | Configuration | Test Position | Conduct -ed Power (dBm) | Max. tune-up Power (dBm) | Figure No. | 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.   |               |               |                         |                          |            |                          |                          |                         |                         |                  |
| 1860      | 18700 | 1RB_Mid       | Left Touch    | 22.10                   | 22.5                     | Fig.11     | 0.126                    | <b>0.20</b>              | 0.207                   | <b>0.32</b>             | -0.11            |

**Table 14.46: SAR Values (LTE Band 2-Body) -AP ON**

| Frequency |       | Configuration | Test Position | Conduct -ed Power (dBm) | Max. tune-up Power (dBm) | Figure No. | 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.   |               |               |                         |                          |            |                          |                          |                         |                         |                  |
| 1860      | 18700 | 1RB_Mid       | Front         | 22.10                   | 22.5                     | Fig.12     | 0.231                    | <b>0.25</b>              | 0.372                   | <b>0.41</b>             | -0.01            |

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

**Table 14.47: SAR Values (LTE Band 4-Head)**

| Frequency |       | Configuration | Test Position | Conduct -ed Power (dBm) | Max. tune-up Power (dBm) | Figure No. | 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    | 22.22                   | 22.5                     | Fig.13     | 0.094                    | <b>0.10</b>              | 0.142                   | <b>0.15</b>             | -0.04            |

**Table 14.48: SAR Values (LTE Band 4-Body) -AP ON**

| Frequency |       | Configuration | Test Position | Conduct -ed Power (dBm) | Max. tune-up Power (dBm) | Figure No. | 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       | Bottom        | 22.22                   | 22.5                     | Fig.14     | 0.395                    | <b>0.42</b>              | 0.740                   | <b>0.79</b>             | 0.04             |

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

**Table 14.49: SAR Values (LTE Band 5-Head)**

| Frequency | Configuration | Test | Conduct | Max. | Figure | Measured | Reported | Measured | Reported | Power |
|-----------|---------------|------|---------|------|--------|----------|----------|----------|----------|-------|
|-----------|---------------|------|---------|------|--------|----------|----------|----------|----------|-------|

| MHz | Ch.   |         | Position   | -ed Power (dBm) | tune-up Power (dBm) | No.    | SAR(10g) (W/kg) | SAR(10g) (W/kg) | SAR(1g) (W/kg) | SAR(1g) (W/kg) | Drift (dB) |
|-----|-------|---------|------------|-----------------|---------------------|--------|-----------------|-----------------|----------------|----------------|------------|
| 844 | 20600 | 1RB_Mid | Left Touch | 22.46           | 22.5                | Fig.15 | 0.140           | <b>0.14</b>     | 0.185          | <b>0.19</b>    | -0.07      |

**Table 14.50: SAR Values (LTE Band 5-Body) -AP ON**

| Frequency |       | Configuration | Test Position | Conduct -ed Power (dBm) | Max. tune-up Power (dBm) | Figure No. | 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.   |               |               |                         |                          |            |                          |                          |                         |                         |                  |
| 844       | 20600 | 1RB_Mid       | Rear          | 22.46                   | 22.5                     | Fig.16     | 0.080                    | <b>0.08</b>              | 0.109                   | <b>0.11</b>             | 0.18             |

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

**Table 14.51: SAR Values (LTE Band 7-Head)**

| Frequency |       | Configuration | Test Position | Conduct -ed Power (dBm) | Max. tune-up Power (dBm) | Figure No. | 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_High      | Left Touch    | 22.47                   | 22.5                     | Fig.17     | 0.284                    | <b>0.29</b>              | 0.545                   | <b>0.55</b>             | 0.09             |

**Table 14.52: SAR Values (LTE Band 7-Body) -AP ON**

| Frequency |       | Configuration | Test Position | Conduct -ed Power (dBm) | Max. tune-up Power (dBm) | Figure No. | 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_High      | Rear          | 22.47                   | 22.5                     | Fig.18     | 0.432                    | <b>0.43</b>              | 0.815                   | <b>0.82</b>             | 0.06             |

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

#### 14.4 WLAN Evaluation For 2.4G

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

##### Head Evaluation

**Table 14.53: SAR Values (WLAN - Head)– 802.11b 11Mbps (Fast SAR)**

| 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. |       |               |            |                       |                          |                          |                          |                         |                        |                  |
| 2462      | 11  | Left  | Touch         | /          | 16.23                 | 17.5                     | 0.166                    | <b>0.22</b>              | 0.318                   | <b>0.43</b>            | 0.12             |
| 2462      | 11  | Left  | Tilt          | /          | 16.23                 | 17.5                     | 0.179                    | <b>0.24</b>              | 0.362                   | <b>0.48</b>            | -0.05            |
| 2462      | 11  | Right | Touch         | /          | 16.23                 | 17.5                     | 0.291                    | <b>0.39</b>              | 0.635                   | <b>0.85</b>            | -0.12            |
| 2462      | 11  | Right | Tilt          | /          | 16.23                 | 17.5                     | 0.277                    | <b>0.37</b>              | 0.581                   | <b>0.78</b>            | -0.04            |

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

**Table 14.54: SAR Values (WLAN - Head) – 802.11b 11Mbps (Full SAR)**

| 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. |       |               |            |                       |                          |                          |                          |                         |                        |                  |
| 2462      | 11  | Left  | Touch         | /          | 16.23                 | 17.5                     | 0.164                    | <b>0.22</b>              | 0.314                   | <b>0.42</b>            | 0.08             |
| 2462      | 11  | Left  | Tilt          | /          | 16.23                 | 17.5                     | 0.177                    | <b>0.24</b>              | 0.357                   | <b>0.48</b>            | -0.11            |
| 2462      | 11  | Right | Touch         | Fig.19     | 16.23                 | 17.5                     | 0.294                    | <b>0.39</b>              | 0.639                   | <b>0.86</b>            | -0.10            |
| 2462      | 11  | Right | Tilt          | /          | 16.23                 | 17.5                     | 0.281                    | <b>0.38</b>              | 0.583                   | <b>0.78</b>            | -0.58            |
| 2412      | 1   | Right | Touch         | /          | 16.13                 | 17.5                     | 0.273                    | <b>0.37</b>              | 0.567                   | <b>0.78</b>            | 0.02             |

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. A maximum transmission duty factor of 97.5% is achievable for WLAN in this project and the scaled reported SAR is presented as below.

**Table 14.55: SAR Values (WLAN - Head) – 802.11b 11Mbps (Scaled Reported SAR)**

| Frequency |     | Side  | Test Position | Actual duty factor | maximum duty factor | Reported SAR (1g)(W/kg) | Scaled reported SAR (1g)(W/kg) |
|-----------|-----|-------|---------------|--------------------|---------------------|-------------------------|--------------------------------|
| MHz       | Ch. |       |               |                    |                     |                         |                                |
| 2462      | 11  | Right | Touch         | 97.5%              | 100%                | 0.86                    | <b>0.88</b>                    |

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

### Body Evaluation

**Table 14.56: SAR Values (WLAN - Body)– 802.11b 11Mbps (Fast SAR)-AP ON**

| 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. |               |            |                       |                          |                          |                          |                         |                        |                  |
| 2462      | 11  | Front         | /          | 16.23                 | 17.5                     | 0.050                    | <b>0.07</b>              | 0.096                   | <b>0.13</b>            | 0.13             |
| 2462      | 11  | Rear          | /          | 16.23                 | 17.5                     | 0.070                    | <b>0.09</b>              | 0.142                   | <b>0.19</b>            | 0.12             |
| 2462      | 11  | Left          | /          | 16.23                 | 17.5                     | 0.032                    | <b>0.04</b>              | 0.076                   | <b>0.10</b>            | -0.13            |
| 2462      | 11  | Top           | /          | 16.23                 | 17.5                     | 0.062                    | <b>0.08</b>              | 0.135                   | <b>0.18</b>            | -0.03            |

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

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

**Table 14.57: SAR Values (WLAN - Body) – 802.11b 11Mbps (Full SAR)**

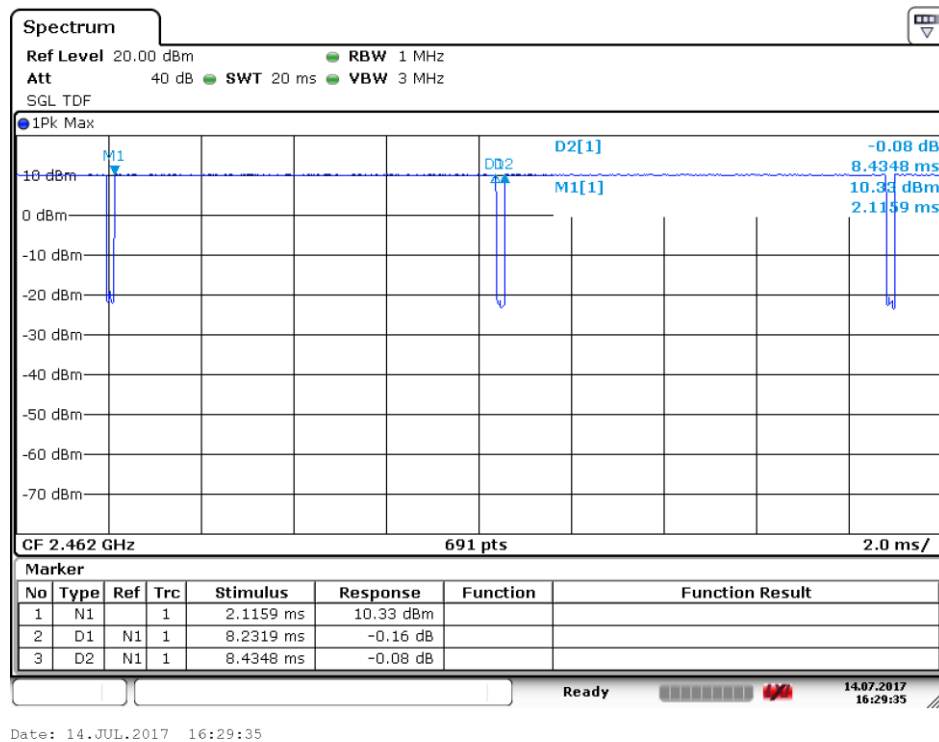
| Frequency |     | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g)(W/kg) | Power Drift (dB) |
|-----------|-----|---------------|------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|------------------------|------------------|
| MHz       | Ch. |               |            |                       |                          |                          |                          |                         |                        |                  |
| 2462      | 11  | Rear          | Fig.20     | 16.23                 | 17.5                     | 0.073                    | <b>0.10</b>              | 0.149                   | <b>0.20</b>            | 0.16             |

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. A maximum transmission duty factor of 97.5% is achievable for WLAN in this project and the scaled reported SAR is presented as below.

