

| Band 5             |                         |                    |                              |                              |                              |
|--------------------|-------------------------|--------------------|------------------------------|------------------------------|------------------------------|
| Bandwidth<br>(MHz) | RB<br>allocation        | Frequency<br>(MHz) | QPSK                         | 16QAM                        | 64QAM                        |
|                    | RB offset<br>(Start RB) |                    | Actual output<br>power (dBm) | Actual output power<br>(dBm) | Actual output<br>power (dBm) |
| 1.4 MHz            | 1RB<br>High (5)         | 848.3              | 22.69                        | 22.21                        | 22.13                        |
|                    |                         | 836.5              | 22.56                        | 22.37                        | 21.96                        |
|                    |                         | 824.7              | 22.14                        | 21.34                        | 21.94                        |
|                    | 1RB<br>Middle (3)       | 848.3              | 22.83                        | 22.33                        | 22.01                        |
|                    |                         | 836.5              | 22.68                        | 22.17                        | 22.08                        |
|                    |                         | 824.7              | 22.23                        | 21.42                        | 21.89                        |
|                    | 1RB<br>Low (0)          | 848.3              | 22.63                        | 22.32                        | 22.09                        |
|                    |                         | 836.5              | 22.78                        | 22.18                        | 21.89                        |
|                    |                         | 824.7              | 22.26                        | 21.45                        | 21.90                        |
|                    | 3RB<br>High (3)         | 848.3              | 22.70                        | 22.37                        | 22.07                        |
|                    |                         | 836.5              | 22.50                        | 22.51                        | 21.73                        |
|                    |                         | 824.7              | 22.08                        | 21.30                        | 21.69                        |
|                    | 3RB<br>Middle (1)       | 848.3              | 22.72                        | 22.49                        | 21.78                        |
|                    |                         | 836.5              | 22.64                        | 22.67                        | 21.64                        |
|                    |                         | 824.7              | 22.14                        | 21.37                        | 21.86                        |
|                    | 3RB<br>Low (0)          | 848.3              | 22.68                        | 21.95                        | 21.76                        |
|                    |                         | 836.5              | 22.64                        | 22.66                        | 21.73                        |
|                    |                         | 824.7              | 22.11                        | 21.36                        | 21.70                        |
|                    | 6RB<br>(0)              | 848.3              | 22.42                        | 21.14                        | -6.03                        |
|                    |                         | 836.5              | 22.47                        | 21.58                        | 20.92                        |
|                    |                         | 824.7              | 22.15                        | 21.45                        | 20.67                        |
| 3 MHz              | 1RB<br>High (14)        | 847.5              | 22.38                        | 22.61                        | 21.89                        |
|                    |                         | 836.5              | 22.81                        | 22.28                        | 22.09                        |
|                    |                         | 825.5              | 22.94                        | 21.09                        | 21.73                        |
|                    | 1RB<br>Middle (7)       | 847.5              | 22.58                        | 22.52                        | 21.75                        |
|                    |                         | 836.5              | 23.07                        | 22.85                        | 22.32                        |
|                    |                         | 825.5              | 22.15                        | 21.32                        | 22.09                        |
|                    | 1RB<br>Low (0)          | 847.5              | 22.73                        | 22.25                        | 21.81                        |
|                    |                         | 836.5              | 23.01                        | 22.22                        | 21.90                        |
|                    |                         | 825.5              | 22.04                        | 21.29                        | 22.14                        |
|                    | 8RB<br>High (7)         | 847.5              | 22.50                        | 21.53                        | 21.03                        |
|                    |                         | 836.5              | 22.44                        | 21.37                        | 21.14                        |
|                    |                         | 825.5              | 22.05                        | 21.27                        | 20.97                        |
|                    | 8RB<br>Middle (4)       | 847.5              | 22.45                        | 21.22                        | 20.93                        |
|                    |                         | 836.5              | 22.44                        | 21.41                        | 21.00                        |
|                    |                         | 825.5              | 22.11                        | 21.35                        | 20.84                        |
|                    | 8RB<br>Low (0)          | 847.5              | 22.43                        | 21.23                        | 20.85                        |
|                    |                         | 836.5              | 22.38                        | 21.65                        | 20.85                        |
|                    |                         | 825.5              | 22.09                        | 21.34                        | 20.94                        |
|                    | 15RB<br>(0)             | 847.5              | 22.42                        | 21.39                        | 21.16                        |
|                    |                         | 836.5              | 22.45                        | 21.49                        | 21.17                        |
|                    |                         | 825.5              | 22.06                        | 21.23                        | 20.98                        |
| 5 MHz              | 1RB<br>High (24)        | 846.5              | 22.56                        | 21.97                        | 22.00                        |
|                    |                         | 836.5              | 22.42                        | 21.91                        | 21.81                        |

|        |                     |       |       |       |       |
|--------|---------------------|-------|-------|-------|-------|
|        | 1RB<br>Middle (12)  | 826.5 | 22.32 | 21.12 | 21.45 |
|        |                     | 846.5 | 23.15 | 22.14 | 22.26 |
|        |                     | 836.5 | 22.85 | 22.68 | 21.73 |
|        | 1RB<br>Low (0)      | 826.5 | 22.10 | 21.29 | 21.97 |
|        |                     | 846.5 | 22.24 | 21.59 | 22.03 |
|        |                     | 836.5 | 22.68 | 21.76 | 20.93 |
|        | 12RB<br>High (13)   | 826.5 | 22.19 | 21.30 | 21.67 |
|        |                     | 846.5 | 22.44 | 21.47 | 20.98 |
|        |                     | 836.5 | 22.38 | 21.34 | 20.99 |
|        | 12RB<br>Middle (6)  | 826.5 | 22.13 | 21.26 | 21.12 |
|        |                     | 846.5 | 22.35 | 21.53 | 21.11 |
|        |                     | 836.5 | 22.39 | 21.42 | 20.97 |
|        | 12RB<br>Low (0)     | 826.5 | 22.13 | 21.28 | 21.15 |
|        |                     | 846.5 | 22.24 | 21.16 | 21.07 |
|        |                     | 836.5 | 22.43 | 21.49 | 21.11 |
|        | 25RB<br>(0)         | 826.5 | 21.93 | 21.09 | 20.90 |
|        |                     | 846.5 | 22.30 | 21.60 | 21.04 |
|        |                     | 836.5 | 22.42 | 21.40 | 21.13 |
| 10 MHz | 1RB<br>High (49)    | 826.5 | 22.02 | 21.09 | 21.17 |
|        |                     | 844.0 | 22.67 | 22.31 | 22.07 |
|        |                     | 836.5 | 22.36 | 21.60 | 21.92 |
|        | 1RB<br>Middle (24)  | 829.0 | 22.54 | 22.61 | 21.94 |
|        |                     | 844.0 | 22.44 | 22.13 | 22.03 |
|        |                     | 836.5 | 22.63 | 22.61 | 22.09 |
|        | 1RB<br>Low (0)      | 829.0 | 22.64 | 21.71 | 22.05 |
|        |                     | 844.0 | 22.42 | 21.88 | 21.96 |
|        |                     | 836.5 | 22.57 | 22.26 | 22.05 |
|        | 25RB<br>High (25)   | 829.0 | 22.05 | 21.28 | 21.54 |
|        |                     | 844.0 | 22.28 | 21.39 | 20.93 |
|        |                     | 836.5 | 22.28 | 21.66 | 20.90 |
|        | 25RB<br>Middle (12) | 829.0 | 22.30 | 21.43 | 20.94 |
|        |                     | 844.0 | 22.37 | 21.43 | 20.92 |
|        |                     | 836.5 | 22.28 | 21.68 | 20.86 |
|        | 25RB<br>Low (0)     | 829.0 | 22.30 | 21.42 | 21.22 |
|        |                     | 844.0 | 22.29 | 21.28 | 20.97 |
|        |                     | 836.5 | 22.33 | 21.67 | 20.97 |
|        | 50RB<br>(0)         | 829.0 | 22.16 | 21.20 | 21.14 |
|        |                     | 844.0 | 22.31 | 21.25 | 21.02 |
|        |                     | 836.5 | 22.35 | 21.44 | 21.12 |
|        |                     | 829.0 | 22.47 | 21.51 | 21.04 |

| Band 7             |                         |                    |                              |                              |                              |
|--------------------|-------------------------|--------------------|------------------------------|------------------------------|------------------------------|
| Bandwidth<br>(MHz) | RB allocation           | Frequency<br>(MHz) | QPSK                         | 16QAM                        | 64QAM                        |
|                    | RB offset<br>(Start RB) |                    | Actual output<br>power (dBm) | Actual output<br>power (dBm) | Actual output<br>power (dBm) |
| 5 MHz              | 1RB<br>High (24)        | 2567.5             | 22.33                        | 21.11                        | 22.19                        |
|                    |                         | 2535               | 22.57                        | 21.19                        | 20.81                        |
|                    |                         | 2502.5             | 21.99                        | 21.34                        | 20.86                        |
|                    | 1RB<br>Middle (12)      | 2567.5             | 22.59                        | 21.29                        | 22.71                        |
|                    |                         | 2535               | 22.88                        | 21.32                        | 20.84                        |
|                    |                         | 2502.5             | 22.64                        | 21.71                        | 21.39                        |
|                    | 1RB<br>Low (0)          | 2567.5             | 22.31                        | 20.85                        | 22.40                        |
|                    |                         | 2535               | 22.52                        | 20.67                        | 20.65                        |
|                    |                         | 2502.5             | 21.98                        | 21.21                        | 20.96                        |
|                    | 12RB<br>High (13)       | 2567.5             | 21.44                        | 20.15                        | 20.32                        |
|                    |                         | 2535               | 21.66                        | 20.62                        | 20.11                        |
|                    |                         | 2502.5             | 21.49                        | 20.49                        | 20.47                        |
|                    | 12RB<br>Middle (6)      | 2567.5             | 21.47                        | 20.55                        | 20.36                        |
|                    |                         | 2535               | 21.70                        | 20.66                        | 20.38                        |
|                    |                         | 2502.5             | 21.52                        | 20.47                        | 20.44                        |
|                    | 12RB<br>Low (0)         | 2567.5             | 21.48                        | 20.32                        | 20.36                        |
|                    |                         | 2535               | 21.68                        | 20.61                        | 20.34                        |
|                    |                         | 2502.5             | 21.53                        | 20.44                        | 20.65                        |
|                    | 25RB<br>(0)             | 2567.5             | 21.39                        | 20.34                        | 20.45                        |
|                    |                         | 2535               | 21.69                        | 20.71                        | 20.29                        |
|                    |                         | 2502.5             | 21.45                        | 20.35                        | 20.64                        |
| 10 MHz             | 1RB<br>High (49)        | 2565               | 22.50                        | 21.40                        | 20.47                        |
|                    |                         | 2535               | 22.32                        | 20.97                        | 20.25                        |
|                    |                         | 2505               | 22.53                        | 21.28                        | 20.52                        |
|                    | 1RB<br>Middle (24)      | 2565               | 22.45                        | 21.62                        | 20.51                        |
|                    |                         | 2535               | 22.96                        | 21.85                        | 20.33                        |
|                    |                         | 2505               | 22.71                        | 21.17                        | 20.61                        |
|                    | 1RB<br>Low (0)          | 2565               | 22.54                        | 21.49                        | 20.45                        |
|                    |                         | 2535               | 22.76                        | 21.38                        | 20.22                        |
|                    |                         | 2505               | 22.49                        | 20.82                        | 20.60                        |
|                    | 25RB<br>High (25)       | 2565               | 21.45                        | 20.41                        | 19.47                        |
|                    |                         | 2535               | 21.68                        | 20.61                        | 19.34                        |
|                    |                         | 2505               | 21.47                        | 20.38                        | 19.84                        |
|                    | 25RB<br>Middle (12)     | 2565               | 21.49                        | 20.62                        | 19.66                        |
|                    |                         | 2535               | 21.67                        | 20.54                        | 19.48                        |
|                    |                         | 2505               | 21.46                        | 20.54                        | 19.86                        |
|                    | 25RB<br>Low (0)         | 2565               | 21.61                        | 20.64                        | 19.44                        |
|                    |                         | 2535               | 21.73                        | 20.62                        | 19.31                        |
|                    |                         | 2505               | 21.52                        | 20.49                        | 19.60                        |
|                    | 50RB<br>(0)             | 2565               | 21.55                        | 20.44                        | 19.43                        |
|                    |                         | 2535               | 21.69                        | 20.53                        | 19.28                        |
|                    |                         | 2505               | 21.42                        | 20.66                        | 19.55                        |
| 15 MHz             | 1RB<br>High (74)        | 2562.5             | 22.17                        | 21.92                        | 20.30                        |
|                    |                         | 2535               | 22.46                        | 21.37                        | 20.10                        |

|        |                     |        |       |       |       |
|--------|---------------------|--------|-------|-------|-------|
|        | 1RB<br>Middle (37)  | 2507.5 | 22.78 | 21.31 | 20.33 |
|        |                     | 2562.5 | 22.94 | 22.19 | 20.66 |
|        |                     | 2535   | 22.92 | 22.16 | 20.17 |
|        | 1RB<br>Low (0)      | 2507.5 | 22.73 | 21.30 | 20.42 |
|        |                     | 2562.5 | 22.25 | 21.87 | 20.22 |
|        |                     | 2535   | 22.47 | 21.45 | 20.29 |
|        | 36RB<br>High (38)   | 2507.5 | 22.48 | 20.76 | 20.55 |
|        |                     | 2562.5 | 21.39 | 20.45 | 19.48 |
|        |                     | 2535   | 21.63 | 20.44 | 19.21 |
|        | 36RB<br>Middle (19) | 2507.5 | 21.55 | 20.51 | 19.50 |
|        |                     | 2562.5 | 21.52 | 20.50 | 19.59 |
|        |                     | 2535   | 21.65 | 20.46 | 19.40 |
|        | 36RB<br>Low (0)     | 2507.5 | 21.42 | 20.47 | 19.64 |
|        |                     | 2562.5 | 21.39 | 20.28 | 19.53 |
|        |                     | 2535   | 21.57 | 20.46 | 19.37 |
|        | 75RB<br>(0)         | 2507.5 | 21.46 | 20.43 | 19.68 |
|        |                     | 2562.5 | 21.39 | 20.40 | 19.57 |
|        |                     | 2535   | 21.58 | 20.50 | 19.28 |
| 20 MHz | 1RB<br>High (99)    | 2507.5 | 21.49 | 20.56 | 19.48 |
|        |                     | 2560   | 22.18 | 20.81 | 20.34 |
|        |                     | 2535   | 22.31 | 21.16 | 20.05 |
|        | 1RB<br>Middle (50)  | 2510   | 22.65 | 21.82 | 20.66 |
|        |                     | 2560   | 22.54 | 21.23 | 20.31 |
|        |                     | 2535   | 22.73 | 21.97 | 20.22 |
|        | 1RB<br>Low (0)      | 2510   | 22.73 | 21.46 | 20.82 |
|        |                     | 2560   | 22.35 | 20.88 | 20.08 |
|        |                     | 2535   | 21.97 | 21.01 | 20.32 |
|        | 50RB<br>High (50)   | 2510   | 22.44 | 20.78 | 20.46 |
|        |                     | 2560   | 21.45 | 20.45 | 19.41 |
|        |                     | 2535   | 21.63 | 20.58 | 19.30 |
|        | 50RB<br>Middle (25) | 2510   | 21.62 | 20.64 | 19.74 |
|        |                     | 2560   | 21.49 | 20.39 | 19.47 |
|        |                     | 2535   | 21.62 | 20.66 | 19.36 |
|        | 50RB<br>Low (0)     | 2510   | 21.54 | 20.50 | 19.67 |
|        |                     | 2560   | 21.46 | 20.28 | 19.36 |
|        |                     | 2535   | 21.58 | 20.53 | 19.41 |
|        | 100RB<br>(0)        | 2510   | 21.42 | 20.20 | 19.57 |
|        |                     | 2560   | 21.48 | 20.39 | 19.34 |
|        |                     | 2535   | 21.56 | 20.47 | 19.44 |
|        |                     | 2510   | 21.53 | 20.47 | 19.62 |

