

# Measurement Report for PCS 1900: GPRS-FDD (TDMA, GMSK, TN 0-1), CHEEK

## Exposure Conditions

|                                  |                 |                        |                 |
|----------------------------------|-----------------|------------------------|-----------------|
| Band                             | PCS 1900        | TSL Permittivity       | 39.7            |
| Frequency [MHz]   Channel Number | 1880.000   661  | TSL Conductivity [S/m] | 1.43            |
| Group   UID                      | GSM   10024-DAC | Phantom Section   TSL  | RightHead   HSL |
| Conversion Factor                | 7.53            | Test Distance [mm]     | 0.00            |

## Hardware Setup

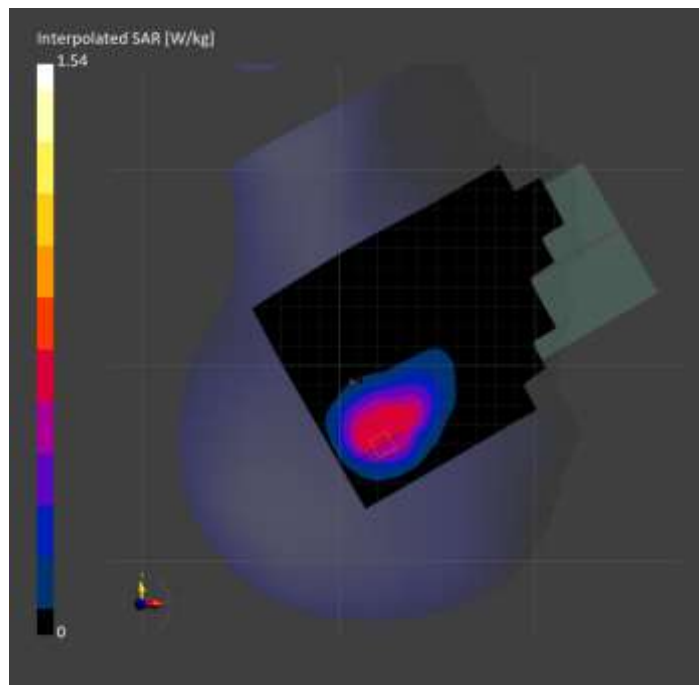
|                          |                              |          |                                  |
|--------------------------|------------------------------|----------|----------------------------------|
| Probe   Calibration Date | EX3DV4 - SN7807   2023-04-11 | Phantom  | Twin-SAM V8.0 (30deg probe tilt) |
| DAE   Calibration Date   | DAE4 Sn1799   2023-04-04     | TSL Type | HBBL-600-10000                   |
| Software Version         | 16.2.4.2524                  |          |                                  |

## Scan Setup

|                     | Area Scan     | Zoom Scan          |
|---------------------|---------------|--------------------|
| Grid Extents [mm]   | 120.0 x 210.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 15.0 x 15.0   | 6.0 x 6.0 x 1.5    |
| Sensor Surface [mm] | 3.0           | 1.4                |
| Graded Grid         | N/A           | Yes                |
| M2/M1 [%]           |               | 74.3               |
| Dist 3dB Peak [mm]  |               | 8.6                |

## Measurement Results

|                  | Area Scan | Zoom Scan    |
|------------------|-----------|--------------|
| psSAR1g [W/Kg]   | 0.616     | <b>0.670</b> |
| psSAR10g [W/Kg]  | 0.371     | <b>0.363</b> |
| Power Drift [dB] | N/A       | -0.03        |



# Measurement Report for Band 4: UMTS-FDD (WCDMA), CHEEK

## Exposure Conditions

|                                  |                   |                        |                 |
|----------------------------------|-------------------|------------------------|-----------------|
| Band                             | Band 4            | TSL Permittivity       | 39.9            |
| Frequency [MHz]   Channel Number | 1752.600   1513   | TSL Conductivity [S/m] | 1.36            |
| Group   UID                      | WCDMA   10011-CAC | Phantom Section   TSL  | RightHead   HSL |
| Conversion Factor                | 8.02              | Test Distance [mm]     | 0.00            |