**Table 14.58: SAR Values (WLAN - Body) – 802.11b 11Mbps (Scaled Reported SAR)**

| Frequency |     | Test Position | Ambient Temperature: 22.3°C |                     | Liquid Temperature: 21.8°C |                                |
|-----------|-----|---------------|-----------------------------|---------------------|----------------------------|--------------------------------|
| MHz       | Ch. |               | Actual duty factor          | maximum duty factor | Reported SAR (1g)(W/kg)    | Scaled reported SAR (1g)(W/kg) |
| 2462      | 11  | Rear          | 97.5%                       | 100%                | 0.20                       | <b>0.21</b>                    |

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



Picture 14.1: The plot of duty factor

## 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 (~ 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 WCDMA 1700 (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.  |               |              |                     |                           |           |                            |
| 1712.4    | 1312 | Rear          | 10           | 1.250               | 1.23                      | 1.01      | /                          |

**Table 15.4: SAR Measurement Variability for Body LTE Band 7 (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 | Rear          | 10           | 0.815               | 0.810                     | 1.006     | /                          |

## 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    | 12                | N                     | 2          | 1       | 1        | 6.0            | 6.0             | $\infty$          |
| 2                         | Isotropy          | B    | 7.4               | R                     | $\sqrt{3}$ | 1       | 1        | 4.3            | 4.3             | $\infty$          |
| 3                         | Boundary effect   | B    | 1.1               | 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                                           | 1.0  | N | 1          | 1    | 1    | 1.0  | 1.0  | $\infty$ |
| 7                                                     | Response time                                   | B                                           | 0.0  | R | $\sqrt{3}$ | 1    | 1    | 0.0  | 0.0  | $\infty$ |
| 8                                                     | Integration time                                | B                                           | 1.7  | R | $\sqrt{3}$ | 1    | 1    | 1.0  | 1.0  | $\infty$ |
| 9                                                     | RF ambient conditions-noise                     | B                                           | 3.0  | R | $\sqrt{3}$ | 1    | 1    | 1.7  | 1.7  | $\infty$ |
| 10                                                    | RF ambient conditions-reflection                | B                                           | 3.0  | R | $\sqrt{3}$ | 1    | 1    | 1.7  | 1.7  | $\infty$ |
| 11                                                    | Probe positioned mech. restrictions             | B                                           | 0.35 | 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  | 5        |
| 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                                           | 1.0  | R | $\sqrt{3}$ | 1    | 1    | 0.6  | 0.6  | $\infty$ |
| 18                                                    | Liquid conductivity (target)                    | B                                           | 5.0  | R | $\sqrt{3}$ | 0.64 | 0.43 | 1.8  | 1.2  | $\infty$ |
| 19                                                    | Liquid conductivity (meas.)                     | A                                           | 1.3  | N | 1          | 0.64 | 0.43 | 0.83 | 0.56 | 9        |
| 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 | 0.96 | 0.78 | 9        |
| Combined standard uncertainty                         |                                                 | $u'_c = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$ |      |   |            |      |      | 10.4 | 10.3 | 95.5     |
| Expanded uncertainty<br>(Confidence interval of 95 %) |                                                 | $u_e = 2u_c$                                |      |   |            |      |      | 20.8 | 20.6 |          |

## 16.2 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                                           | 12                | N                     | 2          | 1       | 1        | 6.0            | 6.0             | ∞                 |
| 2                                                  | Isotropy                                        | B                                           | 7.4               | R                     | $\sqrt{3}$ | 1       | 1        | 4.3            | 4.3             | ∞                 |
| 3                                                  | Boundary effect                                 | B                                           | 1.1               | R                     | $\sqrt{3}$ | 1       | 1        | 0.6            | 0.6             | ∞                 |
| 4                                                  | Linearity                                       | B                                           | 4.7               | R                     | $\sqrt{3}$ | 1       | 1        | 2.7            | 2.7             | ∞                 |
| 5                                                  | Detection limit                                 | B                                           | 1.0               | R                     | $\sqrt{3}$ | 1       | 1        | 0.6            | 0.6             | ∞                 |
| 6                                                  | Readout electronics                             | B                                           | 1.0               | N                     | 1          | 1       | 1        | 1.0            | 1.0             | ∞                 |
| 7                                                  | Response time                                   | B                                           | 0.0               | R                     | $\sqrt{3}$ | 1       | 1        | 0.0            | 0.0             | ∞                 |
| 8                                                  | Integration time                                | B                                           | 1.7               | R                     | $\sqrt{3}$ | 1       | 1        | 1.0            | 1.0             | ∞                 |
| 9                                                  | RF ambient conditions-noise                     | B                                           | 3.0               | R                     | $\sqrt{3}$ | 1       | 1        | 1.7            | 1.7             | ∞                 |
| 10                                                 | RF ambient conditions-reflection                | B                                           | 3.0               | R                     | $\sqrt{3}$ | 1       | 1        | 1.7            | 1.7             | ∞                 |
| 11                                                 | Probe positioned mech. Restrictions             | B                                           | 0.35              | R                     | $\sqrt{3}$ | 1       | 1        | 0.2            | 0.2             | ∞                 |
| 12                                                 | Probe positioning with respect to phantom shell | B                                           | 2.9               | R                     | $\sqrt{3}$ | 1       | 1        | 1.7            | 1.7             | ∞                 |
| 13                                                 | Post-processing                                 | B                                           | 1.0               | R                     | $\sqrt{3}$ | 1       | 1        | 0.6            | 0.6             | ∞                 |
| 14                                                 | Fast SAR z-Approximation                        | B                                           | 7.0               | R                     | $\sqrt{3}$ | 1       | 1        | 4.0            | 4.0             | ∞                 |
| <b>Test sample related</b>                         |                                                 |                                             |                   |                       |            |         |          |                |                 |                   |
| 15                                                 | Test sample positioning                         | A                                           | 3.3               | N                     | 1          | 1       | 1        | 3.3            | 3.3             | 5                 |
| 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             | ∞                 |
| <b>Phantom and set-up</b>                          |                                                 |                                             |                   |                       |            |         |          |                |                 |                   |
| 18                                                 | Phantom uncertainty                             | B                                           | 1.0               | R                     | $\sqrt{3}$ | 1       | 1        | 0.6            | 0.6             | ∞                 |
| 19                                                 | Liquid conductivity (target)                    | B                                           | 5.0               | R                     | $\sqrt{3}$ | 0.64    | 0.43     | 1.8            | 1.2             | ∞                 |
| 20                                                 | Liquid conductivity (meas.)                     | A                                           | 1.3               | N                     | 1          | 0.64    | 0.43     | 0.83           | 0.56            | 43                |
| 21                                                 | Liquid permittivity (target)                    | B                                           | 5.0               | R                     | $\sqrt{3}$ | 0.6     | 0.49     | 1.7            | 1.4             | ∞                 |
| 22                                                 | Liquid permittivity (meas.)                     | A                                           | 1.6               | N                     | 1          | 0.6     | 0.49     | 0.96           | 0.78            | 521               |
| Combined standard uncertainty                      |                                                 | $u_c' = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$ |                   |                       |            |         |          | 11.1           | 11.0            | 257               |
| Expanded uncertainty (Confidence interval of 95 %) |                                                 | $u_e = 2u_c$                                |                   |                       |            |         |          | 22.2           | 22.0            |                   |

## 17 MAIN TEST INSTRUMENTS

**Table 17.1: List of Main Instruments**

| No. | Name                         | Type            | Serial Number | Calibration Date | Valid Period |
|-----|------------------------------|-----------------|---------------|------------------|--------------|
| 01  | Network analyzer             | Agilent E5071C  | MY46103759    | 2016-11-19       | One year     |
| 02  | Dielectric probe             | 85070E          | MY44300317    | /                |              |
| 03  | Power meter                  | NRP             | 102603        | 2017-01-06       | One year     |
| 04  | Power sensor                 | NRP-Z51         | 102211        |                  |              |
| 05  | Signal Generator             | E8257D          | MY47461211    | 2017-06-06       | One year     |
| 06  | Amplifier                    | VTL5400         | 0404          | /                |              |
| 07  | E-field Probe                | SPEAG EX3DV4    | 3633          | 2017-01-23       | One year     |
| 08  | DAE                          | SPEAG DAE4      | 786           | 2016-12-08       | One year     |
| 09  | Dipole Validation Kit        | SPEAG D835V2    | 4d057         | 2015-10-22       | Three year   |
| 10  | Dipole Validation Kit        | SPEAG D1750V2   | 1152          | 2016-09-09       | Three year   |
| 11  | Dipole Validation Kit        | SPEAG D1900V2   | 5d088         | 2015-11-04       | Three year   |
| 12  | Dipole Validation Kit        | SPEAG D2550V2   | 1010          | 2015-07-24       | Three year   |
| 13  | BTS                          | E5515C          | GB47460389    | 2017-01-06       | One year     |
| 14  | Radio Communication Analyzer | Anristu MT8820C | 6201563767    | 2017-01-06       | One year     |

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

## ANNEX A Graph Results

### GSM850 Right Cheek High

Date/Time: 6/27/2017

Electronics: DAE4 Sn786

Medium: Head 900

Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.928$  S/m;  $\epsilon_r = 40.852$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: UID 0, GSM (0) Frequency: 848.8 MHz Duty Cycle: 1:8.3

Probe: EX3DV4 - SN3633 ConvF(8.88, 8.88, 8.88);

**Right Cheek High/Area Scan (61x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.271 W/kg

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

Reference Value = 5.305 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.323 W/kg