| Band 12            |                         |                    |                              |                              |                              |
|--------------------|-------------------------|--------------------|------------------------------|------------------------------|------------------------------|
| Bandwidth<br>(MHz) | RB<br>allocation        | Frequency<br>(MHz) | QPSK                         | 16QAM                        | 64QAM                        |
|                    | RB offset<br>(Start RB) |                    | Actual output<br>power (dBm) | Actual output power<br>(dBm) | Actual output<br>power (dBm) |
| 1.4 MHz            | 1RB<br>High (5)         | 715.3              | 22.79                        | 22.74                        | 21.91                        |
|                    |                         | 707.5              | 23.05                        | 22.99                        | 21.86                        |
|                    |                         | 699.7              | 23.03                        | 22.82                        | 22.07                        |
|                    | 1RB<br>Middle (3)       | 715.3              | 22.92                        | 22.67                        | 21.95                        |
|                    |                         | 707.5              | 23.13                        | 22.94                        | 21.96                        |
|                    |                         | 699.7              | 23.16                        | 22.98                        | 22.01                        |
|                    | 1RB<br>Low (0)          | 715.3              | 22.90                        | 22.72                        | 21.88                        |
|                    |                         | 707.5              | 23.04                        | 22.83                        | 21.88                        |
|                    |                         | 699.7              | 23.13                        | 22.91                        | 22.02                        |
|                    | 3RB<br>High (3)         | 715.3              | 22.99                        | 22.79                        | 22.04                        |
|                    |                         | 707.5              | 22.98                        | 22.98                        | 21.87                        |
|                    |                         | 699.7              | 23.03                        | 22.96                        | 22.01                        |
|                    | 3RB<br>Middle (1)       | 715.3              | 23.13                        | 22.76                        | 22.00                        |
|                    |                         | 707.5              | 23.05                        | 22.99                        | 21.72                        |
|                    |                         | 699.7              | 23.13                        | 22.98                        | 22.03                        |
|                    | 3RB<br>Low (0)          | 715.3              | 22.91                        | 22.75                        | 21.98                        |
|                    |                         | 707.5              | 22.97                        | 22.97                        | 21.62                        |
|                    |                         | 699.7              | 23.00                        | 22.96                        | 21.74                        |
|                    | 6RB<br>(0)              | 715.3              | 22.93                        | 21.73                        | 20.96                        |
|                    |                         | 707.5              | 22.94                        | 21.96                        | 20.81                        |
|                    |                         | 699.7              | 22.98                        | 21.94                        | 20.85                        |
| 3 MHz              | 1RB<br>High (14)        | 714.5              | 22.80                        | 22.71                        | 21.73                        |
|                    |                         | 707.5              | 22.95                        | 22.70                        | 21.70                        |
|                    |                         | 700.5              | 23.08                        | 22.98                        | 21.72                        |
|                    | 1RB<br>Middle (7)       | 714.5              | 23.27                        | 22.96                        | 21.50                        |
|                    |                         | 707.5              | 23.27                        | 22.95                        | 21.57                        |
|                    |                         | 700.5              | 23.19                        | 22.98                        | 22.25                        |
|                    | 1RB<br>Low (0)          | 714.5              | 23.19                        | 22.96                        | 21.90                        |
|                    |                         | 707.5              | 23.02                        | 22.75                        | 22.10                        |
|                    |                         | 700.5              | 22.88                        | 22.85                        | 21.93                        |
|                    | 8RB<br>High (7)         | 714.5              | 22.86                        | 21.84                        | 20.71                        |
|                    |                         | 707.5              | 22.98                        | 21.91                        | 20.96                        |
|                    |                         | 700.5              | 22.97                        | 21.91                        | 21.03                        |
|                    | 8RB<br>Middle (4)       | 714.5              | 22.98                        | 21.93                        | 20.93                        |
|                    |                         | 707.5              | 22.96                        | 21.95                        | 20.92                        |
|                    |                         | 700.5              | 22.99                        | 21.93                        | 21.02                        |
|                    | 8RB<br>Low (0)          | 714.5              | 22.97                        | 21.97                        | 21.00                        |
|                    |                         | 707.5              | 22.89                        | 21.87                        | 20.93                        |
|                    |                         | 700.5              | 22.95                        | 21.90                        | 21.05                        |
|                    | 15RB<br>(0)             | 714.5              | 22.96                        | 21.97                        | 20.90                        |
|                    |                         | 707.5              | 22.98                        | 21.78                        | 20.97                        |
|                    |                         | 700.5              | 22.97                        | 21.88                        | 21.02                        |
| 5 MHz              | 1RB<br>High (24)        | 713.5              | 22.81                        | 22.62                        | 21.59                        |
|                    |                         | 707.5              | 22.66                        | 22.40                        | 22.01                        |

|        |                     |       |       |       |       |
|--------|---------------------|-------|-------|-------|-------|
|        | 1RB<br>Middle (12)  | 701.5 | 22.80 | 22.81 | 21.77 |
|        |                     | 713.5 | 23.60 | 22.92 | 22.05 |
|        |                     | 707.5 | 23.14 | 22.38 | 22.36 |
|        | 1RB<br>Low (0)      | 701.5 | 23.28 | 22.79 | 22.20 |
|        |                     | 713.5 | 22.99 | 22.34 | 21.83 |
|        |                     | 707.5 | 22.92 | 22.17 | 21.93 |
|        | 12RB<br>High (13)   | 701.5 | 22.89 | 22.74 | 21.99 |
|        |                     | 713.5 | 22.90 | 21.76 | 20.53 |
|        |                     | 707.5 | 22.85 | 21.72 | 21.04 |
|        | 12RB<br>Middle (6)  | 701.5 | 22.95 | 22.00 | 20.84 |
|        |                     | 713.5 | 22.99 | 21.95 | 20.73 |
|        |                     | 707.5 | 22.97 | 21.89 | 20.95 |
|        | 12RB<br>Low (0)     | 701.5 | 22.93 | 21.91 | 21.13 |
|        |                     | 713.5 | 22.82 | 21.77 | 20.77 |
|        |                     | 707.5 | 22.87 | 21.74 | 20.84 |
|        | 25RB<br>(0)         | 701.5 | 22.85 | 21.88 | 21.16 |
|        |                     | 713.5 | 22.87 | 21.81 | 20.70 |
|        |                     | 707.5 | 22.90 | 21.91 | 21.07 |
| 10 MHz | 1RB<br>High (49)    | 701.5 | 22.98 | 21.95 | 21.14 |
|        |                     | 711   | 22.86 | 22.62 | 22.30 |
|        |                     | 707.5 | 22.71 | 22.80 | 22.43 |
|        | 1RB<br>Middle (24)  | 704   | 23.00 | 22.64 | 22.25 |
|        |                     | 711   | 23.26 | 22.69 | 22.48 |
|        |                     | 707.5 | 23.01 | 22.87 | 22.42 |
|        | 1RB<br>Low (0)      | 704   | 23.17 | 22.86 | 22.52 |
|        |                     | 711   | 22.73 | 22.29 | 22.36 |
|        |                     | 707.5 | 22.80 | 22.79 | 22.01 |
|        | 25RB<br>High (25)   | 704   | 22.93 | 22.73 | 22.36 |
|        |                     | 711   | 22.99 | 21.92 | 21.96 |
|        |                     | 707.5 | 22.85 | 21.91 | 22.09 |
|        | 25RB<br>Middle (12) | 704   | 22.93 | 21.93 | 22.04 |
|        |                     | 711   | 22.97 | 21.99 | 22.18 |
|        |                     | 707.5 | 22.82 | 21.97 | 22.07 |
|        | 25RB<br>Low (0)     | 704   | 22.92 | 21.95 | 21.91 |
|        |                     | 711   | 22.84 | 21.91 | 22.19 |
|        |                     | 707.5 | 22.89 | 21.88 | 22.10 |
|        | 50RB<br>(0)         | 704   | 22.93 | 21.97 | 22.08 |
|        |                     | 711   | 22.92 | 21.84 | 22.08 |
|        |                     | 707.5 | 22.83 | 21.86 | 21.96 |
|        |                     | 704   | 22.94 | 21.93 | 22.11 |

| Band 28            |               |                    |                           |       |       |
|--------------------|---------------|--------------------|---------------------------|-------|-------|
| Bandwidth<br>(MHz) | RB allocation | Frequency<br>(MHz) | Actual output power (dBm) |       |       |
|                    | RB offset     |                    | QPSK                      | 16QAM | 64QAM |
| 3MHz               | 1RB_High      | 746.5              | 22.88                     | 22.33 | 21.44 |
|                    |               | 719.5              | 23.33                     | 22.72 | 21.71 |
|                    |               | 704.5              | 23.03                     | 22.51 | 21.52 |
|                    | 1RB_Middle    | 746.5              | 22.97                     | 22.63 | 21.77 |
|                    |               | 719.5              | 23.21                     | 22.69 | 21.80 |
|                    |               | 704.5              | 23.36                     | 22.92 | 21.28 |
|                    | 1RB_Low       | 746.5              | 23.03                     | 22.57 | 21.64 |
|                    |               | 719.5              | 22.93                     | 22.80 | 21.57 |
|                    |               | 704.5              | 23.06                     | 22.61 | 21.79 |
|                    | 8RB_High      | 746.5              | 22.42                     | 21.38 | 20.39 |
|                    |               | 719.5              | 22.71                     | 21.77 | 20.50 |
|                    |               | 704.5              | 22.77                     | 21.82 | 20.61 |
|                    | 8RB_Middle    | 746.5              | 22.48                     | 21.45 | 20.66 |
|                    |               | 719.5              | 22.75                     | 21.78 | 20.55 |
|                    |               | 704.5              | 22.72                     | 21.92 | 20.78 |
|                    | 8RB_Low       | 746.5              | 22.58                     | 21.50 | 20.63 |
|                    |               | 719.5              | 22.73                     | 21.71 | 20.60 |
|                    |               | 704.5              | 22.60                     | 21.86 | 20.55 |
|                    | 15RB          | 746.5              | 22.55                     | 21.24 | 20.65 |
|                    |               | 719.5              | 22.78                     | 21.67 | 20.76 |
|                    |               | 704.5              | 22.65                     | 21.75 | 20.74 |
| 5MHz               | 1RB_High      | 745.5              | 22.73                     | 22.08 | 21.63 |
|                    |               | 720.5              | 23.18                     | 22.20 | 21.57 |
|                    |               | 705.5              | 22.64                     | 22.31 | 21.28 |
|                    | 1RB_Middle    | 745.5              | 22.98                     | 22.48 | 22.02 |
|                    |               | 720.5              | 23.20                     | 22.23 | 21.70 |
|                    |               | 705.5              | 23.39                     | 22.19 | 21.82 |
|                    | 1RB_Low       | 745.5              | 22.70                     | 22.15 | 21.77 |
|                    |               | 720.5              | 22.93                     | 22.06 | 21.28 |
|                    |               | 705.5              | 22.59                     | 22.18 | 21.64 |
|                    | 12RB_High     | 745.5              | 22.46                     | 21.46 | 20.45 |
|                    |               | 720.5              | 22.65                     | 21.74 | 21.00 |
|                    |               | 705.5              | 22.74                     | 21.72 | 20.74 |
|                    | 12RB_Middle   | 745.5              | 22.53                     | 21.63 | 20.70 |
|                    |               | 720.5              | 22.70                     | 21.55 | 20.79 |
|                    |               | 705.5              | 22.72                     | 21.78 | 20.81 |
|                    | 12RB_Low      | 745.5              | 22.52                     | 21.66 | 20.68 |
|                    |               | 720.5              | 22.66                     | 21.52 | 20.51 |
|                    |               | 705.5              | 22.66                     | 21.64 | 20.78 |

|       |             |       |       |       |       |
|-------|-------------|-------|-------|-------|-------|
|       | 25RB        | 745.5 | 22.52 | 21.44 | 20.81 |
|       |             | 720.5 | 22.70 | 21.93 | 20.71 |
|       |             | 705.5 | 22.64 | 21.90 | 20.62 |
| 10MHz | 1RB_High    | 743   | 22.82 | 22.05 | 21.70 |
|       |             | 723   | 23.57 | 22.59 | 21.54 |
|       |             | 708   | 22.96 | 22.43 | 21.49 |
|       | 1RB_Middle  | 743   | 22.92 | 22.66 | 21.76 |
|       |             | 723   | 23.32 | 22.65 | 21.75 |
|       |             | 708   | 23.46 | 22.54 | 21.50 |
|       | 1RB_Low     | 743   | 22.89 | 22.50 | 21.60 |
|       |             | 723   | 22.96 | 22.52 | 21.99 |
|       |             | 708   | 22.97 | 22.32 | 21.66 |
|       | 25RB_High   | 743   | 22.56 | 21.59 | 20.38 |
|       |             | 723   | 22.70 | 21.88 | 20.83 |
|       |             | 708   | 22.57 | 21.60 | 20.58 |
|       | 25RB_Middle | 743   | 22.58 | 21.64 | 20.96 |
|       |             | 723   | 22.66 | 21.56 | 20.92 |
|       |             | 708   | 22.56 | 21.59 | 20.35 |
|       | 25RB_Low    | 743   | 22.54 | 21.62 | 20.83 |
|       |             | 723   | 22.69 | 21.64 | 20.67 |
|       |             | 708   | 22.60 | 21.71 | 20.58 |
|       | 50RB        | 743   | 22.58 | 21.44 | 20.52 |
|       |             | 723   | 22.65 | 21.73 | 20.72 |
|       |             | 708   | 22.56 | 21.84 | 20.51 |
| 15MHz | 1RB_High    | 740.5 | 22.73 | 22.24 | 21.63 |
|       |             | 725.5 | 22.90 | 22.75 | 21.48 |
|       |             | 710.5 | 23.01 | 22.47 | 21.55 |
|       | 1RB_Middle  | 740.5 | 22.88 | 22.43 | 21.60 |
|       |             | 725.5 | 22.81 | 22.76 | 21.52 |
|       |             | 710.5 | 23.36 | 22.82 | 21.35 |
|       | 1RB_Low     | 740.5 | 22.86 | 22.24 | 21.63 |
|       |             | 725.5 | 22.83 | 22.96 | 21.70 |
|       |             | 710.5 | 22.98 | 22.65 | 21.58 |
|       | 36RB_High   | 740.5 | 22.60 | 21.60 | 20.65 |
|       |             | 725.5 | 22.72 | 21.68 | 20.74 |
|       |             | 710.5 | 22.62 | 21.69 | 20.72 |
|       | 36RB_Middle | 740.5 | 22.59 | 21.64 | 20.67 |
|       |             | 725.5 | 22.70 | 21.73 | 20.75 |
|       |             | 710.5 | 22.62 | 21.70 | 20.71 |
|       | 36RB_Low    | 740.5 | 22.52 | 21.59 | 20.70 |
|       |             | 725.5 | 22.62 | 21.35 | 20.86 |
|       |             | 710.5 | 22.64 | 21.55 | 20.66 |

|       |             |       |       |       |       |
|-------|-------------|-------|-------|-------|-------|
|       | 75RB        | 740.5 | 22.54 | 21.48 | 20.60 |
|       |             | 725.5 | 22.65 | 21.75 | 20.88 |
|       |             | 710.5 | 22.60 | 21.60 | 20.61 |
| 20MHz | 1RB_High    | 738   | 22.79 | 22.06 | 21.41 |
|       |             | 728   | 22.87 | 22.22 | 21.85 |
|       |             | 713   | 22.97 | 22.72 | 21.15 |
|       | 1RB_Middle  | 738   | 22.76 | 22.40 | 21.51 |
|       |             | 728   | 23.04 | 22.68 | 21.60 |
|       |             | 713   | 22.96 | 22.94 | 21.94 |
|       | 1RB_Low     | 738   | 22.82 | 22.10 | 21.53 |
|       |             | 728   | 22.94 | 22.47 | 21.65 |
|       |             | 713   | 22.86 | 21.99 | 21.56 |
|       | 50RB_High   | 738   | 22.53 | 21.54 | 20.61 |
|       |             | 728   | 22.59 | 21.65 | 20.88 |
|       |             | 713   | 22.52 | 21.70 | 20.54 |
|       | 50RB_Middle | 738   | 22.48 | 21.74 | 20.56 |
|       |             | 728   | 22.60 | 21.72 | 20.64 |
|       |             | 713   | 22.42 | 21.83 | 20.64 |
|       | 50RB_Low    | 738   | 22.53 | 21.70 | 20.62 |
|       |             | 728   | 22.55 | 21.52 | 20.69 |
|       |             | 713   | 22.56 | 21.65 | 20.62 |
|       | 100RB       | 738   | 22.52 | 21.60 | 20.68 |
|       |             | 728   | 22.67 | 21.57 | 20.88 |
|       |             | 713   | 22.56 | 21.56 | 20.57 |

## 11.5 Wi-Fi and BT Measurement result

The maximum output power of BT is 9.27dBm.