## Hardware Setup

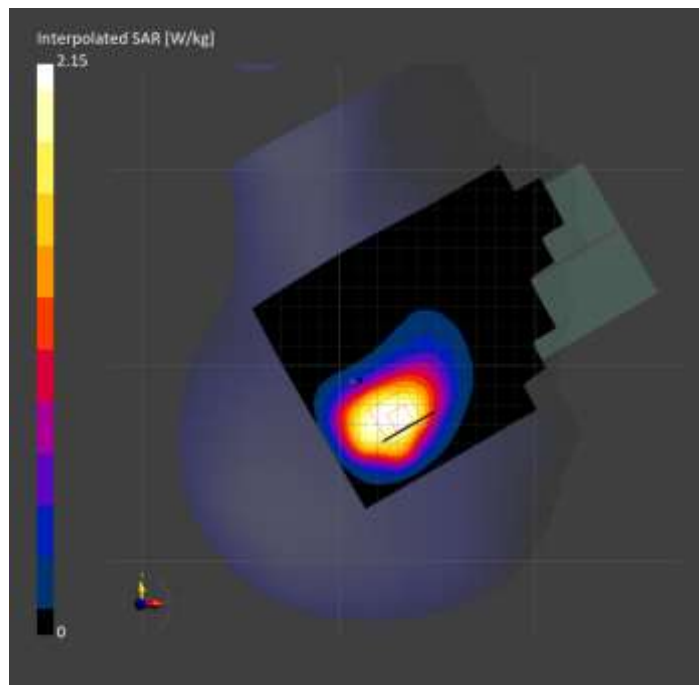
|                          |                              |          |                                  |
|--------------------------|------------------------------|----------|----------------------------------|
| Probe   Calibration Date | EX3DV4 - SN7807   2023-04-11 | Phantom  | Twin-SAM V8.0 (30deg probe tilt) |
| DAE   Calibration Date   | DAE4 Sn1799   2023-04-04     | TSL Type | HBBL-600-10000                   |
| Software Version         | 16.2.4.2524                  |          |                                  |

## Scan Setup

|                     | Area Scan     | Zoom Scan          |
|---------------------|---------------|--------------------|
| Grid Extents [mm]   | 120.0 x 210.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 15.0 x 15.0   | 6.0 x 6.0 x 1.5    |
| Sensor Surface [mm] | 3.0           | 1.4                |
| Graded Grid         | N/A           | Yes                |
| M2/M1 [%]           |               | 70.4               |
| Dist 3dB Peak [mm]  |               | 17.3               |

## Measurement Results

|                  | Area Scan | Zoom Scan    |
|------------------|-----------|--------------|
| psSAR1g [W/Kg]   | 0.803     | <b>0.841</b> |
| psSAR10g [W/Kg]  | 0.492     | <b>0.521</b> |
| Power Drift [dB] | N/A       | -0.00        |



# Measurement Report for Band 53: LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) AntennaCfg:SISO, TILT

## Exposure Conditions

|                                  |                     |                        |                |
|----------------------------------|---------------------|------------------------|----------------|
| Band                             | Band 53             | TSL Permittivity       | 40.3           |
| Frequency [MHz]   Channel Number | 2489.300   60198    | TSL Conductivity [S/m] | 1.80           |
| Group   UID                      | LTE-TDD   10506-AAG | Phantom Section   TSL  | LeftHead   HSL |
| Conversion Factor                | 7.64                | Test Distance [mm]     | 0.00           |

## Hardware Setup

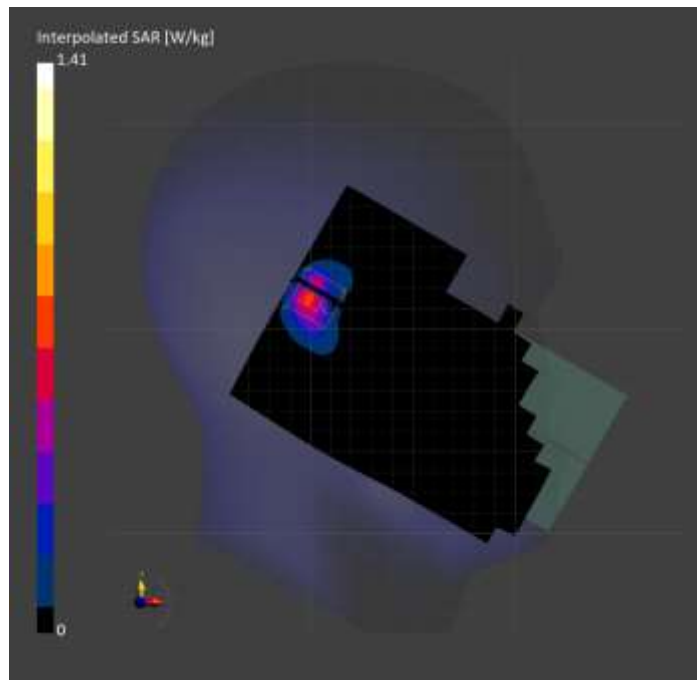
|                          |                              |          |                                  |
|--------------------------|------------------------------|----------|----------------------------------|
| Probe   Calibration Date | EX3DV4 - SN7587   2023-04-18 | Phantom  | Twin-SAM V8.0 (30deg probe tilt) |
| DAE   Calibration Date   | DAE4 Sn1239   2023-03-16     | TSL Type | HBBL-600-10000                   |
| Software Version         | 16.2.4.2524                  |          |                                  |