**SAR(1 g) = 0.264 W/kg; SAR(10 g) = 0.203 W/kg**

Maximum value of SAR (measured) = 0.274 W/kg

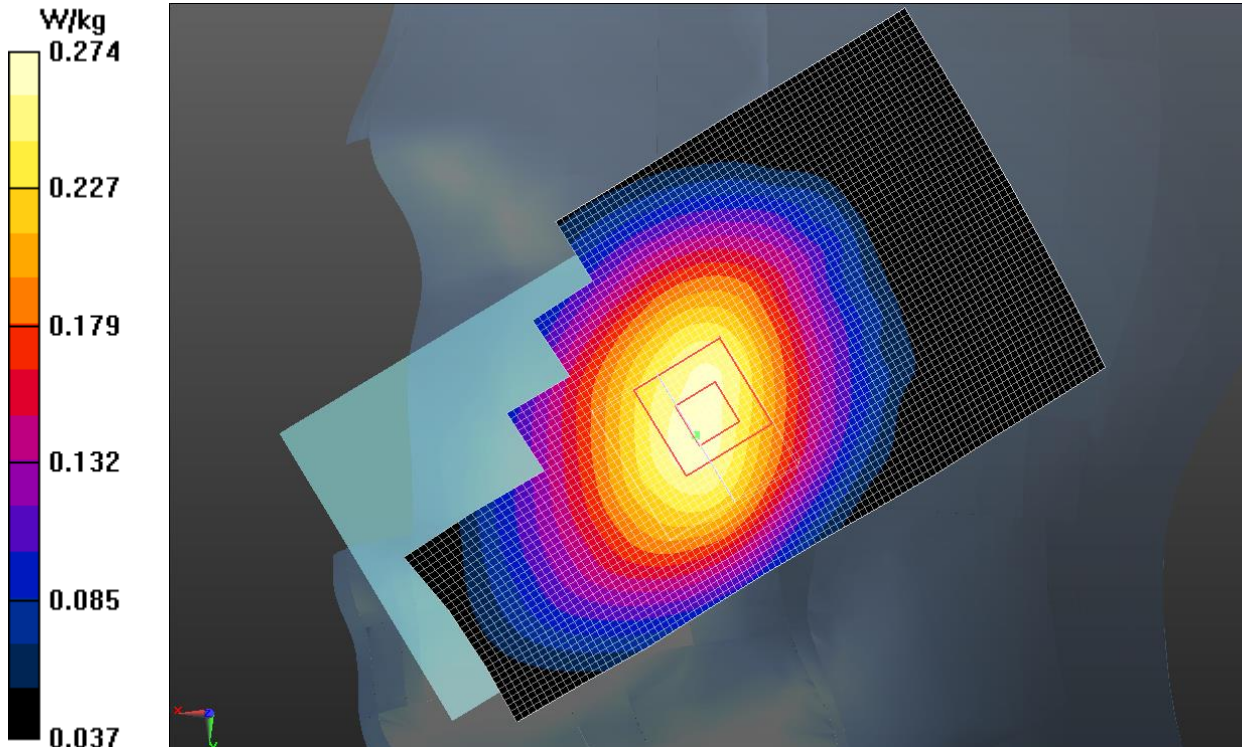


Fig.1 GSM 850MHz

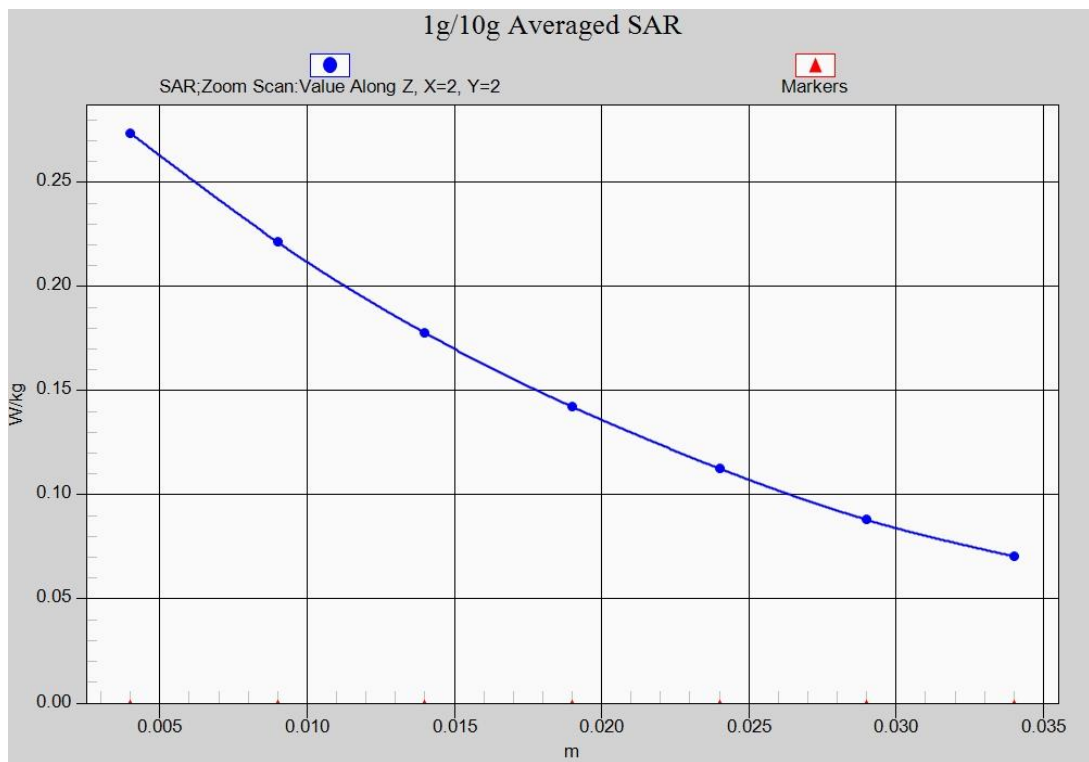


Fig.1-1 Z-Scan at power reference point (GSM 850 MHz)

## GSM850 Body Rear High

Date/Time: 6/27/2017

Electronics: DAE4 Sn786

Medium: Body 900 MHz

Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 1.005$  S/m;  $\epsilon_r = 52.562$   $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C Liquid Temperature: 21.5°C

Communication System: UID 0, 4 slot GPRS (0) Frequency: 848.8 MHz Duty Cycle: 1:2

Probe: EX3DV4 - SN3633 ConvF(9.24, 9.24, 9.24);

**Rear side High/Area Scan (111x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.553 W/kg

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

Reference Value = 22.22 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.673 W/kg

**SAR(1 g) = 0.541 W/kg; SAR(10 g) = 0.414 W/kg**

Maximum value of SAR (measured) = 0.566 W/kg

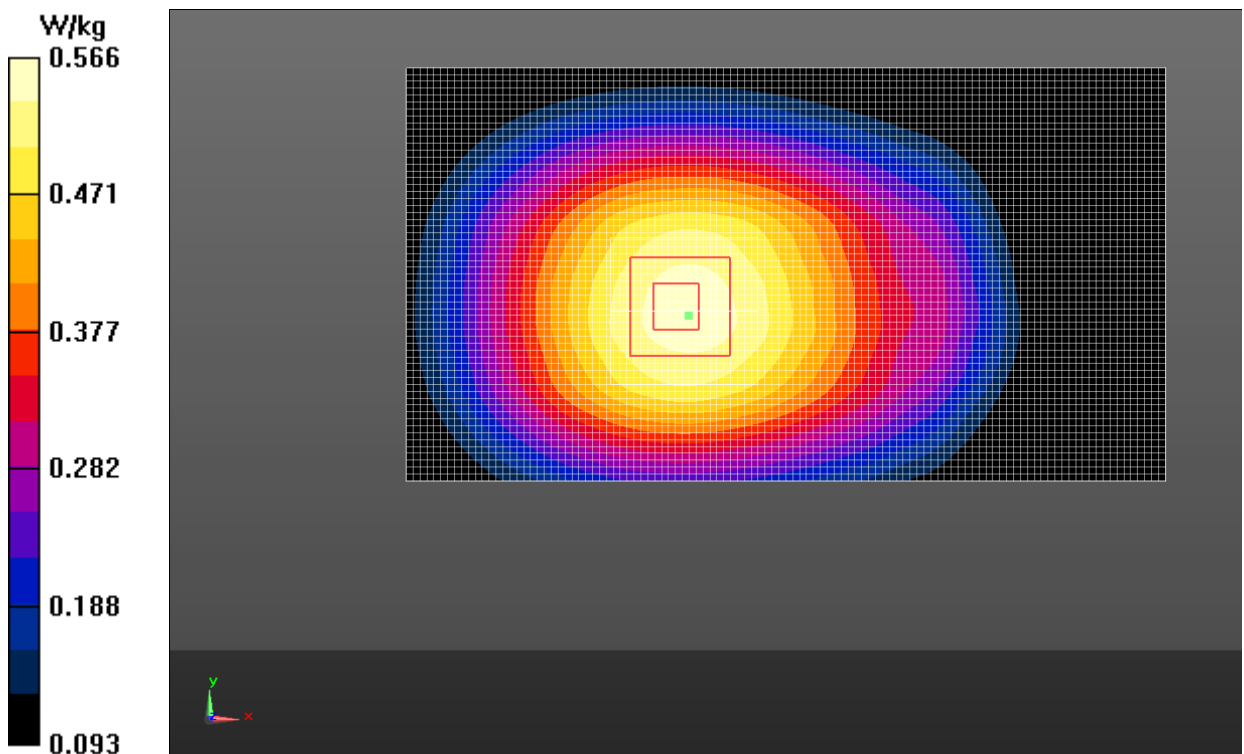
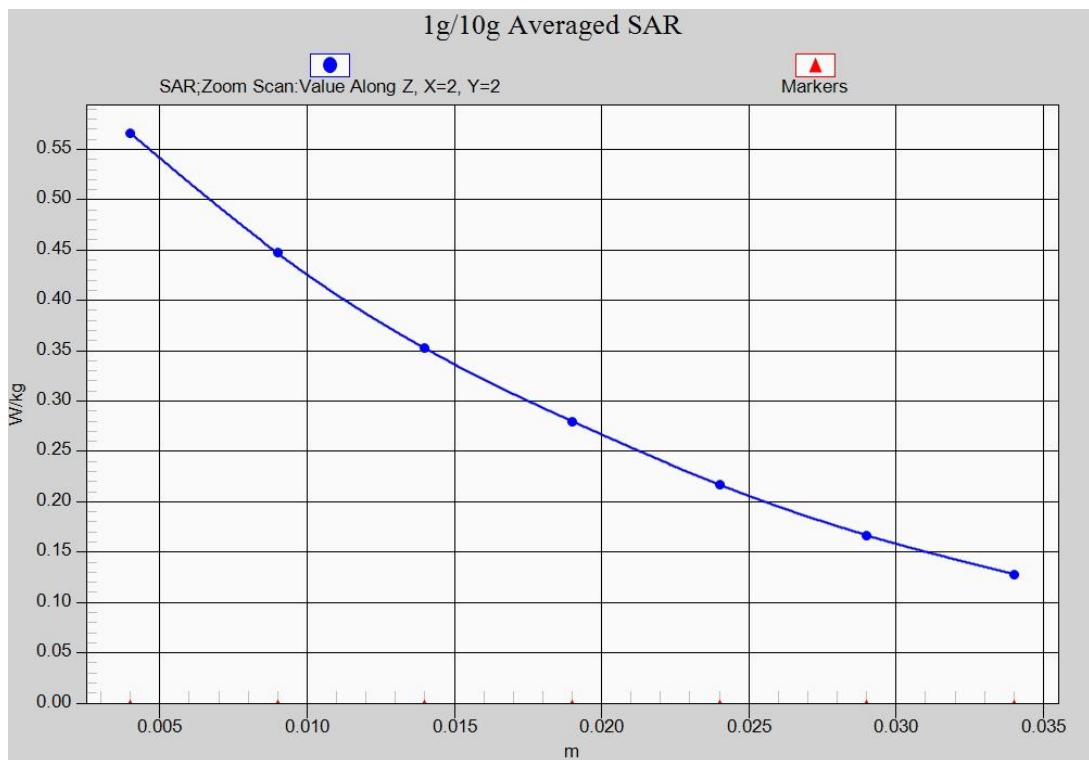


Fig.2 GSM 850 MHz



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

## GSM1900 Left Cheek High

Date/Time: 7/2/2017

Electronics: DAE4 Sn786

Medium: 1900Head

Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.42$  S/m;  $\epsilon_r = 39.142$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: UID 0, GSM (0) Frequency: 1910 MHz Duty Cycle: 1:8.3

Probe: EX3DV4 - SN3633 ConvF(8, 8, 8);

**Left Cheek High/Area Scan (61x101x1):** Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Maximum value of SAR (interpolated) = 0.180 W/kg

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

Reference Value = 2.534 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.246 W/kg