The maximum tune up of BT is 9.5dBm.

The average conducted power for Wi-Fi is as following:

| 802.11b           |       |       |         |        |
|-------------------|-------|-------|---------|--------|
| Channel\data rate | 1Mbps | 2Mbps | 5.5Mbps | 11Mbps |
| 11(2462MHz)       | 18.08 | 18.53 | 18.66   | 18.24  |
| 6(2437(MHz)       | 17.92 | /     | 17.73   | /      |
| 1(2412MHz)        | 18.01 | /     | 17.17   | /      |
| Tune up           | 19.00 | 19.00 | 19.00   | 18.50  |

| 802.11g           |       |       |        |        |        |        |        |        |
|-------------------|-------|-------|--------|--------|--------|--------|--------|--------|
| Channel\data rate | 6Mbps | 9Mbps | 12Mbps | 18Mbps | 24Mbps | 36Mbps | 48Mbps | 54Mbps |
| 11(2462MHz)       | 15.27 | /     | /      | 15.62  | /      | /      | /      | /      |
| Tune up           | 16.00 | 16.00 | 16.00  | 16.00  | 16.00  | 16.00  | 15.50  | 15.00  |
| 6(2437(MHz)       | 15.32 | /     | /      | 15.19  | /      | /      | /      | /      |
| 1(2412MHz)        | 15.35 | 15.07 | 15.51  | 15.66  | 15.07  | 15.12  | 14.70  | 14.67  |
| Tune up           | 16.50 | 16.50 | 16.50  | 16.50  | 16.00  | 16.00  | 15.50  | 15.00  |

| 802.11n-20MHz     |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Channel\data rate | MCS0  | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| 11(2462MHz)       | 15.83 | 15.79 | 15.77 | 15.73 | 15.69 | 15.25 | 15.23 | 14.78 |
| Tune up           | 16.00 | 16.00 | 16.00 | 16.00 | 16.00 | 15.50 | 15.50 | 15.00 |
| 6(2437(MHz)       | 14.87 | /     | /     | /     | /     | /     | /     | /     |
| Tune up           | 17.00 | 16.00 | 16.00 | 16.00 | 16.00 | 15.50 | 15.50 | 15.00 |
| 1(2412MHz)        | 14.76 | /     | /     | /     | /     | /     | /     | /     |
| Tune up           | 16.00 | 16.00 | 16.00 | 16.00 | 16.00 | 15.50 | 15.50 | 15.00 |

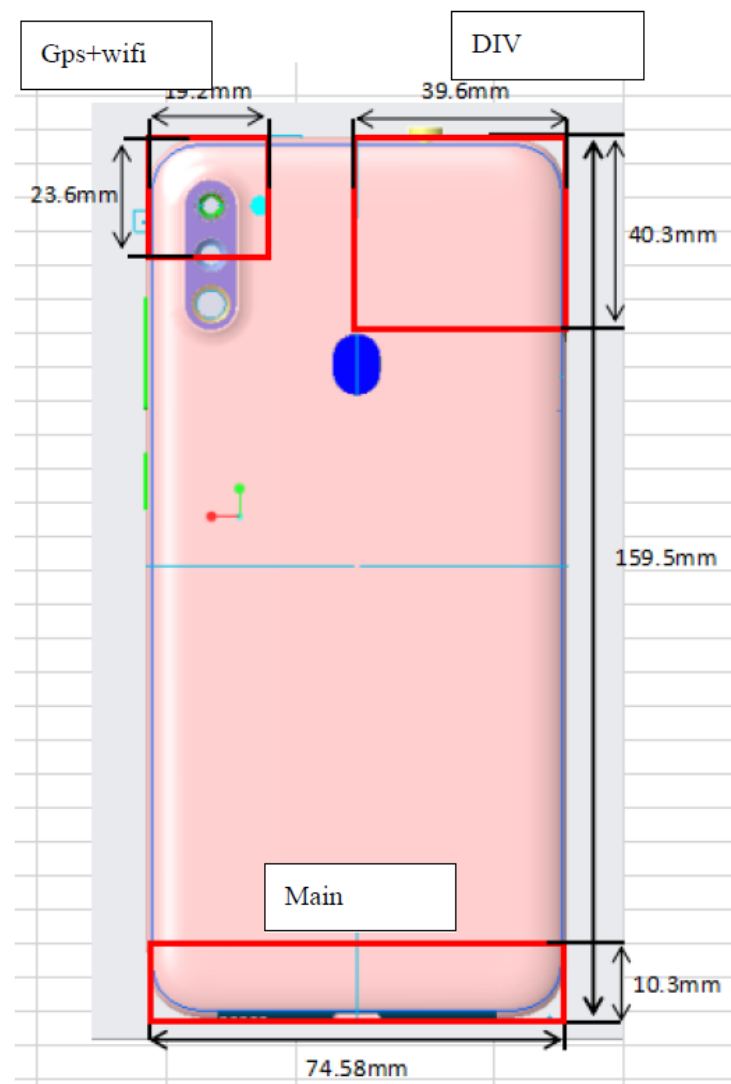
| 802.11n-40MHz     |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Channel\data rate | MCS0  | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| 9(2452MHz)        | 14.03 | /     | /     | /     | /     | /     | /     | /     |
| Tune up           | 17.00 | 16.00 | 16.00 | 16.00 | 16.00 | 16.00 | 15.50 | 15.00 |
| 6(2437MHz)        | 15.31 | 15.26 | 15.24 | 15.23 | 15.19 | 14.68 | 14.65 | 13.69 |
| 3(2422MHz)        | 13.85 | /     | /     | /     | /     | /     | /     | /     |
| Tune up           | 16.00 | 16.00 | 16.00 | 16.00 | 16.00 | 16.00 | 15.50 | 15.00 |

## 12 Simultaneous TX SAR Considerations

### 12.1 Introduction

The following procedures adopted from “FCC SAR Considerations for Cell Phones with Multiple Transmitters” are applicable to handsets with built-in unlicensed transmitters such as 802.11 a/b/g and Bluetooth devices which may simultaneously transmit with the licensed transmitter. For this device, the BT and Wi-Fi can transmit simultaneous with other transmitters.

### 12.2 Transmit Antenna Separation Distances



Picture 12.1 Antenna Locations

### 12.3 SAR Measurement Positions

According to the KDB941225 D06 Hot Spot SAR, the edges with less than 2.5 cm distance to the antennas need to be tested for SAR.

| SAR measurement positions |       |      |           |            |          |             |
|---------------------------|-------|------|-----------|------------|----------|-------------|
| Mode                      | Front | Rear | Left edge | Right edge | Top edge | Bottom edge |
| Main antenna              | Yes   | Yes  | Yes       | Yes        | No       | Yes         |
| WLAN                      | Yes   | Yes  | No        | Yes        | Yes      | No          |

### 12.4 Standalone SAR Test Exclusion Considerations

Standalone 1-g head or body SAR evaluation by measurement or numerical simulation is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied. The 1-g SAR test exclusion threshold for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$$\left[ \frac{(\text{max. power of channel, including tune-up tolerance, mW})}{(\text{min. test separation distance, mm})} \right] \cdot \sqrt{f(\text{GHz})} \leq 3.0 \text{ for 1-g SAR, where}$$

- $f(\text{GHz})$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

**Table 12.1: Standalone SAR test exclusion considerations**

| Band/Mode   | F(GHz) | Position | SAR test exclusion threshold(mW) | RF output power |       | SAR test exclusion |
|-------------|--------|----------|----------------------------------|-----------------|-------|--------------------|
|             |        |          |                                  | dBm             | mW    |                    |
| Bluetooth   | 2.441  | Head     | 9.60                             | 9.5             | 8.9   | Yes                |
|             |        | Body     | 19.20                            | 9.5             | 8.9   | Yes                |
| 2.4GHz WLAN | 2.45   | Head     | 9.58                             | 19              | 79.43 | No                 |
|             |        | Body     | 19.17                            | 19              | 79.43 | No                 |

### 13 Evaluation of Simultaneous

**Table 13.1: The sum of reported SAR values for main antenna and WiFi 2.4G**

|                                     | Position               | Main antenna | WLAN  | Sum         |
|-------------------------------------|------------------------|--------------|-------|-------------|
| Maximum reported SAR value for Head | Left hand, Touch cheek | 0.21         | 0.67  | <b>0.88</b> |
| Maximum reported SAR value for Body | Bottom                 | 1.11         | <0.01 | <b>1.11</b> |

**Table 13.2: The sum of reported SAR values for main antenna and BT**

|                                     | Position                | Main antenna | BT                  | Sum         |
|-------------------------------------|-------------------------|--------------|---------------------|-------------|
| Maximum reported SAR value for Head | Right hand, Touch cheek | 0.28         | 0.37                | <b>0.65</b> |
| Maximum reported SAR value for Body | Bottom                  | 1.11         | 0.19 <sup>[1]</sup> | <b>1.30</b> |

[1] - Estimated SAR for Bluetooth (see the table 13.3)

**Table 13.3: Estimated SAR for Bluetooth**

| Mode/Band | F (GHz) | Position | Distance (mm) | Upper limit of power * |     | Estimated <sub>1g</sub> (W/kg) |
|-----------|---------|----------|---------------|------------------------|-----|--------------------------------|
|           |         |          |               | dBm                    | mW  |                                |
| Bluetooth | 2.441   | Head     | 5             | 9.5                    | 8.9 | 0.37                           |
| Bluetooth | 2.441   | Body     | 10            | 9.5                    | 8.9 | 0.19                           |

\* - Maximum possible output power declared by manufacturer

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

(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm) · [ $\sqrt{f(\text{GHz})/x}$ ] W/kg for test separation distances ≤ 50 mm;

where x = 7.5 for 1-g SAR.

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

#### Conclusion:

According to the above tables, the sum of reported SAR values is < 1.6 W/kg. So the simultaneous transmission SAR with volume scans is not required.

## 14 SAR Test Result

It is determined by user manual for the distance between the EUT and the phantom bottom.  
The distance is 10 mm and just applied to the condition of body worn accessory.

It is performed for all SAR measurements with area scan based 1-g SAR estimation (Fast SAR). A zoom scan measurement is added when the estimated 1-g SAR is the highest measured SAR in each exposure configuration, wireless mode and frequency band combination or more than 1.2W/kg.

The calculated SAR is obtained by the following formula:

$$\text{Reported SAR} = \text{Measured SAR} \times 10^{(P_{\text{Target}} - P_{\text{Measured}})/10}$$

Where  $P_{\text{Target}}$  is the power of manufacturing upper limit;

$P_{\text{Measured}}$  is the measured power in chapter 11.

**Table 14.1: Duty Cycle**

| Mode                   | Duty Cycle |
|------------------------|------------|
| Speech for GSM850      | 1:2        |
| Speech for GSM1900     | 1:4        |
| GPRS&EGPRS for GSM850  | 1:2        |
| GPRS&EGPRS for GSM1900 | 1:4        |
| WCDMA&LTE FDD          | 1:1        |

### The evaluation of multi-SIM cards:

We'll perform the head measurement in all bands with the primary SIM card depending on the evaluation of multi-SIM cards and retest on highest value point with other SIM cards. Then, repeat the measurement in the Body test.

| Frequency |         | Mode/Band | Side  | Position | SIM Type | 1g SAR (W/kg) | Power Drift |
|-----------|---------|-----------|-------|----------|----------|---------------|-------------|
| MHz       | Channel |           |       |          |          |               |             |
| 20600     | 844     | LTE Band5 | Right | Cheek    | SIM1     | 0.12          | 0.08        |
| 20600     | 844     | LTE Band5 | Right | Cheek    | SIM2     | 0.089         | 0.05        |

Note: According to the values in the above table, the **SIM1** is the primary SIM card.

We'll perform the head measurement with the SIM1 and retest on highest value point with others.

| Frequency |         | Mode/Band | Position | SIM Type | 1g SAR (W/kg) | Power Drift |
|-----------|---------|-----------|----------|----------|---------------|-------------|
| MHz       | Channel |           |          |          |               |             |
| 20600     | 844     | LTE Band5 | Rear     | SIM1     | 0.159         | 0.1         |
| 20600     | 844     | LTE Band5 | Rear     | SIM2     | 0.142         | 0.06        |

Note: According to the values in the above table, the **SIM1** is the primary SIM card.

We'll perform the body measurement with the SIM1 and retest on highest value point with others.

### The evaluation of multi-Batteries:

We'll perform the head measurement in all bands with the primary Battery depending on the evaluation of multi-Batteries and retest on highest value point with other Battery. Then, repeat the measurement in the Body test.

| Frequency |         | Mode/Band | Side  | Position | Battery | 1g SAR<br>(W/kg) | PowerDrift |
|-----------|---------|-----------|-------|----------|---------|------------------|------------|
| MHz       | Channel |           |       |          |         |                  |            |
| 20150     | 829     | LTE Band5 | Right | Cheek    | B1      | 0.12             | 0.08       |
| 20150     | 829     | LTE Band5 | Right | Cheek    | B2      | 0.085            | 0.07       |

Note: According to the values in the above table, the **B1** is the primary Battery.

We'll perform the head measurement with the B1 and retest on highest value point with others.

| Frequency |         | Mode/Band | Position | Battery | 1g SAR<br>(W/kg) | PowerDrift |
|-----------|---------|-----------|----------|---------|------------------|------------|
| MHz       | Channel |           |          |         |                  |            |
| 20150     | 829     | LTE Band5 | Rear     | B1      | 0.159            | 0.1        |
| 20150     | 829     | LTE Band5 | Rear     | B2      | 0.151            | 0.02       |

Note: According to the values in the above table, the **B1** is the primary Battery.

We'll perform the body measurement with the B1 and retest on highest value point with others.

### Note

**S1:SIM1**

**S2:SIM2**

**B1: The battery of HQ-71S by SCUD(Fujian) Electronics Co., Ltd**

**B2: The battery of HQ-71S by Ningde Amperex Technology Limited**

**H1: The headset of EHS61ASFWE by DONGGUAN YOUNGBO ELECTRONICS CO.,LTD**

**H2: The battery of EHS61ASFWE by CRESYN VIETNAM CO.,LTD.**

## 14.1 SAR results for Fast SAR

**Table 14.1-1: SAR Values (GSM 850 MHz Band - Head)**

| Ambient Temperature: 22.9 °C |       |       |               |                 |                       | Liquid Temperature: 22.5°C |                         |                         |                          |                          |                  |
|------------------------------|-------|-------|---------------|-----------------|-----------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |       | Side  | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm)   | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz   |       |               |                 |                       |                            |                         |                         |                          |                          |                  |
| 190                          | 836.6 | Left  | Cheek         | /               | 27.28                 | 28.5                       | 0.162                   | <b>0.21</b>             | 0.126                    | <b>0.17</b>              | -0.18            |
| 190                          | 836.6 | Left  | Tilt          | /               | 27.28                 | 28.5                       | 0.106                   | <b>0.14</b>             | 0.086                    | <b>0.11</b>              | -0.06            |
| 251                          | 848.8 | Right | Cheek         | Fig.1           | 27.12                 | 28.5                       | 0.206                   | <b>0.28</b>             | 0.16                     | <b>0.22</b>              | -0.05            |
| 190                          | 836.6 | Right | Cheek         | /               | 27.28                 | 28.5                       | 0.177                   | <b>0.23</b>             | 0.137                    | <b>0.18</b>              | 0.02             |
| 128                          | 824.2 | Right | Cheek         | /               | 27.43                 | 28.5                       | 0.13                    | <b>0.17</b>             | 0.101                    | <b>0.13</b>              | 0.07             |
| 190                          | 836.6 | Right | Tilt          | /               | 27.28                 | 28.5                       | 0.115                   | <b>0.15</b>             | 0.091                    | <b>0.12</b>              | 0.18             |
| 251                          | 848.8 | Right | Cheek         | B2              | 27.12                 | 28.5                       | 0.189                   | <b>0.26</b>             | 0.143                    | <b>0.20</b>              | -0.02            |
| 251                          | 848.8 | Right | Cheek         | S2              | 27.12                 | 28.5                       | 0.176                   | <b>0.24</b>             | 0.134                    | <b>0.18</b>              | -0.06            |

Note: the head SAR of GSM850 is tested with GPRS (4Txslots) mode because of VoIP.

