

## Body Simultaneous Transmission SAR Evaluation for WWAN Antenna with WLAN 2.4G Or WLAN 5G and BT

| Band                                                                                                          | Antenna | Position         | Stand alone SAR |         |           |           | SUM SAR |         |
|---------------------------------------------------------------------------------------------------------------|---------|------------------|-----------------|---------|-----------|-----------|---------|---------|
|                                                                                                               |         |                  | 1               | 2       | 3         | 4         | (1+3)   | (1+2+4) |
|                                                                                                               |         |                  | WWAN            | 5G WIFI | 2.4G WIFI | Bluetooth |         |         |
| LTE B2                                                                                                        | ANT0    | Front Side 10mm  | 0.284           | 0.066   | 0.071     | 0.043     | 0.355   | 0.393   |
|                                                                                                               | ANT0    | Back Side 10mm   | 0.294           | 0.273   | 0.295     | 0.063     | 0.589   | 0.630   |
|                                                                                                               | ANT0    | Left Edge 10mm   | 0.057           | 0.218   | 0.177     | 0.030     | 0.234   | 0.305   |
|                                                                                                               | ANT0    | Right Edge 10mm  | 0.392           | 0.030   | 0.037     | 0.031     | 0.429   | 0.453   |
|                                                                                                               | ANT0    | Top Edge 10mm    | 0.020           | 0.029   | 0.016     | 0.028     | 0.036   | 0.077   |
|                                                                                                               | ANT0    | Bottom Edge 10mm | 0.251           | 0.046   | 0.013     | 0.022     | 0.264   | 0.319   |
| LTE B4                                                                                                        | ANT0    | Front Side 10mm  | 0.356           | 0.066   | 0.071     | 0.043     | 0.427   | 0.465   |
|                                                                                                               | ANT0    | Back Side 10mm   | 0.630           | 0.273   | 0.295     | 0.063     | 0.925   | 0.966   |
|                                                                                                               | ANT0    | Left Edge 10mm   | 0.073           | 0.218   | 0.177     | 0.030     | 0.250   | 0.321   |
|                                                                                                               | ANT0    | Right Edge 10mm  | 0.471           | 0.030   | 0.037     | 0.031     | 0.508   | 0.532   |
|                                                                                                               | ANT0    | Top Edge 10mm    | 0.031           | 0.029   | 0.016     | 0.028     | 0.047   | 0.088   |
|                                                                                                               | ANT0    | Bottom Edge 10mm | 0.435           | 0.046   | 0.013     | 0.022     | 0.448   | 0.503   |
| LTE B5                                                                                                        | ANT0    | Front Side 10mm  | 0.678           | 0.066   | 0.071     | 0.043     | 0.749   | 0.787   |
|                                                                                                               | ANT0    | Back Side 10mm   | 0.549           | 0.273   | 0.295     | 0.063     | 0.844   | 0.885   |
|                                                                                                               | ANT0    | Left Edge 10mm   | 0.228           | 0.218   | 0.177     | 0.030     | 0.405   | 0.476   |
|                                                                                                               | ANT0    | Right Edge 10mm  | 0.174           | 0.030   | 0.037     | 0.031     | 0.211   | 0.235   |