**SAR(1 g) = 0.158 W/kg; SAR(10 g) = 0.099 W/kg**

Maximum value of SAR (measured) = 0.171 W/kg

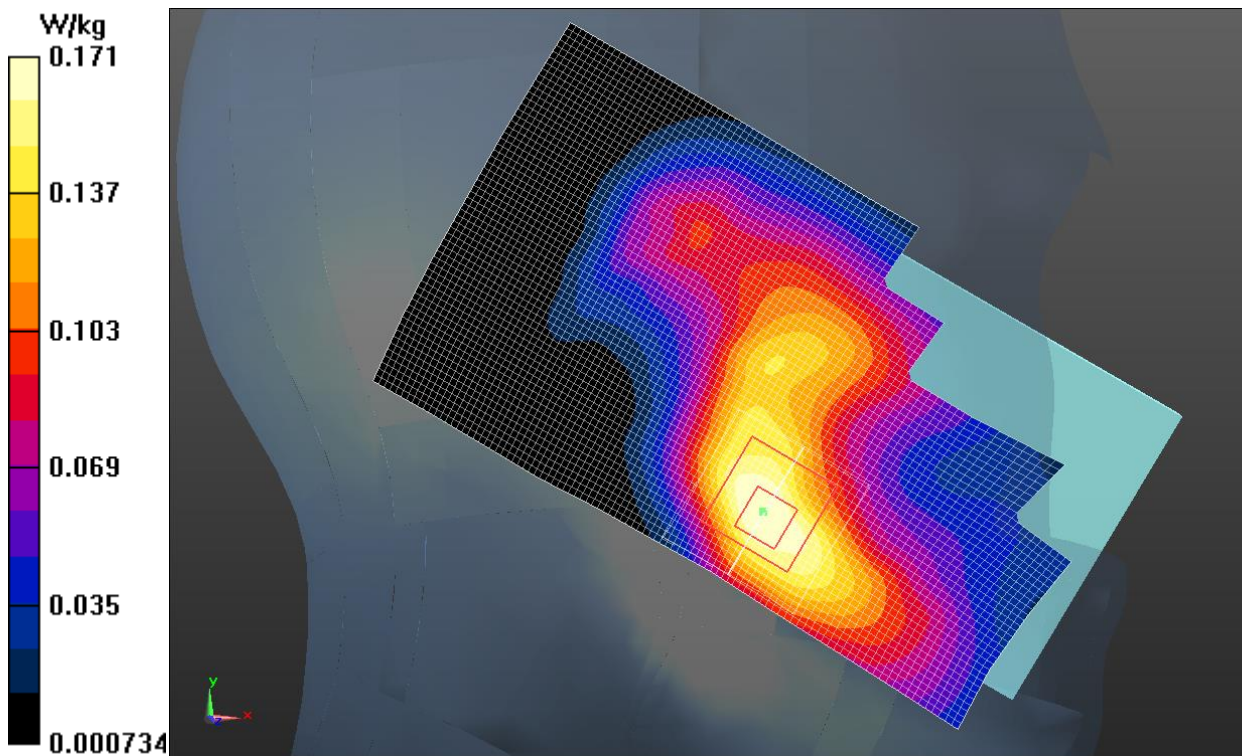
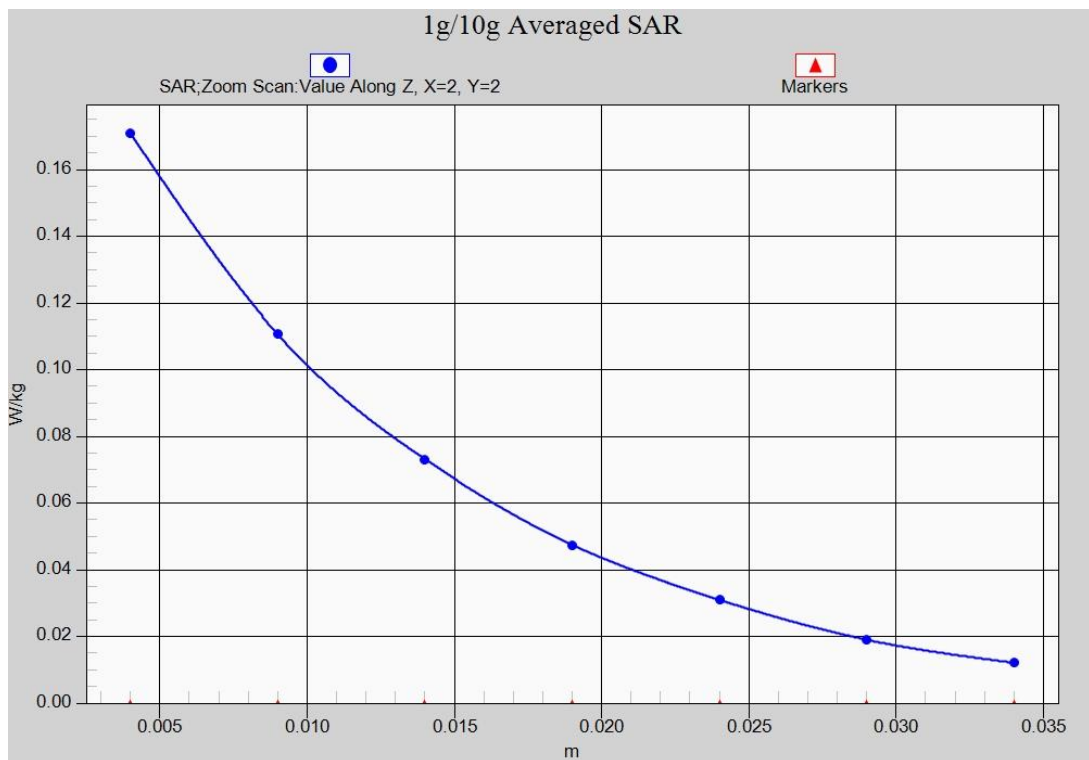


Fig.3 GSM 1900 MHz



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

## GSM1900 Body Rear High

Date/Time: 7/2/2017

Electronics: DAE4 Sn786

Medium: 1900 Body

Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.549$  S/m;  $\epsilon_r = 52.843$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C Liquid Temperature: 21.5°C

Communication System: UID 0, 4 slot GPRS (0) Frequency: 1909.8 MHz Duty Cycle: 1:2.

Probe: EX3DV4 - SN3633 ConvF(7.55, 7.55, 7.55);

**Rear side High/Area Scan (61x101x1):** Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Maximum value of SAR (interpolated) = 0.364 W/kg

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

Reference Value = 5.427 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.519 W/kg

**SAR(1 g) = 0.326 W/kg; SAR(10 g) = 0.205 W/kg**

Maximum value of SAR (measured) = 0.350 W/kg

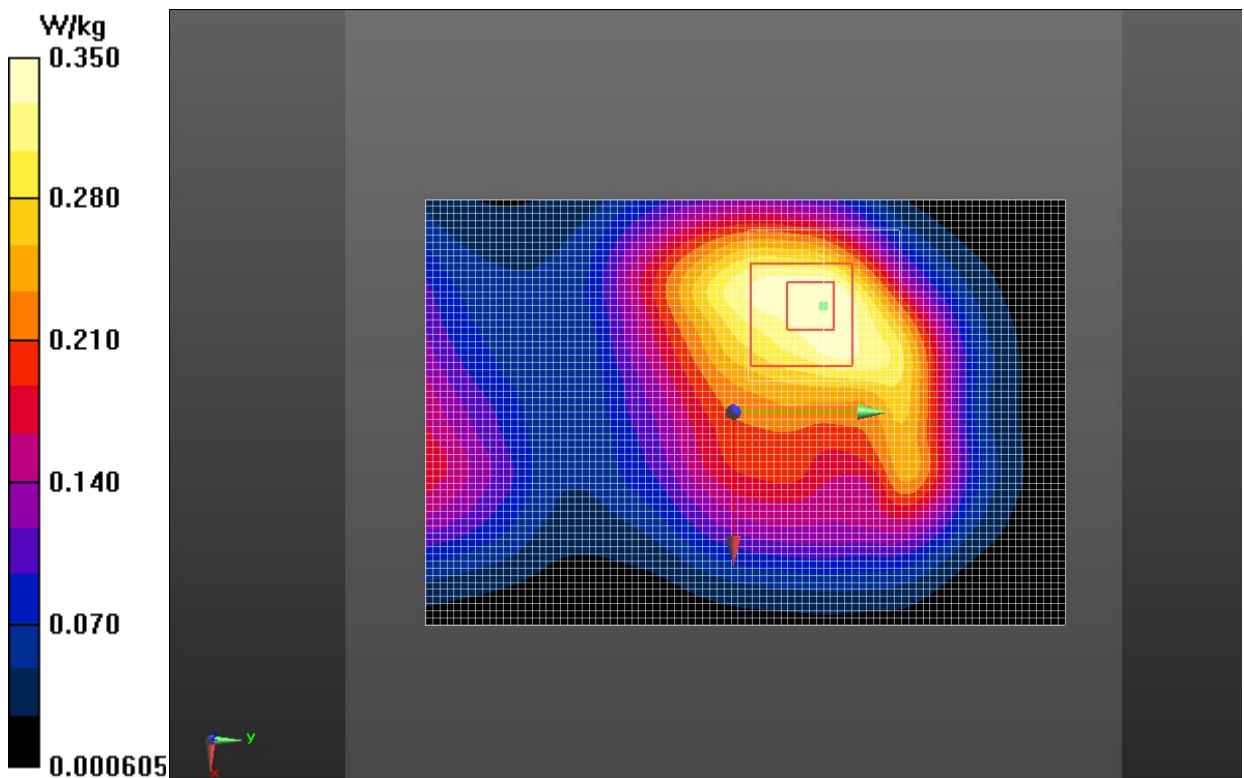
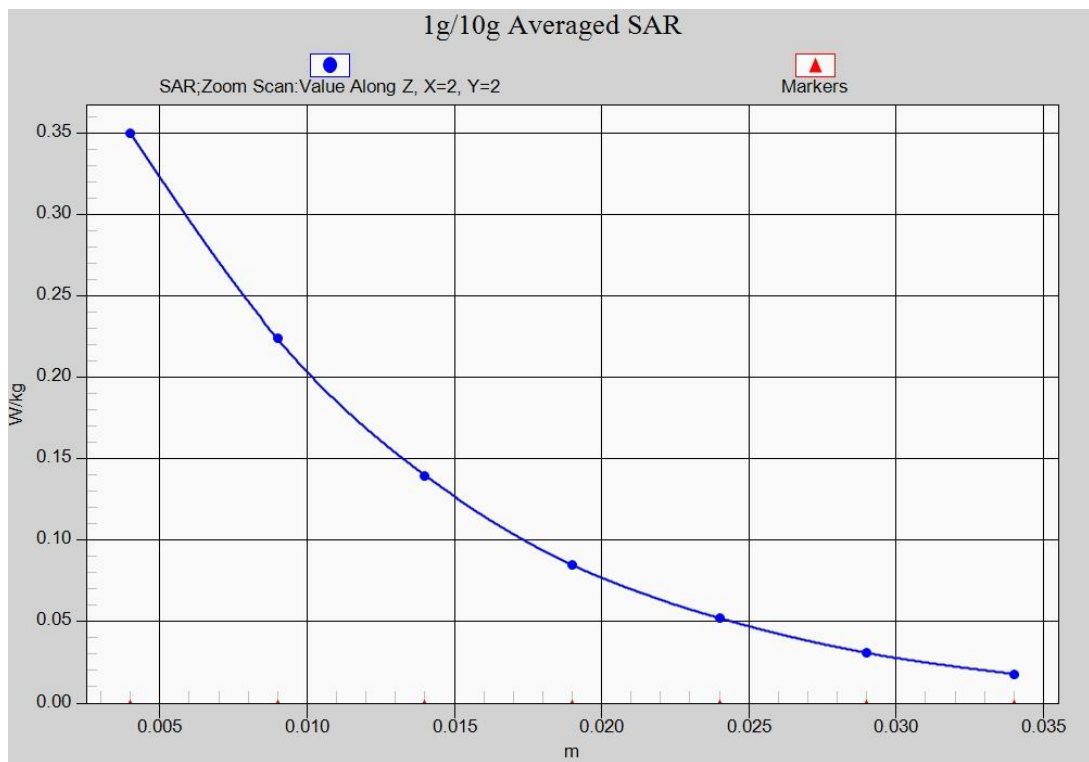