**Table 14.1-2: SAR Values (GSM 850 MHz Band - Body)**

| Ambient Temperature: 22.9 °C |       |                            |               |                 |                       | Liquid Temperature: 22.5°C |                         |                         |                          |                          |                  |
|------------------------------|-------|----------------------------|---------------|-----------------|-----------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |       | Mode (number of timeslots) | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm)   | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz   |                            |               |                 |                       |                            |                         |                         |                          |                          |                  |
| 190                          | 836.6 | GPRS (4)                   | Front         | /               | 27.28                 | 28.5                       | 0.134                   | <b>0.18</b>             | 0.093                    | <b>0.12</b>              | -0.10            |
| 251                          | 848.8 | GPRS (4)                   | Rear          | Fig.2           | 27.12                 | 28.5                       | 0.36                    | <b>0.49</b>             | 0.217                    | <b>0.30</b>              | 0.06             |
| 190                          | 836.6 | GPRS (4)                   | Rear          | /               | 27.28                 | 28.5                       | 0.244                   | <b>0.32</b>             | 0.149                    | <b>0.20</b>              | -0.14            |
| 128                          | 824.2 | GPRS (4)                   | Rear          | /               | 27.43                 | 28.5                       | 0.178                   | <b>0.23</b>             | 0.127                    | <b>0.16</b>              | 0.05             |
| 190                          | 836.6 | GPRS (4)                   | Left          | /               | 27.28                 | 28.5                       | 0.116                   | <b>0.15</b>             | 0.077                    | <b>0.10</b>              | 0.16             |
| 190                          | 836.6 | GPRS (4)                   | Right         | /               | 27.28                 | 28.5                       | 0.149                   | <b>0.20</b>             | 0.099                    | <b>0.13</b>              | -0.06            |
| 190                          | 836.6 | GPRS (4)                   | Bottom        | /               | 27.28                 | 28.5                       | 0.092                   | <b>0.12</b>             | 0.049                    | <b>0.06</b>              | 0.00             |
| 251                          | 848.8 | EGPRS (4)                  | Rear          | /               | 27.15                 | 28.5                       | 0.351                   | <b>0.48</b>             | 0.213                    | <b>0.29</b>              | 0.09             |
| 251                          | 848.8 | GPRS (4)                   | Rear          | B2              | 27.12                 | 28.5                       | 0.326                   | <b>0.45</b>             | 0.187                    | <b>0.26</b>              | 0.02             |
| 251                          | 848.8 | GPRS (4)                   | Rear          | S2              | 27.12                 | 28.5                       | 0.342                   | <b>0.47</b>             | 0.202                    | <b>0.28</b>              | -0.06            |

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

**Table 14.1-3: SAR Values (GSM 1900 MHz Band - Head)**

| Ambient Temperature: 22.9 °C |        |       |               |                  |                       | Liquid Temperature: 22.5 °C |                         |                         |                          |                          |                  |
|------------------------------|--------|-------|---------------|------------------|-----------------------|-----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |        | Side  | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm)    | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz    |       |               |                  |                       |                             |                         |                         |                          |                          |                  |
| 810                          | 1909.8 | Left  | Cheek         | /                | 27.67                 | 28.5                        | 0.079                   | <b>0.10</b>             | 0.05                     | <b>0.06</b>              | 0.18             |
| 661                          | 1880   | Left  | Cheek         | Fig.3            | 27.93                 | 28.5                        | 0.094                   | <b>0.11</b>             | 0.06                     | <b>0.07</b>              | -0.03            |
| 512                          | 1850.2 | Left  | Cheek         | /                | 27.53                 | 28.5                        | 0.087                   | <b>0.11</b>             | 0.055                    | <b>0.07</b>              | -0.17            |
| 661                          | 1880   | Left  | Tilt          | /                | 27.93                 | 28.5                        | 0.09                    | <b>0.10</b>             | 0.055                    | <b>0.06</b>              | 0.18             |
| 661                          | 1880   | Right | Cheek         | /                | 27.93                 | 28.5                        | 0.09                    | <b>0.10</b>             | 0.055                    | <b>0.06</b>              | 0.02             |
| 661                          | 1880   | Right | Tilt          | /                | 27.93                 | 28.5                        | 0.071                   | <b>0.08</b>             | 0.043                    | <b>0.05</b>              | -0.07            |
| 661                          | 1880   | Left  | Cheek         | B2               | 27.93                 | 28.5                        | 0.081                   | <b>0.09</b>             | 0.051                    | <b>0.06</b>              | -0.06            |
| 661                          | 1880   | Left  | Cheek         | S2               | 27.93                 | 28.5                        | 0.086                   | <b>0.10</b>             | 0.057                    | <b>0.06</b>              | 0.07             |

Note: the head SAR of GSM1900 is tested with GPRS (2Txslots) mode because of VoIP.

**Table 14.1-4: SAR Values (GSM 1900 MHz Band - Body)**

| Ambient Temperature: 22.9 °C |        |                            |               |                  |                       | Liquid Temperature: 22.5 °C |                         |                         |                          |                          |                  |
|------------------------------|--------|----------------------------|---------------|------------------|-----------------------|-----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |        | Mode (number of timeslots) | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm)    | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz    |                            |               |                  |                       |                             |                         |                         |                          |                          |                  |
| 661                          | 1880   | GPRS (2)                   | Front         | /                | 27.93                 | 28.5                        | 0.159                   | <b>0.18</b>             | 0.096                    | <b>0.11</b>              | 0.03             |
| 810                          | 1909.8 | GPRS (2)                   | Rear          | /                | 27.93                 | 28.5                        | 0.253                   | <b>0.29</b>             | 0.145                    | <b>0.17</b>              | 0.11             |
| 661                          | 1880   | GPRS (2)                   | Rear          | /                | 27.93                 | 28.5                        | 0.067                   | <b>0.08</b>             | 0.04                     | <b>0.05</b>              | 0.08             |
| 512                          | 1850.2 | GPRS (2)                   | Rear          | /                | 27.93                 | 28.5                        | 0.031                   | <b>0.04</b>             | 0.019                    | <b>0.02</b>              | 0.14             |
| 661                          | 1880   | GPRS (2)                   | Left          | /                | 27.67                 | 28.5                        | 0.35                    | <b>0.42</b>             | 0.192                    | <b>0.23</b>              | -0.17            |
| 661                          | 1880   | GPRS (2)                   | Right         | /                | 27.93                 | 28.5                        | 0.41                    | <b>0.47</b>             | 0.226                    | <b>0.26</b>              | -0.03            |
| 810                          | 1909.8 | GPRS (2)                   | Bottom        | Fig.4            | 27.53                 | 28.5                        | 0.505                   | <b>0.63</b>             | 0.275                    | <b>0.34</b>              | 0.01             |
| 661                          | 1880   | GPRS (2)                   | Bottom        | /                | 27.53                 | 28.5                        | 0.483                   | <b>0.60</b>             | 0.27                     | <b>0.34</b>              | 0.09             |
| 512                          | 1850.2 | GPRS (2)                   | Bottom        | /                | 27.53                 | 28.5                        | 0.468                   | <b>0.59</b>             | 0.234                    | <b>0.29</b>              | 0.06             |
| 810                          | 1909.8 | EGPRS (2)                  | Bottom        | /                | 27.53                 | 28.5                        | 0.421                   | <b>0.53</b>             | 0.213                    | <b>0.27</b>              | 0.07             |
| 512                          | 1850.2 | GPRS (2)                   | Bottom        | B2               | 27.93                 | 28.5                        | 0.159                   | <b>0.18</b>             | 0.096                    | <b>0.11</b>              | 0.03             |
| 512                          | 1850.2 | GPRS (2)                   | Bottom        | S2               | 27.93                 | 28.5                        | 0.253                   | <b>0.29</b>             | 0.145                    | <b>0.17</b>              | 0.11             |

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

**Table 14.1-5: SAR Values (WCDMA 1900 MHz Band - Head)**

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5 °C |        |       |               |                 |                       |                          |                         |                         |                          |                          |                  |
|----------------------------------------------------------|--------|-------|---------------|-----------------|-----------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                                                |        | Side  | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                                                      | MHz    |       |               |                 |                       |                          |                         |                         |                          |                          |                  |
| 9538                                                     | 1907.6 | Left  | Cheek         | /               | 22.92                 | 23.5                     | 0.078                   | <b>0.09</b>             | 0.048                    | <b>0.05</b>              | -0.13            |
| 9400                                                     | 1880   | Left  | Cheek         | Fig.5           | 23.22                 | 23.5                     | 0.08                    | <b>0.09</b>             | 0.05                     | <b>0.05</b>              | 0.03             |
| 9262                                                     | 1852.4 | Left  | Cheek         | /               | 22.95                 | 23.5                     | 0.076                   | <b>0.09</b>             | 0.047                    | <b>0.05</b>              | 0.03             |
| 9400                                                     | 1880   | Right | Cheek         | /               | 23.22                 | 23.5                     | 0.077                   | <b>0.08</b>             | 0.044                    | <b>0.05</b>              | 0.06             |
| 9400                                                     | 1880   | Right | Cheek         | /               | 23.22                 | 23.5                     | 0.071                   | <b>0.08</b>             | 0.043                    | <b>0.05</b>              | 0.00             |
| 9400                                                     | 1880   | Right | Tilt          | /               | 23.22                 | 23.5                     | 0.056                   | <b>0.06</b>             | 0.032                    | <b>0.03</b>              | 0.17             |
| 9400                                                     | 1880   | Left  | Cheek         | B2              | 23.22                 | 23.5                     | 0.07                    | <b>0.07</b>             | 0.043                    | <b>0.05</b>              | 0.04             |
| 9400                                                     | 1880   | Left  | Cheek         | S2              | 23.22                 | 23.5                     | 0.074                   | <b>0.08</b>             | 0.045                    | <b>0.05</b>              | 0.03             |

**Table 14.1-6: SAR Values (WCDMA 1900 MHz Band - Body)**

| Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C |        |                  |                     |                              |                             |                               |                               |                                |                                |                        |
|-------------------------------------------------------------|--------|------------------|---------------------|------------------------------|-----------------------------|-------------------------------|-------------------------------|--------------------------------|--------------------------------|------------------------|
| Frequency                                                   |        | Test<br>Position | Figure<br>No./ Note | Conducte<br>d Power<br>(dBm) | Max. tune-up<br>Power (dBm) | Measured<br>SAR(1g)<br>(W/kg) | Reported<br>SAR(1g)<br>(W/kg) | Measured<br>SAR(10g)<br>(W/kg) | Reported<br>SAR(10g)<br>(W/kg) | Power<br>Drift<br>(dB) |
| Ch.                                                         | MHz    |                  |                     |                              |                             |                               |                               |                                |                                |                        |
| 9400                                                        | 1880   | Front            | /                   | 23.22                        | 23.5                        | 0.281                         | <b>0.30</b>                   | 0.164                          | <b>0.17</b>                    | 0.14                   |
| 9400                                                        | 1880   | Rear             | /                   | 23.22                        | 23.5                        | 0.452                         | <b>0.48</b>                   | 0.26                           | <b>0.28</b>                    | 0.10                   |
| 9400                                                        | 1880   | Left             | /                   | 23.22                        | 23.5                        | 0.131                         | <b>0.14</b>                   | 0.078                          | <b>0.08</b>                    | 0.17                   |
| 9400                                                        | 1880   | Right            | /                   | 23.22                        | 23.5                        | 0.054                         | <b>0.06</b>                   | 0.032                          | <b>0.03</b>                    | -0.06                  |
| 9538                                                        | 1907.6 | Bottom           | /                   | 22.92                        | 23.5                        | 0.669                         | <b>0.76</b>                   | 0.367                          | <b>0.42</b>                    | -0.17                  |
| 9400                                                        | 1880   | Bottom           | /                   | 23.22                        | 23.5                        | 0.717                         | <b>0.76</b>                   | 0.392                          | <b>0.42</b>                    | -0.07                  |
| 9262                                                        | 1852.4 | Bottom           | Fig.6               | 22.95                        | 23.5                        | 0.735                         | <b>0.83</b>                   | 0.399                          | <b>0.45</b>                    | 0.03                   |
| 9262                                                        | 1852.4 | Bottom           | B2                  | 22.95                        | 23.5                        | 0.721                         | <b>0.82</b>                   | 0.382                          | <b>0.43</b>                    | 0.08                   |
| 9262                                                        | 1852.4 | Bottom           | S2                  | 22.95                        | 23.5                        | 0.73                          | <b>0.83</b>                   | 0.393                          | <b>0.45</b>                    | 0.06                   |

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

**Table 14.1-7: SAR Values (WCDMA 1700 MHz Band - Head)**

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C |        |       |               |                 |                       |                          |                         |                         |                          |                          |                  |
|---------------------------------------------------------|--------|-------|---------------|-----------------|-----------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                                               |        | Side  | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                                                     | MHz    |       |               |                 |                       |                          |                         |                         |                          |                          |                  |
| 1412                                                    | 1732.4 | Left  | Cheek         | /               | 23.09                 | 23.5                     | 0.124                   | <b>0.14</b>             | 0.083                    | <b>0.09</b>              | -0.01            |
| 1412                                                    | 1732.4 | Left  | Tilt          | /               | 23.09                 | 23.5                     | 0.106                   | <b>0.12</b>             | 0.068                    | <b>0.07</b>              | 0.14             |
| 1513                                                    | 1752.6 | Right | Cheek         | Fig.7           | 22.89                 | 23.5                     | 0.19                    | <b>0.22</b>             | 0.121                    | <b>0.14</b>              | -0.06            |
| 1412                                                    | 1732.4 | Right | Cheek         | /               | 23.09                 | 23.5                     | 0.187                   | <b>0.21</b>             | 0.119                    | <b>0.13</b>              | 0.18             |
| 1312                                                    | 1712.4 | Right | Cheek         | /               | 23.19                 | 23.5                     | 0.149                   | <b>0.16</b>             | 0.096                    | <b>0.10</b>              | 0.16             |
| 1412                                                    | 1732.4 | Right | Tilt          | /               | 23.09                 | 23.5                     | 0.092                   | <b>0.10</b>             | 0.057                    | <b>0.06</b>              | -0.01            |
| 1513                                                    | 1752.6 | Right | Cheek         | B2              | 22.89                 | 23.5                     | 0.167                   | <b>0.19</b>             | 0.11                     | <b>0.13</b>              | -0.02            |
| 1513                                                    | 1752.6 | Right | Cheek         | S2              | 22.89                 | 23.5                     | 0.146                   | <b>0.17</b>             | 0.091                    | <b>0.10</b>              | 0.04             |