## Scan Setup

|                     | Area Scan     | Zoom Scan          |
|---------------------|---------------|--------------------|
| Grid Extents [mm]   | 120.0 x 200.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 10.0 x 10.0   | 5.0 x 5.0 x 1.5    |
| Sensor Surface [mm] | 3.0           | 1.4                |
| Graded Grid         | N/A           | Yes                |
| M2/M1 [%]           |               | 78.7               |
| Dist 3dB Peak [mm]  |               | 5.5                |

## Measurement Results

|                  | Area Scan | Zoom Scan    |
|------------------|-----------|--------------|
| psSAR1g [W/Kg]   | 0.534     | <b>0.619</b> |
| psSAR10g [W/Kg]  | 0.231     | <b>0.243</b> |
| Power Drift [dB] | N/A       | -0.00        |



# Measurement Report for Band n12: 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz) RBPosition:Mid AntennaCfg:SISO, CHEEK

## Exposure Conditions

|                                  |                           |                        |                 |
|----------------------------------|---------------------------|------------------------|-----------------|
| Band                             | Band n12                  | TSL Permittivity       | 42.3            |
| Frequency [MHz]   Channel Number | 707.500   141500          | TSL Conductivity [S/m] | 0.870           |
| Group   UID                      | 5G NR FR1 FDD   10938-AAC | Phantom Section   TSL  | RightHead   HSL |
| Conversion Factor                | 9.96                      | Test Distance [mm]     | 0.00            |

## Hardware Setup

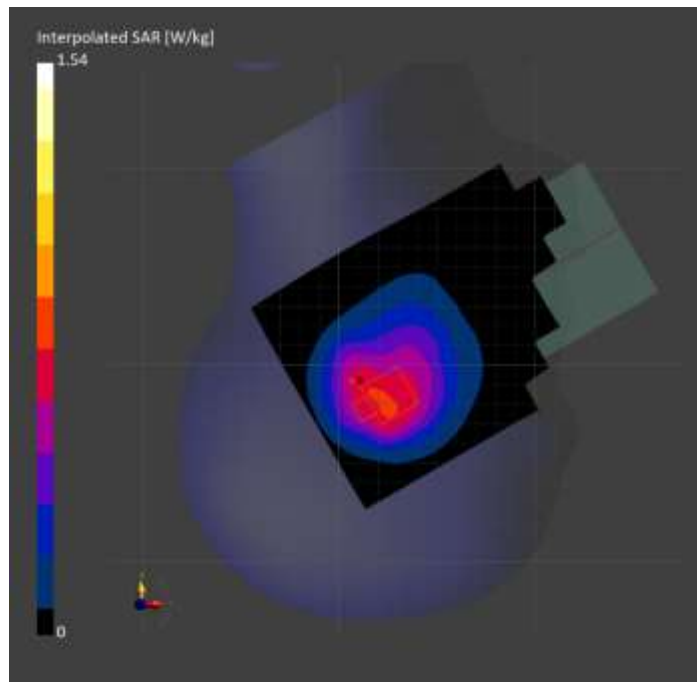
|                          |                              |          |                                  |
|--------------------------|------------------------------|----------|----------------------------------|
| Probe   Calibration Date | EX3DV4 - SN3991   2022-09-22 | Phantom  | Twin-SAM V8.0 (30deg probe tilt) |
| DAE   Calibration Date   | DAE4 Sn1674   2023-05-11     | TSL Type | HBBL-600-10000                   |
| Software Version         | 16.2.4.2524                  |          |                                  |

## Scan Setup

|                     | Area Scan     | Zoom Scan          |
|---------------------|---------------|--------------------|
| Grid Extents [mm]   | 120.0 x 210.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 15.0 x 15.0   | 6.0 x 6.0 x 1.5    |
| Sensor Surface [mm] | 3.0           | 1.4                |
| Graded Grid         | N/A           | Yes                |
| M2/M1 [%]           |               | 74.4               |
| Dist 3dB Peak [mm]  |               | 7.3                |