Fig.4 GSM 1900 MHz



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

## WCDMA 850 Left Cheek High

Date/Time: 6/27/2017

Electronics: DAE4 Sn786

Medium: 900 Head

Medium parameters used (interpolated):  $f = 846.6$  MHz;  $\sigma = 0.923$  S/m;  $\epsilon_r = 40.860$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C Liquid Temperature: 21.5°C

Communication System: UID 0, W-CDMA 835(Band5) Frequency: 846.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(8.88, 8.88, 8.88);

**Left cheek High/Area Scan (61x111x1):** Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Maximum value of SAR (interpolated) = 0.206 W/kg

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

Reference Value = 7.503 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.245 W/kg

**SAR(1 g) = 0.195 W/kg; SAR(10 g) = 0.148 W/kg**

Maximum value of SAR (measured) = 0.204 W/kg

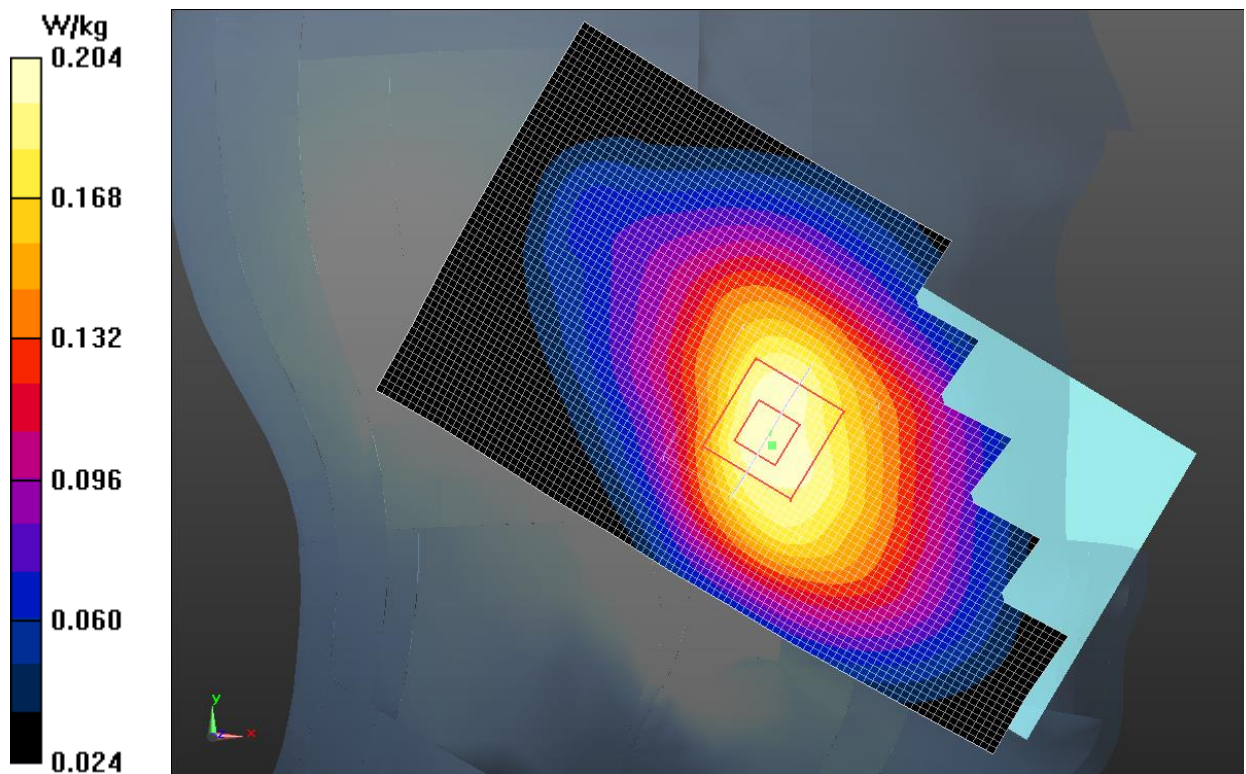
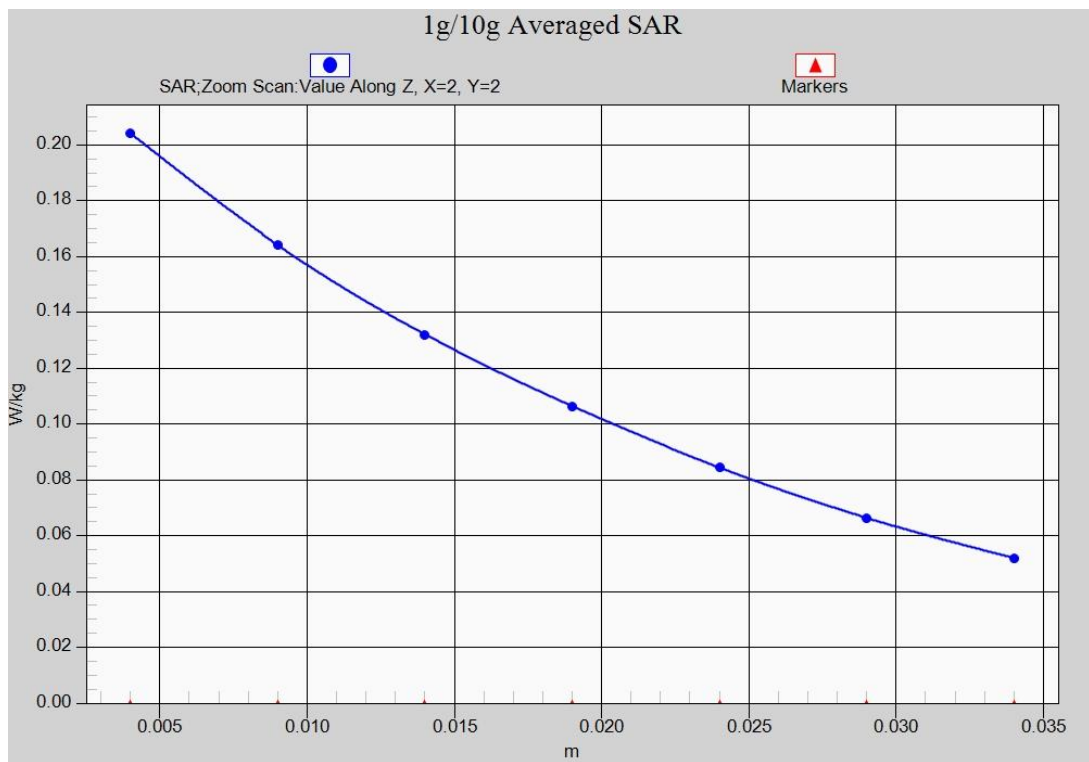


Fig.5 WCDMA 850



**Fig.5-1 Z-Scan at power reference point (WCDMA 850)**

## WCDMA 850 Body Rear Middle

Date/Time: 6/27/2017

Electronics: DAE4 Sn786

Medium: Body 900 MHz

Medium parameters used (interpolated):  $f = 846.6$  MHz;  $\sigma = 1.002$  S/m;  $\epsilon_r = 52.574$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: UID 0, WCDMA (0) Frequency: 846.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(9.24, 9.24, 9.24);

**Rear side High/Area Scan (61x101x1):** Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Maximum value of SAR (interpolated) = 0.229 W/kg

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

Reference Value = 14.03 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.265 W/kg