|                                                                                                               | ANT0    | Top Edge 10mm    | 0.014           | 0.029   | 0.016     | 0.028     | 0.030   | 0.071   |
|                                                                                                               | ANT0    | Bottom Edge 10mm | 0.244           | 0.046   | 0.013     | 0.022     | 0.257   | 0.312   |
| LTE B7                                                                                                        | ANT0    | Front Side 10mm  | 0.482           | 0.066   | 0.071     | 0.043     | 0.553   | 0.591   |
|                                                                                                               | ANT0    | Back Side 10mm   | 0.643           | 0.273   | 0.295     | 0.063     | 0.938   | 0.979   |
|                                                                                                               | ANT0    | Left Edge 10mm   | 0.183           | 0.218   | 0.177     | 0.030     | 0.360   | 0.431   |
|                                                                                                               | ANT0    | Right Edge 10mm  | 0.139           | 0.030   | 0.037     | 0.031     | 0.176   | 0.200   |
|                                                                                                               | ANT0    | Top Edge 10mm    | 0.020           | 0.029   | 0.016     | 0.028     | 0.036   | 0.077   |
|                                                                                                               | ANT0    | Bottom Edge 10mm | 0.998           | 0.046   | 0.013     | 0.022     | 1.011   | 1.066   |
| LTE B12                                                                                                       | ANT0    | Front Side 10mm  | 0.418           | 0.066   | 0.071     | 0.043     | 0.489   | 0.527   |
|                                                                                                               | ANT0    | Back Side 10mm   | 0.455           | 0.273   | 0.295     | 0.063     | 0.750   | 0.791   |
|                                                                                                               | ANT0    | Left Edge 10mm   | 0.289           | 0.218   | 0.177     | 0.030     | 0.466   | 0.537   |
|                                                                                                               | ANT0    | Right Edge 10mm  | 0.188           | 0.030   | 0.037     | 0.031     | 0.225   | 0.249   |
|                                                                                                               | ANT0    | Top Edge 10mm    | 0.022           | 0.029   | 0.016     | 0.028     | 0.038   | 0.079   |
|                                                                                                               | ANT0    | Bottom Edge 10mm | 0.143           | 0.046   | 0.013     | 0.022     | 0.156   | 0.211   |
| LTE B13                                                                                                       | ANT0    | Front Side 10mm  | 0.622           | 0.066   | 0.071     | 0.043     | 0.693   | 0.731   |
|                                                                                                               | ANT0    | Back Side 10mm   | 0.552           | 0.273   | 0.295     | 0.063     | 0.847   | 0.888   |
|                                                                                                               | ANT0    | Left Edge 10mm   | 0.304           | 0.218   | 0.177     | 0.030     | 0.481   | 0.552   |
|                                                                                                               | ANT0    | Right Edge 10mm  | 0.199           | 0.030   | 0.037     | 0.031     | 0.236   | 0.260   |
|                                                                                                               | ANT0    | Top Edge 10mm    | 0.018           | 0.029   | 0.016     | 0.028     | 0.034   | 0.075   |
|                                                                                                               | ANT0    | Bottom Edge 10mm | 0.204           | 0.046   | 0.013     | 0.022     | 0.217   | 0.272   |
| LTE B17                                                                                                       | ANT0    | Front Side 10mm  | 0.368           | 0.066   | 0.071     | 0.043     | 0.439   | 0.477   |