**Table 14.1-8: SAR Values (WCDMA 1700 MHz Band - Body)**

| Ambient Temperature: 22.9 °C      Liquid Temperature: 22.5°C |        |               |                  |                           |                          |                         |                         |                          |                          |                  |
|--------------------------------------------------------------|--------|---------------|------------------|---------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                                                    |        | Test Position | Figure No./ Note | Conducte<br>d Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                                                          | MHz    |               |                  |                           |                          |                         |                         |                          |                          |                  |
| 1412                                                         | 1732.5 | Front         | /                | 23.09                     | 23.5                     | 0.384                   | <b>0.42</b>             | 0.222                    | <b>0.24</b>              | -0.08            |
| 1513                                                         | 1752.6 | Rear          | /                | 22.89                     | 23.5                     | 0.825                   | <b>0.95</b>             | 0.46                     | <b>0.53</b>              | 0.13             |
| 1412                                                         | 1732.5 | Rear          | /                | 23.09                     | 23.5                     | 0.842                   | <b>0.93</b>             | 0.464                    | <b>0.51</b>              | 0.04             |
| 1312                                                         | 1712.4 | Rear          | /                | 23.19                     | 23.5                     | 0.796                   | <b>0.85</b>             | 0.44                     | <b>0.47</b>              | 0.00             |
| 1412                                                         | 1732.5 | Left          | /                | 23.09                     | 23.5                     | 0.094                   | <b>0.10</b>             | 0.058                    | <b>0.06</b>              | 0.18             |
| 1412                                                         | 1732.5 | Right         | /                | 23.09                     | 23.5                     | 0.089                   | <b>0.10</b>             | 0.057                    | <b>0.06</b>              | -0.12            |
| 1513                                                         | 1752.6 | Bottom        | Fig.8            | 22.89                     | 23.5                     | 0.961                   | 1.11                    | 0.524                    | <b>0.60</b>              | 0.08             |
| 1412                                                         | 1732.5 | Bottom        | /                | 23.09                     | 23.5                     | 0.893                   | <b>0.98</b>             | 0.48                     | <b>0.53</b>              | 0.07             |
| 1312                                                         | 1712.4 | Bottom        | /                | 23.19                     | 23.5                     | 0.898                   | <b>0.96</b>             | 0.487                    | <b>0.52</b>              | -0.13            |
| 1513                                                         | 1752.6 | Bottom        | B2               | 22.89                     | 23.5                     | 0.931                   | <b>1.07</b>             | 0.502                    | <b>0.58</b>              | 0.04             |
| 1513                                                         | 1752.6 | Bottom        | S2               | 22.89                     | 23.5                     | 0.945                   | <b>1.09</b>             | 0.511                    | <b>0.59</b>              | 0.03             |

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

**Table 14.1-9: SAR Values (WCDMA 850 MHz Band - Head)**

| Ambient Temperature: 22.9 °C |       |       |               |                 |                       | Liquid Temperature: 22.5°C |                         |                         |                          |                          |                  |
|------------------------------|-------|-------|---------------|-----------------|-----------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |       | Side  | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm)   | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz   |       |               |                 |                       |                            |                         |                         |                          |                          |                  |
| 4183                         | 836.6 | Left  | Cheek         | /               | 23.27                 | 25                         | 0.091                   | <b>0.14</b>             | 0.069                    | <b>0.10</b>              | -0.16            |
| 4183                         | 836.6 | Left  | Tilt          | /               | 23.27                 | 25                         | 0.056                   | <b>0.08</b>             | 0.045                    | <b>0.07</b>              | 0.02             |
| 4233                         | 846.6 | Right | Cheek         | Fig.9           | 23.31                 | 25                         | 0.109                   | <b>0.16</b>             | 0.083                    | <b>0.12</b>              | 0.10             |
| 4183                         | 836.6 | Right | Cheek         | /               | 23.27                 | 25                         | 0.094                   | <b>0.14</b>             | 0.072                    | <b>0.11</b>              | -0.12            |
| 4132                         | 826.4 | Right | Cheek         | /               | 23.35                 | 25                         | 0.078                   | <b>0.11</b>             | 0.06                     | <b>0.09</b>              | 0.15             |
| 4183                         | 836.6 | Right | Tilt          | /               | 23.27                 | 25                         | 0.064                   | <b>0.10</b>             | 0.049                    | <b>0.07</b>              | 0.09             |
| 4233                         | 846.6 | Right | Cheek         | B2              | 23.31                 | 25                         | 0.089                   | <b>0.13</b>             | 0.063                    | <b>0.09</b>              | 0.05             |
| 4233                         | 846.6 | Right | Cheek         | S2              | 23.31                 | 25                         | 0.094                   | <b>0.14</b>             | 0.075                    | <b>0.11</b>              | 0.14             |

**Table 14.1-10: SAR Values (WCDMA 850 MHz Band - Body)**

| Ambient Temperature: 22.9 °C |       |               |                  |                       |                          | Liquid Temperature: 22.5°C |                         |                          |                          |                  |
|------------------------------|-------|---------------|------------------|-----------------------|--------------------------|----------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |       | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg)    | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz   |               |                  |                       |                          |                            |                         |                          |                          |                  |
| 4183                         | 836.6 | Front         | /                | 23.27                 | 25                       | 0.074                      | <b>0.11</b>             | 0.045                    | <b>0.07</b>              | 0.18             |
| 4233                         | 846.6 | Rear          | Fig.10           | 23.31                 | 25                       | 0.149                      | <b>0.22</b>             | 0.09                     | <b>0.13</b>              | -0.03            |
| 4183                         | 836.6 | Rear          | /                | 23.27                 | 25                       | 0.121                      | <b>0.18</b>             | 0.074                    | <b>0.11</b>              | 0.15             |
| 4132                         | 826.4 | Rear          | /                | 23.35                 | 25                       | 0.095                      | <b>0.14</b>             | 0.058                    | <b>0.08</b>              | -0.17            |
| 4183                         | 836.6 | Left          | /                | 23.27                 | 25                       | 0.059                      | <b>0.09</b>             | 0.039                    | <b>0.06</b>              | 0.10             |
| 4183                         | 836.6 | Right         | /                | 23.27                 | 25                       | 0.075                      | <b>0.11</b>             | 0.049                    | <b>0.07</b>              | -0.16            |
| 4183                         | 836.6 | Bottom        | /                | 23.27                 | 25                       | 0.044                      | <b>0.07</b>             | 0.025                    | <b>0.04</b>              | 0.04             |
| 4233                         | 846.6 | Rear          | B2               | 23.31                 | 25                       | 0.141                      | <b>0.21</b>             | 0.083                    | <b>0.12</b>              | -0.07            |
| 4233                         | 846.6 | Rear          | S2               | 23.31                 | 25                       | 0.135                      | <b>0.20</b>             | 0.076                    | <b>0.11</b>              | 0.07             |

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

**Table 14.1-11: SAR Values (LTE Band2 - Head)**

| Ambient Temperature: 22.9 °C |      |           |       |               |                  | Liquid Temperature: 22.5°C |                          |                         |                         |                          |                          |                  |
|------------------------------|------|-----------|-------|---------------|------------------|----------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |      | Mode      | Side  | Test Position | Figure No./ Note | Conduct ed Power (dBm)     | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz  |           |       |               |                  |                            |                          |                         |                         |                          |                          |                  |
| 18900                        | 1880 | 1RB_High  | Left  | Cheek         | Fig.11           | 23.42                      | 23.5                     | 0.078                   | <b>0.08</b>             | 0.05                     | <b>0.05</b>              | -0.17            |
| 18900                        | 1880 | 1RB_High  | Left  | Tilt          | /                | 23.42                      | 23.5                     | 0.075                   | <b>0.08</b>             | 0.047                    | <b>0.05</b>              | 0.00             |
| 18900                        | 1880 | 1RB_High  | Right | Cheek         | /                | 23.42                      | 23.5                     | 0.065                   | <b>0.07</b>             | 0.041                    | <b>0.04</b>              | -0.12            |
| 18900                        | 1880 | 1RB_High  | Right | Tilt          | /                | 23.42                      | 23.5                     | 0.055                   | <b>0.06</b>             | 0.035                    | <b>0.04</b>              | 0.02             |
| 18700                        | 1860 | 50RB_High | Left  | Cheek         | /                | 22.26                      | 22.5                     | 0.056                   | <b>0.06</b>             | 0.037                    | <b>0.04</b>              | 0.13             |
| 18700                        | 1860 | 50RB_High | Left  | Tilt          | /                | 22.26                      | 22.5                     | 0.062                   | <b>0.07</b>             | 0.038                    | <b>0.04</b>              | -0.10            |
| 18700                        | 1860 | 50RB_High | Right | Cheek         | /                | 22.26                      | 22.5                     | 0.056                   | <b>0.06</b>             | 0.035                    | <b>0.04</b>              | 0.09             |
| 18700                        | 1860 | 50RB_High | Right | Tilt          | /                | 22.26                      | 22.5                     | 0.046                   | <b>0.05</b>             | 0.028                    | <b>0.03</b>              | -0.03            |
| 18900                        | 1880 | 1RB_High  | Left  | Cheek         | B2               | 23.42                      | 23.5                     | 0.066                   | <b>0.07</b>             | 0.038                    | <b>0.04</b>              | -0.10            |
| 18900                        | 1880 | 1RB_High  | Left  | Cheek         | S2               | 23.42                      | 23.5                     | 0.057                   | <b>0.06</b>             | 0.031                    | <b>0.03</b>              | 0.07             |

Note: The LTE mode is QPSK\_20MHz.

**Table 14.1-12: SAR Values (LTE Band2 - Body)**

| Ambient Temperature: 22.9 °C |      |           |               |                  |                        | Liquid Temperature: 22.5°C |                         |                         |                          |                          |                  |
|------------------------------|------|-----------|---------------|------------------|------------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |      | Mode      | Test Position | Figure No./ Note | Conduct ed Power (dBm) | Max. tune-up Power (dBm)   | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz  |           |               |                  |                        |                            |                         |                         |                          |                          |                  |
| 18900                        | 1880 | 1RB_High  | Front         | /                | 23.42                  | 23.5                       | 0.241                   | <b>0.25</b>             | 0.14                     | <b>0.14</b>              | 0.08             |
| 18900                        | 1880 | 1RB_High  | Rear          | /                | 23.42                  | 23.5                       | 0.375                   | <b>0.38</b>             | 0.216                    | <b>0.22</b>              | 0.15             |
| 18900                        | 1880 | 1RB_High  | Left          | /                | 23.42                  | 23.5                       | 0.11                    | <b>0.11</b>             | 0.067                    | <b>0.07</b>              | 0.10             |
| 18900                        | 1880 | 1RB_High  | Right         | /                | 23.42                  | 23.5                       | 0.044                   | <b>0.04</b>             | 0.025                    | <b>0.03</b>              | -0.16            |
| 18900                        | 1880 | 1RB_High  | Bottom        | Fig.12           | 23.42                  | 23.5                       | 0.604                   | <b>0.62</b>             | 0.326                    | <b>0.33</b>              | -0.03            |
| 18700                        | 1860 | 50RB_High | Front         | /                | 22.26                  | 22.5                       | 0.19                    | <b>0.20</b>             | 0.111                    | <b>0.12</b>              | -0.13            |
| 18700                        | 1860 | 50RB_High | Rear          | /                | 22.26                  | 22.5                       | 0.306                   | <b>0.32</b>             | 0.176                    | <b>0.19</b>              | 0.02             |
| 18700                        | 1860 | 50RB_High | Left          | /                | 22.26                  | 22.5                       | 0.094                   | <b>0.10</b>             | 0.054                    | <b>0.06</b>              | -0.18            |
| 18700                        | 1860 | 50RB_High | Right         | /                | 22.26                  | 22.5                       | <0.01                   | <b>&lt;0.01</b>         | <0.01                    | <b>&lt;0.01</b>          | 0.06             |
| 18700                        | 1860 | 50RB_High | Bottom        | /                | 22.26                  | 22.5                       | 0.496                   | <b>0.52</b>             | 0.269                    | <b>0.28</b>              | -0.14            |
| 18900                        | 1880 | 1RB_High  | Bottom        | B2               | 23.42                  | 23.5                       | 0.586                   | <b>0.60</b>             | 0.312                    | <b>0.32</b>              | 0.08             |
| 18900                        | 1880 | 1RB_High  | Bottom        | S2               | 23.42                  | 23.5                       | 0.563                   | <b>0.57</b>             | 0.289                    | <b>0.29</b>              | -0.09            |

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

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.1-13: SAR Values (LTE Band4 - Head)**

| Ambient Temperature: 22.9 °C |      |          |       |               |                  | Liquid Temperature: 22.5°C |                          |                         |                         |                          |                          |                  |
|------------------------------|------|----------|-------|---------------|------------------|----------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |      | Mode     | Side  | Test Position | Figure No./ Note | Conduct ed Power (dBm)     | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz  |          |       |               |                  |                            |                          |                         |                         |                          |                          |                  |
| 20300                        | 1745 | 1RB_Mid  | Left  | Cheek         | /                | 22.74                      | 23.5                     | 0.064                   | <b>0.08</b>             | 0.043                    | <b>0.05</b>              | -0.03            |
| 20300                        | 1745 | 1RB_Mid  | Left  | Tilt          | /                | 22.74                      | 23.5                     | 0.058                   | <b>0.07</b>             | 0.037                    | <b>0.04</b>              | -0.18            |
| 20300                        | 1745 | 1RB_Mid  | Right | Cheek         | Fig.13           | 22.74                      | 23.5                     | 0.089                   | <b>0.11</b>             | 0.057                    | <b>0.07</b>              | -0.04            |
| 20300                        | 1745 | 1RB_Mid  | Right | Tilt          | /                | 22.74                      | 23.5                     | 0.046                   | <b>0.05</b>             | 0.029                    | <b>0.03</b>              | 0.12             |
| 20050                        | 1720 | 50RB_Low | Left  | Cheek         | /                | 22.02                      | 22.5                     | 0.039                   | <b>0.04</b>             | 0.027                    | <b>0.03</b>              | 0.10             |
| 20050                        | 1720 | 50RB_Low | Left  | Tilt          | /                | 22.02                      | 22.5                     | <0.01                   | <b>&lt;0.01</b>         | <0.01                    | <b>&lt;0.01</b>          | 0.14             |
| 20050                        | 1720 | 50RB_Low | Right | Cheek         | /                | 22.02                      | 22.5                     | 0.061                   | <b>0.07</b>             | 0.039                    | <b>0.04</b>              | 0.16             |
| 20050                        | 1720 | 50RB_Low | Right | Tilt          | /                | 22.02                      | 22.5                     | <0.01                   | <b>&lt;0.01</b>         | <0.01                    | <b>&lt;0.01</b>          | -0.05            |
| 20300                        | 1745 | 1RB_Mid  | Right | Cheek         | B2               | 22.74                      | 23.5                     | 0.068                   | <b>0.08</b>             | 0.041                    | <b>0.05</b>              | -0.07            |
| 20300                        | 1745 | 1RB_Mid  | Right | Cheek         | S2               | 22.74                      | 23.5                     | 0.07                    | <b>0.08</b>             | 0.043                    | <b>0.05</b>              | 0.08             |

Note: The LTE mode is QPSK\_20MHz.