**SAR(1 g) = 0.212 W/kg; SAR(10 g) = 0.165 W/kg**

Maximum value of SAR (measured) = 0.222 W/kg

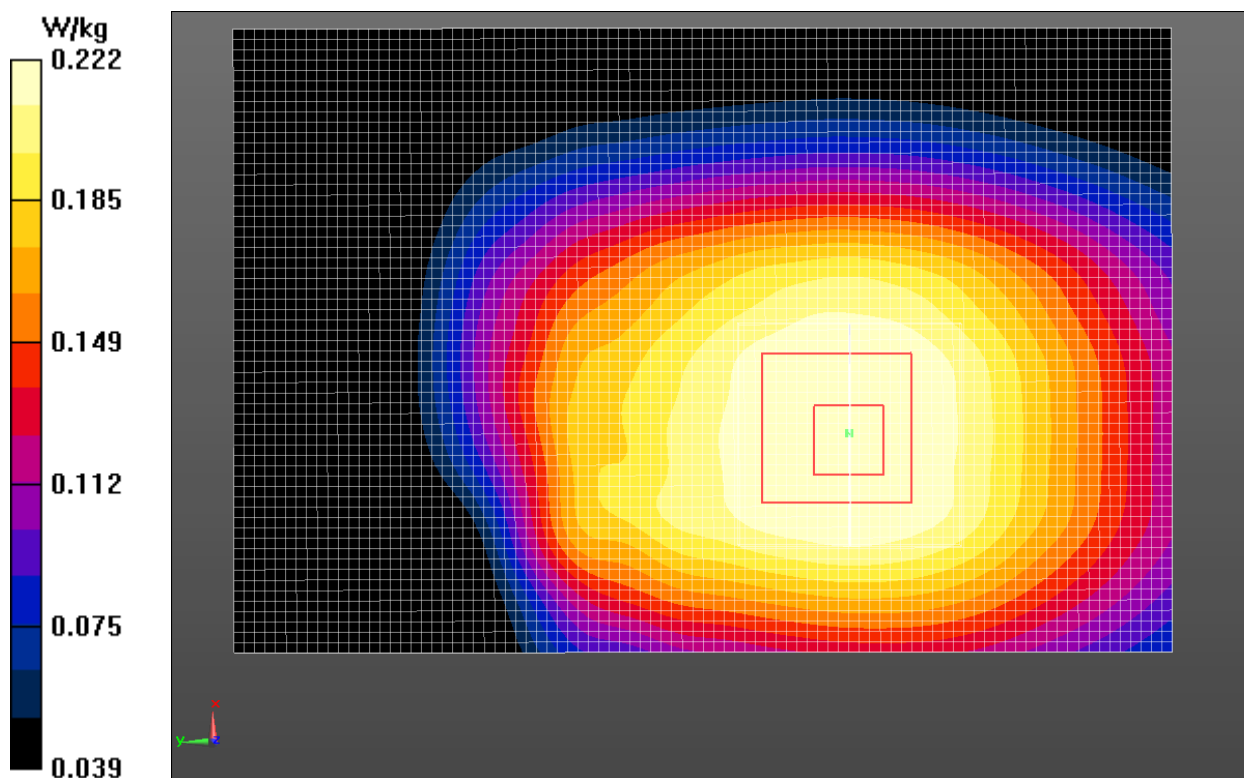
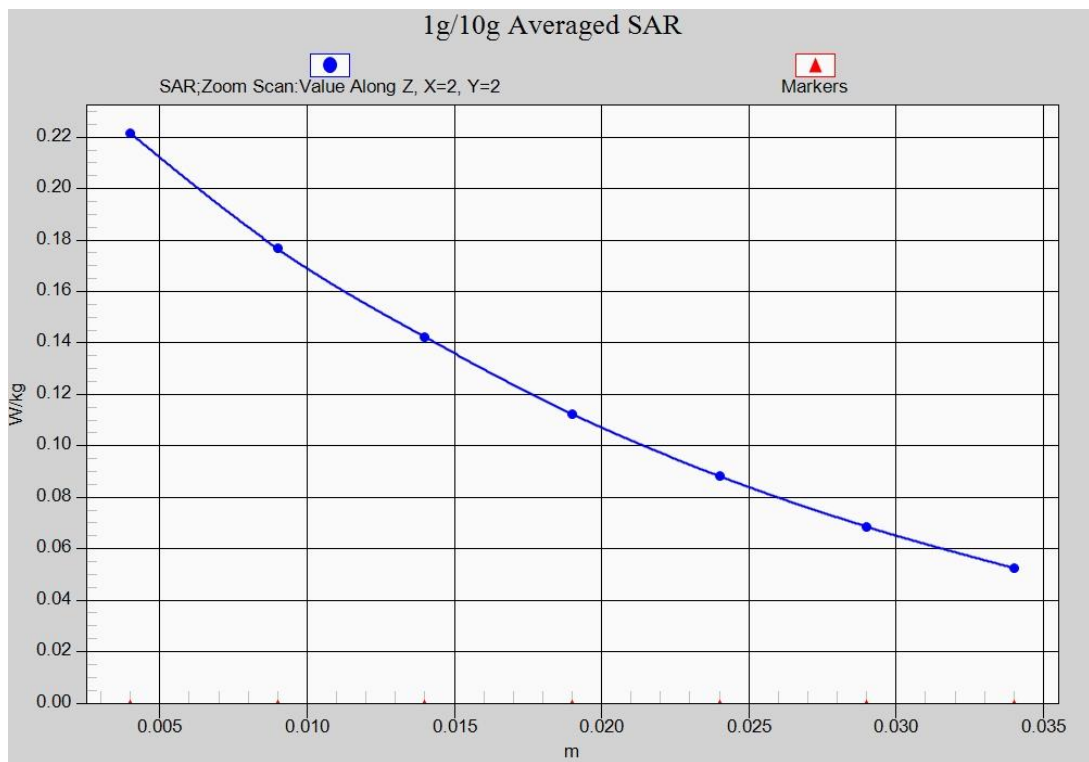


Fig.6 WCDMA 850



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

## WCDMA 1700 Left Cheek High

Date/Time: 6/30/2017

Electronics: DAE4 Sn786

Medium: 1800Head

Medium parameters used (interpolated):  $f = 1752.6\text{MHz}$ ;  $\sigma = 1.342\text{S/m}$ ;  $\epsilon_r = 39.551$ ;  $\rho = 1000\text{ kg/m}^3$

Ambient Temperature:  $22.0^\circ\text{C}$  Liquid Temperature:  $21.5^\circ\text{C}$

Communication System: UID 0, WCDMA (0) Frequency:  $1752.6\text{ MHz}$  Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(8.08, 8.08, 8.08);

**Left Cheek High/Area Scan (61x101x1):** Interpolated grid:  $dx=1.500\text{ mm}$ ,  $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) =  $0.248\text{ W/kg}$

**Left Cheek High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $3.283\text{ V/m}$ ; Power Drift =  $0.75\text{ dB}$

Peak SAR (extrapolated) =  $0.320\text{ W/kg}$

**SAR(1 g) =  $0.228\text{ W/kg}$ ; SAR(10 g) =  $0.152\text{ W/kg}$**

Maximum value of SAR (measured) =  $0.240\text{ W/kg}$

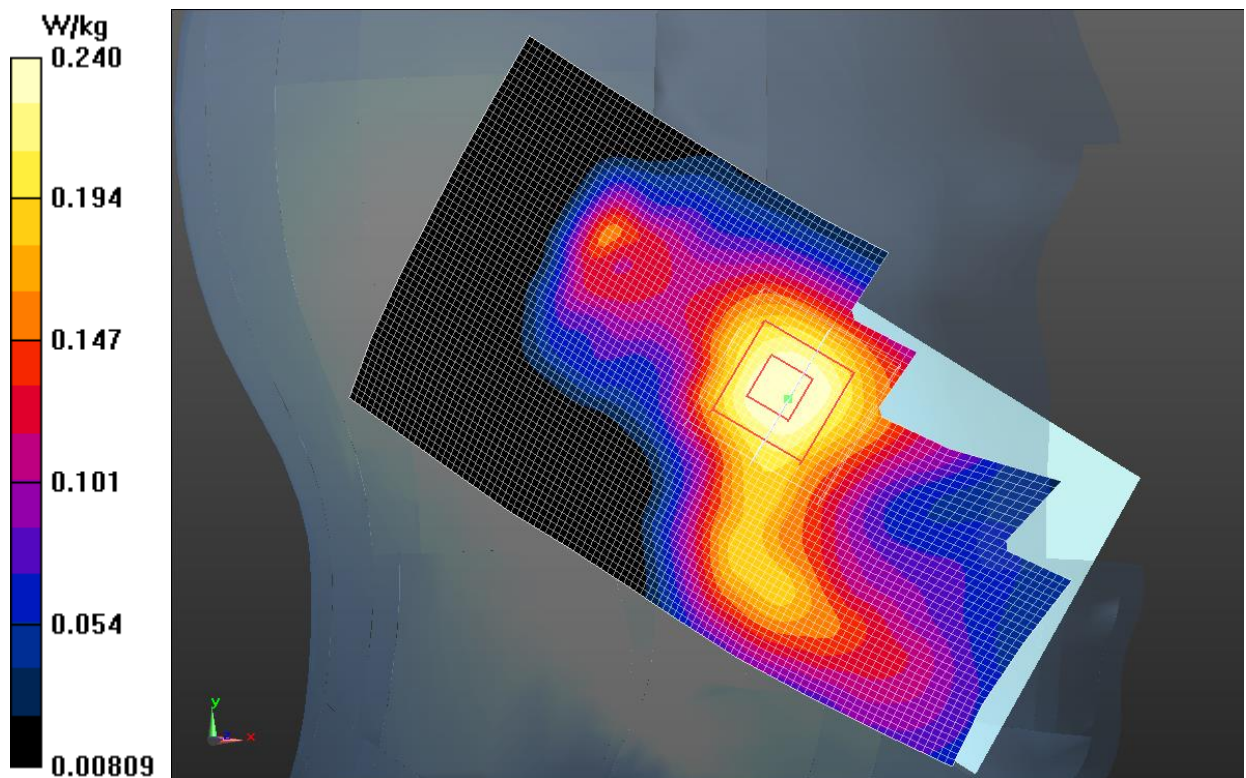
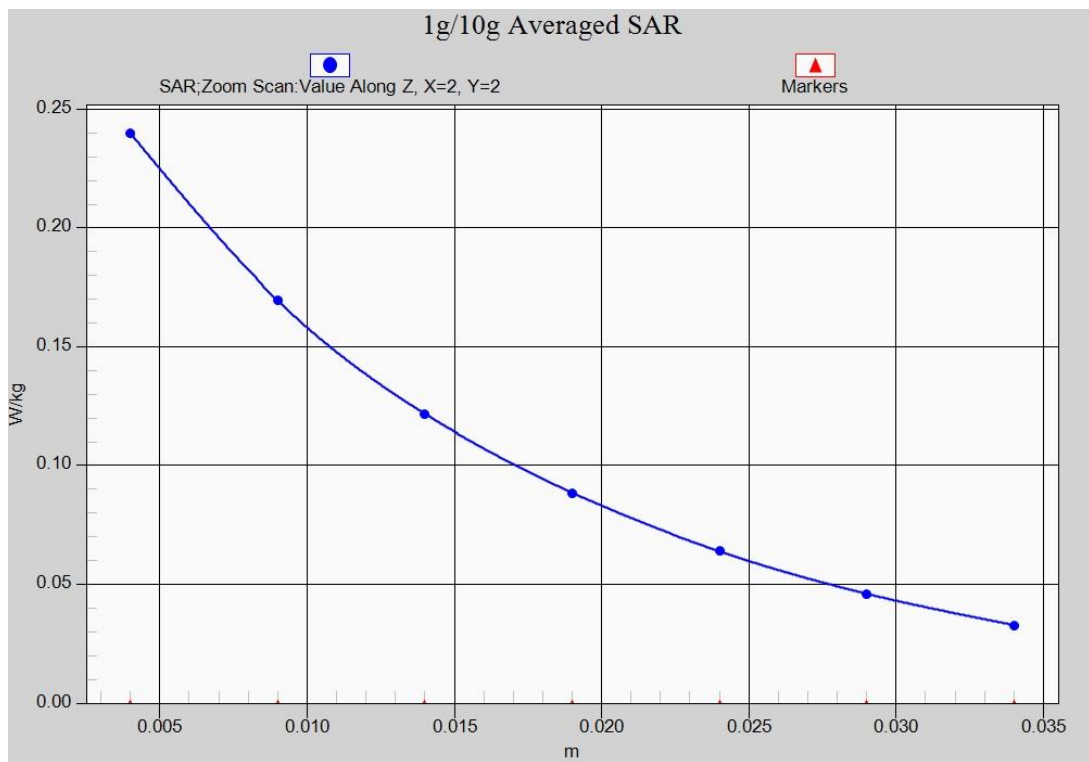


Fig.7 WCDMA1700



**Fig.7-1 Z-Scan at power reference point (WCDMA1700)**

## WCDMA 1700 Body Rear Low

Date/Time: 6/30/2017

Electronics: DAE4 Sn786

Medium: 1800 Body

Medium parameters used (interpolated):  $f = 1712.4$  MHz;  $\sigma = 1.442$  S/m;  $\epsilon_r = 53.362$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: UID 0, WCDMA (0) Frequency: 1712.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(7.9, 7.9, 7.9);

**Front side Low /Area Scan (61x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 1.34 W/kg

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

Reference Value = 8.869 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 2.26 W/kg