|                                                                                                               | ANT0    | Back Side 10mm   | 0.450           | 0.273   | 0.295     | 0.063     | 0.745   | 0.786   |
|                                                                                                               | ANT0    | Left Edge 10mm   | 0.252           | 0.218   | 0.177     | 0.030     | 0.429   | 0.500   |
|                                                                                                               | ANT0    | Right Edge 10mm  | 0.161           | 0.030   | 0.037     | 0.031     | 0.198   | 0.222   |
|                                                                                                               | ANT0    | Top Edge 10mm    | 0.027           | 0.029   | 0.016     | 0.028     | 0.043   | 0.084   |
|                                                                                                               | ANT0    | Bottom Edge 10mm | 0.138           | 0.046   | 0.013     | 0.022     | 0.151   | 0.206   |
| LTE B66                                                                                                       | ANT0    | Front Side 10mm  | 0.757           | 0.066   | 0.071     | 0.043     | 0.828   | 0.866   |
|                                                                                                               | ANT0    | Back Side 10mm   | 1.184           | 0.273   | 0.295     | 0.063     | 1.479   | 1.520   |
|                                                                                                               | ANT0    | Left Edge 10mm   | 0.150           | 0.218   | 0.177     | 0.030     | 0.327   | 0.398   |
|                                                                                                               | ANT0    | Right Edge 10mm  | 0.997           | 0.030   | 0.037     | 0.031     | 1.034   | 1.058   |
|                                                                                                               | ANT0    | Top Edge 10mm    | 0.055           | 0.029   | 0.016     | 0.028     | 0.071   | 0.112   |
|                                                                                                               | ANT0    | Bottom Edge 10mm | 0.900           | 0.046   | 0.013     | 0.022     | 0.913   | 0.968   |
| Note:                                                                                                         |         |                  |                 |         |           |           |         |         |
| 1: The highest Summed 1g SAR is 1.520 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required. |         |                  |                 |         |           |           |         |         |

**Limbs Simultaneous Transmission SAR Evaluation for WWAN Antenna with WLAN 2.4G Or WLAN 5G and BT**

| Band    | Antenna | Position        | Stand alone SAR |         |           |           | SUM SAR |              |
|---------|---------|-----------------|-----------------|---------|-----------|-----------|---------|--------------|
|         |         |                 | 1               | 2       | 3         | 4         | (1+3)   | (1+2+4)      |
|         |         |                 | WWAN            | 5G WIFI | 2.4G WIFI | Bluetooth |         |              |
| LTE B2  | ANT0    | Front Side 0mm  | 1.084           | 0.148   | 0.128     | 0.029     | 1.212   | 1.261        |
|         | ANT0    | Back Side 0mm   | 0.672           | 0.097   | 0.142     | 0.064     | 0.814   | 0.833        |
|         | ANT0    | Left Edge 0mm   | 0.184           | 0.296   | 0.384     | 0.071     | 0.568   | 0.551        |
|         | ANT0    | Right Edge 0mm  | 1.273           | 0.014   | 0.035     | 0.022     | 1.308   | 1.309        |
|         | ANT0    | Top Edge 0mm    | 0.009           | 0.092   | 0.036     | 0.024     | 0.045   | 0.125        |
|         | ANT0    | Bottom Edge 0mm | 1.092           | 0.032   | 0.064     | 0.030     | 1.156   | 1.154        |
| LTE B4  | ANT0    | Front Side 0mm  | 1.402           | 0.148   | 0.128     | 0.029     | 1.530   | 1.579        |
|         | ANT0    | Back Side 0mm   | 1.032           | 0.097   | 0.142     | 0.064     | 1.174   | 1.193        |
|         | ANT0    | Left Edge 0mm   | 0.189           | 0.296   | 0.384     | 0.071     | 0.573   | 0.556        |
|         | ANT0    | Right Edge 0mm  | 1.469           | 0.014   | 0.035     | 0.022     | 1.504   | 1.505        |
|         | ANT0    | Top Edge 0mm    | 0.037           | 0.092   | 0.036     | 0.024     | 0.073   | 0.153        |