## Measurement Results

|                  | Area Scan | Zoom Scan    |
|------------------|-----------|--------------|
| psSAR1g [W/Kg]   | 0.693     | <b>0.731</b> |
| psSAR10g [W/Kg]  | 0.480     | <b>0.471</b> |
| Power Drift [dB] | N/A       | 0.03         |



# Measurement Report for WLAN 2.4GHz: IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle), CHEEK

## Exposure Conditions

|                                  |                  |                        |                |
|----------------------------------|------------------|------------------------|----------------|
| Band                             | WLAN 2.4GHz      | TSL Permittivity       | 40.2           |
| Frequency [MHz]   Channel Number | 2412.000   1     | TSL Conductivity [S/m] | 1.65           |
| Group   UID                      | WLAN   10415-AAA | Phantom Section   TSL  | LeftHead   HSL |
| Conversion Factor                | 7.64             | Test Distance [mm]     | 0.00           |

## Hardware Setup

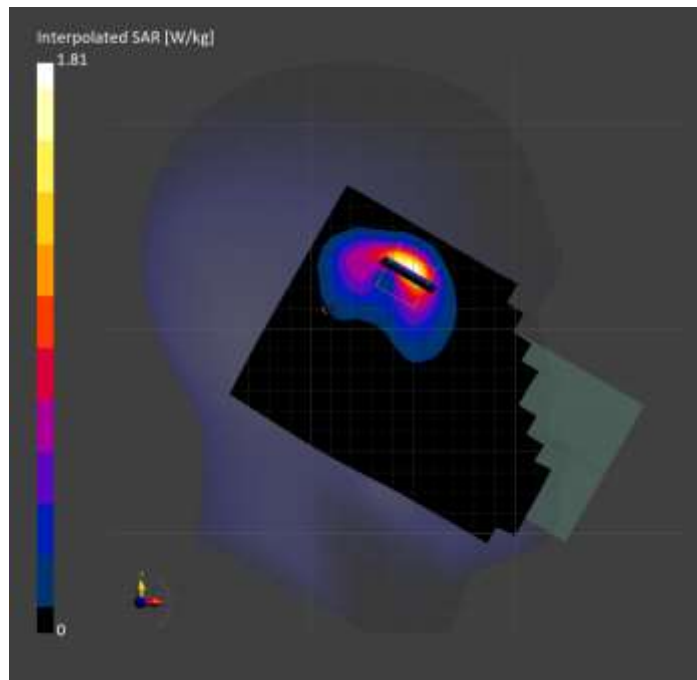
|                          |                              |          |                                  |
|--------------------------|------------------------------|----------|----------------------------------|
| Probe   Calibration Date | EX3DV4 - SN7587   2023-04-18 | Phantom  | Twin-SAM V8.0 (30deg probe tilt) |
| DAE   Calibration Date   | DAE4 Sn1239   2023-03-16     | TSL Type | HBBL-600-10000                   |
| Software Version         | 16.2.4.2524                  |          |                                  |

## Scan Setup

|                     | Area Scan     | Zoom Scan          |
|---------------------|---------------|--------------------|
| Grid Extents [mm]   | 120.0 x 200.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 10.0 x 10.0   | 5.0 x 5.0 x 1.5    |
| Sensor Surface [mm] | 3.0           | 1.4                |
| Graded Grid         | N/A           | Yes                |
| M2/M1 [%]           |               | 77.3               |
| Dist 3dB Peak [mm]  |               | 5.5                |

## Measurement Results

|                  | Area Scan | Zoom Scan    |
|------------------|-----------|--------------|
| psSAR1g [W/Kg]   | 0.764     | <b>0.778</b> |
| psSAR10g [W/Kg]  | 0.320     | <b>0.331</b> |
| Power Drift [dB] | N/A       | 0.04         |



# Measurement Report for WLAN 5GHz: IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle), CHEEK

## Exposure Conditions

|                                  |                  |                        |                 |
|----------------------------------|------------------|------------------------|-----------------|
| Band                             | WLAN 5GHz        | TSL Permittivity       | 36.5            |
| Frequency [MHz]   Channel Number | 5610.000   122   | TSL Conductivity [S/m] | 4.92            |
| Group   UID                      | WLAN   10544-AAD | Phantom Section   TSL  | RightHead   HSL |
| Conversion Factor                | 4.8              | Test Distance [mm]     | 0.00            |