**SAR(1 g) = 1.25 W/kg; SAR(10 g) = 0.662 W/kg**

Maximum value of SAR (measured) = 1.41 W/kg

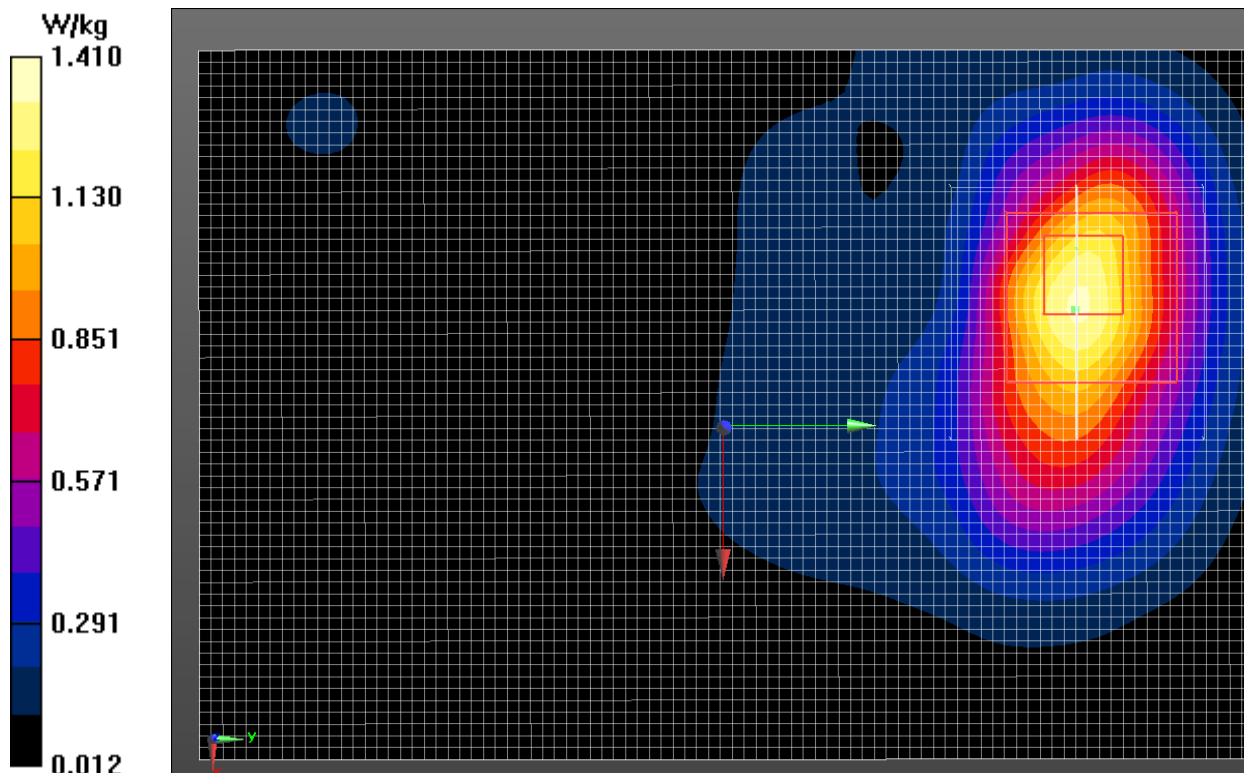
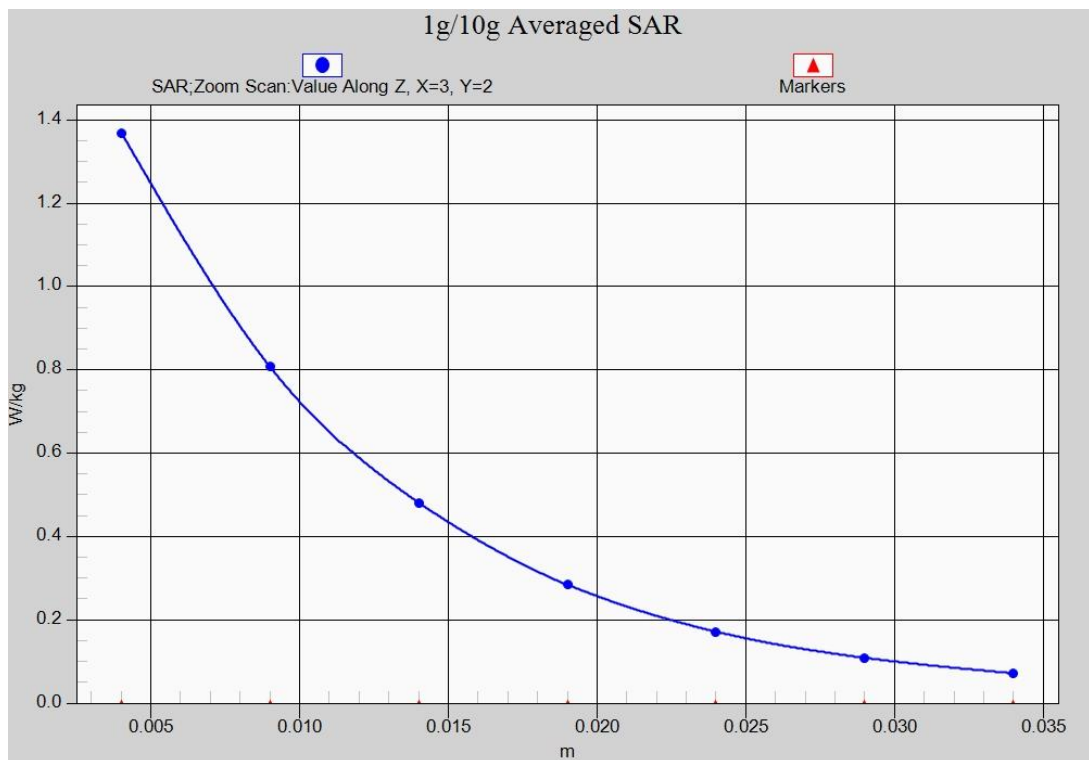


Fig.8 WCDMA1700



**Fig.8-1 Z-Scan at power reference point (WCDMA1700)**

## WCDMA 1900 Left Cheek High

Date/Time: 7/2/2017

Electronics: DAE4 Sn786

Medium: 1900Head

Medium parameters used:  $f = 1907.6$  MHz;  $\sigma = 1.41$  S/m;  $\epsilon_r = 39.121$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: UID 0, WCDMA (0) Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(8, 8, 8);

**Left Cheek High/Area Scan (61x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

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

Reference Value = 4.592 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.603 W/kg

**SAR(1 g) = 0.382 W/kg; SAR(10 g) = 0.234 W/kg**

Maximum value of SAR (measured) = 0.425 W/kg

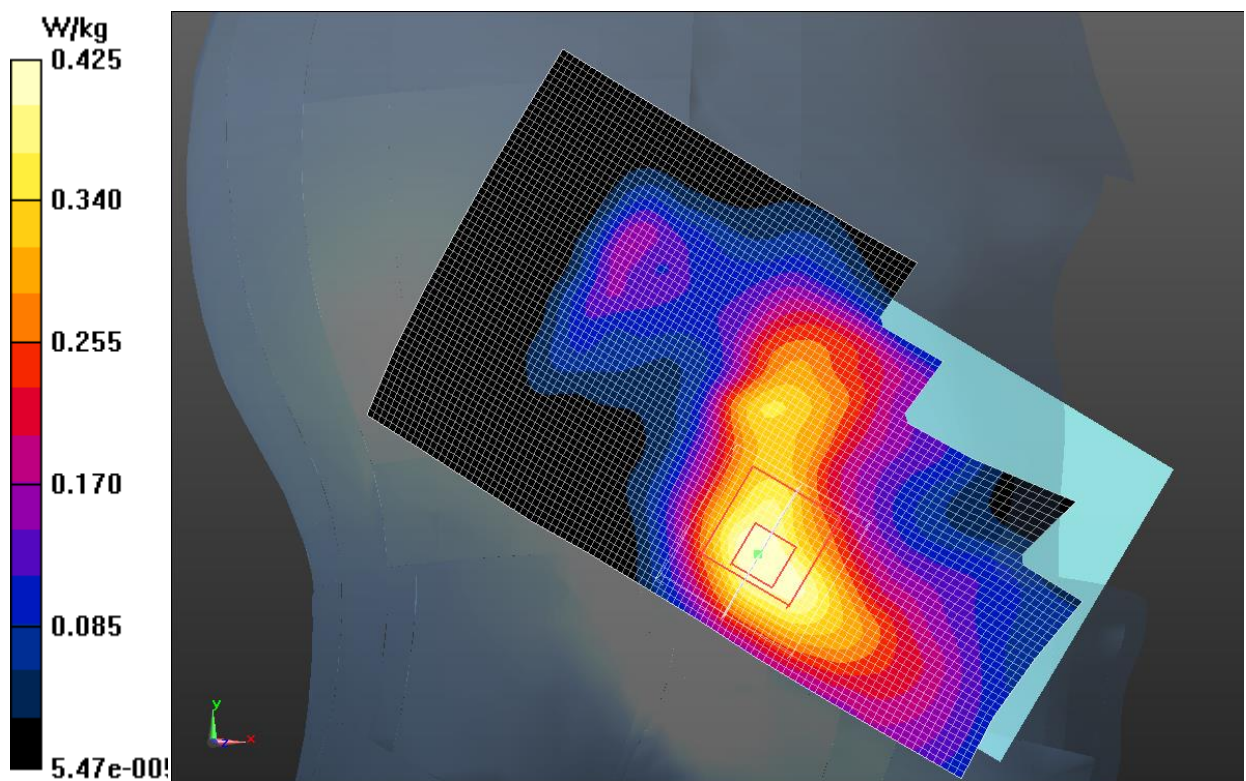
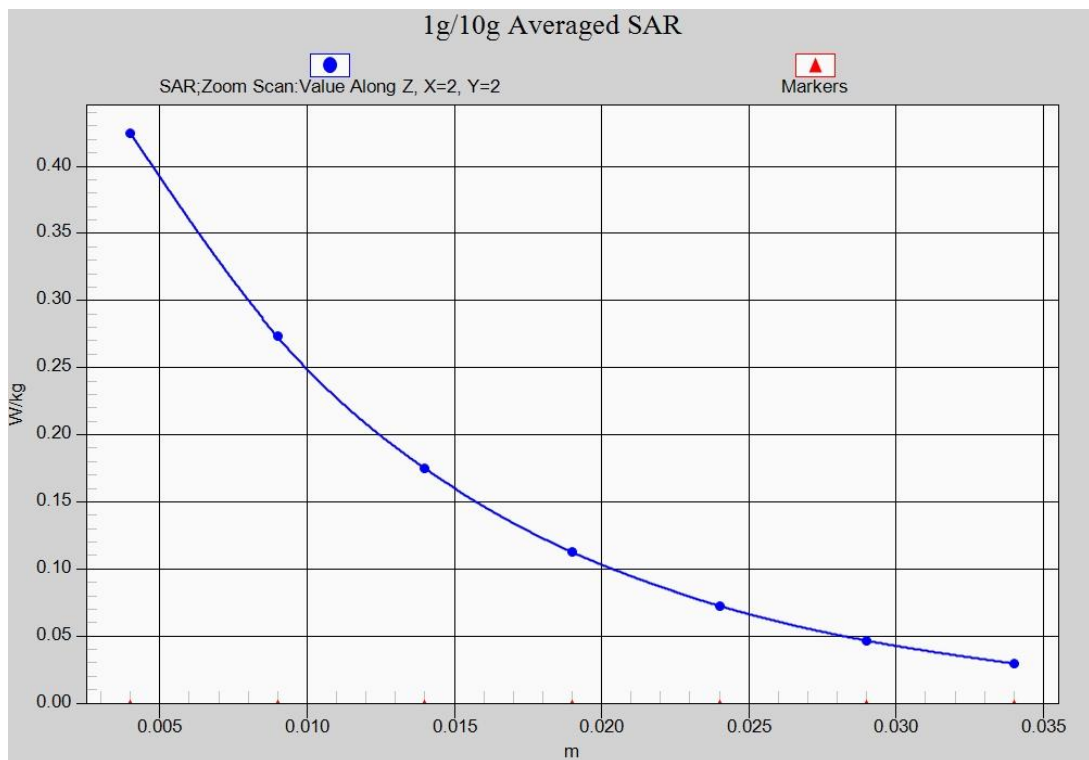