**Table 14.1-14: SAR Values (LTE Band4 - Body)**

| Ambient Temperature: 22.9 °C      Liquid Temperature: 22.5°C |        |          |               |                  |                        |                          |                         |                         |                          |                          |                  |
|--------------------------------------------------------------|--------|----------|---------------|------------------|------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                                                    |        | Mode     | Test Position | Figure No./ Note | Conduct ed Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                                                          | MHz    |          |               |                  |                        |                          |                         |                         |                          |                          |                  |
| 20300                                                        | 1745   | 1RB_Mid  | Front         | /                | 22.74                  | 23.5                     | 0.286                   | <b>0.34</b>             | 0.167                    | <b>0.20</b>              | 0.07             |
| 20300                                                        | 1745   | 1RB_Mid  | Rear          |                  | 22.74                  | 23.5                     | 0.616                   | <b>0.73</b>             | 0.342                    | <b>0.41</b>              | 0.12             |
| 20300                                                        | 1745   | 1RB_Mid  | Left          | /                | 22.74                  | 23.5                     | 0.092                   | <b>0.11</b>             | 0.057                    | <b>0.07</b>              | 0.03             |
| 20300                                                        | 1745   | 1RB_Mid  | Right         | /                | 22.74                  | 23.5                     | 0.07                    | <b>0.08</b>             | 0.044                    | <b>0.05</b>              | 0.09             |
| 20300                                                        | 1745   | 1RB_Mid  | Bottom        | Fig.14           | 22.74                  | 23.5                     | 0.728                   | <b>0.87</b>             | 0.393                    | <b>0.47</b>              | 0.15             |
| 20175                                                        | 1732.5 | 1RB_Mid  | Bottom        | /                | 22.71                  | 23.5                     | 0.714                   | <b>0.86</b>             | 0.39                     | <b>0.47</b>              | 0.13             |
| 20050                                                        | 1720   | 1RB_Mid  | Bottom        | /                | 22.7                   | 23.5                     | 0.709                   | <b>0.85</b>             | 0.388                    | <b>0.47</b>              | -0.14            |
| 20050                                                        | 1720   | 50RB_Low | Front         | /                | 22.02                  | 22.5                     | 0.234                   | <b>0.26</b>             | 0.136                    | <b>0.15</b>              | -0.09            |
| 20050                                                        | 1720   | 50RB_Low | Rear          |                  | 22.02                  | 22.5                     | 0.505                   | <b>0.56</b>             | 0.276                    | <b>0.31</b>              | 0.18             |
| 20050                                                        | 1720   | 50RB_Low | Left          | /                | 22.02                  | 22.5                     | 0.059                   | <b>0.07</b>             | 0.037                    | <b>0.04</b>              | -0.13            |
| 20050                                                        | 1720   | 50RB_Low | Right         | /                | 22.02                  | 22.5                     | 0.054                   | <b>0.06</b>             | 0.035                    | <b>0.04</b>              | -0.13            |
| 20050                                                        | 1720   | 50RB_Low | Bottom        |                  | 22.02                  | 22.5                     | 0.578                   | <b>0.65</b>             | 0.311                    | <b>0.35</b>              | -0.06            |
| 20050                                                        | 1720   | 100RB    | Bottom        | /                | 22.04                  | 22.5                     | 0.557                   | <b>0.62</b>             | 0.305                    | <b>0.34</b>              | -0.04            |
| 20300                                                        | 1745   | 1RB_Mid  | Bottom        | B2               | 22.74                  | 23.5                     | 0.687                   | <b>0.82</b>             | 0.356                    | <b>0.42</b>              | -0.05            |
| 20300                                                        | 1745   | 1RB_Mid  | Bottom        | S2               | 22.74                  | 23.5                     | 0.701                   | <b>0.84</b>             | 0.376                    | <b>0.45</b>              | 0.02             |

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

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.1-15: SAR Values (LTE Band5 - Head)**

| Ambient Temperature: 22.9 °C |     |          |       |               |                  | Liquid Temperature: 22.5°C |                          |                         |                         |                          |                          |                  |
|------------------------------|-----|----------|-------|---------------|------------------|----------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |     | Mode     | Side  | Test Position | Figure No./ Note | Conduct ed Power (dBm)     | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz |          |       |               |                  |                            |                          |                         |                         |                          |                          |                  |
| 20600                        | 844 | 1RB_High | Left  | Cheek         | /                | 22.67                      | 24                       | 0.114                   | <b>0.15</b>             | 0.087                    | <b>0.12</b>              | 0.09             |
| 20600                        | 844 | 1RB_High | Left  | Tilt          | /                | 22.67                      | 24                       | 0.078                   | <b>0.11</b>             | 0.062                    | <b>0.08</b>              | 0.01             |
| 20600                        | 844 | 1RB_High | Right | Cheek         | Fig.15           | 22.67                      | 24                       | 0.12                    | <b>0.16</b>             | 0.093                    | <b>0.13</b>              | 0.08             |
| 20600                        | 844 | 1RB_High | Right | Tilt          | /                | 22.67                      | 24                       | 0.089                   | <b>0.12</b>             | 0.071                    | <b>0.10</b>              | -0.07            |
| 20600                        | 844 | 25RB_Mid | Left  | Cheek         | /                | 22.37                      | 23                       | 0.088                   | <b>0.10</b>             | 0.066                    | <b>0.08</b>              | 0.00             |
| 20600                        | 844 | 25RB_Mid | Left  | Tilt          | /                | 22.37                      | 23                       | 0.061                   | <b>0.07</b>             | 0.048                    | <b>0.06</b>              | 0.13             |
| 20600                        | 844 | 25RB_Mid | Right | Cheek         | /                | 22.37                      | 23                       | 0.09                    | <b>0.10</b>             | 0.071                    | <b>0.08</b>              | -0.17            |
| 20600                        | 844 | 25RB_Mid | Right | Tilt          | /                | 22.37                      | 23                       | 0.066                   | <b>0.08</b>             | 0.052                    | <b>0.06</b>              | -0.08            |
| 20600                        | 844 | 1RB_High | Right | Cheek         | B2               | 22.67                      | 24                       | 0.089                   | <b>0.12</b>             | 0.062                    | <b>0.08</b>              | 0.05             |
| 20600                        | 844 | 1RB_High | Right | Cheek         | S2               | 22.67                      | 24                       | 0.085                   | <b>0.12</b>             | 0.061                    | <b>0.08</b>              | 0.07             |

Note: The LTE mode is QPSK\_10MHz.

**Table 14.1-16: SAR Values (LTE Band5 - Body)**

| Ambient Temperature: 22.9 °C |     |          |               |                  |                        | Liquid Temperature: 22.5°C |                         |                         |                          |                          |                  |
|------------------------------|-----|----------|---------------|------------------|------------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |     | Mode     | Test Position | Figure No./ Note | Conduct ed Power (dBm) | Max. tune- up Power (dBm)  | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz |          |               |                  |                        |                            |                         |                         |                          |                          |                  |
| 20600                        | 844 | 1RB_High | Front         | /                | 22.67                  | 24                         | 0.099                   | <b>0.13</b>             | 0.093                    | <b>0.13</b>              | 0.03             |
| 20600                        | 844 | 1RB_High | Rear          | Fig.16           | 22.67                  | 24                         | 0.159                   | <b>0.22</b>             | 0.121                    | <b>0.16</b>              | 0.10             |
| 20600                        | 844 | 1RB_High | Left          | /                | 22.67                  | 24                         | 0.082                   | <b>0.11</b>             | 0.07                     | <b>0.10</b>              | 0.16             |
| 20600                        | 844 | 1RB_High | Right         | /                | 22.67                  | 24                         | 0.101                   | <b>0.14</b>             | 0.086                    | <b>0.12</b>              | 0.07             |
| 20600                        | 844 | 1RB_High | Bottom        | /                | 22.67                  | 24                         | 0.074                   | <b>0.10</b>             | 0.049                    | <b>0.07</b>              | 0.04             |
| 20600                        | 844 | 25RB_Mid | Front         | /                | 22.37                  | 23                         | 0.073                   | <b>0.08</b>             | 0.068                    | <b>0.08</b>              | 0.17             |
| 20600                        | 844 | 25RB_Mid | Rear          | /                | 22.37                  | 23                         | 0.112                   | <b>0.13</b>             | 0.086                    | <b>0.10</b>              | 0.03             |
| 20600                        | 844 | 25RB_Mid | Left          | /                | 22.37                  | 23                         | 0.067                   | <b>0.08</b>             | 0.057                    | <b>0.07</b>              | 0.08             |
| 20600                        | 844 | 25RB_Mid | Right         | /                | 22.37                  | 23                         | 0.079                   | <b>0.09</b>             | 0.066                    | <b>0.08</b>              | 0.02             |
| 20600                        | 844 | 25RB_Mid | Bottom        | /                | 22.37                  | 23                         | 0.056                   | <b>0.06</b>             | 0.036                    | <b>0.04</b>              | -0.10            |
| 20600                        | 844 | 1RB_High | Rear          | B2               | 22.67                  | 24                         | 0.142                   | <b>0.19</b>             | 0.103                    | <b>0.14</b>              | 0.06             |
| 20600                        | 844 | 1RB_High | Rear          | S2               | 22.67                  | 24                         | 0.151                   | <b>0.21</b>             | 0.112                    | <b>0.15</b>              | 0.02             |

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

Note2: The LTE mode is QPSK\_10MHz.

**Table 14.1-17: SAR Values (LTE Band7 - Head)**

| Ambient Temperature: 22.9 °C |      |           |       |               |                  | Liquid Temperature: 22.5°C |                          |                         |                         |                          |                          |                  |
|------------------------------|------|-----------|-------|---------------|------------------|----------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |      | Mode      | Side  | Test Position | Figure No./ Note | Conduct ed Power (dBm)     | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz  |           |       |               |                  |                            |                          |                         |                         |                          |                          |                  |
| 21100                        | 2535 | 1RB_Mid   | Left  | Cheek         | Fig.17           | 22.73                      | 23.2                     | 0.128                   | <b>0.14</b>             | 0.068                    | <b>0.08</b>              | -0.01            |
| 21100                        | 2535 | 1RB_Mid   | Left  | Tilt          | /                | 22.73                      | 23.2                     | 0.094                   | <b>0.10</b>             | 0.048                    | <b>0.05</b>              | 0.05             |
| 21100                        | 2535 | 1RB_Mid   | Right | Cheek         | /                | 22.73                      | 23.2                     | 0.095                   | <b>0.11</b>             | 0.049                    | <b>0.05</b>              | -0.08            |
| 21100                        | 2535 | 1RB_Mid   | Right | Tilt          | /                | 22.73                      | 23.2                     | 0.046                   | <b>0.05</b>             | 0.025                    | <b>0.03</b>              | -0.06            |
| 21100                        | 2535 | 50RB_High | Left  | Cheek         | /                | 21.63                      | 22.2                     | 0.108                   | <b>0.12</b>             | 0.057                    | <b>0.06</b>              | -0.14            |
| 21100                        | 2535 | 50RB_High | Left  | Tilt          | /                | 21.63                      | 22.2                     | 0.08                    | <b>0.09</b>             | 0.041                    | <b>0.05</b>              | 0.15             |
| 21100                        | 2535 | 50RB_High | Right | Cheek         | /                | 21.63                      | 22.2                     | 0.081                   | <b>0.09</b>             | 0.041                    | <b>0.05</b>              | -0.02            |
| 21100                        | 2535 | 50RB_High | Right | Tilt          | /                | 21.63                      | 22.2                     | 0.045                   | <b>0.05</b>             | 0.026                    | <b>0.03</b>              | 0.06             |
| 21100                        | 2535 | 1RB_Mid   | Left  | Cheek         | B2               | 22.73                      | 23.2                     | 0.108                   | <b>0.12</b>             | 0.054                    | <b>0.06</b>              | -0.07            |
| 21100                        | 2535 | 1RB_Mid   | Left  | Cheek         | S2               | 22.73                      | 23.2                     | 0.112                   | <b>0.12</b>             | 0.061                    | <b>0.07</b>              | 0.05             |

Note: The LTE mode is QPSK\_20MHz.

**Table 14.1-18: SAR Values (LTE Band7 - Body)**

| Ambient Temperature: 22.9 °C |      |           |               |                  |                        | Liquid Temperature: 22.5°C |                         |                         |                          |                          |                  |
|------------------------------|------|-----------|---------------|------------------|------------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |      | Mode      | Test Position | Figure No./ Note | Conduct ed Power (dBm) | Max. tune-up Power (dBm)   | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz  |           |               |                  |                        |                            |                         |                         |                          |                          |                  |
| 21100                        | 2535 | 1RB_Mid   | Front         | /                | 22.73                  | 23.2                       | 0.324                   | <b>0.36</b>             | 0.173                    | <b>0.19</b>              | 0.09             |
| 21100                        | 2535 | 1RB_Mid   | Rear          | /                | 22.73                  | 23.2                       | 0.455                   | <b>0.51</b>             | 0.23                     | <b>0.26</b>              | -0.03            |
| 21100                        | 2535 | 1RB_Mid   | Left          | /                | 22.73                  | 23.2                       | 0.156                   | <b>0.17</b>             | 0.086                    | <b>0.10</b>              | -0.17            |
| 21100                        | 2535 | 1RB_Mid   | Right         | /                | 22.73                  | 23.2                       | 0.114                   | <b>0.13</b>             | 0.065                    | <b>0.07</b>              | -0.03            |
| 21100                        | 2535 | 1RB_Mid   | Bottom        | Fig.18           | 22.73                  | 23.2                       | 0.55                    | <b>0.61</b>             | 0.273                    | <b>0.30</b>              | 0.02             |
| 21100                        | 2535 | 50RB_High | Front         | /                | 21.63                  | 22.2                       | 0.271                   | <b>0.22</b>             | 0.145                    | <b>0.17</b>              | -0.18            |
| 21100                        | 2535 | 50RB_High | Rear          | /                | 21.63                  | 22.2                       | 0.379                   | <b>0.43</b>             | 0.193                    | <b>0.22</b>              | -0.11            |
| 21100                        | 2535 | 50RB_High | Left          | /                | 21.63                  | 22.2                       | 0.132                   | <b>0.11</b>             | 0.073                    | <b>0.08</b>              | -0.09            |
| 21100                        | 2535 | 50RB_High | Right         | /                | 21.63                  | 22.2                       | 0.099                   | <b>0.11</b>             | 0.057                    | <b>0.06</b>              | -0.05            |
| 21100                        | 2535 | 50RB_High | Bottom        | /                | 21.63                  | 22.2                       | 0.45                    | <b>0.51</b>             | 0.224                    | <b>0.26</b>              | -0.08            |
| 21100                        | 2535 | 1RB_Mid   | Bottom        | B2               | 22.73                  | 23.2                       | 0.45                    | <b>0.50</b>             | 0.235                    | <b>0.26</b>              | 0.05             |
| 21100                        | 2535 | 1RB_Mid   | Bottom        | S2               | 22.73                  | 23.2                       | 0.38                    | <b>0.42</b>             | 0.197                    | <b>0.22</b>              | 0.07             |

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

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.1-19: SAR Values (LTE Band12 - Head)**

| Ambient Temperature: 22.9 °C |     |           |       |               |                  | Liquid Temperature: 22.5°C |                          |                         |                         |                          |                          |                  |
|------------------------------|-----|-----------|-------|---------------|------------------|----------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |     | Mode      | Side  | Test Position | Figure No./ Note | Conduct ed Power (dBm)     | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz |           |       |               |                  |                            |                          |                         |                         |                          |                          |                  |
| 23130                        | 711 | 1RB_Mid   | Left  | Cheek         | /                | 23.26                      | 24                       | 0.076                   | <b>0.09</b>             | 0.059                    | <b>0.07</b>              | 0.10             |
| 23130                        | 711 | 1RB_Mid   | Left  | Tilt          | /                | 23.26                      | 24                       | 0.057                   | <b>0.07</b>             | 0.044                    | <b>0.05</b>              | -0.10            |
| 23130                        | 711 | 1RB_Mid   | Right | Cheek         | Fig.19           | 23.26                      | 24                       | 0.082                   | <b>0.10</b>             | 0.064                    | <b>0.08</b>              | 0.04             |
| 23130                        | 711 | 1RB_Mid   | Right | Tilt          | /                | 23.26                      | 24                       | 0.054                   | <b>0.06</b>             | 0.043                    | <b>0.05</b>              | -0.04            |
| 23130                        | 711 | 25RB_High | Left  | Cheek         | /                | 22.99                      | 23                       | 0.074                   | <b>0.07</b>             | 0.058                    | <b>0.06</b>              | -0.13            |
| 23130                        | 711 | 25RB_High | Left  | Tilt          | /                | 22.99                      | 23                       | 0.054                   | <b>0.05</b>             | 0.043                    | <b>0.04</b>              | 0.15             |
| 23130                        | 711 | 25RB_High | Right | Cheek         | /                | 22.99                      | 23                       | 0.079                   | <b>0.08</b>             | 0.06                     | <b>0.06</b>              | 0.10             |
| 23130                        | 711 | 25RB_High | Right | Tilt          | /                | 22.99                      | 23                       | 0.058                   | <b>0.06</b>             | 0.046                    | <b>0.05</b>              | 0.18             |
| 23130                        | 711 | 1RB_Mid   | Right | Cheek         | B2               | 23.26                      | 24                       | 0.066                   | <b>0.08</b>             | 0.048                    | <b>0.06</b>              | 0.02             |
| 23130                        | 711 | 1RB_Mid   | Right | Cheek         | S2               | 23.26                      | 24                       | 0.071                   | <b>0.08</b>             | 0.052                    | <b>0.06</b>              | 0.06             |

Note: The LTE mode is QPSK\_10MHz.