|         | ANT0    | Bottom Edge 0mm | 1.414           | 0.032   | 0.064     | 0.030     | 1.478   | 1.476        |
| LTE B5  | ANT0    | Front Side 0mm  | 1.199           | 0.148   | 0.128     | 0.029     | 1.327   | 1.376        |
|         | ANT0    | Back Side 0mm   | 0.711           | 0.097   | 0.142     | 0.064     | 0.853   | 0.872        |
|         | ANT0    | Left Edge 0mm   | 0.342           | 0.296   | 0.384     | 0.071     | 0.726   | 0.709        |
|         | ANT0    | Right Edge 0mm  | 0.525           | 0.014   | 0.035     | 0.022     | 0.560   | 0.561        |
|         | ANT0    | Top Edge 0mm    | 0.024           | 0.092   | 0.036     | 0.024     | 0.060   | 0.140        |
|         | ANT0    | Bottom Edge 0mm | 0.644           | 0.032   | 0.064     | 0.030     | 0.708   | 0.706        |
| LTE B7  | ANT0    | Front Side 0mm  | 1.871           | 0.148   | 0.128     | 0.029     | 1.999   | 2.048        |
|         | ANT0    | Back Side 0mm   | 1.711           | 0.097   | 0.142     | 0.064     | 1.853   | 1.872        |
|         | ANT0    | Left Edge 0mm   | 0.366           | 0.296   | 0.384     | 0.071     | 0.750   | 0.733        |
|         | ANT0    | Right Edge 0mm  | 0.472           | 0.014   | 0.035     | 0.022     | 0.507   | 0.508        |
|         | ANT0    | Top Edge 0mm    | 0.032           | 0.092   | 0.036     | 0.024     | 0.068   | 0.148        |
|         | ANT0    | Bottom Edge 0mm | 1.309           | 0.032   | 0.064     | 0.030     | 1.373   | 1.371        |
| LTE B12 | ANT0    | Front Side 0mm  | 1.245           | 0.148   | 0.128     | 0.029     | 1.373   | 1.422        |
|         | ANT0    | Back Side 0mm   | 1.077           | 0.097   | 0.142     | 0.064     | 1.219   | 1.238        |
|         | ANT0    | Left Edge 0mm   | 0.329           | 0.296   | 0.384     | 0.071     | 0.713   | 0.696        |
|         | ANT0    | Right Edge 0mm  | 0.425           | 0.014   | 0.035     | 0.022     | 0.460   | 0.461        |
|         | ANT0    | Top Edge 0mm    | 0.028           | 0.092   | 0.036     | 0.024     | 0.064   | 0.144        |
|         | ANT0    | Bottom Edge 0mm | 1.156           | 0.032   | 0.064     | 0.030     | 1.220   | 1.218        |
| LTE B13 | ANT0    | Front Side 0mm  | 1.187           | 0.148   | 0.128     | 0.029     | 1.315   | 1.364        |
|         | ANT0    | Back Side 0mm   | 0.801           | 0.097   | 0.142     | 0.064     | 0.943   | 0.962        |
|         | ANT0    | Left Edge 0mm   | 0.380           | 0.296   | 0.384     | 0.071     | 0.764   | 0.747        |
|         | ANT0    | Right Edge 0mm  | 0.643           | 0.014   | 0.035     | 0.022     | 0.678   | 0.679        |
|         | ANT0    | Top Edge 0mm    | 0.037           | 0.092   | 0.036     | 0.024     | 0.073   | 0.153        |
|         | ANT0    | Bottom Edge 0mm | 0.711           | 0.032   | 0.064     | 0.030     | 0.775   | 0.773        |
| LTE B17 | ANT0    | Front Side 0mm  | 1.254           | 0.148   | 0.128     | 0.029     | 1.382   | 1.431        |
|         | ANT0    | Back Side 0mm   | 1.053           | 0.097   | 0.142     | 0.064     | 1.195   | 1.214        |
|         | ANT0    | Left Edge 0mm   | 0.331           | 0.296   | 0.384     | 0.071     | 0.715   | 0.698        |
|         | ANT0    | Right Edge 0mm  | 0.460           | 0.014   | 0.035     | 0.022     | 0.495   | 0.496        |
|         | ANT0    | Top Edge 0mm    | 0.029           | 0.092   | 0.036     | 0.024     | 0.065   | 0.145        |
|         | ANT0    | Bottom Edge 0mm | 1.082           | 0.032   | 0.064     | 0.030     | 1.146   | 1.144        |
| LTE B66 | ANT0    | Front Side 0mm  | 2.486           | 0.148   | 0.128     | 0.029     | 2.614   | <b>2.663</b> |
|         | ANT0    | Back Side 0mm   | 1.657           | 0.097   | 0.142     | 0.064     | 1.799   | 1.818        |
|         | ANT0    | Left Edge 0mm   | 0.335           | 0.296   | 0.384     | 0.071     | 0.719   | 0.702        |
|         | ANT0    | Right Edge 0mm  | 2.371           | 0.014   | 0.035     | 0.022     | 2.406   | 2.407        |
|         | ANT0    | Top Edge 0mm    | 0.071           | 0.092   | 0.036     | 0.024     | 0.107   | 0.187        |
|         | ANT0    | Bottom Edge 0mm | 2.394           | 0.032   | 0.064     | 0.030     | 2.458   | 2.456        |

Note:

1: The highest Summed 10g SAR is 2.663 W/Kg &lt; 4.0 W/kg, so Simultaneous Transmission SAR test is not required.