## Hardware Setup

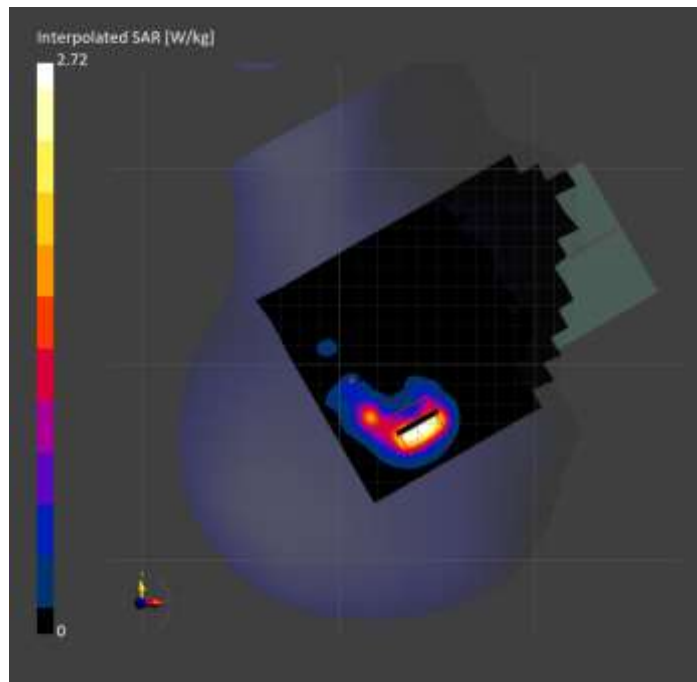
|                          |                              |          |                                  |
|--------------------------|------------------------------|----------|----------------------------------|
| Probe   Calibration Date | EX3DV4 - SN7810   2023-04-25 | Phantom  | Twin-SAM V8.0 (30deg probe tilt) |
| DAE   Calibration Date   | DAE4 Sn1439   2023-03-16     | TSL Type | HBBL-600-10000                   |
| Software Version         | 16.2.4.2524                  |          |                                  |

## Scan Setup

|                     | Area Scan     | Zoom Scan          |
|---------------------|---------------|--------------------|
| Grid Extents [mm]   | 120.0 x 200.0 | 24.0 x 24.0 x 22.0 |
| Grid Steps [mm]     | 10.0 x 10.0   | 4.0 x 4.0 x 1.4    |
| Sensor Surface [mm] | 3.0           | 1.4                |
| Graded Grid         | N/A           | Yes                |
| M2/M1 [%]           |               | 55.8               |
| Dist 3dB Peak [mm]  |               | 4.4                |

## Measurement Results

|                  | Area Scan | Zoom Scan    |
|------------------|-----------|--------------|
| psSAR1g [W/Kg]   | 0.564     | <b>0.580</b> |
| psSAR10g [W/Kg]  | 0.191     | <b>0.175</b> |
| Power Drift [dB] | N/A       | -0.01        |



# Measurement Report for Band n258: CW, EDGE RIGHT

## Exposure Conditions

|                                  |                   |                               |                   |
|----------------------------------|-------------------|-------------------------------|-------------------|
| Band                             | n258              | Phantom Section               | 5G                |
| Frequency [MHz]   Channel Number | 24800.0   2025833 | Conversion Factor             | 1.0               |
| Group   UID                      | CW, 0--           | Position   Test Distance [mm] | EDGE RIGHT   2.00 |

## Hardware Setup

|                          |  |         |               |
|--------------------------|--|---------|---------------|
| Probe   Calibration Date | EUmmWV4 - SN9589_F1-55GHz   2022-09-20 | Phantom | mmWave   xxxx |
| DAE   Calibration Date   | DAE4 Sn1377   2022-09-15               | Medium  | Air   -       |
| Software Version         | 3.2.2.2358                             |         |               |

## Scan Setup

|                     |   |                     |             |
|---------------------|---|---------------------|-------------|
| Scan Type           | 5G Scan                                   | Grid Extents [mm]   | 25.0 x 25.0 |
| Grid Steps [lambda] | 0.16885944481471585 x 0.16885944481471585 | Sensor Surface [mm] | 2.0         |

## Measurement Results

|                              |      |
|------------------------------|------|
| Avg. Area [cm <sup>2</sup> ] | 4.00 |
| psPDn+ [W/m <sup>2</sup> ]   | 3.95 |
| psPDtot+ [W/m <sup>2</sup> ] | 5.52 |
| psPDmod+ [W/m <sup>2</sup> ] | 6.49 |
| E <sub>max</sub> [V/m]       | 107  |
| Power Drift [dB]             | 0.01 |