**Table 14.1-20: SAR Values (LTE Band12 - Body)**

| Ambient Temperature: 22.9 °C |     |           |               |                  |                        | Liquid Temperature: 22.5°C |                         |                         |                          |                          |                  |
|------------------------------|-----|-----------|---------------|------------------|------------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |     | Mode      | Test Position | Figure No./ Note | Conduct ed Power (dBm) | Max. tune-up Power (dBm)   | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz |           |               |                  |                        |                            |                         |                         |                          |                          |                  |
| 23130                        | 711 | 1RB_Mid   | Front         | /                | 23.26                  | 24                         | 0.063                   | <b>0.07</b>             | 0.049                    | <b>0.06</b>              | -0.14            |
| 23130                        | 711 | 1RB_Mid   | Rear          | /                | 23.26                  | 24                         | 0.085                   | <b>0.10</b>             | 0.05                     | <b>0.06</b>              | -0.12            |
| 23130                        | 711 | 1RB_Mid   | Left          | /                | 23.26                  | 24                         | 0.074                   | <b>0.09</b>             | 0.051                    | <b>0.06</b>              | 0.17             |
| 23130                        | 711 | 1RB_Mid   | Right         | /                | 23.26                  | 24                         | 0.086                   | <b>0.10</b>             | 0.053                    | <b>0.06</b>              | -0.09            |
| 23130                        | 711 | 1RB_Mid   | Bottom        | /                | 23.26                  | 24                         | <0.01                   | <b>&lt;0.01</b>         | <0.01                    | <b>&lt;0.01</b>          | -0.01            |
| 23130                        | 711 | 25RB_High | Front         | /                | 22.99                  | 23                         | 0.067                   | <b>0.07</b>             | 0.052                    | <b>0.05</b>              | -0.01            |
| 23130                        | 711 | 25RB_High | Rear          | Fig.20           | 22.99                  | 23                         | 0.113                   | <b>0.11</b>             | 0.086                    | <b>0.09</b>              | 0.08             |
| 23130                        | 711 | 25RB_High | Left          | /                | 22.99                  | 23                         | 0.074                   | <b>0.07</b>             | 0.052                    | <b>0.05</b>              | 0.03             |
| 23130                        | 711 | 25RB_High | Right         | /                | 22.99                  | 23                         | 0.104                   | <b>0.10</b>             | 0.073                    | <b>0.07</b>              | 0.15             |
| 23130                        | 711 | 25RB_High | Bottom        | /                | 22.99                  | 23                         | <0.01                   | <b>&lt;0.01</b>         | <0.01                    | <b>&lt;0.01</b>          | -0.14            |
| 23130                        | 711 | 25RB_High | Rear          | B2               | 22.99                  | 23                         | 0.089                   | <b>0.09</b>             | 0.056                    | <b>0.06</b>              | 0.04             |
| 23130                        | 711 | 25RB_High | Rear          | S2               | 22.99                  | 23                         | 0.073                   | <b>0.07</b>             | 0.051                    | <b>0.05</b>              | 0.03             |

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

Note2: The LTE mode is QPSK\_10MHz.

**Table 14.1-21: SAR Values (LTE Band28 - Head)**

| Ambient Temperature: 22.9 °C |     |          |       |               |                  | Liquid Temperature: 22.5°C |                          |                         |                         |                          |                          |                  |
|------------------------------|-----|----------|-------|---------------|------------------|----------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |     | Mode     | Side  | Test Position | Figure No./ Note | Conduct ed Power (dBm)     | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz |          |       |               |                  |                            |                          |                         |                         |                          |                          |                  |
| 27460                        | 728 | 1RB_Mid  | Left  | Cheek         | /                | 23.04                      | 24                       | 0.059                   | <b>0.07</b>             | 0.042                    | <b>0.05</b>              | 0.15             |
| 27460                        | 728 | 1RB_Mid  | Left  | Tilt          | /                | 23.04                      | 24                       | <0.01                   | <b>&lt;0.01</b>         | <0.01                    | <b>&lt;0.01</b>          | -0.17            |
| 27460                        | 728 | 1RB_Mid  | Right | Cheek         | Fig.21           | 23.04                      | 24                       | 0.064                   | <b>0.08</b>             | 0.049                    | <b>0.06</b>              | 0.06             |
| 27460                        | 728 | 1RB_Mid  | Right | Tilt          | /                | 23.04                      | 24                       | <0.01                   | <b>&lt;0.01</b>         | <0.01                    | <b>&lt;0.01</b>          | 0.04             |
| 27460                        | 728 | 50RB_Mid | Left  | Cheek         | /                | 22.6                       | 23                       | <0.01                   | <b>&lt;0.01</b>         | <0.01                    | <b>&lt;0.01</b>          | 0.13             |
| 27460                        | 728 | 50RB_Mid | Left  | Tilt          | /                | 22.6                       | 23                       | <0.01                   | <b>&lt;0.01</b>         | <0.01                    | <b>&lt;0.01</b>          | -0.11            |
| 27460                        | 728 | 50RB_Mid | Right | Cheek         | /                | 22.6                       | 23                       | <0.01                   | <b>&lt;0.01</b>         | <0.01                    | <b>&lt;0.01</b>          | -0.09            |
| 27460                        | 728 | 50RB_Mid | Right | Tilt          | /                | 22.6                       | 23                       | <0.01                   | <b>&lt;0.01</b>         | <0.01                    | <b>&lt;0.01</b>          | 0.07             |
| 27460                        | 728 | 1RB_Mid  | Right | Cheek         | B2               | 23.04                      | 24                       | 0.034                   | <b>0.04</b>             | 0.028                    | <b>0.03</b>              | 0.04             |
| 27460                        | 728 | 1RB_Mid  | Right | Cheek         | S2               | 23.04                      | 24                       | 0.051                   | <b>0.06</b>             | 0.039                    | <b>0.05</b>              | -0.06            |

Note: The LTE mode is QPSK\_20MHz.

**Table 14.1-22: SAR Values (LTE Band28 - Body)**

| Ambient Temperature: 22.9 °C |     |          |               |                  |                        | Liquid Temperature: 22.5°C |                         |                         |                          |                          |                  |
|------------------------------|-----|----------|---------------|------------------|------------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |     | Mode     | Test Position | Figure No./ Note | Conduct ed Power (dBm) | Max. tune-up Power (dBm)   | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz |          |               |                  |                        |                            |                         |                         |                          |                          |                  |
| 27460                        | 728 | 1RB_Mid  | Front         | /                | 23.04                  | 24                         | 0.066                   | <b>0.08</b>             | 0.051                    | <b>0.06</b>              | -0.01            |
| 27460                        | 728 | 1RB_Mid  | Rear          | Fig.22           | 23.04                  | 24                         | 0.112                   | <b>0.14</b>             | 0.085                    | <b>0.11</b>              | -0.04            |
| 27460                        | 728 | 1RB_Mid  | Left          | /                | 23.04                  | 24                         | 0.076                   | <b>0.09</b>             | 0.054                    | <b>0.07</b>              | 0.10             |
| 27460                        | 728 | 1RB_Mid  | Right         | /                | 23.04                  | 24                         | 0.103                   | <b>0.13</b>             | 0.072                    | <b>0.09</b>              | 0.14             |
| 27460                        | 728 | 1RB_Mid  | Bottom        | /                | 23.04                  | 24                         | <0.01                   | <b>&lt;0.01</b>         | <0.01                    | <b>&lt;0.01</b>          | -0.02            |
| 27460                        | 728 | 50RB_Mid | Front         | /                | 22.6                   | 23                         | 0.049                   | <b>0.05</b>             | 0.038                    | <b>0.04</b>              | 0.17             |
| 27460                        | 728 | 50RB_Mid | Rear          | /                | 22.6                   | 23                         | 0.083                   | <b>0.09</b>             | 0.062                    | <b>0.07</b>              | -0.09            |
| 27460                        | 728 | 50RB_Mid | Left          | /                | 22.6                   | 23                         | 0.056                   | <b>0.06</b>             | 0.039                    | <b>0.04</b>              | -0.15            |
| 27460                        | 728 | 50RB_Mid | Right         | /                | 22.6                   | 23                         | 0.075                   | <b>0.08</b>             | 0.052                    | <b>0.06</b>              | 0.14             |
| 27460                        | 728 | 50RB_Mid | Bottom        | /                | 22.6                   | 23                         | <0.01                   | <b>&lt;0.01</b>         | <0.01                    | <b>&lt;0.01</b>          | 0.08             |
| 27460                        | 728 | 1RB_Mid  | Rear          | B2               | 23.04                  | 24                         | 0.054                   | <b>0.07</b>             | 0.038                    | <b>0.05</b>              | -0.04            |
| 27460                        | 728 | 1RB_Mid  | Rear          | S2               | 23.04                  | 24                         | 0.062                   | <b>0.08</b>             | 0.041                    | <b>0.05</b>              | -0.04            |

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

Note2: The LTE mode is QPSK\_20MHz.

## 14.2 SAR results for Standard procedure

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

**Table 14.2-1: SAR Values (GSM 850 MHz Band - Head)**

| Ambient Temperature: 22.9 °C |       |       |               |                 |                       | Liquid Temperature: 22.5°C |                         |                         |                          |                          |                  |
|------------------------------|-------|-------|---------------|-----------------|-----------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |       | Side  | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm)   | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz   |       |               |                 |                       |                            |                         |                         |                          |                          |                  |
| 251                          | 848.8 | Right | Cheek         | Fig.1           | 27.12                 | 28.5                       | 0.206                   | 0.28                    | 0.16                     | 0.22                     | -0.05            |

Note: the head SAR of GSM850 is tested with GPRS (4Txslots) mode because of VoIP.

**Table 14.2-2: SAR Values (GSM 850 MHz Band - Body)**

| Ambient Temperature: 22.9 °C |       |                            |               |                  |                       | Liquid Temperature: 22.5°C |                         |                         |                          |                          |                  |
|------------------------------|-------|----------------------------|---------------|------------------|-----------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |       | Mode (number of timeslots) | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm)   | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz   |                            |               |                  |                       |                            |                         |                         |                          |                          |                  |
| 251                          | 848.8 | GPRS (4)                   | Rear          | Fig.2            | 27.12                 | 28.5                       | 0.36                    | 0.49                    | 0.217                    | 0.30                     | 0.06             |

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

**Table 14.2-3: SAR Values (GSM 1900 MHz Band - Head)**

| Ambient Temperature: 22.9 °C |      |      |               |                  |                       | Liquid Temperature: 22.5°C |                         |                         |                          |                          |                  |
|------------------------------|------|------|---------------|------------------|-----------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |      | Side | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm)   | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz  |      |               |                  |                       |                            |                         |                         |                          |                          |                  |
| 661                          | 1880 | Left | Cheek         | Fig.3            | 27.93                 | 28.5                       | 0.094                   | 0.11                    | 0.06                     | 0.07                     | -0.03            |

Note: the head SAR of GSM1900 is tested with GPRS (2Txslots) mode because of VoIP.

**Table 14.2-4: SAR Values (GSM 1900 MHz Band - Body)**

| Ambient Temperature: 22.9 °C |        |                            |               |                  |                       | Liquid Temperature: 22.5°C |                         |                         |                          |                          |                  |
|------------------------------|--------|----------------------------|---------------|------------------|-----------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |        | Mode (number of timeslots) | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm)   | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz    |                            |               |                  |                       |                            |                         |                         |                          |                          |                  |
| 810                          | 1909.8 | GPRS (2)                   | Bottom        | Fig.4            | 27.53                 | 28.5                       | 0.505                   | 0.63                    | 0.275                    | 0.34                     | 0.01             |

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

**Table 14.2-5: SAR Values (WCDMA 1900 MHz Band - Head)**

| Ambient Temperature: 22.9 °C |      |      |               |                 |                       | Liquid Temperature: 22.5°C |                         |                         |                          |                          |                  |
|------------------------------|------|------|---------------|-----------------|-----------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |      | Side | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm)   | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz  |      |               |                 |                       |                            |                         |                         |                          |                          |                  |
| 9400                         | 1880 | Left | Cheek         | Fig.5           | 23.22                 | 23.5                       | 0.08                    | 0.09                    | 0.05                     | 0.05                     | 0.03             |

**Table 14.2-6: SAR Values (WCDMA 1900 MHz Band - Body)**

| Ambient Temperature: 22.9 °C |        |               |                  |                       |                          | Liquid Temperature: 22.5°C |                         |                          |                          |                  |
|------------------------------|--------|---------------|------------------|-----------------------|--------------------------|----------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |        | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg)    | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz    |               |                  |                       |                          |                            |                         |                          |                          |                  |
| 9262                         | 1852.4 | Bottom        | Fig.6            | 22.95                 | 23.5                     | 0.735                      | <b>0.83</b>             | 0.399                    | <b>0.45</b>              | 0.03             |

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

**Table 14.2-7: SAR Values (WCDMA 1700 MHz Band - Head)**

| Ambient Temperature: 22.9 °C |        |       |               |                 |                           | Liquid Temperature: 22.5°C     |                               |                               |                                |                                |                     |
|------------------------------|--------|-------|---------------|-----------------|---------------------------|--------------------------------|-------------------------------|-------------------------------|--------------------------------|--------------------------------|---------------------|
| Frequency                    |        | Side  | Test Position | Figure No./Note | Conducte<br>d Power (dBm) | Max.<br>tune-up<br>Power (dBm) | Measured<br>SAR(1g)<br>(W/kg) | Reported<br>SAR(1g)<br>(W/kg) | Measured<br>SAR(10g)<br>(W/kg) | Reported<br>SAR(10g)<br>(W/kg) | Power<br>Drift (dB) |
| Ch.                          | MHz    |       |               |                 |                           |                                |                               |                               |                                |                                |                     |
| 1513                         | 1752.6 | Right | Cheek         | Fig.7           | 22.89                     | 23.5                           | 0.19                          | 0.22                          | 0.121                          | 0.14                           | -0.06               |

**Table 14.2-8: SAR Values (WCDMA 1700 MHz Band - Body)**

| Ambient Temperature: 22.9 °C |        |               |                  |                       |                          | Liquid Temperature: 22.5°C |                         |                          |                          |                  |
|------------------------------|--------|---------------|------------------|-----------------------|--------------------------|----------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |        | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg)    | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz    |               |                  |                       |                          |                            |                         |                          |                          |                  |
| 1513                         | 1752.6 | Bottom        | Fig.8            | 22.89                 | 23.5                     | 0.961                      | <b>1.11</b>             | 0.524                    | <b>0.60</b>              | 0.08             |

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

**Table 14.2-9: SAR Values (WCDMA 850 MHz Band - Head)**

| Ambient Temperature: 22.9 °C |       |       |               |                 |                           | Liquid Temperature: 22.5°C     |                            |                            |                             |                             |                  |
|------------------------------|-------|-------|---------------|-----------------|---------------------------|--------------------------------|----------------------------|----------------------------|-----------------------------|-----------------------------|------------------|
| Frequency                    |       | Side  | Test Position | Figure No./Note | Conducte<br>d Power (dBm) | Max.<br>tune-up<br>Power (dBm) | Measured SAR(1g)<br>(W/kg) | Reported SAR(1g)<br>(W/kg) | Measured SAR(10g)<br>(W/kg) | Reported SAR(10g)<br>(W/kg) | Power Drift (dB) |
| Ch.                          | MHz   |       |               |                 |                           |                                |                            |                            |                             |                             |                  |
| 4233                         | 846.6 | Right | Cheek         | Fig.9           | 23.31                     | 25                             | 0.109                      | 0.16                       | 0.083                       | 0.12                        | 0.10             |

**Table 14.2-10: SAR Values (WCDMA 850 MHz Band - Body)**

| Ambient Temperature: 22.9 °C |       |               |                  |                       |                          | Liquid Temperature: 22.5°C |                         |                          |                          |                  |
|------------------------------|-------|---------------|------------------|-----------------------|--------------------------|----------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |       | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg)    | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz   |               |                  |                       |                          |                            |                         |                          |                          |                  |
| 4233                         | 846.6 | Rear          | Fig.10           | 23.31                 | 25                       | 0.149                      | <b>0.22</b>             | 0.09                     | <b>0.13</b>              | -0.03            |

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

**Table 14.2-11: SAR Values (LTE Band2 - Head)**

| Ambient Temperature: 22.9 °C |      |          |      |               |                  | Liquid Temperature: 22.5°C |                          |                         |                         |                          |                          |                  |
|------------------------------|------|----------|------|---------------|------------------|----------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |      | Mode     | Side | Test Position | Figure No./ Note | Conduct ed Power (dBm)     | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz  |          |      |               |                  |                            |                          |                         |                         |                          |                          |                  |
| 18900                        | 1880 | 1RB_High | Left | Cheek         | Fig.11           | 23.42                      | 23.5                     | 0.078                   | 0.08                    | 0.05                     | 0.05                     | -0.17            |

Note: The LTE mode is QPSK\_20MHz.