Fig.9 WCDMA1900



**Fig.9-1 Z-Scan at power reference point (WCDMA1900)**

## WCDMA 1900 Body Front Middle

Date/Time: 7/2/2017

Electronics: DAE4 Sn786

Medium: 1900 Body

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.532$  S/m;  $\epsilon_r = 52.967$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C Liquid Temperature: 21.5°C

Communication System: UID 0, WCDMA (0) Frequency: 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(7.55, 7.55, 7.55);

**Front side Middle 10mm/Area Scan (111x61x1):** Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Maximum value of SAR (interpolated) = 0.483 W/kg

**Front side Middle 10mm/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 14.60 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.700 W/kg

**SAR(1 g) = 0.413 W/kg; SAR(10 g) = 0.249 W/kg**

Maximum value of SAR (measured) = 0.456 W/kg

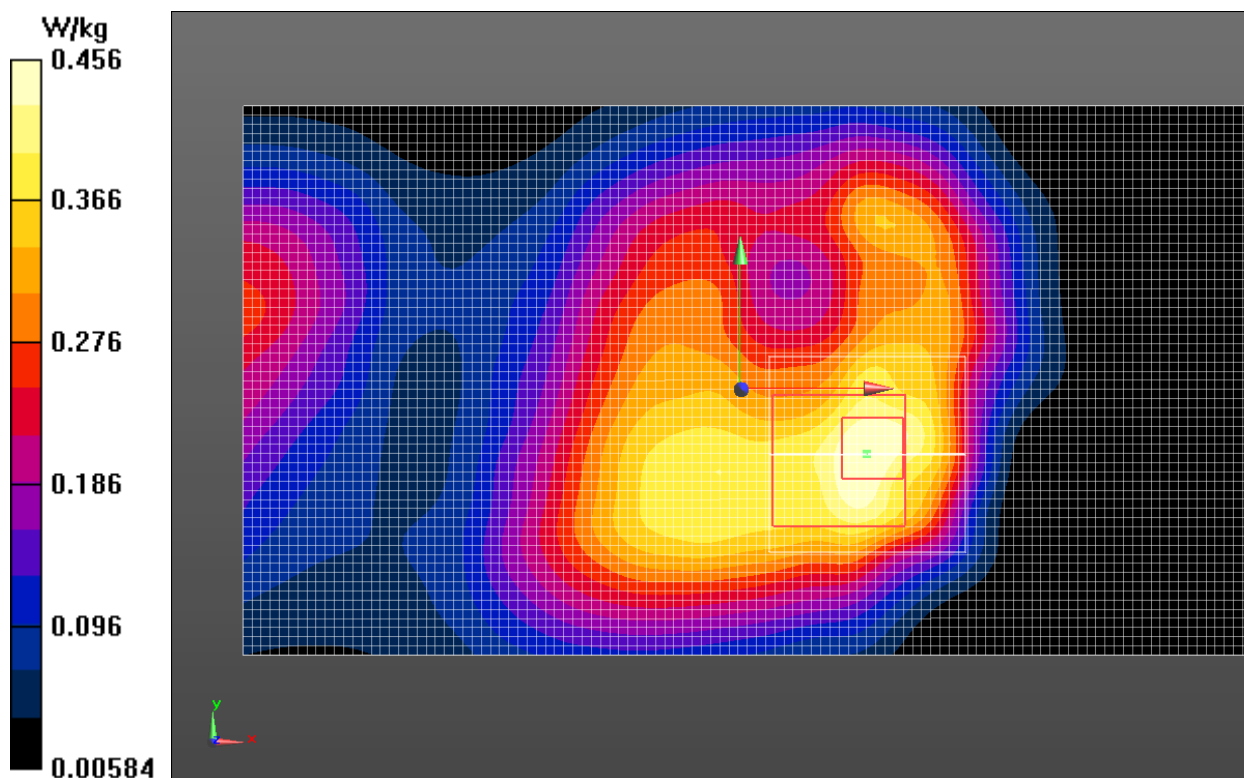
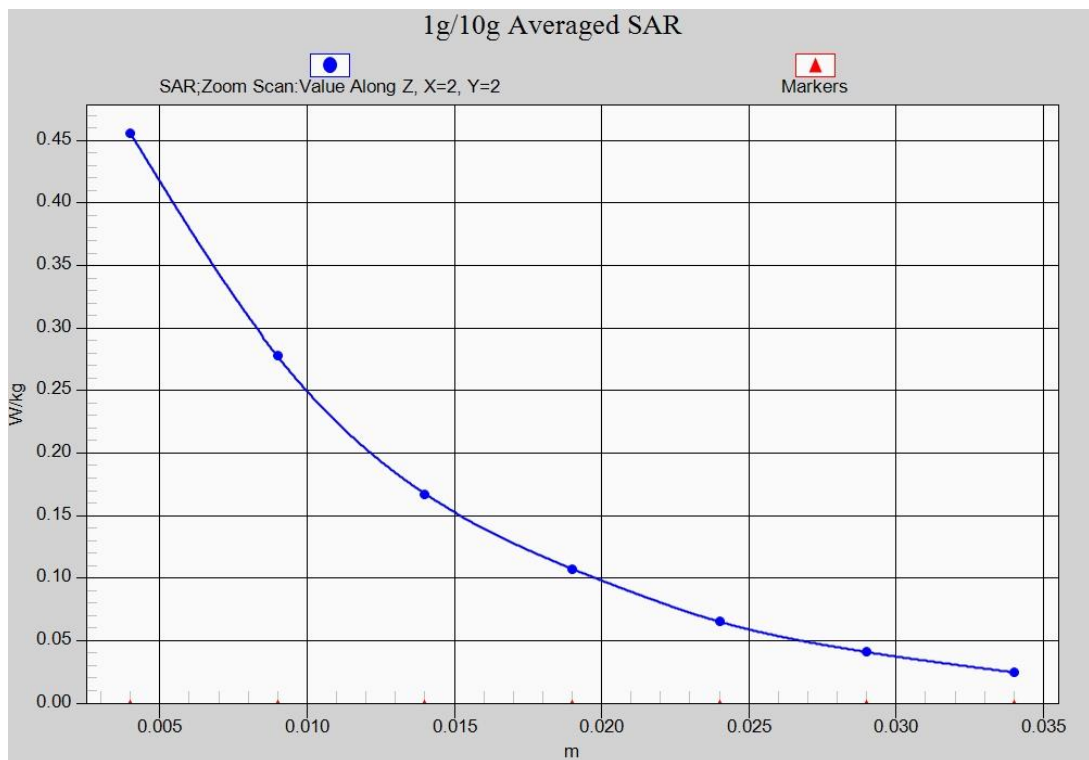


Fig.10 WCDMA1900



**Fig.10-1 Z-Scan at power reference point (WCDMA1900)**

## LTE Band 2 Left Cheek Low with QPSK\_20MHz\_1RB\_Mid

Date/Time: 7/2/2017

Electronics: DAE4 Sn786

Medium: 1900Head

Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.494$  S/m;  $\epsilon_r = 39.321$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C Liquid Temperature: 21.5°C

Communication System: UID 0, LTE\_FDD (0) Frequency: 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(8, 8, 8);

**Left Cheek Low 1RB\_Middle/Area Scan (61x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.226 W/kg

**Left Cheek Low 1RB\_Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.171 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.335 W/kg

**SAR(1 g) = 0.207 W/kg; SAR(10 g) = 0.126 W/kg**

Maximum value of SAR (measured) = 0.224 W/kg

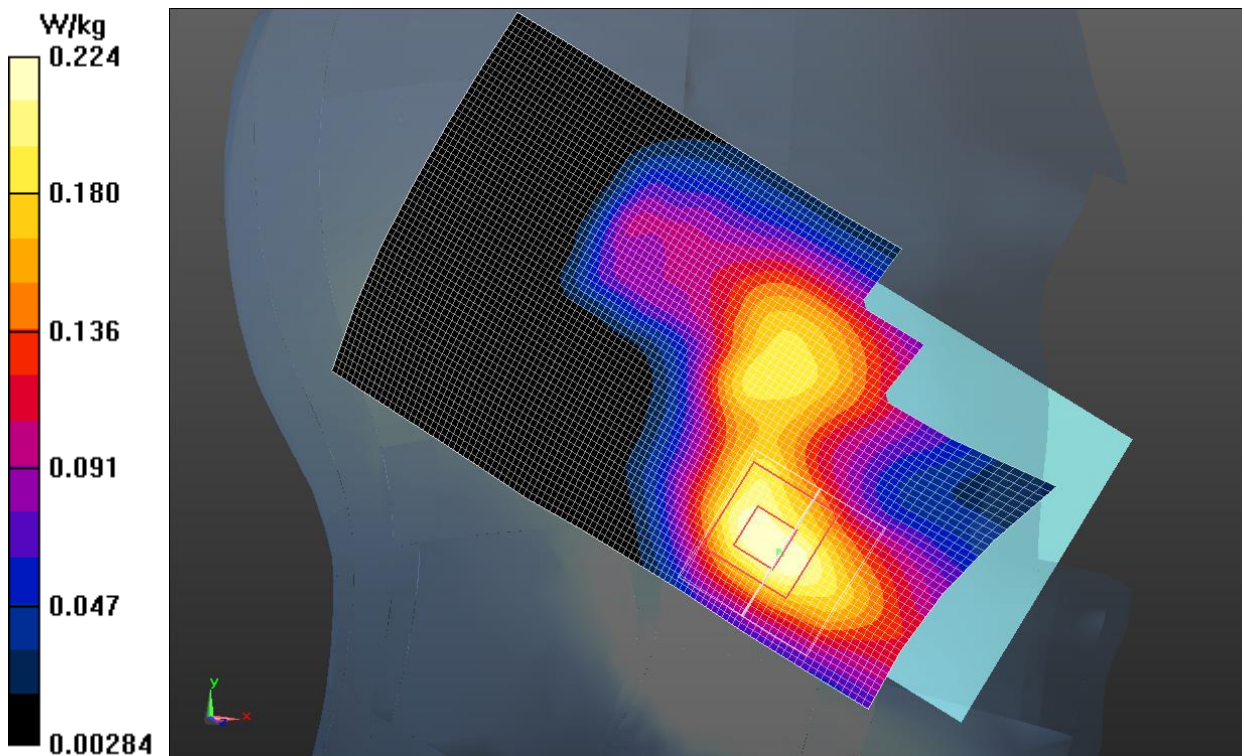


Fig.11 LTE Band 2