**Table 14.2-12: SAR Values (LTE Band2 - Body)**

| Ambient Temperature: 22.9 °C |      |          |               |                  |                        | Liquid Temperature: 22.5°C |                         |                         |                          |                          |                  |
|------------------------------|------|----------|---------------|------------------|------------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |      | Mode     | Test Position | Figure No./ Note | Conduct ed Power (dBm) | Max. tune-up Power (dBm)   | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz  |          |               |                  |                        |                            |                         |                         |                          |                          |                  |
| 18900                        | 1880 | 1RB_High | Bottom        | Fig.12           | 23.42                  | 23.5                       | 0.604                   | 0.62                    | 0.326                    | 0.33                     | -0.03            |

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

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.2-13: SAR Values (LTE Band4 - Head)**

| Ambient Temperature: 22.9 °C |      |         |       |               |                  | Liquid Temperature: 22.5°C |                          |                         |                         |                          |                          |                  |
|------------------------------|------|---------|-------|---------------|------------------|----------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |      | Mode    | Side  | Test Position | Figure No./ Note | Conduct ed Power (dBm)     | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz  |         |       |               |                  |                            |                          |                         |                         |                          |                          |                  |
| 20300                        | 1745 | 1RB_Mid | Right | Cheek         | Fig.13           | 22.74                      | 23.5                     | 0.089                   | 0.11                    | 0.057                    | 0.07                     | -0.04            |

Note: The LTE mode is QPSK\_20MHz.

**Table 14.2-14: SAR Values (LTE Band4 - Body)**

| Ambient Temperature: 22.9 °C      Liquid Temperature: 22.5°C |      |         |               |                  |                        |                          |                         |                         |                          |                          |                  |
|--------------------------------------------------------------|------|---------|---------------|------------------|------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                                                    |      | Mode    | Test Position | Figure No./ Note | Conduct ed Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                                                          | MHz  |         |               |                  |                        |                          |                         |                         |                          |                          |                  |
| 20300                                                        | 1745 | 1RB_Mid | Bottom        | Fig.14           | 22.74                  | 23.5                     | 0.728                   | 0.87                    | 0.393                    | 0.47                     | 0.15             |

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

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.2-15: SAR Values (LTE Band5 - Head)**

| Ambient Temperature: 22.9 °C |     |          |       |               |                  | Liquid Temperature: 22.5°C |                          |                         |                         |                          |                          |                  |
|------------------------------|-----|----------|-------|---------------|------------------|----------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |     | Mode     | Side  | Test Position | Figure No./ Note | Conduct ed Power (dBm)     | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz |          |       |               |                  |                            |                          |                         |                         |                          |                          |                  |
| 20600                        | 844 | 1RB_High | Right | Cheek         | Fig.15           | 22.67                      | 24                       | 0.12                    | 0.16                    | 0.093                    | 0.13                     | 0.08             |

Note: The LTE mode is QPSK\_10MHz.

**Table 14.2-16: SAR Values (LTE Band5 - Body)**

| Ambient Temperature: 22.9 °C |     |          |               |                  |                        | Liquid Temperature: 22.5°C |                         |                         |                          |                          |                  |
|------------------------------|-----|----------|---------------|------------------|------------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |     | Mode     | Test Position | Figure No./ Note | Conduct ed Power (dBm) | Max. tune-up Power (dBm)   | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz |          |               |                  |                        |                            |                         |                         |                          |                          |                  |
| 20600                        | 844 | 1RB_High | Rear          | Fig.16           | 22.67                  | 24                         | 0.159                   | 0.22                    | 0.121                    | 0.16                     | 0.10             |

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

Note2: The LTE mode is QPSK\_10MHz.

**Table 14.2-17: SAR Values (LTE Band7 - Head)**

| Ambient Temperature: 22.9 °C |      |         |      |               |                  | Liquid Temperature: 22.5°C |                          |                         |                         |                          |                          |                  |
|------------------------------|------|---------|------|---------------|------------------|----------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |      | Mode    | Side | Test Position | Figure No./ Note | Conduct ed Power (dBm)     | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz  |         |      |               |                  |                            |                          |                         |                         |                          |                          |                  |
| 21100                        | 2535 | 1RB_Mid | Left | Cheek         | Fig.17           | 22.73                      | 23.2                     | 0.128                   | 0.14                    | 0.068                    | 0.08                     | -0.01            |

Note: The LTE mode is QPSK\_20MHz.

**Table 14.2-18: SAR Values (LTE Band7 - Body)**

| Ambient Temperature: 22.9 °C |      |         |               |                  |                        | Liquid Temperature: 22.5°C |                         |                         |                          |                          |                  |
|------------------------------|------|---------|---------------|------------------|------------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |      | Mode    | Test Position | Figure No./ Note | Conduct ed Power (dBm) | Max. tune-up Power (dBm)   | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz  |         |               |                  |                        |                            |                         |                         |                          |                          |                  |
| 21100                        | 2535 | 1RB_Mid | Bottom        | Fig.18           | 22.73                  | 23.2                       | 0.55                    | 0.61                    | 0.273                    | 0.30                     | 0.02             |

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

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.2-19: SAR Values (LTE Band12 - Head)**

| Ambient Temperature: 22.9 °C |     |         |       |               |                  | Liquid Temperature: 22.5°C |                          |                         |                         |                          |                          |                  |
|------------------------------|-----|---------|-------|---------------|------------------|----------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |     | Mode    | Side  | Test Position | Figure No./ Note | Conduct ed Power (dBm)     | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz |         |       |               |                  |                            |                          |                         |                         |                          |                          |                  |
| 23130                        | 711 | 1RB_Mid | Right | Cheek         | Fig.19           | 23.26                      | 24                       | 0.082                   | 0.10                    | 0.064                    | 0.08                     | 0.04             |

Note: The LTE mode is QPSK\_10MHz.

**Table 14.2-20: SAR Values (LTE Band12 - Body)**

| Ambient Temperature: 22.9 °C |     |           |               |                  |                        | Liquid Temperature: 22.5°C |                         |                         |                          |                          |                  |
|------------------------------|-----|-----------|---------------|------------------|------------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |     | Mode      | Test Position | Figure No./ Note | Conduct ed Power (dBm) | Max. tune-up Power (dBm)   | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz |           |               |                  |                        |                            |                         |                         |                          |                          |                  |
| 23130                        | 711 | 25RB_High | Rear          | Fig.20           | 22.99                  | 23                         | 0.113                   | 0.11                    | 0.086                    | 0.09                     | 0.08             |

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

Note2: The LTE mode is QPSK\_10MHz.

**Table 14.2-21: SAR Values (LTE Band28 - Head)**

| Ambient Temperature: 22.9 °C |     |         |       |               |                  | Liquid Temperature: 22.5°C |                          |                         |                         |                          |                          |                  |
|------------------------------|-----|---------|-------|---------------|------------------|----------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |     | Mode    | Side  | Test Position | Figure No./ Note | Conduct ed Power (dBm)     | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz |         |       |               |                  |                            |                          |                         |                         |                          |                          |                  |
| 27460                        | 728 | 1RB_Mid | Right | Cheek         | Fig.21           | 23.04                      | 24                       | 0.064                   | 0.08                    | 0.049                    | 0.06                     | 0.06             |

Note: The LTE mode is QPSK\_20MHz.

**Table 14.2-22: SAR Values (LTE Band28 - Body)**

| Ambient Temperature: 22.9 °C |     |         |               |                  |                        | Liquid Temperature: 22.5°C |                         |                         |                          |                          |                  |
|------------------------------|-----|---------|---------------|------------------|------------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |     | Mode    | Test Position | Figure No./ Note | Conduct ed Power (dBm) | Max. tune-up Power (dBm)   | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Power Drift (dB) |
| Ch.                          | MHz |         |               |                  |                        |                            |                         |                         |                          |                          |                  |
| 27460                        | 728 | 1RB_Mid | Rear          | Fig.22           | 23.04                  | 24                         | 0.112                   | 0.14                    | 0.085                    | 0.11                     | -0.04            |

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

Note2: The LTE mode is QPSK\_20MHz.

### 14.3 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 14.3-1: SAR Values (WLAN - Head)– 802.11b (Fast SAR)**

| Ambient Temperature: 22.9 °C |     |       |               |           |             | Liquid Temperature: 22.5°C |                |                |                 |                 |            |
|------------------------------|-----|-------|---------------|-----------|-------------|----------------------------|----------------|----------------|-----------------|-----------------|------------|
| Frequency                    |     | Side  | Test Position | Figure    | Conducted   | Max. tune-                 | Measured       | Reported       | Measured        | Reported        | Power      |
| MHz                          | Ch. |       |               | No./ Note | Power (dBm) | up Power (dBm)             | SAR(1g) (W/kg) | SAR(1g) (W/kg) | SAR(10g) (W/kg) | SAR(10g) (W/kg) | Drift (dB) |
| 2462                         | 11  | Left  | Touch         | /         | 18.66       | 19                         | 0.622          | <b>0.67</b>    | 0.331           | <b>0.36</b>     | 0.01       |
| 2462                         | 11  | Left  | Tilt          | /         | 18.66       | 19                         | 0.504          | <b>0.55</b>    | 0.272           | <b>0.29</b>     | 0.12       |
| 2462                         | 11  | Right | Touch         | /         | 18.66       | 19                         | 0.171          | <b>0.18</b>    | 0.089           | <b>0.10</b>     | 0.04       |
| 2462                         | 11  | Right | Tilt          | /         | 18.66       | 19                         | 0.201          | <b>0.22</b>    | 0.099           | <b>0.11</b>     | -0.01      |
| 2462                         | 11  | Left  | Touch         | B2        | 18.66       | 19                         | 0.589          | <b>0.64</b>    | 0.312           | <b>0.34</b>     | 0.06       |
| 2462                         | 11  | Left  | Touch         | S2        | 18.66       | 19                         | 0.573          | <b>0.62</b>    | 0.284           | <b>0.31</b>     | 0.03       |

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

**Table 14.3-2: SAR Values (WLAN - Head)– 802.11b (Full SAR)**

| Ambient Temperature: 22.9 °C |     |      |               |                  |                        | Liquid Temperature: 22.5°C |                         |                         |                          |                          |                  |
|------------------------------|-----|------|---------------|------------------|------------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------|
| Frequency                    |     | Side | Test Position | Figure No./ Note | Conducte d Power (dBm) | Max. tune- up Power (dBm)  | Measured SAR(1g) (W/kg) | Reported SAR(1g)( W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g )(W/kg) | Power Drift (dB) |
| MHz                          | Ch. |      |               |                  |                        |                            |                         |                         |                          |                          |                  |
| 2462                         | 11  | Left | Touch         | Fig.23           | 18.66                  | 19                         | 0.623                   | 0.67                    | 0.320                    | 0.35                     | 0.01             |
| 2462                         | 11  | Left | Tilt          | /                | 18.66                  | 19                         | 0.532                   | 0.58                    | 0.258                    | 0.28                     | 0.12             |

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

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

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

**Table 14.3-3: SAR Values (WLAN - Head) – 802.11b (Scaled Reported SAR)**

| Ambient Temperature: 22.9 °C |     |      |               |                    | Liquid Temperature: 22.5°C |                         |                                |
|------------------------------|-----|------|---------------|--------------------|----------------------------|-------------------------|--------------------------------|
| Frequency                    |     | Side | Test Position | Actual duty factor | maximum duty factor        | Reported SAR (1g)(W/kg) | Scaled reported SAR (1g)(W/kg) |
| MHz                          | Ch. |      |               |                    |                            |                         |                                |
| 2462                         | 11  | Left | Touch         | 100%               | 100%                       | <b>0.67</b>             | <b>0.67</b>                    |

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

## Body Evaluation

**Table 14.3-4: SAR Values (WLAN - Body)– 802.11b (Fast SAR)**

| Frequency |     | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg) | Reported SAR(1g)(W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g)(W/kg) | Power Drift (dB) |
|-----------|-----|---------------|------------------|-----------------------|--------------------------|-------------------------|------------------------|--------------------------|-------------------------|------------------|
| MHz       | Ch. |               |                  |                       |                          |                         |                        |                          |                         |                  |
| 2462      | 11  | Front         | /                | 18.66                 | 19                       | 0.082                   | <b>0.09</b>            | 0.075                    | <b>0.08</b>             | 0.08             |
| 2462      | 11  | Rear          | /                | 18.66                 | 19                       | 0.151                   | <b>0.16</b>            | 0.123                    | <b>0.13</b>             | -0.11            |
| 2462      | 11  | Right         | /                | 18.66                 | 19                       | 0.085                   | <b>0.09</b>            | 0.074                    | <b>0.08</b>             | 0.03             |
| 2462      | 11  | Top           | /                | 18.66                 | 19                       | 0.047                   | <b>0.05</b>            | 0.04                     | <b>0.04</b>             | -0.04            |
| 2462      | 11  | Rear          | B2               | 18.66                 | 19                       | 0.123                   | <b>0.13</b>            | 0.098                    | <b>0.11</b>             | -0.05            |
| 2462      | 11  | Rear          | S2               | 18.66                 | 19                       | 0.112                   | <b>0.12</b>            | 0.095                    | <b>0.10</b>             | 0.07             |

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

**Table 14.3-5: SAR Values (WLAN - Body)– 802.11b (Full SAR)**

| Frequency |     | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(1g) (W/kg) | Reported SAR(1g)(W/kg) | Measured SAR(10g) (W/kg) | Reported SAR(10g)(W/kg) | Power Drift (dB) |
|-----------|-----|---------------|------------------|-----------------------|--------------------------|-------------------------|------------------------|--------------------------|-------------------------|------------------|
| MHz       | Ch. |               |                  |                       |                          |                         |                        |                          |                         |                  |
| 2462      | 11  | Rear          | Fig.14           | 18.66                 | 19                       | 0.151                   | <b>0.16</b>            | 0.075                    | <b>0.08</b>             | -0.11            |

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

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

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

**Table 14.3-6: SAR Values (WLAN - Body) – 802.11b (Scaled Reported SAR)**

| Frequency |     | Test Position | Actual duty factor | maximum duty factor | Reported SAR (1g)(W/kg) | Scaled reported SAR (1g)(W/kg) |
|-----------|-----|---------------|--------------------|---------------------|-------------------------|--------------------------------|
| MHz       | Ch. |               |                    |                     |                         |                                |
| 2462      | 11  | Rear          | 100%               | 100%                | <b>0.16</b>             | <b>0.16</b>                    |

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